Rare Plant and Vegetation Survey of The Columbia Plateau Trail

Pacific Biodiversity Institute

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January 2009

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Recommended Citation

Smith IV, H.M., G. Wooten, and P.H. Morrison, P.H. 2009. Rare Plant and Vegetation Survey of the Columbia Plateau Trail. Pacific Biodiversity Institute, Winthrop, Washington. 171 p.

Acknowledgements

Steven Link and Robin O'Quinn assisted with field surveys. Diana Hackenburg, Juliet Rhodes, and Alexis Monetta assisted with entering and checking the data we collected into databases. The photographs in this report were taken by Hans Smith, Peter Morrison, and George Wooten.

Project Funding

This project was funded by the Washington State Parks and Recreation Commission.

Executive Summary

Pacific Biodiversity Institute (PBI) conducted a rare plant and vegetation survey of the Columbia Plateau Trail (CPT) for the Washington State Parks and Recreation Commission (WSPRC). The CPT travels 130 miles across the Columbia Plateau, starting near the City of Cheney in the north and ending near the City of Pasco in the south. The trail passes through Spokane, Lincoln, Adams, Whitman, and Franklin Counties. The entire trail occurs in Washington's Channeled Scablands, a unique landscape feature of the Columbia Plateau. The Channeled Scabland vegetation communities consist of mostly dry shrub-steppe and grassland types, some dry forest types, and an assortment of wetland types associated with vernal pools, pothole lakes, and river riparian areas.

Field surveys of the CPT were conducted in April through October 2008. All sections of the trail were visited at least once during the 2008 field season. Ownership boundary issues abound along the trail, precluding adequate surveys of all areas. WSPRC GIS park boundary data did not correlate well with ground conditions. Areas that were not obviously in WSPRC ownership based on ground conditions were not surveyed by field personnel.

Developed and disturbed sites comprise a majority of WSPRC ownership along the CPT. The CPT ownership boundary is too narrow to comprise native vegetation communities not highly impacted by development and maintenance activities associated with the existing railway bed. Some natural vegetation communities do occur, especially in places where the WSPRC ownership boundary widens. However, the actual ownership of many of these sites remains ambiguous due to discrepancies between WSPRC ownership data and on the ground conditions.

To better describe vegetation and ecological conditions along the CPT, we divided the trail into eight separate sections based on similarities of landform and disturbance influences. A total of 105 vegetation community polygons were mapped and visited along the CPT, and 19 different vegetation community/land cover classes were described within these polygons. Many of the natural vegetation communities mapped within WSPRC ownership were in fair to poor condition due to exotic and noxious species infestations and human caused disturbances such as railway development, livestock grazing, hydrological alteration, and agricultural land development. Most of the communities we mapped were just the edge components of larger natural vegetation community patches that occur mostly on adjacent properties. The conditions of the patches were more predicated on adjacent land use activities than activities and disturbances taking place on WSPRC ownership. The section of trail within the Turnbull National Wildlife Refuge contains the largest amount of good condition natural communities.

No rare plants were found within WSPRC ownership along the CPT. Rare plant habitat has been degraded by railway development within much of the WSPRC owned lands, however good habitat for rare plants still exists all along the CPT corridor. Based on available data from DNR NHP, rare plant populations would be most likely to occur within the portion of the CPT that crosses the Turnbull National Wildlife Refuge.

Restoration of natural vegetation communities would not likely be successful unless it is conducted with planned efforts taking place on adjacent properties. Better mapping and documentation of WSPRC ownership along the CPT is necessary for adequate resource protection and stewardship. Land use activities inconsistent with State Park ownership, such as livestock grazing, agricultural production, and home site development, are occurring in portions of the CPT and are degrading natural resource conditions.

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Introduction

The CPT was surveyed for rare plant occurrences, vegetation communities and characteristics, noxious weeds and ecological condition by PBI in 2008, under contract with WSPRC. This report summarizes the activities and findings of the contracted work.

The CPT refers to properties associated with a decommissioned railroad right-of-way running roughly 130 miles from Cheney to Pasco, Washington. The trail passes through Spokane, Lincoln, Adams, Whitman, and Franklin Counties. The area controlled by WSPRC along the extent of the CPT is typically no more than 30 meters (100 ft) centered on the old railroad bed. Some associated properties expanding WSPRC ownership beyond the 30-meter wide right-of-way occur periodically along the old railway system, mostly along the northern section of the CPT. According to GIS data depicting WSPRC ownership around the CPT, the total area of the WSPRC properties associated with the CPT is around 2000 acres. Figure 1 depicts the location of the trail across Washington's Columbia Plateau.

Figure 1. Overview map of the CPT and its location on Washington's Columbia Plateau in relationship to the channeled scablands.

Due to its long length, the CPT travels across many different landforms and bisects a diversity of natural communities. The elevation along the trail ranges from approximately 350 ft near the Tri-Cities to over 2000 ft near Cheney. The entire trail occurs in Washington's Channeled Scablands, a unique landscape feature of the Columbia Plateau. The Channeled Scablands consist of a large network of scoured channels in the Columbia Plateau's deep basalt cap, left over from Ice Age super-floods that occurred periodically up until 15,000 years ago. The Channeled Scabland vegetation communities consists of mostly dry shrub-steppe and grassland types, some dry forest types, and an assortment of wetland types associated with vernal pools, pothole lakes, and river riparian areas.

Historical Vegetation of the CPT

Early explorers first started recording information about vegetation in the Columbia Plateau in the 1800's. The first botanical study in the area was conducted by J. G. Cooper as part of the Northern Pacific Railroad Survey (Cooper et al 1859, 1860 and 1994). This area was also part of a more intensive botanical survey conducted as part of the Sandberg and Leiberg Expedition of 1893 (Mack 1988) (Figure 2). They describe the area covered by the CPT as part of two of four vegetation "districts" that they encountered. The northeastern part of the CPT is part of District 1, which is characterized by open ponderosa pine forests with understory dominants of xerophytic grasses on zonal soils or mesic shrubs along the stream courses (Mack 1988). The mid-section and southwestern section of the CPT is part of District II. This was described as having soils dominated by *Purshia tridentata* and *Artemisia tridentata* with xerophytic grasses in the understory.

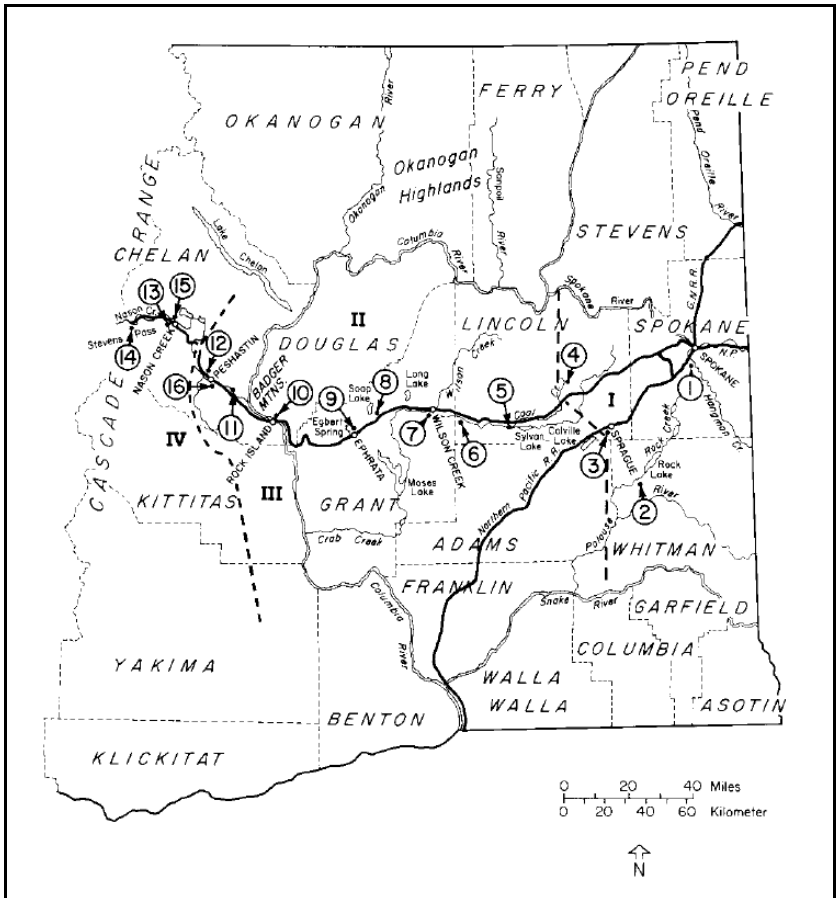


Figure 1. The westward trek of Sandberg and Leiberg's expedition across the Columbia Plateau in 1893 generally followed the roadway of the Great Northern Railroad. The circled numbers indicate Sandberg and Leiberg's designation of their campsites as well as the campsites' locations and the chronology in which the camps were established. Roman numerals refer to their four major botanical districts; the Columbia River is the boundary between Districts II and III.

Figure 2. Routes of Sandberg and Leiberg Expedition and Vegetation Districts (from Mack 1988).

Mack (1988) overlays the Sandberg and Leiberg Expedition route on a later map of shrub-steppe communities created by Daubenmire (1970) which shows the CPT as part of three vegetation zones (Figure 3):

- *Artemisia tridentata – Agropyron*
- *Artemisia tridentata – Festuca*
- *Artemisia tripartita – Festuca*

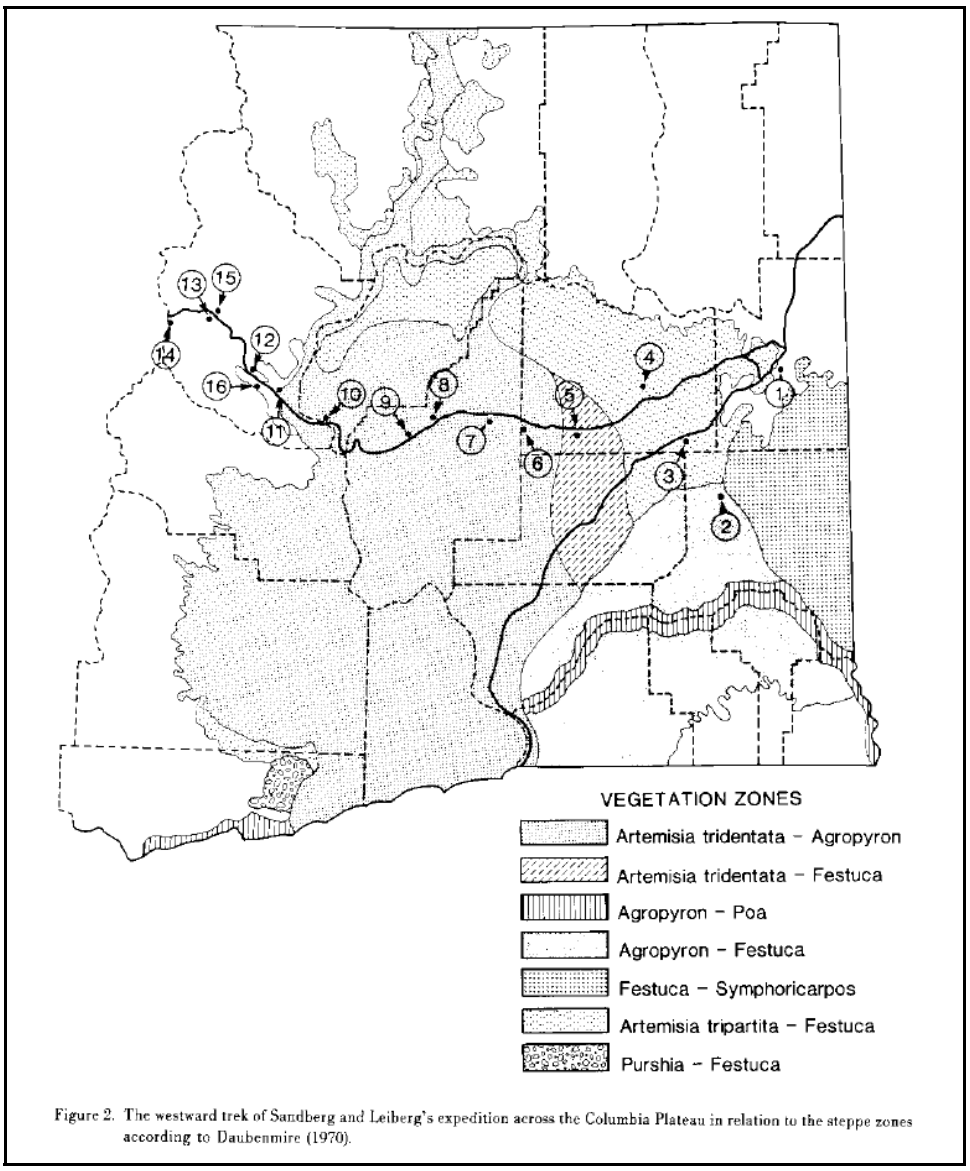


Figure 3. Routes of Sandberg and Leiberg Expedition vs. Daubenmire vegetation zones (from Mack 1988).

Although the trail travels through some of the least inhabited parts of Eastern Washington, human impacts and influences on the native ecosystems have been dramatic. Conversion of natural vegetation communities to agricultural lands and the introduction of livestock for grazing have affected every square inch of ground crossed by the CPT. The development and disturbance of the old railway the CPT now encompasses diminished the native vegetation component within the park property, and this disturbance corridor now acts as a vector for the spread of noxious and exotic species across the landscape. It is

difficult to understate the negative effects of historic and current human activities in altering the composition and conditions of native vegetation communities and ecosystems throughout the CPT lands.

Survey Conditions and Survey Routes

The southern portion of project area was surveyed for rare plants by an assortment of botanist/ecologists in April and May, 2008. Vegetation community surveys along the entire trail and additional rare plant surveys were conducted in August and October 2008 by three botanist/ecologists. Table 1 depicts which botanist/ecologists were active in surveys during different times of the field season. (We do not include a map of our survey routes in this report due to the shape and long distance covered by the CPT. It would be difficult to adequately display our survey data in a single map. Our survey routes are available in a GIS dataset delivered in association with this report to WSPRC).

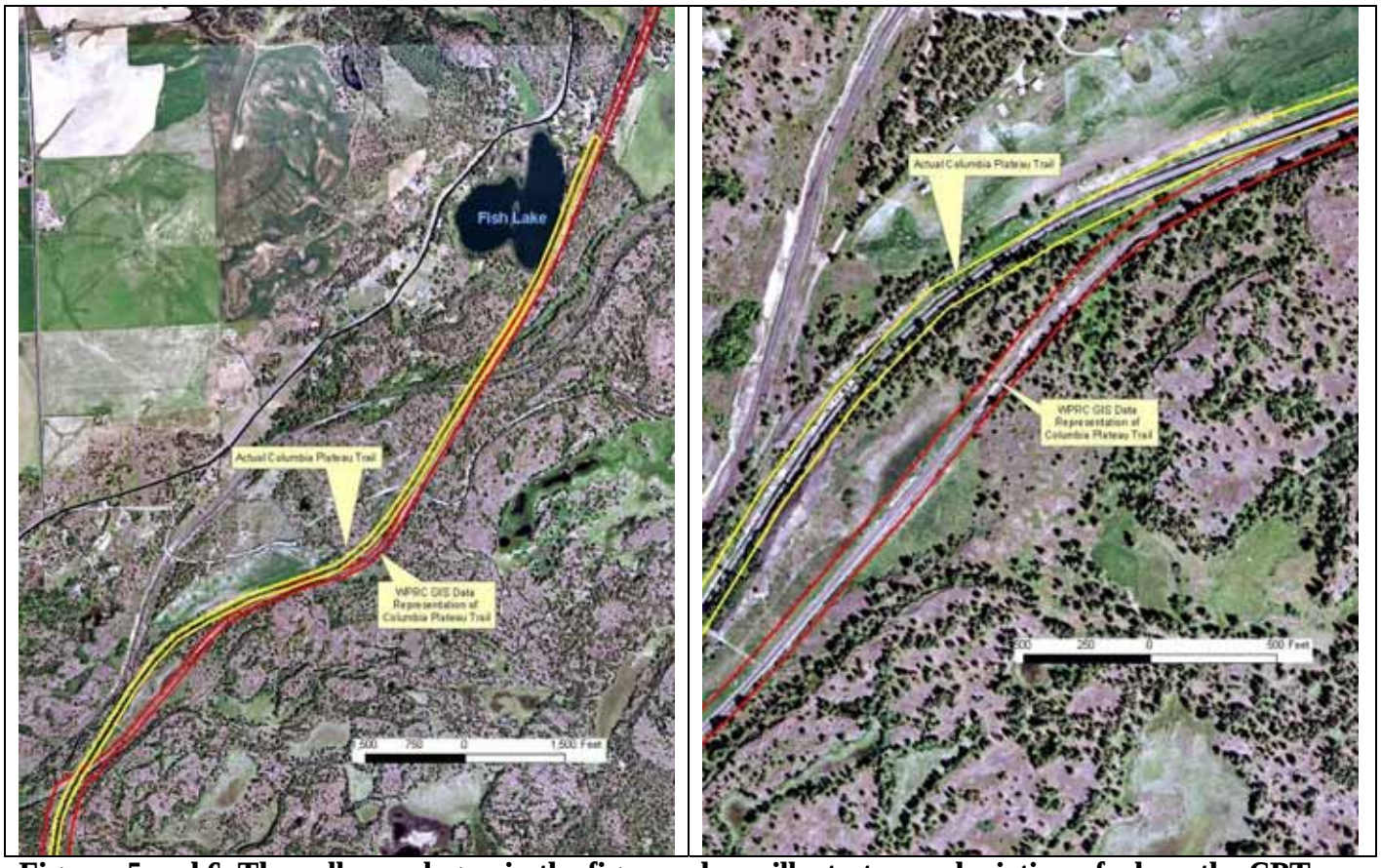
Table 1. Survey dates and surveyors.

Dates (2008)	Field Surveyor
April	G Wooten, H Smith, P Morrison, S Link
May	G Wooten, S Link
August	H Smith, P Morrison, R O'Quinn
October	R O'Quinn

Many characteristics of the CPT made for difficult survey access. To start, most of the trail is covered in deep rock ballast that precludes access by most vehicles, bikes, horses, and even foot travel over long distances. The rock ballast is sharp edged and loosely packed, and old steel spikes stick out of the ballast pile waiting to puncture tires. Travel hazards such as old trellises and dark antiquated tunnels were not always deemed safe for survey access, and thus work around routes through remote areas with often un-marked roads had to be sought to keep on the trail. In many places, terrain off the trail was exceptionally steep and not suitable for access on foot. Waterbodies and wetlands alongside the trail were often not readily accessible due to steep drop-offs and/or fencing barriers.

Some portions of the trail near Cheney and Pasco had the rock ballast removed for easier access. However, in this section of trail, there were major discrepancies in the GIS ownership boundary information provided by WSPRC and the actual location of the trail on the ground. In some cases, this ownership boundary conflict precluded adequate survey access. Figures 4 to 6 illustrate some of the most grievous boundary discrepancies encountered along the CPT. Along the full distance of the trail, the actual boundaries delineating WSPRC land from surrounding properties proved very difficult to ascertain during field surveys. In many places, fences on the ground were remarkably closer to the edge of the disturbed trail than what was depicted in the WSPRC GIS data. Because of these discrepancies, field surveyors mostly evaluated vegetation community conditions and searched for rare plants within whatever was the most obvious boundary marker on the ground.

Figure 4. The polygon outlined in red and labeled 45 consists of a residential structure and the accompanying yard space. It is doubtful that the property represented within this polygon actually belongs to WSPRC. This example is from the Amber Lake trailhead.



Figures 5 and 6. The yellow polygon in the figures above illustrate our depiction of where the CPT boundary should be, while the red polygon is representative of the WSPRC GIS boundary data. These examples are from Fish Lake and south.

Vegetation Community Surveys

Methods

Pre-field reviews of literature, GIS data, and remote sensing data were conducted early in the season. Maps, GIS data, and remotely sensed data were assembled together into an ArcMap GIS project covering the project area. Topographic maps and digital elevation models (DEMs) were also assembled. Using the gathered spatial data resources, discrete vegetation polygons meant to represent specific plant communities or mosaics of plant communities were manually delineated by staff ecologists as polygon features in an ESRI shapefile format.

The CPT properties were visited at least twice during the field season to assure observation of both early and late-blooming plant species. The first visit was primarily a reconnaissance of the project area, meant to create a basic plant list for the park property and to conduct initial rare plant surveys for early bloomers. The later visit focused on collecting field data for the vegetation polygon map and adding more species to the plant list during the summer season. Before the field season was complete, all vegetation polygons that could be accessed safely were visited and field data was collected.

Plant community data was recorded on a form initially developed WSPRC (Appendix A). Recorded data included a wide variety of information about the vegetation composition, environmental characteristics, disturbance history and other notes for each polygon. Each polygon was rated for its overall ecological condition according to a simple ranking system (Appendix B). Vegetation community and land cover classifications were assigned using information and keys from standard literature sources cited in the Reference section of this document.

During field visits survey personnel had printed and digital maps available that included high resolution aerial imagery. Digital maps were accessed in the field using ArcPad software (ESRI 2007) running on pocket PC, GPS enabled devices. Use of ArcPad allowed all survey routes to be mapped on a GPS recorder in real time, and allowed for viewing and editing data directly from field locations, resulting in field-verified attributes for the vegetation polygons.

Once gathered, the field data was edited and entered into a Microsoft Access database and linked to the vegetation polygon geodatabase. Further refinements and editing of the vegetation data stored in the personal geodatabase was made based on information collected in the field with ArcPad.

Results

While vegetation community diversity and conditions vary across the entire 132-mile stretch of the CPT, large tracks of the trail possess rather homogenous and repetitive conditions that are better mapped and described by generalized regions rather than individual polygons representing homogenous conditions. This is especially true because the narrow portion of ownership by WSPRC along the trail corridor is mostly comprised of the actual devegetated trail itself, and the immediately adjacent lands are typically highly disturbed by historic railroad development and maintenance activities. It should be noted that this exercise of mapping and surveying vegetation communities is typically applied to WSPRC properties that are more representative of traditional park boundary conditions, where the park boundary is not extremely narrow, and individual patches of vegetation occur completely within the boundary of WSPRC ownership. In the case of the CPT, only small slivers of vegetation communities in the surrounding landscape are occurring within WSPRC ownership meaning that using our typical guidelines we would be effectively mapping highly fragmented segments of very small edge portions of larger vegetation community polygons that occur mostly outside WSPRC ownership. Accurate mapping of these small fragmented slivers would greatly increase the resolution of mapping (and thus the time and expenses) required for this project, and would not be consistent with the level of detail and work we've provided in other similar vegetation mapping projects.

To mitigate this issue, we did our best to divide the trail into logical polygon sections at different spatial scales. The first scale, which is most consistent with our conventional mapping techniques, looked at breaking apart the trail into polygons based on the consistency of repetitiveness of the predominant vegetation characteristics and land-use types on surrounding lands. This was a vegetation focused mapping and is thus a finer resolution mapping resulting in 105 individual polygons. (Due to the relatively small nature of these polygons within the narrow and long expanse of the CPT, it is not possible to adequately display the 105 vegetation polygons within large scale maps in this report. The vegetation polygon data is provided as a GIS deliverable associated with this report, complete with field derived attributes.)

The other polygon map identified regions of similarity based on the associated landforms and jurisdictions through which the trail travels. This method yielded 8 regions which work well to define generalized zones in which pressures on ecological conditions, disturbances, and vegetation types are more similar. Figure 7 provides a map of how we divided the CPT into the 8 regions, or polygon "groups". The remainder of the Results Section in this report will describe our findings on vegetation communities based on the polygon groups illustrated in Figure 5.

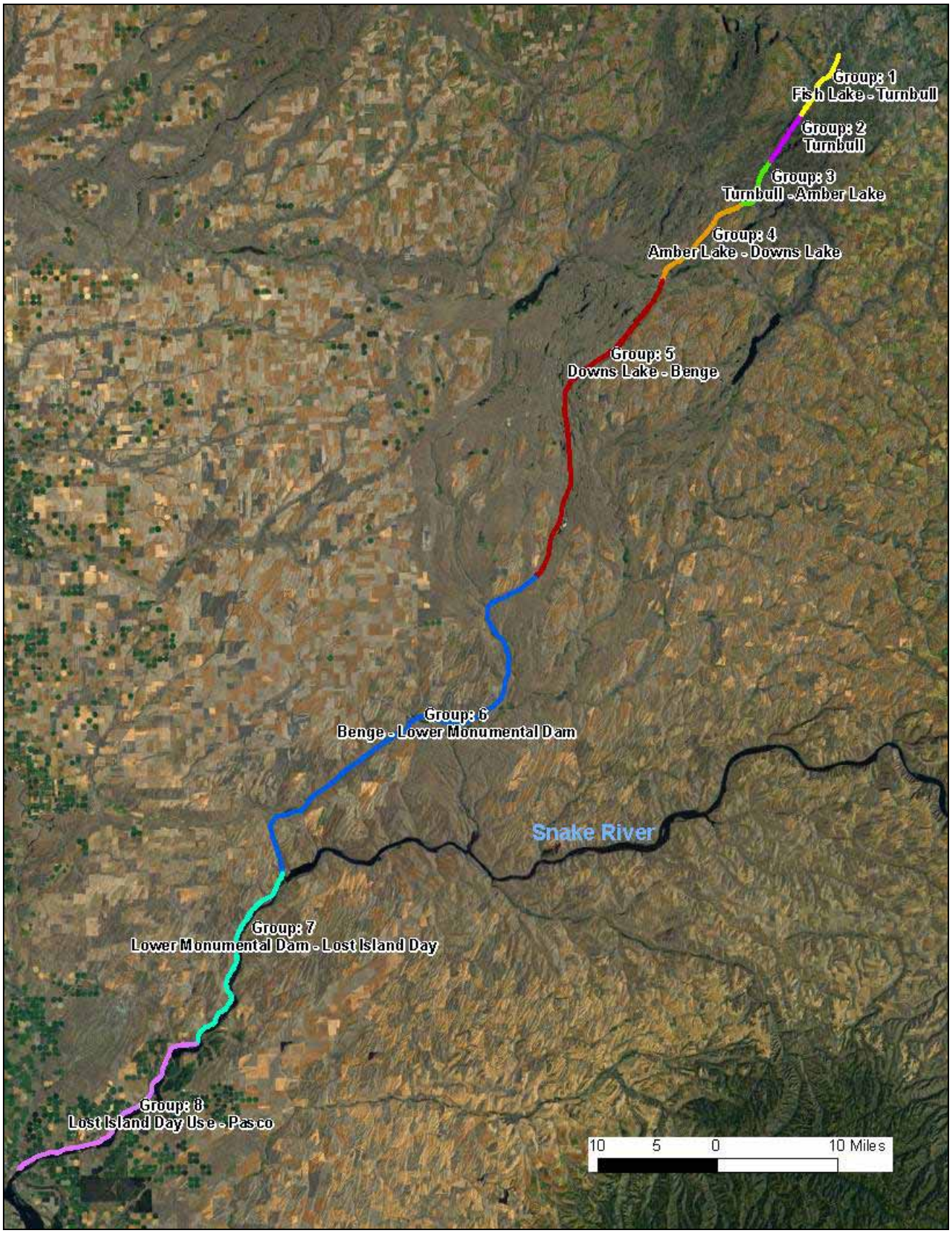


Figure 7. Map of the 8 polygon groups mapped to describe regions of similarity along the 130 mile CPT.

Descriptions of Polygon Groups

Group 1

This section of trail occurs from the far north end of the trail near Fish Lake to the edge of Turnbull National Wildlife Refuge, approximately 6 miles in length (Figure 8).

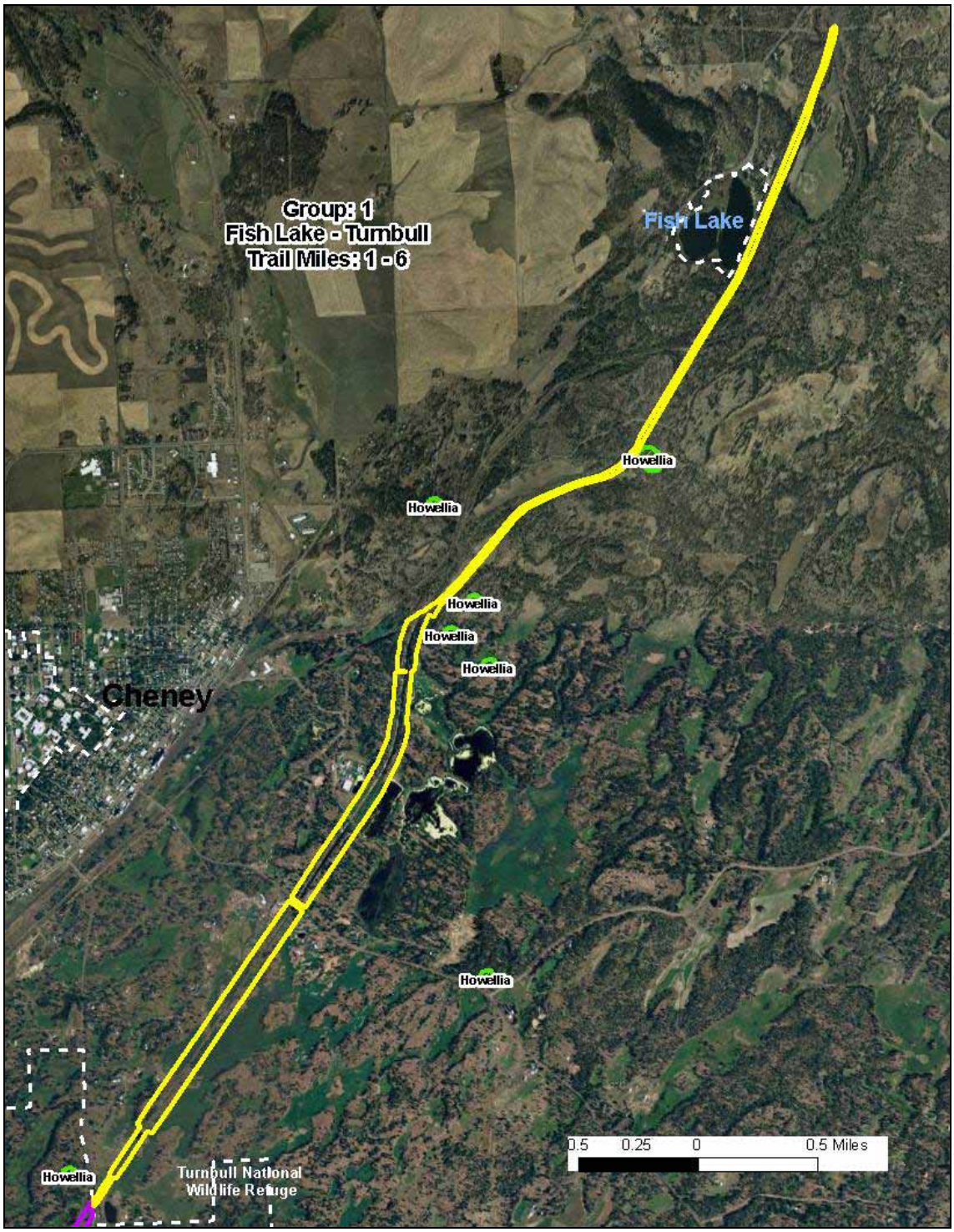


Figure 8. The Group 1 section of the CPT is illustrated by the yellow polygon. The small green polygons labeled Howellia refer to WA DNR NHP rare plant sightings for howellia (*Howellia aquatilis*).

This section of trail overlaps the vegetation polygons presented in Table 2.

Table 2. Polygons and trail miles starting from the North comprising Group 1.

Group	Polygons	Trail Miles
1	1 - 14	1 - 6

Within these polygons the plant associations detailed in Table 3 occur.

Table 3. Plant associations occurring within the Group 1 polygons (See Table 18 on page 38 for definitions of the Plant Association codes).

Group	Plant Associations
Group 1	ERNI2/POSE
	PHAR3
	PIPO/PSSP6
	PIPO/SYAL
	POTR5/SYAL

This section of trail is the highest in elevation along the CPT, ranging around 2300 feet. The surrounding landscape is forested with ponderosa pine stands (Figure 9), but also contains large wetland complexes located in the many potholes and kettles formed during the Missoula Floods. Agricultural development and livestock grazing are two land use pressures affecting natural communities in this area. Historic logging, railway development, and roadway development have disturbed and altered many of the native vegetation communities in this area. This section of trail gets some of the greatest recreational use due to its location near Cheney and Eastern Washington University. Part of this trail is paved and all of it is accessible by bike and on foot because the rock ballast has been removed and the trail surface regraded. Although recreation use is higher along this section of the trail, disproportionate effects due to the increase do not seem to be a negative factor against the existing vegetation communities.

Figure 9. Ponderosa pine forest alongside the CPT in the Group 1 section of trail.

Land ownership issues are more frequent along this section of trail. If the GIS boundary from WSPRC is correct, then many land use activities that are inconsistent with State Park regulations are occurring within WSPRC lands in this area. These land uses include farming and livestock grazing. Figure 10 illustrates a place along the trail where agricultural lands directly abut the rail trail.

Figure 10. Aerial photo showing how active agricultural lands abut the CPT and seemingly occur on WSPRC property (red line is WSPRC GIS boundary – red arrow points out active agriculture).

Exotic and noxious weed presence is high along the trail in this area. Reed canarygrass (*Phalaris aurundinacea*), spotted knapweed (*Centaurea stoebe*), cheat grass (*Bromus tectorum*), North Africa grass *(Ventenata dubia),* and bulbous bluegrass (*Poa bulbosa*) are among the most common weeds established along the trail. Reed canarygrass occurs in most of the wetland and near wetland sites, while cheat grass and bulbous bluegrass occur throughout the dryland sites. Figure 11 exhibits a reed canarygrass infestation under a quaking aspen grove along this part of the trail.

Figure 11. Reed canarygrass infestation in wet aspen grove along the Group 1 section of trail.

Included in Figure 8 are rare plant population polygons provided by DNR NHP (2007). These polygons illustrate that while rare plants are known to exist near to the CPT properties, no known populations occur within the properties. Most of the wetland sites within this section of the trail are too degraded by railroad development and farming activities to support rare plant populations.

The GIS ownership boundary for the trail provided to us by WSPRC does not reflect the actual location of the trail in much of this area. Often, the GIS boundary is on a different railroad alignment than the actual trail. The GIS boundary extends out way beyond the border fences in most locations along this section of trail. This makes it very difficult for field surveyors to ascertain the proper vegetation survey area.

Group 2

This section occurs near the north end of the trail where the old railway crosses the Turnbull National Wildlife Refuge, a section approximately 5 miles in length (Figure 12).

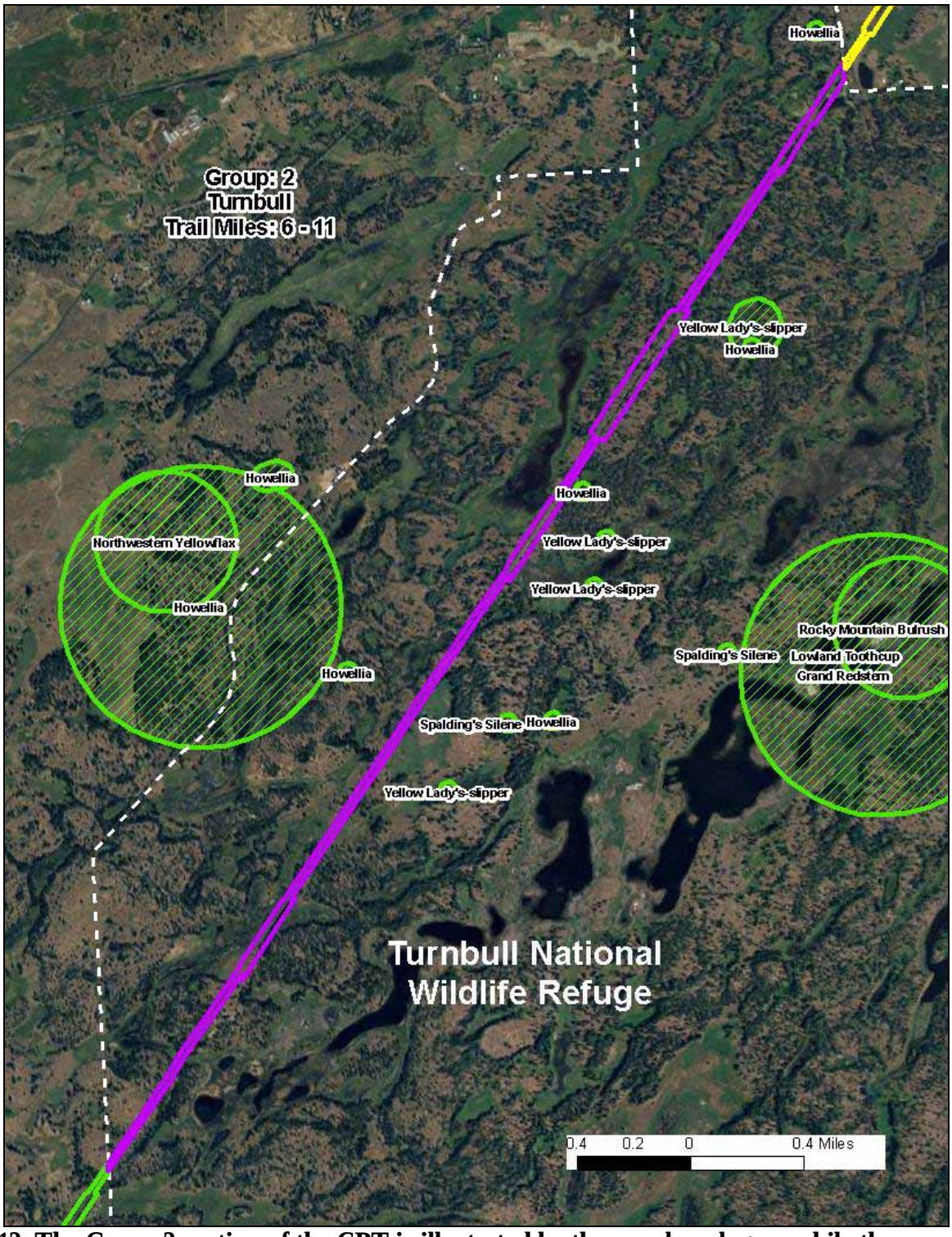


Figure 12. The Group 2 section of the CPT is illustrated by the purple polygon, while the northwestern Turnbull National Wildlife Refuge boundary is illustrated by the white hash line. The green polygons refer to WA DNR NHP rare plant sightings.

This section of trail overlaps the vegetation polygons presented in Table 4.

Table 4. Polygons and trail miles starting from the North comprising Group 2.

Group	Polygons	Trail Miles
2	15 - 23	6 - 11

Within these polygons the plant associations detailed in Table 5 occur.

Table 5. Plant associations occurring within the Group 2 polygons.

Group	Plant Associations
Group 2	PHAR3
	PIPO/SYAL
	PONA4
	POTR5/SYAL

The Group 2 vegetation polygons are similar in overall composition to the polygons in Group 1. The elevational range (around 2300 ft) and landform remain consistent between these two groups, and vegetation community patches consist of ponderosa pine forest and woodlands (Figure 13), dry shrub-steppe/grasslands, shrubby aspen thickets (Figure 14), and herbaceous/graminoid wetlands dominated by reed canarygrass (Figure 15). However, because this section of trail lies within the Turnbull National Wildlife Refuge, the land use pressures of farming, grazing, and development on the surrounding landscape are diminished and the overall conditions of surrounding vegetation communities are better.

Figure 13. Example of ponderosa pine forest along the CPT in the Turnbull National Wildlife Refuge.

Figure 14. Example of a shrubby aspen grove along the CPT in the Turnbull National Wildlife Refuge.

Figure 15. Example of an herbaceous/graminoid wetland dominated by reed canarygrass along the CPT in the Turnbull National Wildlife Refuge

Many rare plant populations have been mapped near the trail in this area, according to data supplied by DNR Natural Heritage Program (Figure 12). No rare plant populations were encountered within the identifiable WSPRC property boundary during surveys for this project, but small patches of adequate habitat do exist along the outskirts of the trail to support rare species like Spalding's silene (*Silene*

spaldingii) and yellow lady's slipper (*Cypripedium parviflorum*). As with other parts of the trail, identification of the actual park property boundary was difficult and fencing on the ground did not necessarily align with GIS data provided by WSPRC. Because of this, some sections of mapped WSPRC land that could contain rare plants were not surveyed during this project. The potential for howellia (*Howellia aquatilis*) to occur in some of the wetlands crossed by the trail is possible, though distinguishing whether or not the plants are occurring on WSPRC property could be very difficult. Figure 16 provides an aerial view of the trail and WSPRC property boundary (according to WSPRC GIS data which appears flawed in many areas) crossing a significant wetland within the Turnbull NWR. The amount of wetland actually shown within WSPRC ownership in this area is very small and has been highly disturbed by railway development.

Figure 16. Illustration on an aerial photograph of the CPT and WSPRC GIS property boundary crossing a wetland on the Turnbull National Wildlife Refuge.

The Group 2 vegetation polygons represent the highest quality ecological conditions for vegetation communities along the entire length of the CPT. Nonetheless, most of the area within State Park's ownership consists of the trail bed itself, and the areas directly adjacent have been disturbed during railroad development and maintenance.

Group 3

This section runs from the boundary of Turnbull National Wildlife Refuge to the northeast side of Amber Lake, a section approximately 5 miles in length (Figure 17).

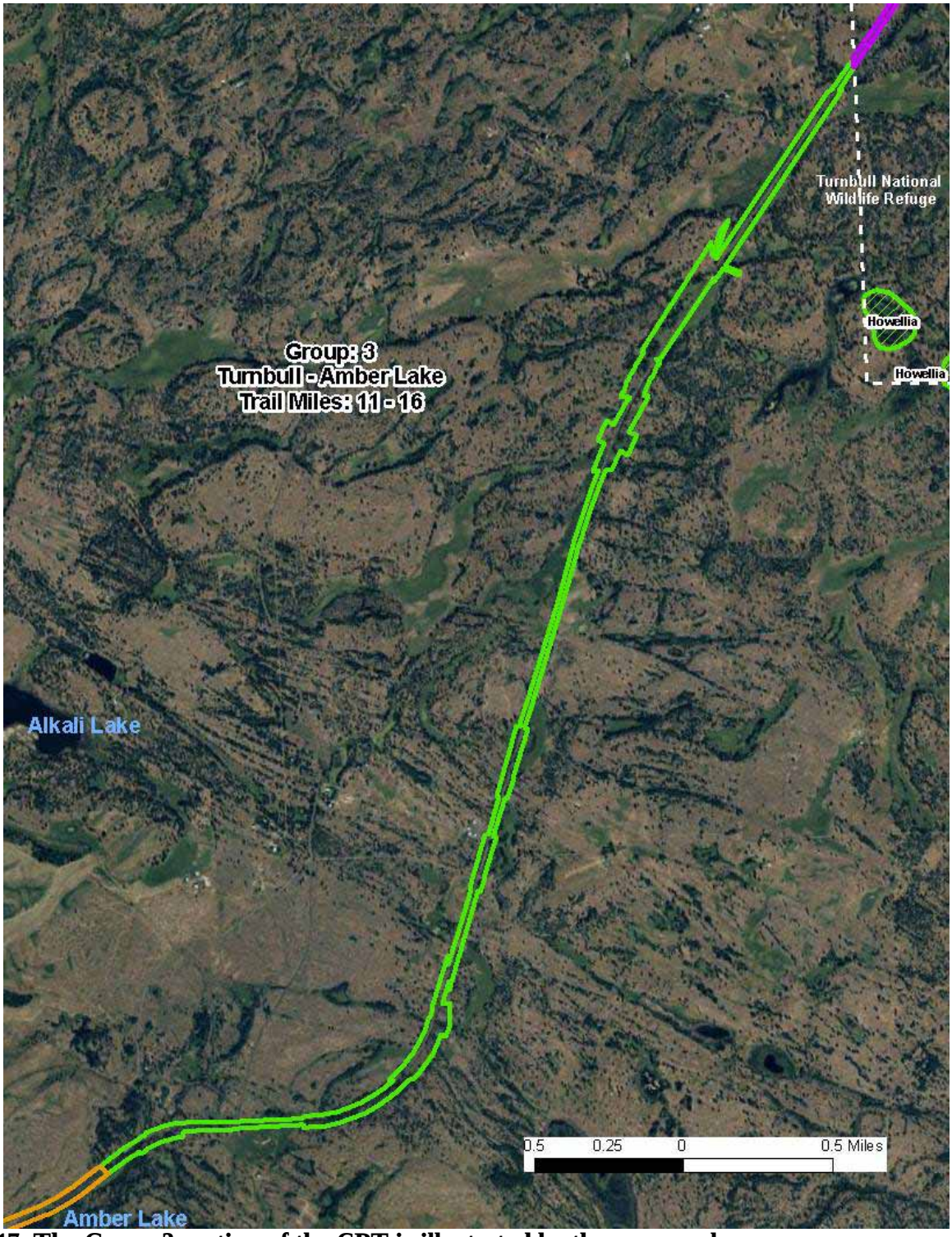


Figure 17. The Group 3 section of the CPT is illustrated by the green polygon.

This section of trail overlaps the vegetation polygons presented in Table 6.

Table 6. Polygons and trail miles starting from the North comprising Group 3.

Group	Polygons	Trail Miles
3	24 - 39	11 - 16

Within these polygons the plant associations detailed in Table 7 occur.

Table 7. Plant associations occurring within the Group 3 polygons.

Group	Plant Associations
Group 3	BEOC2-COSE16
	Disturbed mixed shrub
	PHAR3
	PIPO/PSSP6
	PIPO/SYAL
	POTR5/SYAL

The vegetation community characteristics of the Group 3 polygons are very similar to the characteristics of the Group 1 polygons. The elevational range and landform are consistent, but because these polygons occur outside of the Turnbull National Wildlife Refuge the ecological condition of the surrounding landscape is more severely impacted by agriculture, grazing, and development.

Group 4

This section starts near the northeast end of Amber Lake and continues to the large railroad berm crossing the shallow gorge at Downs Lake, a section approximately 9 miles in length (Figure 18).

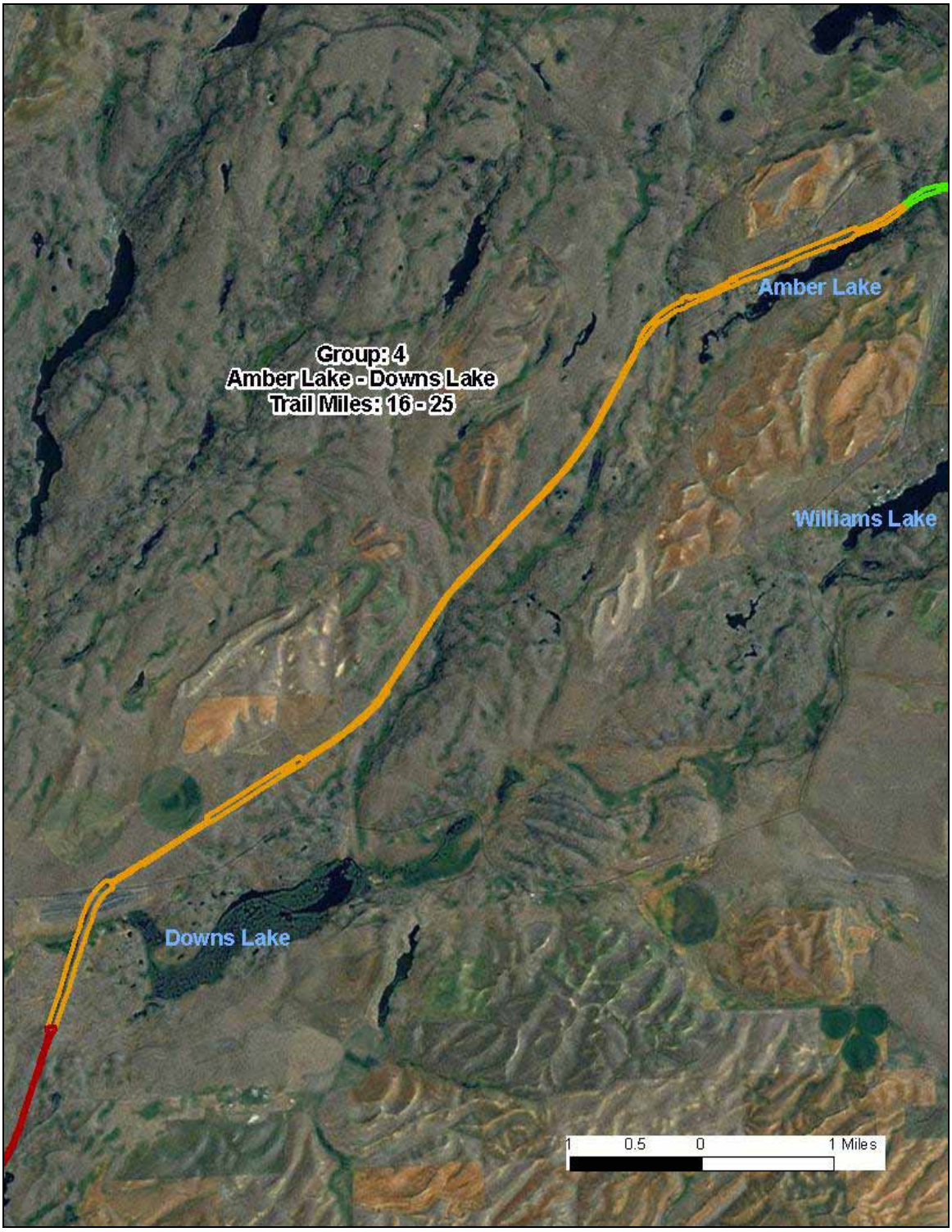


Figure 18. The Group 4 section of the CPT is illustrated by the orange polygon.

This section of trail overlaps the vegetation polygons presented in Table 8.

Table 8. Polygons and trail miles starting from the North comprising Group 4.

Group	Polygons	Trail Miles
4	40 - 55	16 - 25

Within these polygons the plant associations detailed in Table 9 occur.

Table 9. Plant associations occurring within the Group 4 polygons.

Group	Plant Associations
Group 4	Disturbed Grassland
	ERNA10/PSSP6
	ERNI2/POSE
	LECI4
	PHAR3
	PIPO/PSSP6
	POTR5/SYAL
	ROWO
	SYAL/PSSP6 mosaic

This section of trail comprises a much different vegetation community mosaic than that of the first three groups. The Group 4 polygons occur at a lower elevation than Groups 1 – 3, ranging around 2000 ft. Ponderosa pine forests become increasingly sparse along this section, and dry shrub-steppe/grassland communities become the dominant community types. Vegetation cover by exotic grasses (mostly cheatgrass and bulbous bluegrass) is high along this section of the trail.

The dominant land use surrounding the trail in this area is mostly livestock grazing, and some irrigated agriculture. Although Rush and Gamon (1997) describe this section of trail to be within the threetip sagebrush-Idaho fescue (*Artemisia tripartite-Festuca idahoensis*) habitat type, no threetip sagebrush was encountered within the CPT right-of-way in this area. The dominant shrubs along the trail here are rubber rabbitbrush (*Ericameria nauseosa*) and yellow rabbitbrush (*Chrysothamnus viscidiflorus*). The replacement of sage dominated shrub-steppe with rabbitbrush dominated steppe communities is a typical pattern occurring throughout the Columbia Basin, where road, railroad, and agricultural development has taken place.

Within the dry shrub-steppe/grassland matrix in this area, small patches of aspen and deciduous shrubs sporadically occur in pothole depression (Figure 19). These small woodlands and thickets are important features for wildlife habitat.

Figure 19. Example of a deciduous shrub thicket occurring along the CPT in the Group 4 section of trail.

A majority of this section of the trail has a property boundary no more than 30 meters in width according to the WSPRC GIS data. Because the boundary is so close to the trail edge in most of this section the developed/disturbed land cover type is the most dominant feature on WSPRC property, while the more natural surrounding vegetation communities occur as small edge patches within the property line.

The farthest south polygon in this polygon group (polygon 55) denotes the end of the improved trail section between Fish Lake and Downs Lake (Figure 20). From here south to McCoy Canyon on the Snake River the trail bed consists of a deep layer of rock ballast, which precludes easy access by anything other than hardy four-wheel drive vehicles.

Figure 20. Polygon 55, the south end of the Group 4 polygons, denotes the end of the improved recreational trail starting near Fish Lake.

Group 5

This section occurs from Downs Lake to the town of Benge, a section approximately 29 miles in length (Figure 21).

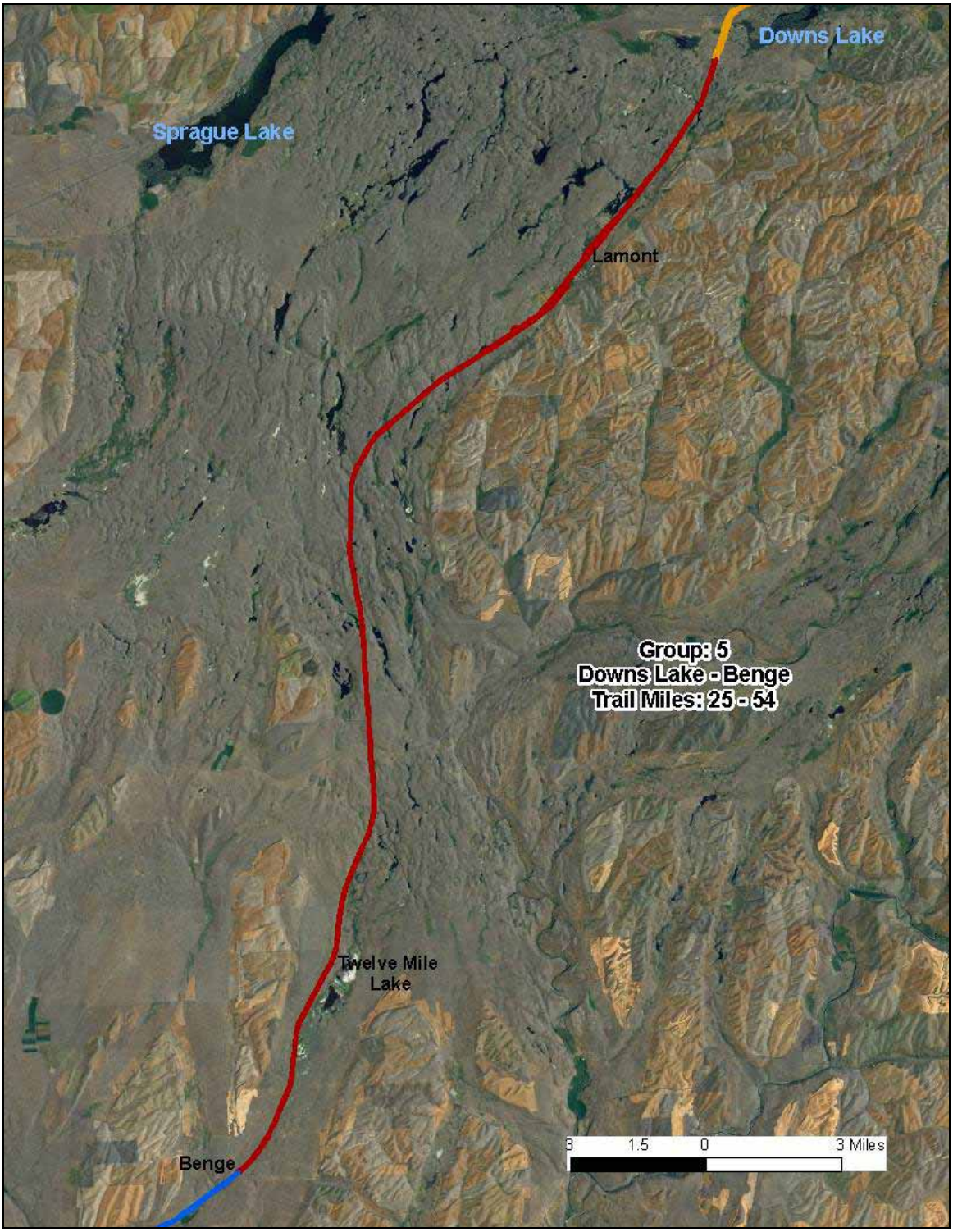


Figure 21. The Group 5 section of the CPT is illustrated by the red polygon.

This section of trail overlaps the vegetation polygons presented in Table 10.

Table 10. Polygons and trail miles starting from the North comprising Group 5.

Group	Polygons	Trail Miles
5	56 - 78	25 - 54

Within these polygons the plant associations detailed in Table 11 occur.

Table 11. Plant associations occurring within the Group 5 polygons.

Group	Plant Associations
Group 5	ARRI2/POSE
	Disturbed mixed shrub
	ERNA10/PSSP6
	LECI4
	PHAR3
	PSSP6-POSE
	ROWO
	TYLA-SCACA

Like the Group 4 polygons, the vegetation communities present around the Group 5 polygons consist mostly of dry shrub-steppe/grassland types where livestock grazing is a significant land use pressure. This polygon group ranges from 2000 to 1500 feet in elevation, and it is in this group that the scabland sagebrush / Sandberg bluegrass (*Artemisia rigida/Poa secunda*) plant community begins to occur in abundance on lithosol soils. No native forest or woodland communities occur along this section of trail (Figure 22). Many small ponds, vernal pools, and pothole lakes occur along this section of trail, but all of these wetland features within WSPRC ownership are highly degraded by grazing and the impacts of railway development (Figure 23).

Figure 22. The surrounding vegetation communities along this section of the CPT are all shrub-steppe / grassland types completely devoid of forest cover.

Figure 23. Excessive livestock grazing highly degrades wetland communities along this section of the trail.

As with the Group 4 polygons, a majority of this section of trail has a boundary of 30 meters in width, meaning most of the WSPRC property is made up of developed/disturbed landcover types. In areas where the WSPRC boundary does expand significantly beyond 30 meters in width, past agricultural and transportation infrastructure development has displaced the native vegetation types and significantly degraded the ecological conditions.

Along the Group 5 section of trail, the underlying landforms change from highly channelized scablands with shallow soils, many basalt cliff faces and outcrops, and potholes in the northern section, to more open flats with deep sandy soils in the southern section. The Twelve Mile Lake wetland complex occurs near to the trail along the southern section. This area of the trail is one of the few places where saltgrass (*Distichlis spicata*) occurs in great abundance.

Small patches of good condition bluebunch wheatgrass – Idaho fescue (*Pseudoroegneria spicata – Festuca idahoensis*) grassland occur sporadically in the northern portion of the Group 5 section, however these patches are so small and few and far between that they were not mapped. Most of the WSPRC property in this section is infested with cheatgrass and bulbous bluegrass, as well as many exotic herbs.

Group 6

This section occurs from the town of Benge to the Lower Monumental Dam on the Snake River, a section approximately 40 miles in length (Figure 24).

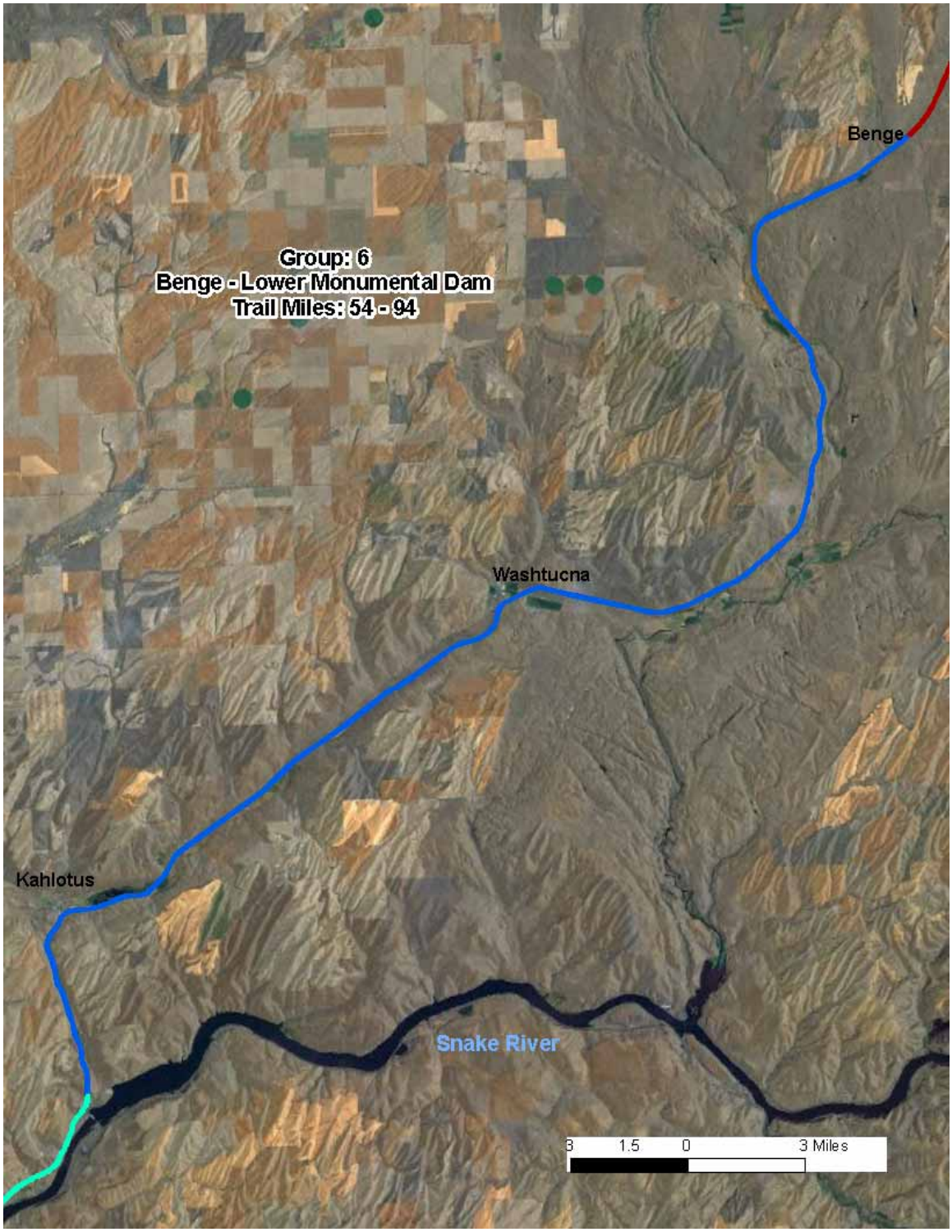


Figure 24. The Group 6 section of the CPT is illustrated by the blue polygon.

This section of trail overlaps the vegetation polygons presented in Table 12.

Table 12. Polygons and trail miles starting from the North comprising Group 6.

Group	Polygons	Trail Miles
6	79 - 96	54 - 94

Within these polygons the plant associations detailed in Table 13 occur.

Table 13. Plant associations occurring within the Group 6 polygons.

Group	Plant Associations
Group 6	ARTR2/PSSP6
	Disturbed mixed shrub
	ERNA10/PSSP6
	ERNI2/POSE
	PSSP6-POSE
	TYLA-SCACA

The Group 6 polygons range from 1500 – 500 ft in elevation. This section of trail leaves the basalt cap of the Columbia Plateau and follows some of the wider shallow valleys and canyons that connect into the Palouse and Snake Rivers. Livestock grazing, agricultural development and road and railway development have significantly degraded the ecological condition of natural communities along this stretch of the trail. As with the Group 4 polygons, the dominant vegetation communities in this area are dry shrub-steppe/grassland types, and exotic grass and herb cover is profuse in the communities along the sides of the trail (Figure 25).

Figure 25. Russian thistle and tumble mustard cover the entire CPT right of way along this section of trail that bisects abandoned agricultural fields near Washtucna.

Some large valley bottom wetland patches are bisected by the old railroad bed in this area. Although important to local wildlife, these wetland features have significant non-native plant cover and due to the narrow width of the WSPRC property boundary in these areas most of the actual wetlands do not occur on

WSPRC ownership. The old railway is raised on earthen berms through the wetlands that take up most of the WSPRC ownership (Figures 26 and 27).

Figure 26. The CPT railway berm bisecting a wetland near Benge.

Figure 27. The CPT railway berm bisecting a wetland near Kahlotus.

Group 7

This section occurs from the Lower Monumental Dam to the Lost Island Day Use Area along the Snake River, a section approximately 17 miles in length (Figure 28).

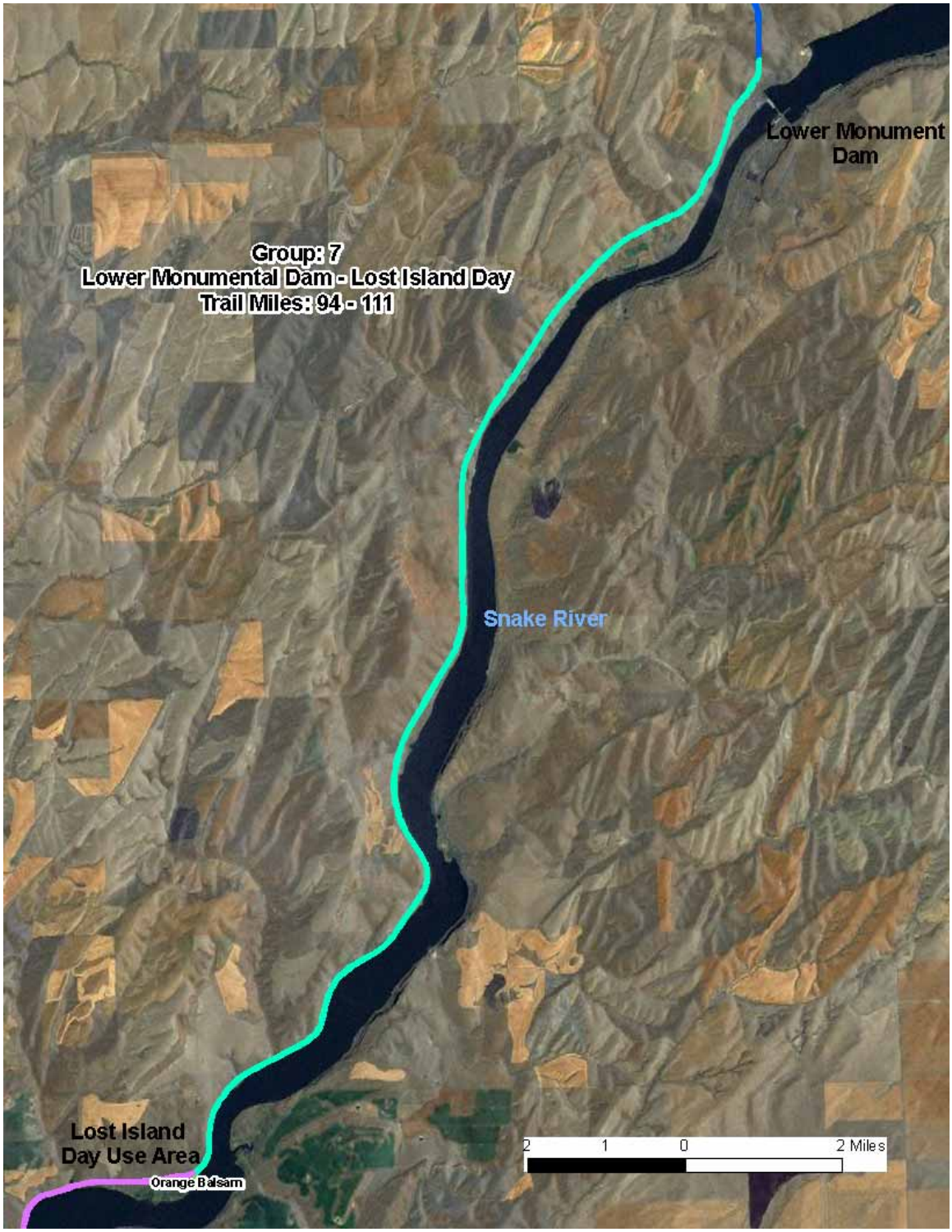


Figure 28. The Group 7 section of the CPT is illustrated by the green polygon.

This section of trail overlaps the vegetation polygons presented in Table 14.

Table 14. Polygons and trail miles starting from the North comprising Group 7.

Group	Polygons	Trail Miles
7	96 - 97	94 - 111

Within these polygons the plant associations detailed in Table 15 occur.

Table 15. Plant associations occurring within the Group 7 polygons.

Group	Plant Associations
Group 7	ERNA10/PSSP6
	ERNI2/BRTE-POSE

The Group 7 polygons occur along the western slopes of the hillsides confining the Snake River. These polygons range from 500 – 350 feet in elevation. The WSPRC ownership boundary is narrow along this stretch of trail, and the amount of disturbance created during the development of the trail along the steep hillsides is quite wide. Therefore, most of the land base in WSPRC ownership along this section of trail is developed/disturbed (Figures 29 and 30). The surrounding vegetation communities along this section of trail are dry grassland communities and the snow buckwheat / Sandberg bluegrass community occurs on the basalt cliffs and outcrops. Exotic grass and herb cover is high within the patches of natural communities that occur in the narrow WSPRC ownership.

Figure 29. The CPT along this portion of the Snake River was dug out wide from the steep hillslopes above the river.

Figure 30. Large infills and bank cuts have disturbed and/or replaced native vegetation communities within the narrow WSPRC boundary along this portion of the trail.

At the intersection of McCoy Canyon with the Snake River the CPT once again becomes an improved trail heading south that is accessible by foot, bike, and/or 2-wheel drive vehicle. The rock ballast that ranges from Downs Lake to McCoy Canyon has been removed to open the trail to recreationalists.

Group 8

This section ranges from the Lost Island Day Use Area to the far southern end of the trail near Pasco, a section approximately 20 miles in length (Figure 31).

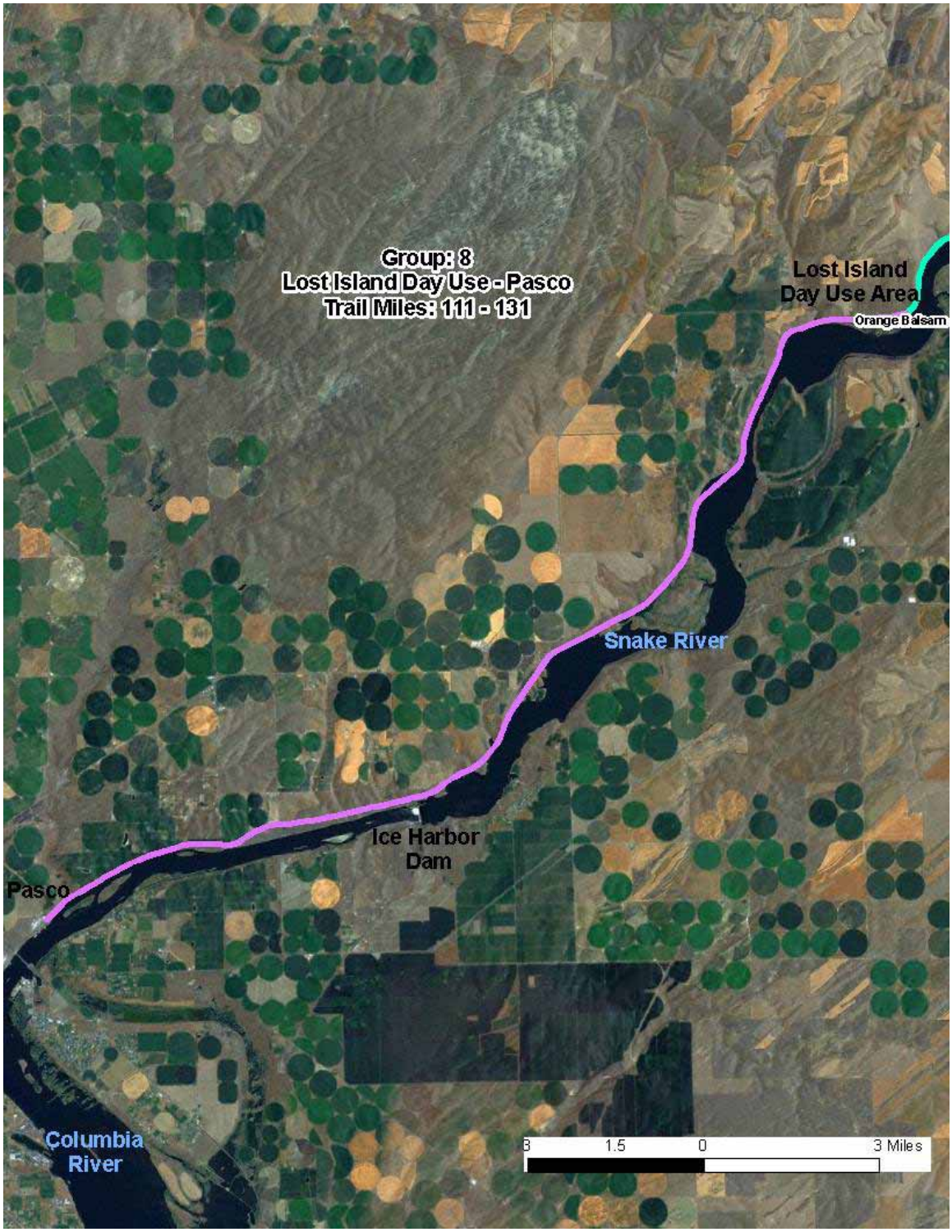


Figure 31. The Group 8 section of the CPT is illustrated by the pink polygon.

This section of trail overlaps the vegetation polygons presented in Table 16.

Table 16. Polygons and trail miles starting from the North comprising Group 8.

Group	Polygons	Trail Miles
8	98 - 105	111 – 131

Within these polygons the plant associations detailed in Table 17 occur.

Table 17. Plant associations occurring within the Group 7 polygons.

Group	Plant Associations
Group 8	ARTR2/PSSP6
	Disturbed mixed shrub
	ERNA10/PSSP6
	ERNI2/POSE

The Group 8 polygons make up the furthest south portion of the CPT. These polygons occur on the western shore of the Snake River at an elevation just above 300 feet. This area has been impacted by the raising of the river via hydroelectric and reservoir control dams, extensive agricultural development, and railway and transportation infrastructure development (Figure 32). The dry shrub-steppe and grassland communities in this area are infested with alien grasses and forbs, and many artificial wetland communities have been manifested by the raised water table. These wetland communities have significant exotic and noxious species cover.

Figure 32. Overview of landscape surrounding the Group 8 section of the CPT north of Ice Harbor Dam (CPT is visible as a linear feature along the shoreline).

The section of trail from Ice Harbor Dam to Pasco once again becomes inaccessible by most means of transportation due to the presence of rock ballast and steel rails. The big sagebrush / bluebunch wheatgrass (*Artemisia tridentata / Pseudoroegneria spicata*) becomes the dominant natural vegetation community surrounding the developed rail line along this section of trail. As with the other natural communities along the southern section of trail, the condition of the big sagebrush / bluebunch wheatgrass communities near Pasco are in poor condition due to the extent of exotic grass and herb cover.

Descriptions of Plant Associations

A total of 105 vegetation community polygons were mapped and visited along The Columbia Plateau Trail. Within these 105 polygons, a total of 19 vegetation community/land cover classes were attributed as primary, secondary, or tertiary community types (Table 18). Primary community types are the dominant or matrix vegetation community within a polygon, whereas secondary and tertiary community types are less abundant vegetation community types that occur within the same polygon and were not conducive to being mapped as a separate polygon due to the size, shape, or pattern of the community patches within the polygon.

Table 18. Vegetation community/land cover classes mapped in the CPT. (See Appendix C for status code descriptions.) Note that the "~" under Global Status represents the rank estimated by PBI.

Plant Associations	Scientific Names	Common Names	Authority	Global Status
ARRI2/POSE	*Artemisia rigida / Poa secunda*	Scabland sagebrush / Sandberg bluegrass	Daubenmire, 1970	G4
ARTR2/PSSP6	*Artemisia tridentata / Pseudoroegneria spicata*	big sagebrush / bluebunch wheatgrass	Daubenmire, 1970	G5
BEOC2-COSE16	*Betula occidentalis - Cornus sericea*	water birch - redosier dogwood	Crawford, 2003	G3
ERNA10/PSSP6	*Ericameria nauseosa / Pseudoroegneria spicata*	rubber rabbitbrush / bluebunch wheatgrass	Montana Natural Heritage Program, 2002	G3
ERNI2/POSE	*Eriogonum niveum / Poa secunda*	snow buckwheat / Sandberg bluegrass	Daubenmire, 1970	G3
LECI4	*Leymus cinereus*	basin wildrye	Kagan, 2004	G2G3
PHAR3	*Phalaris arundinacea*	reed canarygrass	Crawford, 2003	NR
PIPO/PSSP6	*Pinus ponderosa / Pseudoroegneria spicata*	Ponderosa pine / bluebunch wheatgrass	Kagan, 2004	G4
PIPO/SYAL	*Pinus ponderosa / Symphoricarpos albus*	Ponderosa pine / common snowberry	Kagan, 2004	G4
PONA4	*Potamogeton natans*	floating pondweed	Kagan, 2004	G5
POTR5/SYAL	*Populus tremuloides / Symphoricarpos albus*	quaking aspen / common snowberry	Crawford, 2003	G3
PSSP6-POSE	*Pseudoroegneria spicata - Poa secunda*	bluebunch wheatgrass - Sandberg bluegrass	Daubenmire, 1970	G4
ROWO	*Rosa woodsii*	Woods' rose	Crawford, 2003	~G2
TYLA-SCACA	*Typha latifolia - Schoenoplectus acutus var. acutus*	broadleaf cattail - hardstem bullrush	Crawford, 2003	G5
SYAL/PSSP6 mosaic	*Symphoricarpos albus / Pseudoroegneria spicata* mosaic	common snowberry / bluebunch wheatgrass mosaic	PBI	~G3
Developed/Disturbed	Developed/Disturbed	Developed/Disturbed	PBI	NR
Disturbed Grassland	Disturbed Grassland	Disturbed Grassland	PBI	NR
Disturbed mixed shrub	Disturbed mixed shrub	Disturbed mixed shrub	PBI	NR
Water	Water	Water	PBI	NR

These vegetation community/land cover types represent our best determination of how the existing vegetation and land cover patterns observed within the park's landscape relate to vegetation communities, plant associations, and/or land cover categories previously described in existing reference literature. Table 19 illustrates how existing vegetation patches observed and mapped by PBI were assigned to a particular vegetation community/land cover classification. Appendix D provides a full accounting of all the attributes described for each polygon mapped within the project area.

Table 19. Relationship of observed vegetation patches to subsequent vegetation community/land cover classification.[1]

Plant Association and/or Land Cover Class	Existing Vegetation Description
ARRI2/POSE	ARRI2/BRTE-PSSP6-POSE
	ARRI2/POSE-BRTE
	ARRI2/POSE-PSSP6-BRTE
	ARRI2-ERNA10-POSE-BRTE
	ARTR2/POBU-POSE
	ARTR2/POSE-PSSP6-BRTE
ARTR2/PSSP6	ARTR2/BRTE-POSE-PSSP6
	ARTR2/BRTE-PSSP6
	ARTR2/BRTE-PSSP6-POSE
	ARTR2-ERNA10/POSE-PSSP6-BRTE
BEOC2-COSE16	BEOC2-SALIX-COSE4/PHAR3-TYLA
ERNA10/PSSP6	ERNA10/BRTE-LECI4-PSSP6
	ERNA10/BRTE-POSE-PSSP6
	ERNA10/BRTE-PSSP6-LECI4
	ERNA10/BRTE-PSSP6-POSE
	ERNA10/POBU-BRTE-POSE
	ERNA10/POSE-BRTE-PSSP6
	ERNA10/PSSP6-POSE-BRTE
	ERNA10-CHVI8/BRTE-POSE-PSSP6
	ERNA10-CHVI8/POBU-BRTE-POSE
ERNI2/POSE	ERNI2/BRTE-POSE
	ERNI2/POSE-BRTE
LECI4	LECI4-PHAR3
	LECI4-PHAR3-CIAR4
PHAR3	PASM-BRTE-PHAR3
	PHAR3
	PHAR3 - weedy grasses
	PHAR3 wetland
	PHAR3 wetland
	PHAR3/NULU-SCIRP
	PHAR3-BRIN2
	PHAR3-LEMI3

[1] Although most Existing Vegetation patches can be intuitively assigned to a corresponding Vegetation Community or Plant Association, some existing vegetation assignments are less intuitive and require a more in-depth understanding of the vegetation conditions than what is presented in this table. Such in-depth information is better provided in Appendix D. There is not a direct one-to-one relationship between Existing Vegetation patch descriptions and the Vegetation Community or Plant Association type. Diverse sets of variables such as growth form canopy cover, ecological condition, historic conditions, and effects of natural and human caused disturbances must also be considered.

Plant Association and/or Land Cover Class	Existing Vegetation Description
	PHAR3-SCACA-CAAR2
	PHAR3-TYLA-CAREX
	PHAR3-URDI
PIPO/PSSP6	PIPO/POBU-BRTE
	PIPO/SYAL/FEID-PSSP6
	PIPO/SYAL/FEID-VEDU-PSSP6
PIPO/SYAL	PIPO/SYAL-ROWO/BRAR5-VEDU-PSSP6
PONA4	Deep water herbaceous wetland
	PIPO-POTR5/ROWO-PHLE4-SYAL
	POTR5/PRVI-ROWO-SYAL
	POTR5/SALIX-ROWO/PHAR3
	POTR5/SYAL/CARU
POTR5/SYAL	POTR5/SYAL-ROWO/PSSP6-LECI4
	BRTE-PSSP6-POSE
PSSP6-POSE	PSSP6-POSE-BRTE
	ROWO/PHAR3
	ROWO-ELAN/LECI4-PHAR3
	ROWO-SYAL/LECI4-PHAR3
ROWO	ROWO-SYAL-EQHY
SYAL/PSSP6 mosaic	CHVI8-SYAL/PSSP6-BRTE
	TYLA-SCACA-PHAR3
TYLA-SCACA	TYLA-SCACA-SOCA6
	Asphalt trail and sides
	disturbed grasslands
	home site
	old silos and development - RVs
	Rail Road Junctions
	Trail Head
	trail/rail bed
	trail/rail bed - roads
	trail/rail bed, Ag lands, roads
	trail/rail bed, disturbed sites, roads, development
	Trailhead Parking Lot
	Tunnel
Developed/Disturbed	weedy grasses
	BRTE-POBU-POSE
Disturbed Grassland	POBU-BRTE-POSE
	POTR5-ACNE2/SALIX-ELAN
	PUTR2/SALIX-ROWO-COSE16/LECI4-PHAR3
	SALIX/BRTE-PASM
	SALIX-COSE4/PHAR3
	SALIX-ELAN-ROWO/TYLA-URDI-SOCA6
	SALIX-ROWO/LECI4-PHAR3
Disturbed mixed shrub	SALIX-ROWO-LECI4-PHAR3
Water	Water

Descriptions of Vegetation Community Types

scabland sagebrush / Sandberg bluegrass ARRI2/POSE G4

This plant association is described by Daubenmire (1970). It is a dry shrub-steppe community occurring on lithosols in the Columbia Basin. Plant cover is typically sparse within this community, and shrub cover consists mostly of scabland sagebrush growing no more than 1 to 2 feet tall. Sandberg bluegrass is the dominant grass. Exotic plant cover in this community is typically low because of the soil limitations associated with lithosols, however this community is extremely susceptible to livestock trampling.

big sagebrush / bluebunch wheatgrass ARTR2/PSSP6 G5

This plant association is described by Daubenmire (1970). While it is a common community within some areas of the Columbia Basin, it is rather uncommon along the CPT. This is probably partly due to the extensive historic land conversion practices that have taken place along the CPT corridor. This community has extensive exotic grass infestations where it occurs within WSPRC ownership.

water birch - redosier dogwood BEOC2-COSE16 G3

This wetland shrubland community is described by Crawford (2003). It occurs in only one location along the CPT near Amber Lake in polygon 39. It is questionable whether this wetland patch actually occurs on WSPRC ownership.

rubber rabbitbrush / bluebunch wheatgrass ERNA10/PSSP6 G3

The rubber rabbitbrush / bluebunch wheatgrass plant association is associated with historic land conversion and livestock grazing disturbances in arid steppe environments (MTNHP 2002). Exotic grasses including cheatgrass and bulbous bluegrass are high in this community. This community seems to be increasing its range in the Columbia Basin due to the extent of human activities. Exotic and noxious dryland herbs occur in their greatest abundance within this community along the CPT.

snow buckwheat / Sandberg bluegrass ERNI2/POSE G3

This plant association is described by Daubenmire (1970). This association is common on lithosols and exposed basalt bedrock cliffs and roadcuts. Its characteristics are similar to the scabland sagebrush / Sandberg bluegrass community, however it is more widespread and scabland sagebrush is absent within this community.

basin wildrye LECI4 G2G3

The basin wildrye plant association is described by Daubenmire (1970). The plant association title represents a loose conglomeration of grassland communities dominated by basin wildrye. This community is common in small patches along the northern half of the trail where small potholes and depressions abound.

reed canarygrass PHAR3 NA

This community is described by Crawford (2003). It is not a native plant community, but because of the success of reed canarygrass in naturalizing and colonizing itself in Pacific Northwest wetlands it is now a recognized community type. The extensive places along the northern portion of the CPT where the reed canarygrass community occurs represent areas where more biologically complex native plant wetlands and wet grasslands have been loss. Reed canarygrass takes advantage of disturbance caused by land conversion activities, but it also spreads rapidly via rhizomes into non-disturbed systems.

Ponderosa pine / bluebunch wheatgrass PIPO/PSSP6 G4

This plant association is described by Kagan (2004). It is a common low elevation forest type in Eastern Washington. It is differentiated from the ponderosa pine / common snowberry community by the open understory devoid of shrub cover and low in diversity. Exotic plant cover of non-native grasses can be extensive in some patches of this community based on historic disturbances and livestock grazing impacts.

Ponderosa pine / common snowberry PIPO/SYAL G4

This plant association is described by Kagan (2004). It is a common low elevation forest type in Eastern Washington. Along the CPT, it occurs in small patches along the northern portion of the trail north of Amber Lake. It is differentiated from the ponderosa pine / bluebunch wheatgrass community by the increased presence and cover of deciduous shrubs and herbs. Vascular plant diversity in this community along the CPT is high when it is in good ecological condition. Exotic plant cover by non-native grasses can be extensive in some patches of this community based on historic disturbances and livestock grazing impacts.

floating pondweed PONA4 G5

The open water areas of the pothole lakes and ponds in the northern portion of the CPT around Turnbull National Wildlife Refuge are dominated by floating pondweed. This wetland community is described by Kagan (2004).

quaking aspen / common snowberry POTR5/SYAL G3

This community is described by Crawford (2003). It is a wet forest/shrubland community type that is dominated by quaking aspen in the upper canopy. It is common in small patches along the CPT in the northern portion of the trail north of Downs Lake. Shrub and native vascular plant diversity is very high in some patches of this community, especially on the Turnbull National Wildlife Refuge. Infestations by reed canarygrass into some patches of this community are occurring, a phenomenon that threatens the ecological condition of these highly productive habitats. Livestock grazing can be a significant threat to this community type as well due to the occurrence of abundant forage and grasses.

bluebunch wheatgrass - Sandberg bluegrass PSSP6-POSE G4

This plant association is described by Daubenmire (1970). This grassland community type occurs interspersed with dry shrub-steppe communities along the central portion of the trail. Exotic grass and herb cover is typically high within this community along the CPT.

Woods' rose ROWO ~G2

The Woods' rose community is described by Crawford (2003). It is typified by small dense patches of Woods' rose sometimes mixed with other shrubs and/or grasses, but sometimes as a monoculture patch of just rose. It is common in small wet depressions along the northern part of the CPT north of Twelve Mile Lake.

broadleaf cattail - hardstem bulrush TYLA-SCACA G5

This community is described by Crawford (2003). It is actually two wetland community types combined together due to their common intermixed occurrence in the pothole lakes and ponds along the northern section of the CPT.

common snowberry / bluebunch wheatgrass mosaic SYAL/PSSP6 mosaic ~G3
This plant community mosaic describes a unique vegetation condition occurring along the CPT in the forest to shrub-steppe transition zone near Amber Lake. In this area small patches of common snowberry intermix within a matrix of bluebunch wheatgrass grassland. Exotic grass and forb cover is high in the grassland portion of this mosaic.

Rare Plant Surveys

Methods

We visited different sections of the CPT multiple times during the 2008 field season to conduct rare plant surveys. We used the Washington Department of Natural Resources Natural Heritage Program's (WANHP) rare plant list to determine the conservation status of vascular plants encountered in the field.

Field surveys were conducted from April to October. See Table 1 on page 7 of this report for more information about survey dates by specific field personnel. During the field surveys, we were equipped with reference literature, rare plant lists for the area, maps showing rare plant locations from previous surveys, and a portable plant identification lab. We looked for rare plants in habitats previously identified as being likely occurrence sites. So as not to miss a rare plant, all vascular plant species encountered during the inventory were identified, either on site, at base camp in the portable laboratory, or back at our office.

Survey routes were determined based on the desire to cover efficiently a large proportion of the park's area throughout the field season. We surveyed areas of the park more intensively where rare plants are more likely to occur. Survey routes for the rare plant inventory and rare plant locations were recorded either by hand, on a hardcopy topographic map, or as GPS waypoints and trackpoints, all of which were later compiled into a single GIS data layer that is provided as a work product along with the vegetation community data and this report.

Results

No rare plant species were known to occur within WSPRC ownership along the CPT according to previous inventories (Rush and Gamon 1997). Our surveys in 2008 did not locate any new rare plant populations within WSPRC ownership.

Table 20 provides a list of rare plant species tracked by the WA DNR Natural Heritage Program that are known to occur within two miles of the CPT. This list is composed of both historic observations and current observations.

Table 20. Rare plants with sightings documented in the WA DNR NHP GIS database, which occur within 2 miles of the WSPRC CPT properties.

Scientific Name	Common Name	State Status	State Rank	Global Rank
Ammannia robusta	Grand Redstem	T	S1	G5
Antennaria parvifolia	Nuttall's Pussy-toes	S	S2	G5
Astragalus misellus var. pauper	Pauper Milk-vetch	S	S3	G4T3
Cryptantha leucophaea	Gray Cryptantha	S	S2S3	G2G3
Cypripedium parviflorum	Yellow Lady's-slipper	T	S2	G5

Scientific Name	Common Name	State Status	State Rank	Global Rank
Erigeron piperianus	Piper's Daisy	S	S3	G3
Gilia leptomeria	Great Basin Gilia	T	S1	G5
Hierochloe odorata	Common Northern Sweet Grass	R1	SNR	G5
Howellia aquatilis	Howellia	T	S2S3	G3
Impatiens aurella	Orange Balsam	R2	S3?	G4?
Mimulus washingtonensis	Washington Monkey-flower	X	SX	G4
Nicotiana attenuata	Coyote Tobacco	S	S2	G4
Oenothera caespitosa ssp. caespitosa	Cespitose Evening-primrose	S	S2	G5T5
Rotala ramosior	Lowland Toothcup	T	S1	G5
Scirpus saximontanus	Rocky Mountain Bulrush	T	S1	G5
Sclerolinon digynum	Northwestern Yellowflax	T	S1S2	G5
Silene spaldingii	Spalding's Silene	T	S2	G2
Spartina pectinata	Prairie Cordgrass	S	S2	G5
Viola renifolia	Kidney-leaved Violet	S	S2	G5

Because of the nature of the long length and landscape breadth of the CPT combined with the pattern of narrow corridor land ownership and the impacts of historic railway development, it is very difficult to predict areas where rare plant occurrences have the highest potential. In the case of the CPT, it is the authors' professional opinions that rare plant populations likely occur somewhere along the trail system, but attempting to map or spatially document potential sites would require a focused inventory and analysis of a magnitude beyond the scale of this project. It is logical to assume that the parts of the CPT within the Turnbull National Wildlife Refuge, where known rare plant populations occur with a very high density, possess the greatest potential for rare plant occurrence. This reasoning carries some weight but is flawed by the assumption that the DNR NHP rare plant database is based on comprehensive inventory methods. Turnbull has a much higher likelihood of being surveyed for rare plants given its ownership and land management policies, hence a greater number of rare plant populations have been found there. Although human disturbance pressures are greater on the habitats outside of Turnbull, there are quite a few small patches of potential rare plant habitat along the entire CPT corridor. For management considerations regarding rare plant populations along the CPT, WSPRC should conduct higher intensity yet locally focused inventories for rare plants and not rely on the results of this survey as documentation that rare plants do not occur. The rare plant surveys conducted for this project were not focused on high survey coverage of one particular area, and because of the trail's remoteness and length many areas were only surveyed once which does not account well for the diverse phenology of potential rare plants.

Vascular Plant List for the 2008 Project Area

365 vascular plant species were identified to at least genus within the project area in 2008. Of these species, 99 species are known to be exotic plants, meaning 27% of the plant species diversity within WSPRC ownership is non-native. Table 21 provides the list of all 365 species encountered within the CPT.

Key to Vascular Plant Species Lists

Column 1: "Symbol": Four-letter plant code as shown on the USDA PLANTS database.
Column 2: Scientific name as shown on the USDA PLANTS database.
Column 3: Common name as shown on the USDA PLANTS database.

Column 5: Status as exotic to Washington State according to USDA PLANTS database.

Table 21. List of plants identified within the CPT during 2008 field surveys.

4 Letter Code	Scientific Name with Author	Common Name	Family	Alien
ACNE2	*Acer negundo L.*	Boxelder	Aceraceae	
ACMI2	*Achillea millefolium L.*	common yarrow	Asteraceae	yes
ACHY	*Achnatherum hymenoides (Roem. & Schult.) Barkworth*	Indian ricegrass	Poaceae	
ACOCC	*Achnatherum occidentale (Thurb.) Barkworth ssp. californicum (Merr. & Burtt Davy) Barkworth*	California needlegrass	Poaceae	
ACRE3	*Acroptilon repens (L.) DC.*	hardheads	Asteraceae	yes
AGGR	*Agoseris grandiflora (Nutt.) Greene*	bigflower agoseris	Asteraceae	
AGCR	*Agropyron cristatum (L.) Gaertn.*	crested wheatgrass	Poaceae	yes
AGGI2	*Agrostis gigantea Roth*	redtop	Poaceae	yes
ALPL	*Alisma plantago-aquatica L.*	European water plantain	Alismataceae	yes
ALDO	*Allium douglasii Hook.*	Douglas' onion	Liliaceae	
ALLIU	*Allium L.*	onion	Liliaceae	
ALAE	*Alopecurus aequalis Sobol.*	shortawn foxtail	Poaceae	
ALOPE	*Alopecurus L.*	foxtail	Poaceae	
AMAL	*Amaranthus albus L.*	prostrate pigweed	Amaranthaceae	yes
AMAC2	*Ambrosia acanthicarpa Hook.*	flatspine bur ragweed	Asteraceae	
AMAL2	*Amelanchier alnifolia (Nutt.) Nutt. ex M. Roem.*	Saskatoon serviceberry	Rosaceae	
AMFR	*Amorpha fruticosa L.*	desert false indigo	Fabaceae	
AMSIN	*Amsinckia Lehm.*	fiddleneck	Boraginaceae	
AMME	*Amsinckia menziesii (Lehm.) A. Nelson & J.F. Macbr.*	Menzies' fiddleneck	Boraginaceae	
AMTE3	*Amsinckia tessellata A. Gray*	bristly fiddleneck	Boraginaceae	
ANMA	*Anaphalis margaritacea (L.) Benth.*	western pearly everlasting	Asteraceae	
ANOF	*Anchusa officinalis L.*	common bugloss	Boraginaceae	yes
ANAN2	*Antennaria anaphaloides Rydb.*	pearly pussytoes	Asteraceae	
ANMI3	*Antennaria microphylla Rydb.*	littleleaf pussytoes	Asteraceae	
ANMI3	*Antennaria microphylla Rydb.*	littleleaf pussytoes	Asteraceae	
ANCA14	*Anthriscus caucalis M. Bieb.*	bur chervil	Apiaceae	yes
APAN2	*Apocynum androsaemifolium L.*	spreading dogbane	Apocynaceae	
ARHO2	*Arabis holboellii Hornem.*	Holboell's rockcress	Brassicaceae	

4 Letter Code	Scientific Name with Author	Common Name	Family	Alien
ARUV	*Arctostaphylos uva-ursi (L.) Spreng.*	kinnikinnick	Ericaceae	
ARPUL	*Aristida purpurea Nutt. var. longiseta (Steud.) Vasey*	Fendler threeawn	Poaceae	
ARCO9	*Arnica cordifolia Hook.*	heartleaf arnica	Asteraceae	
ARCA12	*Artemisia campestris L.*	field sagewort	Asteraceae	
ARDO3	*Artemisia douglasiana Besser*	Douglas' sagewort	Asteraceae	
ARDR4	*Artemisia dracunculus L.*	tarragon	Asteraceae	
ARLU	*Artemisia ludoviciana Nutt.*	white sagebrush	Asteraceae	
ARRI2	*Artemisia rigida (Nutt.) A. Gray*	scabland sagebrush	Asteraceae	
ARTR2	*Artemisia tridentata Nutt.*	big sagebrush	Asteraceae	
ASSP	*Asclepias speciosa Torr.*	showy milkweed	Asclepiadaceae	
ASOF	*Asparagus officinalis L.*	garden asparagus	Liliaceae	yes
ASCA11	*Astragalus canadensis L.*	Canadian milkvetch	Fabaceae	
ASIN5	*Astragalus inflexus Douglas ex Hook.*	bent milkvetch	Fabaceae	
ASPU9	*Astragalus purshii Douglas ex Hook.*	woollypod milkvetch	Fabaceae	
ASSC6	*Astragalus sclerocarpus A. Gray*	woodypod milkvetch	Fabaceae	
ASSU7	*Astragalus succumbens Douglas ex Hook.*	Columbia milkvetch	Fabaceae	
BACA3	*Balsamorhiza careyana A. Gray*	Carey's balsamroot	Asteraceae	
BASA3	*Balsamorhiza sagittata (Pursh) Nutt.*	arrowleaf balsamroot	Asteraceae	
BASC5	*Bassia scoparia (L.) A.J. Scott*	burningbush	Chenopodiaceae	yes
BEVU	*Berberis vulgaris L.*	common barberry	Berberidaceae	yes
BEER	*Berula erecta (Huds.) Coville*	cutleaf waterparsnip	Apiaceae	
BERU	*Besseya rubra (Douglas ex Hook.) Rydb.*	red besseya	Scrophulariaceae	
BEOC2	*Betula occidentalis Hook.*	water birch	Betulaceae	
BIFR	*Bidens frondosa L.*	devil's beggartick	Asteraceae	
BRAR5	*Bromus arvensis L.*	field brome	Poaceae	yes
BRDIR	*Bromus diandrus Roth ssp. rigidus (Roth) Lainz*	ripgut brome	Poaceae	yes
BRHOH	*Bromus hordeaceus L. ssp. hordeaceus*	soft brome	Poaceae	yes
BRIN2	*Bromus inermis Leyss.*	smooth brome	Poaceae	yes
BRTE	*Bromus tectorum L.*	cheatgrass	Poaceae	yes
BUAR3	*Buglossoides arvensis (L.) I.M. Johnst.*	corn gromwell	Boraginaceae	yes
CARU	*Calamagrostis rubescens Buckley*	pinegrass	Poaceae	

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CAQU2	*Camassia quamash (Pursh) Greene*	small camas	Liliaceae	
CABOB	*Camissonia boothii (Douglas ex Lehm.) P.H. Raven ssp. boothii*	Booth's suncup	Onagraceae	
CARO2	*Campanula rotundifolia L.*	bluebell bellflower	Campanulaceae	
CAAT2	*Carex atherodes Spreng.*	wheat sedge	Cyperaceae	
CADO2	*Carex douglasii Boott*	Douglas' sedge	Cyperaceae	
CAGE2	*Carex geyeri Boott*	Geyer's sedge	Cyperaceae	
CAREX	*Carex L.*	sedge	Cyperaceae	
CAPR5	*Carex praegracilis W. Boott*	clustered field sedge	Cyperaceae	
CEVE	*Ceanothus velutinus Douglas ex Hook.*	snowbrush ceanothus	Rhamnaceae	
CECY2	*Centaurea cyanus L.*	garden cornflower	Asteraceae	yes
CEDI3	*Centaurea diffusa Lam.*	diffuse knapweed	Asteraceae	yes
CESO3	*Centaurea solstitialis L.*	yellow star-thistle	Asteraceae	yes
CESTM	*Centaurea stoebe L. ssp. micranthos (Gugler) Hayek*	spotted knapweed	Asteraceae	yes
CETE5	*Ceratocephala testiculata (Crantz) Roth*	curveseed butterwort	Ranunculaceae	yes
CHDO	*Chaenactis douglasii (Hook.) Hook. & Arn.*	Douglas' dustymaiden	Asteraceae	
CHGL13	*Chamaesyce glyptosperma (Engelm.) Small*	ribseed sandmat	Euphorbiaceae	
CHMU2	*Chenopodium murale L.*	nettleleaf goosefoot	Chenopodiaceae	yes
CHJU	*Chondrilla juncea L.*	rush skeletonweed	Asteraceae	yes
CHTE2	*Chorispora tenella (Pall.) DC.*	crossflower	Brassicaceae	yes
CHVI8	*Chrysothamnus viscidiflorus (Hook.) Nutt.*	yellow rabbitbrush	Asteraceae	
CIIN	*Cichorium intybus L.*	chicory	Asteraceae	yes
CIAR4	*Cirsium arvense (L.) Scop.*	Canada thistle	Asteraceae	yes
CIBR	*Cirsium brevifolium Nutt.*	Palouse thistle	Asteraceae	
CIUN	*Cirsium undulatum (Nutt.) Spreng.*	wavyleaf thistle	Asteraceae	
CIVU	*Cirsium vulgare (Savi) Ten.*	bull thistle	Asteraceae	yes
CLPU	*Clarkia pulchella Pursh*	pinkfairies	Onagraceae	
CLPA5	*Claytonia parviflora Douglas ex Hook.*	streambank springbeauty	Portulacaceae	
CLPE	*Claytonia perfoliata Donn ex Willd.*	miner's lettuce	Portulacaceae	
CLRUR	*Claytonia rubra (Howell) Tidestr. ssp. rubra*	redstem springbeauty	Portulacaceae	
CLLI2	*Clematis ligusticifolia Nutt.*	western white clematis	Ranunculaceae	
COPA3	*Collinsia parviflora Lindl.*	maiden blue eyed Mary	Scrophulariaceae	
COGR4	*Collomia grandiflora Douglas ex Lindl.*	grand collomia	Polemoniaceae	
COLI2	*Collomia linearis Nutt.*	tiny trumpet	Polemoniaceae	

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COAR4	*Convolvulus arvensis L.*	field bindweed	Convolvulaceae	yes
COCA5	*Conyza canadensis (L.) Cronquist*	Canadian horseweed	Asteraceae	
COSE16	*Cornus sericea L.*	redosier dogwood	Cornaceae	
CRDO2	*Crataegus douglasii Lindl.*	black hawthorn	Rosaceae	
CRAT	*Crepis atribarba A. Heller*	slender hawksbeard	Asteraceae	
CRAM3	*Cryptantha ambigua (A. Gray) Greene*	basin cryptantha	Boraginaceae	
CRPT	*Cryptantha pterocarya (Torr.) Greene*	wingnut cryptantha	Boraginaceae	
CRTO4	*Cryptantha torreyana (A. Gray) Greene*	Torrey's cryptantha	Boraginaceae	
CYOF	*Cynoglossum officinale L.*	gypsyflower	Boraginaceae	yes
CYFR2	*Cystopteris fragilis (L.) Bernh.*	brittle bladderfern	Dryopteridaceae	
DAGL	*Dactylis glomerata L.*	orchardgrass	Poaceae	yes
DAUN	*Danthonia unispicata (Thurb.) Munro ex Macoun*	onespike danthonia	Poaceae	
DELPH	*Delphinium L.*	larkspur	Ranunculaceae	
DELI3	*Delphinium lineapetalum Ewan*	thinpetal larkspur	Ranunculaceae	
DENU2	*Delphinium nuttallianum Pritz. ex Walp.*	twolobe larkspur	Ranunculaceae	
DEINI2	*Descurainia incana (Bernh. ex Fisch. & C.A. Mey.) Dorn ssp. incisa (Engelm. ex A. Gray) Kartesz & Gandhi*	mountain tansymustard	Brassicaceae	
DEPI	*Descurainia pinnata (Walter) Britton*	western tansymustard	Brassicaceae	
DESO2	*Descurainia sophia (L.) Webb ex Prantl*	herb sophia	Brassicaceae	yes
DIFU2	*Dipsacus fullonum L.*	Fuller's teasel	Dipsacaceae	yes
DIFU2	*Dipsacus fullonum L.*	Fuller's teasel	Dipsacaceae	yes
DISP	*Distichlis spicata (L.) Greene*	saltgrass	Poaceae	
DOCO	*Dodecatheon conjugens Greene*	Bonneville shootingstar	Primulaceae	
DOPUC	*Dodecatheon pulchellum (Raf.) Merr. ssp. cusickii (Greene) Calder & Roy L. Taylor*	Cusick's shootingstar	Primulaceae	
DRVE2	*Draba verna L.*	spring draba	Brassicaceae	yes
ELAN	*Elaeagnus angustifolia L.*	Russian olive	Elaeagnaceae	yes
ELPA3	*Eleocharis palustris (L.) Roem. & Schult.*	common spikerush	Cyperaceae	
ELEOC	*Eleocharis R. Br.*	spikerush	Cyperaceae	
ELELE	*Elymus elymoides (Raf.) Swezey ssp. elymoides*	squirreltail	Poaceae	
ELGL	*Elymus glaucus Buckley*	blue wildrye	Poaceae	

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ELMU3	*Elymus multisetus M.E. Jones*	big squirreltail	Poaceae	
ELRE4	*Elymus repens (L.) Gould*	quackgrass	Poaceae	yes
EPBR3	*Epilobium brachycarpum C. Presl*	tall annual willowherb	Onagraceae	
EPILO	*Epilobium L.*	willowherb	Onagraceae	
EPMI	*Epilobium minutum Lindl. ex Lehm.*	chaparral willowherb	Onagraceae	
EQAR	*Equisetum arvense L.*	field horsetail	Equisetaceae	
EQHY	*Equisetum hyemale L.*	scouringrush horsetail	Equisetaceae	
EQLA	*Equisetum laevigatum A. Braun*	smooth horsetail	Equisetaceae	
ERNA10	*Ericameria nauseosa (Pall. ex Pursh) G.L. Nesom & Baird*	rubber rabbitbrush	Asteraceae	
ERIGE2	*Erigeron L.*	fleabane	Asteraceae	
ERDO	*Eriogonum douglasii Benth.*	Douglas' buckwheat	Polygonaceae	
ERHE2	*Eriogonum heracleoides Nutt.*	parsnipflower buckwheat	Polygonaceae	
ERNI2	*Eriogonum niveum Douglas ex Benth.*	snow buckwheat	Polygonaceae	
ERUM	*Eriogonum umbellatum Torr.*	sulphur-flower buckwheat	Polygonaceae	
ERCI6	*Erodium cicutarium (L.) L'Hér. ex Aiton*	redstem stork's bill	Geraniaceae	yes
ERCAC	*Erysimum capitatum (Douglas ex Hook.) Greene var. capitatum*	sanddune wallflower	Brassicaceae	
EUES	*Euphorbia esula L.*	leafy spurge	Euphorbiaceae	yes
EURA11	*Eurybia radulina (A. Gray) G.L. Nesom*	roughleaf aster	Asteraceae	
EUOC4	*Euthamia occidentalis Nutt.*	western goldentop	Asteraceae	
FEID	*Festuca idahoensis Elmer*	Idaho fescue	Poaceae	
FEOV	*Festuca ovina L.*	sheep fescue	Poaceae	yes
FRVE	*Fragaria vesca L.*	woodland strawberry	Rosaceae	
FRPU2	*Fritillaria pudica (Pursh) Spreng.*	yellow fritillary	Liliaceae	
GAAR	*Gaillardia aristata Pursh*	common gaillardia	Asteraceae	
GATE2	*Galeopsis tetrahit L.*	brittlestem hempnettle	Lamiaceae	yes
GAAP2	*Galium aparine L.*	stickywilly	Rubiaceae	
GABI	*Galium bifolium S. Watson*	twinleaf bedstraw	Rubiaceae	
GABO2	*Galium boreale L.*	northern bedstraw	Rubiaceae	
GALIU	*Galium L.*	bedstraw	Rubiaceae	
GEVI2	*Geranium viscosissimum Fisch. & C.A. Mey. ex C.A. Mey.*	sticky purple geranium	Geraniaceae	
GETR	*Geum triflorum Pursh*	old man's whiskers	Rosaceae	
GLOC	*Glyceria ×occidentalis (Piper) J.C. Nelson*	northwestern mannagrass	Poaceae	

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GLLE3	*Glycyrrhiza lepidota Pursh*	American licorice	Fabaceae	
GNPA	*Gnaphalium palustre Nutt.*	western marsh cudweed	Asteraceae	
GRSP	*Grayia spinosa (Hook.) Moq.*	spiny hopsage	Chenopodiaceae	
GRNA	*Grindelia nana Nutt.*	Idaho gumweed	Asteraceae	
HEAN3	*Helianthus annuus L.*	common sunflower	Asteraceae	
HEAN3	*Helianthus annuus L.*	common sunflower	Asteraceae	
HELIA3	*Helianthus L.*	sunflower	Asteraceae	
HEPE	*Helianthus petiolaris Nutt.*	prairie sunflower	Asteraceae	
HEMA80	*Heracleum maximum Bartram*	common cowparsnip	Apiaceae	
HECO26	*Hesperostipa comata (Trin. & Rupr.) Barkworth*	needle and thread	Poaceae	
HECY2	*Heuchera cylindrica Douglas ex Hook.*	roundleaf alumroot	Saxifragaceae	
HIAL2	*Hieracium albiflorum Hook.*	white hawkweed	Asteraceae	
HISCA	*Hieracium scouleri Hook. var. albertinum (Farr) G.W. Douglas & G.A. Allen*		Asteraceae	
HIVU2	*Hippuris vulgaris L.*	common mare's-tail	Hippuridaceae	
HOUM	*Holosteum umbellatum L.*	jagged chickweed	Caryophyllaceae	yes
HOJU	*Hordeum jubatum L.*	foxtail barley	Poaceae	
HOMU	*Hordeum murinum L.*	mouse barley	Poaceae	yes
HYCA4	*Hydrophyllum capitatum Douglas ex Benth.*	ballhead waterleaf	Hydrophyllaceae	
HYPE	*Hypericum perforatum L.*	common St. Johnswort	Clusiaceae	yes
IRMI	*Iris missouriensis Nutt.*	Rocky Mountain iris	Iridaceae	
IRPS	*Iris pseudacorus L.*	paleyellow iris	Iridaceae	yes
JUAR2	*Juncus arcticus Willd.*	arctic rush	Juncaceae	
JUARL	*Juncus arcticus Willd. ssp. littoralis (Engelm.) Hultén*	mountain rush	Juncaceae	
JUEN	*Juncus ensifolius Wikstr.*	swordleaf rush	Juncaceae	
JUNIP	*Juniperus L.*	juniper	Cupressaceae	
JUOC	*Juniperus occidentalis Hook.*	western juniper	Cupressaceae	
KOMA	*Koeleria macrantha (Ledeb.) Schult.*	prairie Junegrass	Poaceae	
LABI	*Lactuca biennis (Moench) Fernald*	tall blue lettuce	Asteraceae	
LASE	*Lactuca serriola L.*	prickly lettuce	Asteraceae	yes
LATA	*Lactuca tatarica (L.) C.A. Mey.*	blue lettuce	Asteraceae	
LEMI3	*Lemna minor L.*	common duckweed	Lemnaceae	
LEPID	*Lepidium L.*	pepperweed	Brassicaceae	
LEPE2	*Lepidium perfoliatum L.*	clasping pepperweed	Brassicaceae	yes
LERER	*Lewisia rediviva Pursh var. rediviva*	bitter root	Portulacaceae	

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LECI4	*Leymus cinereus (Scribn. & Merr.) A. Löve*	basin wildrye	Poaceae	
LIDAD	*Linaria dalmatica (L.) Mill. ssp. dalmatica*	Dalmatian toadflax	Scrophulariaceae	yes
LILE3	*Linum lewisii Pursh*	Lewis flax	Linaceae	
LIGL2	*Lithophragma glabrum Nutt.*	bulbous woodland-star	Saxifragaceae	
LIPA5	*Lithophragma parviflorum (Hook.) Nutt. ex Torr. & A. Gray*	smallflower woodland-star	Saxifragaceae	
LIRU4	*Lithospermum ruderale Douglas ex Lehm.*	western stoneseed	Boraginaceae	
LOAR5	*Logfia arvensis (L.) Holub*	field cottonrose	Asteraceae	yes
LODI	*Lomatium dissectum (Nutt.) Mathias & Constance*	fernleaf biscuitroot	Apiaceae	
LOMA3	*Lomatium macrocarpum (Nutt. ex Torr. & A. Gray) J.M. Coult. & Rose*	bigseed biscuitroot	Apiaceae	
LOTR2	*Lomatium triternatum (Pursh) J.M. Coult. & Rose*	nineleaf biscuitroot	Apiaceae	
LOUNU	*Lotus unifoliolatus (Hook.) Benth. var. unifoliolatus*	American bird's-foot trefoil	Fabaceae	
LUAR3	*Lupinus argenteus Pursh*	silvery lupine	Fabaceae	
LUAR7	*Lupinus aridus Douglas*	desert lupine	Fabaceae	
LULE3	*Lupinus leucophyllus Douglas ex Lindl.*	velvet lupine	Fabaceae	
LUPO2	*Lupinus polyphyllus Lindl.*	bigleaf lupine	Fabaceae	
LUSE4	*Lupinus sericeus Pursh*	silky lupine	Fabaceae	
LUSU5	*Lupinus sulphureus Douglas ex Hook.*	sulphur lupine	Fabaceae	
LYBA4	*Lycium barbarum L.*	matrimony vine	Solanaceae	yes
LYAS	*Lycopus asper Greene*	rough bugleweed	Lamiaceae	
LYSIM	*Lysimachia L.*	yellow loosestrife	Primulaceae	
LYSA2	*Lythrum salicaria L.*	purple loosestrife	Lythraceae	yes
MACA2	*Machaeranthera canescens (Pursh) A. Gray*	hoary tansyaster	Asteraceae	
MAGL2	*Madia glomerata Hook.*	mountain tarweed	Asteraceae	
MADIA	*Madia Molina*	tarweed	Asteraceae	
MAAQ2	*Mahonia aquifolium (Pursh) Nutt.*	hollyleaved barberry	Berberidaceae	
MAST4	*Maianthemum stellatum (L.) Link*	starry false lily of the valley	Liliaceae	
MALUS	*Malus Mill.*	apple	Rosaceae	
MELU	*Medicago lupulina L.*	black medick	Fabaceae	yes
MESA	*Medicago sativa L.*	alfalfa	Fabaceae	yes
MEIN2	*Melilotus indicus (L.) All.*	annual yellow sweetclover	Fabaceae	yes
MEOF	*Melilotus officinalis (L.) Lam.*	yellow sweetclover	Fabaceae	yes

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MEAR4	*Mentha arvensis L.*	wild mint	Lamiaceae	
MEDI	*Mentzelia dispersa S. Watson*	bushy blazingstar	Loasaceae	
MELA2	*Mentzelia laevicaulis (Hook.) Torr. & A. Gray*	smoothstem blazingstar	Loasaceae	
MIPE8	*Microthlaspi perfoliatum (L.) F.K. Mey.*	claspleaf pennycress	Brassicaceae	yes
MIGU	*Mimulus guttatus DC.*	seep monkeyflower	Scrophulariaceae	
MYOSO	*Myosotis L.*	forget-me-not	Boraginaceae	
MYST2	*Myosotis stricta Link ex Roem. & Schult.*	strict forget-me-not	Boraginaceae	yes
NAOF	*Nasturtium officinale W.T. Aiton*	watercress	Brassicaceae	yes
NABR	*Navarretia breweri (A. Gray) Greene*	Brewer's navarretia	Polemoniaceae	
NEBR	*Nemophila breviflora A. Gray*	basin nemophila	Hydrophyllaceae	
NECA2	*Nepeta cataria L.*	catnip	Lamiaceae	yes
NULU	*Nuphar lutea (L.) Sm.*	yellow pond-lily	Nymphaeaceae	
OEPA	*Oenothera pallida Lindl.*	pale evening primrose	Onagraceae	
OLDOI	*Olsynium douglasii (A. Dietr.) E.P. Bicknell var. inflatum (Suksd.) Cholewa & Douglass M. Hend.*	inflated grasswidow	Iridaceae	
ONAC	*Onopordum acanthium L.*	Scotch cottonthistle	Asteraceae	yes
OPPO	*Opuntia polyacantha Haw.*	plains pricklypear	Cactaceae	
PACA6	*Panicum capillare L.*	witchgrass	Poaceae	
PAVI5	*Parthenocissus vitacea (Knerr) Hitchc.*	woodbine	Vitaceae	yes
PASM	*Pascopyrum smithii (Rydb.) A. Löve*	western wheatgrass	Poaceae	
PECO6	*Penstemon confertus Douglas ex Lindl.*	yellow penstemon	Scrophulariaceae	
PEDE4	*Penstemon deustus Douglas ex Lindl.*	scabland penstemon	Scrophulariaceae	
PETR6	*Penstemon triphyllus Douglas ex Lindl.*	Riggin's penstemon	Scrophulariaceae	
PEGA3	*Perideridia gairdneri (Hook. & Arn.) Mathias*	Gardner's yampah	Apiaceae	
PHHA	*Phacelia hastata Douglas ex Lehm.*	silverleaf phacelia	Hydrophyllaceae	
PHHE2	*Phacelia heterophylla Pursh*	varileaf phacelia	Hydrophyllaceae	
PHLI	*Phacelia linearis (Pursh) Holz.*	threadleaf phacelia	Hydrophyllaceae	
PHAR3	*Phalaris arundinacea L.*	reed canarygrass	Poaceae	yes
PHLE4	*Philadelphus lewisii Pursh*	Lewis' mock orange	Hydrangeaceae	
PHPR3	*Phleum pratense L.*	timothy	Poaceae	yes
PHCA7	*Phlox caespitosa Nutt.*	tufted phlox	Polemoniaceae	

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PHLO2	*Phlox longifolia Nutt.*	longleaf phlox	Polemoniaceae	
PHAU7	*Phragmites australis (Cav.) Trin. ex Steud.*	common reed	Poaceae	
PHGE	*Physaria geyeri (Hook.) A. Gray*	Geyer's twinpod	Brassicaceae	
PHCA11	*Physocarpus capitatus (Pursh) Kuntze*	Pacific ninebark	Rosaceae	
PHMA5	*Physocarpus malvaceus (Greene) Kuntze*	mallow ninebark	Rosaceae	
PIPO	*Pinus ponderosa C. Lawson*	ponderosa pine	Pinaceae	
PLTE	*Plagiobothrys tenellus (Nutt. ex Hook.) A. Gray*	Pacific popcornflower	Boraginaceae	
PLLA	*Plantago lanceolata L.*	narrowleaf plantain	Plantaginaceae	yes
PLMA2	*Plantago major L.*	common plantain	Plantaginaceae	yes
PLPA2	*Plantago patagonica Jacq.*	woolly plantain	Plantaginaceae	
PLECT	*Plectritis (Lindl.) DC.*	seablush	Valerianaceae	
PLMA4	*Plectritis macrocera Torr. & A. Gray*	longhorn plectritis	Valerianaceae	
POBU	*Poa bulbosa L.*	bulbous bluegrass	Poaceae	yes
POCO	*Poa compressa L.*	Canada bluegrass	Poaceae	yes
POA	*Poa L.*	bluegrass	Poaceae	
POPA2	*Poa palustris L.*	fowl bluegrass	Poaceae	
POPR	*Poa pratensis L.*	Kentucky bluegrass	Poaceae	yes
POSE	*Poa secunda J. Presl*	Sandberg bluegrass	Poaceae	
POAME	*Polygonum amphibium L. var. emersum Michx.*	longroot smartweed	Polygonaceae	
POAV	*Polygonum aviculare L.*	prostrate knotweed	Polygonaceae	yes
POBI6	*Polygonum bistortoides Pursh*	American bistort	Polygonaceae	
PODOD4	*Polygonum douglasii Greene ssp. douglasii*	Douglas' knotweed	Polygonaceae	
POLYG4	*Polygonum L.*	knotweed	Polygonaceae	
POMI2	*Polygonum minimum S. Watson*	broadleaf knotweed	Polygonaceae	
POIM	*Polystichum imbricans (D.C. Eaton) D.H. Wagner*	narrowleaf swordfern	Dryopteridaceae	
PONI	*Populus nigra L.*	Lombardy poplar	Salicaceae	yes
POTR5	*Populus tremuloides Michx.*	quaking aspen	Salicaceae	
POGR8	*Potamogeton gramineus L.*	variableleaf pondweed	Potamogetonaceae	
POTAM	*Potamogeton L.*	pondweed	Potamogetonaceae	
PONA4	*Potamogeton natans L.*	floating pondweed	Potamogetonaceae	
POZO	*Potamogeton zosteriformis Fernald*	flatstem pondweed	Potamogetonaceae	
POAR8	*Potentilla argentea L.*	silver cinquefoil	Rosaceae	yes
POGL9	*Potentilla glandulosa Lindl.*	sticky cinquefoil	Rosaceae	

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POGRF	*Potentilla gracilis Douglas ex Hook. var. flabelliformis (Lehm.) Nutt. ex Torr. & A. Gray*	slender cinquefoil	Rosaceae	
PRAR3	*Prunus armeniaca L.*	apricot	Rosaceae	yes
PRAV	*Prunus avium (L.) L.*	sweet cherry	Rosaceae	yes
PREM	*Prunus emarginata (Douglas ex Hook.) D. Dietr.*	bitter cherry	Rosaceae	
PRVI	*Prunus virginiana L.*	chokecherry	Rosaceae	
PSSP6	*Pseudoroegneria spicata (Pursh) A. Löve*	bluebunch wheatgrass	Poaceae	
PTTET	*Pteryxia terebinthina (Hook.) J.M. Coult. & Rose var. terebinthina*	turpentine wavewing	Apiaceae	
RAAQ	*Ranunculus aquatilis L.*	white water crowfoot	Ranunculaceae	
RAFL	*Ranunculus flabellaris Raf.*	yellow water buttercup	Ranunculaceae	
RANUN	*Ranunculus L.*	buttercup	Ranunculaceae	
RAPE2	*Ranunculus pensylvanicus L. f.*	Pennsylvania buttercup	Ranunculaceae	
RIAU	*Ribes aureum Pursh*	golden currant	Grossulariaceae	
RIAU	*Ribes aureum Pursh*	golden currant	Grossulariaceae	
RICE	*Ribes cereum Douglas*	wax currant	Grossulariaceae	
ROPS	*Robinia pseudoacacia L.*	black locust	Fabaceae	yes
ROWO	*Rosa woodsii Lindl.*	Woods' rose	Rosaceae	
RUAR9	*Rubus armeniacus Focke*	Himalayan blackberry	Rosaceae	yes
RULA	*Rubus laciniatus Willd.*	cutleaf blackberry	Rosaceae	yes
RULA	*Rubus laciniatus Willd.*	cutleaf blackberry	Rosaceae	yes
RULE	*Rubus leucodermis Douglas ex Torr. & A. Gray*	whitebark raspberry	Rosaceae	
RUAC3	*Rumex acetosella L.*	common sheep sorrel	Polygonaceae	yes
RUCR	*Rumex crispus L.*	curly dock	Polygonaceae	yes
RUMEX	*Rumex L.*	dock	Polygonaceae	
RUSA	*Rumex salicifolius Weinm.*	willow dock	Polygonaceae	
RUVE2	*Rumex venosus Pursh*	veiny dock	Polygonaceae	
SACU	*Sagittaria cuneata Sheldon*	arumleaf arrowhead	Alismataceae	
SAEX	*Salix exigua Nutt.*	narrowleaf willow	Salicaceae	
SALIX	*Salix L.*	willow	Salicaceae	
SALUL	*Salix lucida Muhl. ssp. lasiandra (Benth.) E. Murray*	Pacific willow	Salicaceae	
SASC	*Salix scouleriana Barratt ex Hook.*	Scouler's willow	Salicaceae	
SAKA	*Salsola kali L.*	Russian thistle	Chenopodiaceae	yes
SATR12	*Salsola tragus L.*	prickly Russian thistle	Chenopodiaceae	yes
SANIC5	*Sambucus nigra L. ssp. cerulea (Raf.) R. Bolli*	blue elderberry	Caprifoliaceae	
SARA2	*Sambucus racemosa L.*	red elderberry	Caprifoliaceae	

4 Letter Code	Scientific Name with Author	Common Name	Family	Alien
SCACA	*Schoenoplectus acutus (Muhl. ex Bigelow) A. Löve & D. Löve var. acutus*	hardstem bulrush	Cyperaceae	
SCAM6	*Schoenoplectus americanus (Pers.) Volkart ex Schinz & R. Keller*	chairmaker's bulrush	Cyperaceae	
SCIRP	*Scirpus L.*	bulrush	Cyperaceae	
SCAN3	*Scutellaria angustifolia Pursh*	narrowleaf skullcap	Lamiaceae	
SECE	*Secale cereale L.*	cereal rye	Poaceae	yes
SEST2	*Sedum stenopetalum Pursh*	wormleaf stonecrop	Crassulaceae	
SELAG	*Selaginella P. Beauv.*	spikemoss	Selaginellaceae	
SEIN2	*Senecio integerrimus Nutt.*	lambstongue ragwort	Asteraceae	
SEPU8	*Setaria pumila (Poir.) Roem. & Schult.*	yellow foxtail	Poaceae	yes
SEVI4	*Setaria viridis (L.) P. Beauv.*	green bristlegrass	Poaceae	yes
SIME	*Silene menziesii Hook.*	Menzies' campion	Caryophyllaceae	
SIAL2	*Sisymbrium altissimum L.*	tall tumblemustard	Brassicaceae	yes
SILO3	*Sisymbrium loeselii L.*	small tumbleweed mustard	Brassicaceae	yes
SISU2	*Sium suave Walter*	hemlock waterparsnip	Apiaceae	
SODU	*Solanum dulcamara L.*	climbing nightshade	Solanaceae	yes
SOCA6	*Solidago canadensis L.*	Canada goldenrod	Asteraceae	
SOAR2	*Sonchus arvensis L.*	field sowthistle	Asteraceae	yes
SPMU2	*Sphaeralcea munroana (Douglas) Spach*	Munro's globemallow	Malvaceae	
SPCR	*Sporobolus cryptandrus (Torr.) A. Gray*	sand dropseed	Poaceae	
STPA2	*Stephanomeria paniculata Nutt.*	tufted wirelettuce	Asteraceae	
STPE15	*Stuckenia pectinata (L.) Böerner*	sago pondweed	Potamogetonaceae	
SYAL	*Symphoricarpos albus (L.) S.F. Blake*	common snowberry	Caprifoliaceae	
SYCAC	*Symphyotrichum campestre (Nutt.) G.L. Nesom var. campestre*	western meadow aster	Asteraceae	
SYCAC	*Symphyotrichum campestre (Nutt.) G.L. Nesom var. campestre*	western meadow aster	Asteraceae	
SYSPS	*Symphyotrichum spathulatum (Lindl.) G.L. Nesom var. spathulatum*	western mountain aster	Asteraceae	
SYOF	*Symphytum officinale L.*	common comfrey	Boraginaceae	yes
SYVU	*Syringa vulgaris L.*	common lilac	Oleaceae	yes
TAOF	*Taraxacum officinale F.H. Wigg.*	common dandelion	Asteraceae	yes

4 Letter Code	Scientific Name with Author	Common Name	Family	Alien
THLA	*Thelypodium laciniatum (Hook.) Endl. ex Walp.*	cutleaf thelypody	Brassicaceae	
THIN6	*Thinopyrum intermedium (Host) Barkworth & D.R. Dewey*	intermediate wheatgrass	Poaceae	yes
TORY	*Toxicodendron rydbergii (Small ex Rydb.) Greene*	western poison ivy	Anacardiaceae	
TRDU	*Tragopogon dubius Scop.*	yellow salsify	Asteraceae	yes
TRGRG2	*Triteleia grandiflora Lindl. var. grandiflora*	largeflower triteleia	Liliaceae	
TRAE	*Triticum aestivum L.*	common wheat	Poaceae	yes
TYLA	*Typha latifolia L.*	broadleaf cattail	Typhaceae	
URDI	*Urtica dioica L.*	stinging nettle	Urticaceae	
UTMA	*Utricularia macrorhiza Leconte*	common bladderwort	Lentibulariaceae	
VAEDE	*Valeriana edulis Nutt. ex Torr. & A. Gray var. edulis*	tobacco root	Valerianaceae	
VEDU	*Ventenata dubia (Leers) Coss.*	North Africa grass	Poaceae	yes
VEBL	*Verbascum blattaria L.*	moth mullein	Scrophulariaceae	yes
VETH	*Verbascum thapsus L.*	common mullein	Scrophulariaceae	yes
VEBR	*Verbena bracteata Cav. ex Lag. & Rodr.*	bigbract verbena	Verbenaceae	
VEAN2	*Veronica anagallis-aquatica L.*	water speedwell	Scrophulariaceae	
VIVI	*Vicia villosa Roth*	winter vetch	Fabaceae	yes
VIOLA	*Viola L.*	violet	Violaceae	
VUMY	*Vulpia myuros (L.) C.C. Gmel.*	rat-tail fescue	Poaceae	yes
VUOC	*Vulpia octoflora (Walter) Rydb.*	sixweeks fescue	Poaceae	
WOOR	*Woodsia oregana D.C. Eaton*	Oregon cliff fern	Dryopteridaceae	
XAST	*Xanthium strumarium L.*	rough cocklebur	Asteraceae	
ZIVE	*Zigadenus venenosus S. Watson*	meadow deathcamas	Liliaceae	

Discussion and Recommendations

Noxious Weeds

The CPT has many noxious weed issues. Because of the history of development and disturbance along the trail corridor, many exotic plants considered noxious by the Washington State Noxious Weed Board have adequate habitat conditions for establishment and spread. The extent of spread and invasion for each noxious species is dependent upon which area of the trail one is focused on. Table 4 lists the 21 noxious plant species encountered within WSPRC ownership along the CPT during the 2008 surveys. Reed canarygrass was by far the worst invader in the northern portion of the trail where potholes and wet depressions were abundant.

Table 4. List of noxious weeds occurring within the project area that are currently tracked by the Washington State Noxious Weed Board

4 Letter Code	Scientific Name with Author	Common Name	Family	Noxious Status
ACRE3	*Acroptilon repens (L.) DC.*	hardheads	Asteraceae	B
AMFR	*Amorpha fruticosa L.*	desert false indigo	Fabaceae	B
ANOF	*Anchusa officinalis L.*	common bugloss	Boraginaceae	B
BASC5	*Bassia scoparia (L.) A.J. Scott*	burningbush	Chenopodiaceae	B
CEDI3	*Centaurea diffusa Lam.*	diffuse knapweed	Asteraceae	B
CESO3	*Centaurea solstitialis L.*	yellow star-thistle	Asteraceae	B
CESTM	*Centaurea stoebe L. ssp. micranthos (Gugler) Hayek*	spotted knapweed	Asteraceae	B
CHJU	*Chondrilla juncea L.*	rush skeletonweed	Asteraceae	B
CYOF	*Cynoglossum officinale L.*	gypsyflower	Boraginaceae	B
EUES	*Euphorbia esula L.*	leafy spurge	Euphorbiaceae	B
LIDAD	*Linaria dalmatica (L.) Mill. ssp. dalmatica*	Dalmatian toadflax	Scrophulariaceae	B
LYSA2	*Lythrum salicaria L.*	purple loosestrife	Lythraceae	B
ONAC	*Onopordum acanthium L.*	Scotch cottonthistle	Asteraceae	B
PHAU7	*Phragmites australis (Cav.) Trin. ex Steud.*	common reed	Poaceae	B
CIAR4	*Cirsium arvense (L.) Scop.*	Canada thistle	Asteraceae	C
CIVU	*Cirsium vulgare (Savi) Ten.*	bull thistle	Asteraceae	C
COAR4	*Convolvulus arvensis L.*	field bindweed	Convolvulaceae	C
HYPE	*Hypericum perforatum L.*	common St. Johnswort	Clusiaceae	C
IRPS	*Iris pseudacorus L.*	paleyellow iris	Iridaceae	C
PHAR3	*Phalaris arundinacea L.*	reed canarygrass	Poaceae	C
SECE	*Secale cereale L.*	cereal rye	Poaceae	C

Ecological Condition

Ecological condition of natural communities along the CPT range from good to poor. Only 3 vegetation community polygons were attributed as having a tertiary plant association in good condition. All other ecological condition rankings fell between fair and poor for the dominant communities in each polygon. This is not to say that more good condition patches of vegetation don't exist, its just that good condition patches are so small (mostly due to the narrow width of WSPRC ownership along the trail) they don't register as large enough patches to be mapped separately. In many cases, the larger natural vegetation communities surrounding the CPT were in fair to good condition, but disturbance and development caused by the old railway itself degraded the ecological condition within the narrow WSPRC ownership corridor.

Infestations by exotic plants, chiefly cheatgrass and bulbous bluegrass, are the main reason why natural community ranks are so low along the CPT. Other reasons include current land use practices that have disturbed and/or displaced native vegetation and disturbed soil resources, such as livestock grazing, transportation infrastructure development and maintenance, agricultural land development and use, trail development and use, and old development impacts associated with the railway.

Restoration Opportunities

The nature of the CPT is fraught with managerial complexity when it comes to resource stewardship. Because the WSPRC ownership corridor is so narrow, active restoration of natural vegetation communities and native species habitats is not likely to be successful on a scale that is meaningful. Areas where the WSPRC ownership corridor expands significantly beyond 100 feet in width need to be evaluated for actual land tenure as in many of these areas the WSPRC GIS boundary data does not correlate well with on the ground conditions. However if some of these areas are determined to be fully within WSPRC ownership there may be suitable sites for restoration opportunities. To determine suitability for restoration within this type of narrow ownership pattern, the condition and disturbance pressures on adjacent ownerships also need to be considered. Failure to consider the condition and disturbance pressures across ownerships will result in unsuccessful restoration attempts.

For natural resource stewardship and ecological restoration to be practical, State Parks needs to undertake an exhaustive inventory of its property boundaries, to determine its actual land ownership along the trail, and create a detailed accounting of who the adjacent landowners are and the land uses taking place on their properties. Only with this critical information in hand can successful restoration activities take place. Restoration partnerships with adjacent landowners will be critical for meaningful restoration results.

Understanding the land use pressures from adjacent properties will also help CPT management determine whether new or additional fencing is required to protect natural resources. Poor and inadequate fencing is allowing livestock grazing and in some cases land development to occur on land apparently owned by State Parks. Immediate resource protection from direct ecological threats could be readily accomplished by simply improving the boundary fences along the CPT. It should be noted, however, that fencing of the property boundary may have undesirable ecological impacts in some regions of the trail, depending on the characteristics of the land use on the adjacent property. Wildlife travel and migration permeability on the landscape can be improved by removing artificial barriers such as fencing, and in some areas of the CPT it may be desirable to remove fence if the adjacent land use is not threatening to the natural resources occurring within WSPRC ownership. Again, accurate and comprehensive knowledge of the park boundary and adjacent landowners and land uses is necessary for this level of stewardship decision making to take place.

Lastly, it is apparent that some level of noxious and exotic weed control is already taking place along some parts of the CPT, primarily through manual weed pulling and burning. This activity does not seem to cause overtly negative impacts on the ecological condition of the CPT's natural communities. We recommend that Parks continue this activity as in conjunction with monitoring for negative ecological responses due to soil disturbance and fire damage. Most exotic and noxious plants are coming into the CPT from adjacent parcels, therefore pulling and/or burning these plants on WSPRC property may be little more than a temporary cosmetic treatment that will do little to reduce the long-term infestation. Because the Turnbull National Wildlife Refuge already has a strong natural resource conservation management agenda, focused weed reduction activities and cooperative programs between the adjacent parts of the refuge and State Parks is recommended in the Turnbull area.

Other Recommendations

PBI strongly urges WSPRC to conduct a thorough survey of its property boundaries in each of its parks and properties to ensure that administrators, park officials, park staff, private citizens, and park neighbors are clear about where park boundaries lie on the ground. PBI has conducted plant community surveys for a large portion of WSPRC properties and too many of these surveys have boundary and ownership issues where it is unclear if a particular piece of land is owned by WSPRC or not. In many cases there is an

ecologically compromising land use being conducted within what seems to be the park boundary that is not being managed or controlled by park personnel. This situation is not unique to the CPT, but the consequences of this greater agency dilemma directly effect natural resource conditions in the CPT. It makes sense that effective management and/or protection of natural resources cannot take place if it is not known exactly where these resources are.

Additionally, PBI recommends targeted rare plant surveys be conducted along any portion of the CPT where managerial activities may adversely impact native vegetation outside of the developed railbed. Such surveys should be focused around the estimated zone of impact and should be conducted as many times in a field season as necessary to account for the diverse phenology of rare plants that may use the habitat types to be impacted by management activities.

GIS Products Produced

Associated with this report are polygon layers created by PBI depicting the vegetation community types mapped in the project area of The CPT. The datasets have been converted into ESRI shapefile formats and provided to WSPRC. The spatial datasets are complete with metadata meeting FGDC standards. Refer to the associated metadata for descriptions and attribute definitions for each spatial dataset.

References

Cooper, J.G., N.M. Buckingham, A.R. Anderson. 1859, 1860 and 1994. Plant Life of Washington Territory. Northern Pacific Railroad Survey, Botanical Report 1853-1861, Douglasia Occasional Papers. Washington Native Plant Society. 114 p.

Crawford, Rex C. 2003. A riparian vegetation classification of the Columbia Basin, Washington. 2003. Washington Natural Heritage Program, Washington Department of Natural Resources, Olympia, WA 98504-7016. Published in coordination with Bureau of Land Management, Spokane District and The Nature Conservancy.

Crawford, R.C. 1999. Preliminary key to shrub-steppe plant associations in Washington State. Washington Natural Heritage Program, Washington Department of Natural Resources, Olympia, WA.

Crowe, E., B. Kovalchik, M. J. Kerr, J. Titus, and J. S. Kagan. 2002. Riparian and wetland plant communities of eastern Oregon. Draft report. Oregon Natural Heritage Information Center, Portland, OR.

Daubenmire, R. F. 1970. Steppe vegetation of Washington. Washington State University Agricultural Experiment Station Technical Bulletin No. 62. 131 pp.

Hitchcock, C.L. and A. Cronquist. 1973. Flora of the Pacific Northwest: An Illustrated Manual University of Washington Press, Seattle.

Hitchcock, C.L., Cronquist, A., Ownbey, M., and J. W. Thompson. 1955. Vascular Plants of the Pacific Northwest. University of Washington Press, Seattle.

Kagan, J. S., J. A. Christy, M. P. Murray, and J. A. Titus. 2004. Classification of native vegetation of Oregon. Oregon Natural Heritage Program, Portland. 63 pp.

Kovalchik, B.L and R.R. Clausnitzer. 2004. Classification and Management of Aquatic, Riparian, and Wetland Sites on the National Forests of Eastern Washington. USDA Forest Service GTR-593.

Mack R.N. 1988. First comprehensive botanical survey of the Columbia Plateau, Washington: The Sandberg and Leiberg Expedition of 1893. Northwest Science, v 62. n. 3 pp. 118-128.

MTNHP [Montana Natural Heritage Program]. 2002b. List of ecological communities for Montana. Montana Natural Heritage Program, Montana State Library, Helena, MT.

Rush T., and J. Gamon, 1997. Report on the Washington Natural Heritage Program 1996-97 Rare Plant Inventory and Assessment for the Pasco-to-Fish Lake Trail. Washington Department of Natural Resources, Olympia, WA. 8 pp. plus appendices.

WANHP [Washington Natural Heritage Program]. No date. Unpublished data files. Washington Natural Heritage Program, Department of Natural Resources, Olympia, WA.

Western Ecology Working Group of NatureServe. No date. International Ecological Classification Standard: International Vegetation Classification -Terrestrial Vegetation. NatureServe, Boulder, CO.

Appendix A – Definitions of Vegetation Survey Data

Legend:

Site = name of locality of map project

Polygon = number you put on map

Name/Date = your name / day-month-year completed polygon survey

Photo roll/number = number of roll (on canister) and number of shot

Survey intensity
1 = walked or could see most of polygon (high confidence in survey data)
2 = walked or could see part of polygon interior (moderate confidence)
3 = walked perimeter or could see part of polygon interior (low confidence)
4 = photo interpretation or other remote survey

VEGETATION COVER includes all vascular plants, mosses, lichens and foliose lichens (crustose lichens excluded they are considered rock); this never exceeds 100%. Space between leaves/branches is included in "cover".

Code	**Cover (%)**	Cover mid-pt
0	0	0
1	<1	0.5
2	1-5	3
3	5-25	15
4	25-60	43
5	60-90	75
6	>90	95

TOTAL VEGETATION COVER includes all vascular plants, mosses, lichens and foliose lichens (crustose lichens excluded they are considered rock); this never exceeds 100%.

TREES, SHRUBS, GRAMINOIDS, FORBS, EXOTICS cover includes the space between leaves/branches. Each Life form category canopy cover must be 0-100%. Therefore, the sum of all life forms (layers) can exceed 100%. List most abundant species in each life form category; when trees are cored, note DBH, species, length of core, number of rings counted.

SOIL SURFACE estimate to nearest **%** the following, the sum of the categories adds to 100%
Rock outcrop = exposed bedrock including detached boulders over 1m across
Gravel/cobble = large fragments between sand and boulder
Bare ground = exposed mineral soil
Mosses/lichens = nonvascular plant cover on soil
Litter = includes logs, branches, and basal area of plants
Describe in comments if there is wide variation in any category; note % standing water if it is persistent or characteristic of site.

LAND USE - put 0 (zero) if not applicable to site.

Logging
1 = unlogged, no evidence of past logging or occasional cut stumps not part of systematic harvest of trees, no or very little impact on stand composition
2 = selectively logged: frequent cut stumps but origin of dominant or co-dominant cohort appears to be natural disturbance
3 = heavy logging disturbance with natural regeneration: many cut stumps that predate the dominant or co-dominant cohort with no tree planting
4 = tree plantation: dominant cohort appears to be planted after clearcutting

Stand Age
1 = very young 0-40 yr
2 = young 40-90 yr
3 = mature 90-200 yr
4 = old-growth 200+ yr
5 = young with scattered old trees (2-10 old trees per acre)
6 = mature with scattered old trees

Agriculture
1 = active annual cropping
2 = active perennial herbaceous cropping
3 = active woody plant cultivation
4 = fallow, plowed no crops this yr
5 = Federal CRP
6 = other

Livestock
1 = active heavy grazing (most forage used to ground soil compaction or churning)
2 = active moderate grazing (25-75% forage used)
3 = active light grazing (lots of last years litter left)
4 = no current, heavy past grazing
5 = no current, light past grazing
6 = no obvious sign of grazing

Development
1 = actively used facilities
2 = roads
3 = established trails
4 = abandoned facilities
5 = none obvious
6 = multiple types (detail in comments)

Wildlife
1 = heavy ungulate use
2 = moderate ungulate use
3 = light to no ungulate use
4 = burrowing animals
5 = active beaver
6 = active porcupine
7 = other, list animal

Recreation Use Severity
1 = heavy use, abundant soil and vegetation displacement off trail/road
2 = moderate use, frequent soil and vegetation displacement off trail/road
3 = light use, little sign of activity off trail/road

Recreation Use Primary Type
1 = wheeled
2 = hoofed
3 = pedestrian
4 = combination of above
5 = other

Hydrology
1 = unaltered
2 = altered; dams, dikes, ditches, culverts, etc
3 = not assessed

Plant Association (PA) = list all PAs encountered in polygon survey, in comments list source of name if not on provided key.

Condition Rank of PA in key or estimate

% of Polygon = your estimate

Pattern = how PA is distributed in polygon
1 = matrix (most of polygon)
2 = large patches
3 = small patches
4 = clumped, clustered, contiguous
5 = scattered, more or less evenly repeating
6 = linear
7 = other

Exotic = primary species observed; secondary species observed.

Plot Number = number of any plots established for EO (element occurrence), or other more detail sheets within polygon.

Appendix B – Ecological Condition Ranking System

Ecological Condition Ranks

When assessing conservation priorities and management decisions, it can be useful to rank natural communities into levels of ecological condition. For example, an unfragmented area with high native species diversity, absence of non-native species and little soil erosion often has greater conservation value than another area in the same habitat type that is fragmented, infested with weeds or has erosion problems. Likewise, areas with a lower ecological condition rank may be targets for restoration activities.

The flowing ecological condition ranks were applied to vegetation polygons that were surveyed in this project:

- **Excellent Ecological Condition**

Areas in this class have very few non-native plants. The composition and structure of native vegetation in this condition class correspond to the natural range of variation characteristic to this habitat type. Old-growth conditions often exist. Species diversity of native plants and animals is often high relative to the natural community under consideration. Wildlife habitat conditions are optimal for species of conservation concern. Soil compaction, accelerated erosion and hydrologic alteration are absent. Direct signs of human-induced ecological stress is absent. Many rare plant and animal species may only exist within this condition class.

- **Good Ecological Condition**

Areas in this class have few non-native plants. The composition and structure of native vegetation in this condition class correspond to the natural range of variation characteristic to this habitat type. Old-growth conditions may exist , but have been subject to some human-induced stress. Species diversity of native plants and animals is moderately high relative to the natural community under consideration. Wildlife habitat conditions are adequate for species of conservation concern. Soil compaction, accelerated erosion and hydrologic alteration do not significantly impact the area. Direct signs of human-induced ecological stress are infrequent. Some rare plant and animal species may exist within this condition class.

- **Marginal Ecological Condition**

Areas in this class often have both native and non-native plants. The composition and structure of native vegetation in this condition class is altered from the natural range of variation characteristic to this habitat type. Old-growth conditions are absent. Species diversity of native plants and animals is lower than the two high condition classes. Wildlife habitat conditions may be adequate for some species of conservation concern, but not adequate for many. Soil compaction, accelerated erosion and hydrologic alteration may impact the area. Direct signs of human-induced ecological stress are frequent. Most rare plant and animal species are only infrequently encountered within this condition class.

- **Poor Ecological Condition**

Areas in this class are often dominated by non-native plants. The composition and structure of native vegetation in this condition class is often dramatically altered from the natural range of variation characteristic to this habitat type. Old-growth conditions are absent. Species diversity of native plants and animals is often low. Wildlife habitat conditions are not adequate for most species of conservation concern. Soil compaction, accelerated erosion and hydrologic alteration often impact the area. Direct signs of human-induced ecological stress are frequent. Rare plant and animal species are seldom encountered within this condition class.

Appendix C – Definitions of Vegetation Community Conservation Status and Rank

The following table defines the ranking system for plants and plant communities used by the Washington State Natural Heritage Program.

Code	Definition
G1	Critically imperiled throughout its range; extremely rare with five or fewer occurrences or very few remaining acres.
G2	Imperiled throughout its range; rare with six to 20 occurrences or few remaining acres.
G3	Either very rare and local throughout its range or found locally in a restricted range; uncommon with 21 to 100 occurrences.
G4	Apparently secure throughout its range, though it may be quite rare in some parts of its range, especially at the periphery; many occurrences.
G5	Demonstrably secure in its range, though it may be quite rare in some parts of its range, especially at the periphery; ineradicable under present conditions.
S1	Critically imperiled in Oregon; extremely rare with five or fewer occurrences or very few remaining acres.
S2	Imperiled in Oregon; rare with six to 20 occurrences or few remaining acres.
S3	Either very rare and local in Oregon or found locally in a restricted range; uncommon with 21 to 100 occurrences.
S4	Apparently secure in Oregon, though it may be quite rare in some parts; many occurrences.
S5	Demonstrably secure in Oregon, though it may be quite rare in some parts; ineradicable under present conditions.
U	Unknown
NA	Natural Heritage Rank not available
NR	Not Ranked

Appendix D – Vegetation Community Data Collected for Each Vegetation Community Polygon

Polygon Number 1

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Rail Road Junctions		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: 2 active railroads merge with CPT - highly disturbed

Polygon Number 2

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	2
subcanopy	3
Shrubs Total	2
Dominant Shrubs	CHVI8, ERNI2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD, CHJU, LASE
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	5
Talus:	5
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PIPO/POBU-BRTE		50	Large patch	Poor
Veg Community3:	PIPO/PSSP6	Kagan, 2004			G4
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 3

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	4
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	3
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		55	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PIPO/SYAL/FEID-PSSP6		45	Large patch	Fair
Veg Community3:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg3:			0		
Veg Community3:					

Notes: Young PIPO forest - trail not established

Polygon Number 4

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Trail Head		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Developed trailhead

Polygon Number 5

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	2
subcanopy	3
Shrubs Total	2
Dominant Shrubs	CHVI8, ERNI2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD, CHJU, LASE
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	5
Talus:	5
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PIPO/SYAL/FEID-PSSP6		35	Large patch	Fair
Veg Community3:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg3:	ERNI2/POSE-BRTE		15	Small patch	Poor
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: GIS boundaries depart radically from actual trail - GIS boundary includes active railway!

Polygon Number 6

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	1
Dominant Shrubs	
> 1.5' tall	1
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	50
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	0
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	50
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PHAR3		30	Large patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA
Existing Veg3:			0		
Veg Community3:					

Notes: GIS boundaries depart radically from actual trail - GIS boundary includes active railway!

Polygon Number 7

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	2
subcanopy	3
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD, CHJU, LASE
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	5
Talus:	5
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PIPO/SYAL/FEID-PSSP6		30	Large patch	Fair
Veg Community3:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg3:			0		
Veg Community3:					

Notes: GIS boundaries depart radically from actual trail - GIS boundary includes active railway!

Polygon Number 8

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	4
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	3
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		40	Large patch	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		30	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/SYAL-ROWO/PSSP6-LECI4		30	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes: GIS boundaries of trail right-of-way disagree with fences on the ground. Fences much nearer to trail's edges than GIS boundary suggests

Polygon Number 9

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO, POTR5
emergent	1
maincanopy	3
subcanopy	3
Shrubs Total	3
Dominant Shrubs	ROWO, PHLE4, SYAL, SANIC5, ERNI2, ERHE2, PRVI
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, ELRE4, PSSP6
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	CESTM, EPBR3, MEOF, ACMI2, LODI, LIRU4, GAAR, TRDU, CECY2,
Forbs Perennial	2
Forbs Annual	2
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	1
Rock Outcrop	17
Gravel	10
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, HYPE, LIDAD, VETH, CEDI3
Other Exotic Plants
POBU, BRTE

Water:	1
Rock:	17
Talus:	15
Gravel:	10
Bare Ground:	10
Moss Lichen:	5
Litter:	42

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO-POTR5/ROWO-PHLE4-SYAL		60	Matrix	Fair
Veg Community1:	POTR5/SYAL	Crawford, 2003			G3
Existing Veg2:	Asphalt trail and sides		30	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	PHAR3 - weedy grasses		10	Small patch	Fair
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes: Rock Outcrop = 2% rock outcrop, 15% asphalt. Trail is asphalt here. The sides of the trail extending out toward boundary were once extensively disturbed - at least in

Polygon Number 10

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	5
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	PRVI, ROWO, SANIC5, COSE16, RICE
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	PHAR3, BRTE, POBU, ELELE
Graminoids Perennial	4
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	LEMI3, URDI, VEAN2, TYLA, VETH, MIGU
Forbs Perennial	3
Forbs Annual	2
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	1
Rock Outcrop	26
Gravel	10
Logging	0
Fire:	0
Stand Age	1
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	2
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
VETH, PHAR3
Other Exotic Plants
BRTE, POBU

Water:	1
Rock:	26
Talus:	1
Gravel:	10
Bare Ground:	10
Moss Lichen:	1
Litter:	51

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3-URDI		65	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		35	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:					
Veg Community3:					

Notes: Rock Outcrop = Asphalt

Polygon Number 11

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM, RO
Date	8/12/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	2
subcanopy	2
Shrubs Total	3
Dominant Shrubs	SYAL, ROWO, PHLE4, MAAQ2, SANIC5, PRVI, ERNI2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	GABO2, PHHA, NECA2, ACMI2, LIDAD, CESTM, VETH
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	1
Gravel	35
Logging	0
Fire:	0
Stand Age	1
Agriculture	1 (parts are
Livestock	3 (active grazing in
Development	6 (old rail bed,
Wildlife	3
Recreation Severity	2
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
LIDAD, CESTM, VETH, HYPE
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	1
Talus:	4
Gravel:	35
Bare Ground:	10
Moss Lichen:	2
Litter:	48

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3 wetland (disturbed)		50	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		30	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	ERNI2/POSE-BRTE		20	Small patch	GOOD
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: Fences bounding the area are much closer to the trail than the polygon boundary. Active private agricultural use of state lands. Need to resurvey, establish

Polygon Number 12

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/12/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	POTR5, PIPO
emergent	1
maincanopy	2
subcanopy	2
Shrubs Total	2
Dominant Shrubs	PRVI, ROWO, SANIC5, COSE16, RICE
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	PHAR3, BRTE, POBU, ELELE
Graminoids Perennial	4
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	LEMI3, URDI, VEAN2, TYLA, VETH, MIGU
Forbs Perennial	3
Forbs Annual	2
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	1
Rock Outcrop	26
Gravel	20
Logging	0
Fire:	0
Stand Age	1
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	2
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
VETH, PHAR3
Other Exotic Plants
BRTE, POBU

Water:	1
Rock:	26
Talus:	1
Gravel:	20
Bare Ground:	10
Moss Lichen:	1
Litter:	41

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3 - weedy grasses		70	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		22	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/SYAL-ROWO/PSSP6-LECI4		8	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes: Fences bounding the area are much closer to the trail than the polygon boundary.

Polygon Number 13

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/13/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	PIPO, POBAT, POTR5
emergent	1
maincanopy	1
subcanopy	1
Shrubs Total	2
Dominant Shrubs	SYAL, ROWO, AMAL2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	ELELE, PHAR3, BRTE, POBU, LECI4, ELRE4, VEDU
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	LIDAD, VETH, ASSP, COLI2, HYPE
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	1
Gravel	40
Logging	0
Fire:	0
Stand Age	1
Agriculture	0 (note! Farming
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
LIDAD, VETH, HYPE, VEDU
Other Exotic Plants
BRTE, POBU, PHAR3

Water:	0
Rock:	1
Talus:	2
Gravel:	40
Bare Ground:	5
Moss Lichen:	5
Litter:	47

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	disturbed grasslands		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	trail/rail bed		30	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	PIPO-POTR5/ROWO-PHLE4-SYAL		10	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes: Note: fences on side are MUCH closer than GIS BND. Hayfields along many sides.

Polygon Number 14

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/13/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Trailhead Parking Lot		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:					
Veg Community3:					
Existing Veg3:					
Veg Community3:					

Notes:

Polygon Number 15

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	RO, PM
Date	8/13/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	1
subcanopy	1
Shrubs Total	3
Dominant Shrubs	ROWO, AMAL2, SYAL, SALIX, ERNI2
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	PHAR3, PSSP6, BRTE, ELELE, ELPA3, SCIRP
Graminoids Perennial	3
Graminoids Annual	1
Forbs Total	2
Dominant Forbs	ACMI2, VETH, CIAR4, ASSP, TYLA, SACU, HIVU2, LEMI3
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	13
Rock Outcrop	2
Gravel	35
Logging	0
Fire:	0
Stand Age	1
Agriculture	0
Livestock	0
Development	6
Wildlife	7 (lots of
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
CIAR4, LIDAD, CHJU, HYPE
Other Exotic Plants
BRTE, VETH, PHAR3

Water:	13
Rock:	2
Talus:	2
Gravel:	35
Bare Ground:	5
Moss Lichen:	1
Litter:	42

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3-TYLA-CAREX		60	Large patch	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		30	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	Deep water herbaceous wetland		10	Small patch	Fair
Veg Community3:	PONA4	Kagan, 2004			G5

Notes:

Polygon Number 16

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM, RO
Date	8/13/2008
Total Vegetation	5
Trees Total	3
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	3
subcanopy	3
Shrubs Total	3
Dominant Shrubs	SYAL, ROWO, ERHE2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	FEID, PSSP6, VEDU, BRTE
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	LIRU4, GETR, ACMI2, PEGA3, HYPE
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	2
Gravel	40
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
LIDAD, HYPE, VETH
Other Exotic Plants
TRDU, VEDU, BRTE

Water:	0
Rock:	2
Talus:	15
Gravel:	40
Bare Ground:	2
Moss Lichen:	5
Litter:	36

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		60	Matrix	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		40	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 17

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	RO
Date	8/13/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	PIPO
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	2
Dominant Shrubs	SYAL, ROWO
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	PHAR3, POA, POBU, SCIRP
Graminoids Perennial	3
Graminoids Annual	1
Forbs Total	3
Dominant Forbs	TYLA, VETH, AGUR
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	15
Rock Outcrop	0
Gravel	45
Logging	0
Fire:	0
Stand Age	1
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
LIDAD, HYPE, VETH
Other Exotic Plants
POBU

Water:	15
Rock:	0
Talus:	1
Gravel:	45
Bare Ground:	1
Moss Lichen:	1
Litter:	37

Vegetation Types

			Percent	Pattern	Rank		
Existing Veg1:	PHAR3/NULU-SCIRP (these wetlands are different in terms of species composition -- dom.				50	Matrix	Fair
Veg Community1:	PHAR3	Crawford, 2003			NA		
Existing Veg2:	trail/rail bed		50	linear	Poor		
Veg Community3:	Developed/Disturbed	PBI			NA		
Existing Veg3:			0				
Veg Community3:							

Notes:

Polygon Number 18

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	PM
Date	8/13/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	3
subcanopy	3
Shrubs Total	3
Dominant Shrubs	SYAL, PRVI, COSE16
> 1.5' tall	3
< 1.5' tall	3
Graminoids Total	3
Dominant Graminoids	VEDU, POBU, BRAR5, POA, PSSP6, FEID, CARU
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	COLI2, TRGRG2, NECA2, VETH, MAST4, SOCA6, ACMI2
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	2
Gravel	35
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
VETH, HYPE, LIDAD
Other Exotic Plants
NECA2, VEDU, POBU

Water:	0
Rock:	2
Talus:	5
Gravel:	35
Bare Ground:	8
Moss Lichen:	3
Litter:	47

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-VEDU-PSSP6		55	Matrix	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		35	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/SYAL/CARU		10	Small patch	GOOD
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes: Dry forest with scattered patches of POTR5/SYAL; gravel trail surface.

Polygon Number 19

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	RO
Date	8/13/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	2
subcanopy	3
Shrubs Total	3
Dominant Shrubs	ERNI2, COSE16, SYAL, ROWO, RICE, PRVI
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	BRAR5, BRTE, PSSP6, HECO26, ELELE, PHAR3, LECI4, VEDU,
Graminoids Perennial	2
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	ACMI2, VETH, PEGA3, ASSP, LIDAD
Forbs Perennial	2
Forbs Annual	1
Ferns Total	1
Ferns Evergreen	0
Ferns Deciduous	1
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	8
Gravel	35
Logging	0
Fire:	0
Stand Age	1
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
LIDAD, HYPE, VETH
Other Exotic Plants
VEDU, BRAR5, BRTE

Water:	0
Rock:	8
Talus:	10
Gravel:	35
Bare Ground:	2
Moss Lichen:	10
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL-ROWO/BRAR5-VEDU-PSSP6		50	Matrix	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		25	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	PHAR3-BRIN2		25	Small patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes: Fence along west side is well within documented (digital) boundary for CPT.

Polygon Number 20

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	RO
Date	8/13/2008
Total Vegetation	3
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	1
Dominant Shrubs	
> 1.5' tall	1
< 1.5' tall	0
Graminoids Total	3
Dominant Graminoids	PHAR3, SCACA
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	TYLA, POTAM
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	30
Rock Outcrop	0
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	30
Rock:	0
Talus:	0
Gravel:	30
Bare Ground:	0
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3-SCACA-CAAR2		50	Large patch	Fair
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		50	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes: Large trail impact width impacting small pond

Polygon Number 21

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	PIPO
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	1
Dominant Shrubs	
> 1.5' tall	1
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	0
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	weedy grasses		50	Large patch	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	trail/rail bed		50	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes: highly disturbed site - native vegetation previously cleared

Polygon Number 22

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	3
subcanopy	2
Shrubs Total	2
Dominant Shrubs	SYAL, ROWO, PHLE4, MAAQ2, SANIC5, PRVI, ERNI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	GABO2, PHHA, NECA2, ACMI2, LIDAD, CESTM, VETH
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	1
Agriculture	1
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3, VETH, HYPE
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	5
Talus:	0
Gravel:	40
Bare Ground:	5
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PIPO/SYAL/FEID-PSSP6		30	Large patch	Fair
Veg Community3:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg3:	PHAR3 - weedy grasses		20	Small patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes:

Polygon Number 23

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	2
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		60	Matrix	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		40	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 24

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	POTR5
emergent	0
maincanopy	2
subcanopy	1
Shrubs Total	3
Dominant Shrubs	SYAL, PRVI, COSE16
> 1.5' tall	3
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	0
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3, VETH, HYPE
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	35
Bare Ground:	0
Moss Lichen:	0
Litter:	65

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3 - weedy grasses		50	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		35	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/SYAL-ROWO/PSSP6-LECI4		15	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes:

Polygon Number 25

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	2
Shrubs Total	2
Dominant Shrubs	
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POBU, BRIN2, ELELE, PHAR3
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	0
Gravel	50
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	ACTIVE
Development	6
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	50
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/POBU-BRTE		50	Matrix	Poor
Veg Community1:	PIPO/PSSP6	Kagan, 2004			G4
Existing Veg2:	trail/rail bed - roads		35	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	PHAR3 - weedy grasses		15	Small patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes:

Polygon Number 26

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	5
Trees Total	4
Dominant Trees	POTR5, PIPO
emergent	1
maincanopy	3
subcanopy	3
Shrubs Total	3
Dominant Shrubs	SYAL, ROWO, PHLE4, MAAQ2, SANIC5, PRVI, ERNI2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	30
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	ACTIVE
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	30
Bare Ground:	0
Moss Lichen:	0
Litter:	70

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL-ROWO/BRAR5-VEDU-PSSP6		50	Matrix	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	PHAR3		40	Large patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA
Existing Veg3:	trail/rail bed		10	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA

Notes:

Polygon Number 27

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	3
Trees Total	3
Dominant Trees	PIPO
emergent	1
maincanopy	3
subcanopy	1
Shrubs Total	2
Dominant Shrubs	
> 1.5' tall	2
< 1.5' tall	0
Graminoids Total	3
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	2
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	5
Talus:	15
Gravel:	40
Bare Ground:	5
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/POBU-BRTE		70	Matrix	Poor
Veg Community1:	PIPO/PSSP6	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		20	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	PHAR3 - weedy grasses		10	Small patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes:

Polygon Number 28

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	2
subcanopy	1
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, COSE16
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	0
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3, VETH, HYPE
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	35
Bare Ground:	0
Moss Lichen:	0
Litter:	65

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3 - weedy grasses		60	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		40	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 29

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	2
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PIPO/POBU-BRTE		40	Large patch	Poor
Veg Community3:	PIPO/PSSP6	Kagan, 2004			G4
Existing Veg3:	PIPO/SYAL-ROWO/BRAR5-VEDU-PSSP6		10	Small patch	Fair
Veg Community3:	PIPO/SYAL	Kagan, 2004			G4

Notes:

Polygon Number 30

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	POTR5
emergent	0
maincanopy	2
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SALIX, COSE4
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	30
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	30
Bare Ground:	0
Moss Lichen:	0
Litter:	70

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	SALIX-COSE4/PHAR3		30	Large patch	Poor
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:	PHAR3 wetland		20	Large patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes:

Polygon Number 31

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	POTR5
emergent	0
maincanopy	3
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SYAL, PRVI, COSE16
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3, BRIN2, BRTE, POBU, LECI4
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	30
Logging	0
Fire:	0
Stand Age	6
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	30
Bare Ground:	0
Moss Lichen:	0
Litter:	70

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	POTR5/SYAL-ROWO/PSSP6-LECI4		40	Large patch	Fair
Veg Community1:	POTR5/SYAL	Crawford, 2003			G3
Existing Veg2:	trail/rail bed		40	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	Deep water herbaceous wetland		20	Large patch	Fair
Veg Community3:	PONA4	Kagan, 2004			G5

Notes:

Polygon Number 32

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	4
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	3
subcanopy	3
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		40	Large patch	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		40	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/SYAL-ROWO/PSSP6-LECI4		20	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes:

Polygon Number 33

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	PIPO, POBAT, POTR5
emergent	1
maincanopy	1
subcanopy	1
Shrubs Total	2
Dominant Shrubs	SYAL, ROWO, AMAL2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	ELELE, PHAR3, BRTE, POBU, LECI4, ELRE4, VEDU
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	LIDAD, VETH, ASSP, COLI2, HYPE
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	1
Gravel	40
Logging	0
Fire:	0
Stand Age	1
Agriculture	0 (note! Farming
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
LIDAD, VETH, HYPE, VEDU
Other Exotic Plants
BRTE, POBU, PHAR3

Water:	0
Rock:	1
Talus:	2
Gravel:	40
Bare Ground:	5
Moss Lichen:	5
Litter:	47

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		40	Large patch	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PHAR3 - weedy grasses		30	Large patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA
Existing Veg3:	PIPO/SYAL/FEID-PSSP6		30	Small patch	Fair
Veg Community3:	PIPO/SYAL	Kagan, 2004			G4

Notes:

Polygon Number 34

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	1
Dominant Shrubs	
> 1.5' tall	1
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	50
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	0
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	50
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PHAR3		40	Large patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 35

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	4
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	3
subcanopy	3
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		40	Large patch	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		30	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/SYAL-ROWO/PSSP6-LECI4		30	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes:

Polygon Number 36

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO, POTR5
emergent	1
maincanopy	3
subcanopy	3
Shrubs Total	3
Dominant Shrubs	ROWO, PHLE4, SYAL, SANIC5, ERNI2, ERHE2, PRVI
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, ELRE4, PSSP6
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	CESTM, EPBR3, MEOF, ACMI2, LODI, LIRU4, GAAR, TRDU, CECY2,
Forbs Perennial	2
Forbs Annual	2
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	1
Rock Outcrop	17
Gravel	10
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	6
Wildlife	3
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, HYPE, LIDAD, VETH, CEDI3
Other Exotic Plants
POBU, BRTE

Water:	1
Rock:	17
Talus:	15
Gravel:	10
Bare Ground:	10
Moss Lichen:	5
Litter:	42

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO-POTR5/ROWO-PHLE4-SYAL		70	Matrix	Fair
Veg Community1:	POTR5/SYAL	Crawford, 2003			G3
Existing Veg2:	trail/rail bed		30	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 37

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	1
Dominant Shrubs	
> 1.5' tall	1
< 1.5' tall	0
Graminoids Total	4
Dominant Graminoids	PHAR3
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	50
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	0
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	50
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3 - weedy grasses		60	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:	trail/rail bed		40	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 38

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	2
Shrubs Total	2
Dominant Shrubs	SYAL, PRVI, PHLE4
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, PSSP6, POSE, FEID
Graminoids Perennial	2
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CESTM, MEOF, VETH
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	35
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
CESTM, LIDAD, VETH
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	0
Talus:	1
Gravel:	35
Bare Ground:	10
Moss Lichen:	0
Litter:	54

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		60	Large patch	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	trail/rail bed		40	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 39

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	5
Trees Total	4
Dominant Trees	PIPO, POTR5
emergent	1
maincanopy	4
subcanopy	3
Shrubs Total	3
Dominant Shrubs	ROWO, PHLE4, BEOC2, SYAL, COSE4, SANIC5, PRVI
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, ELRE4, PSSP6
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	3
Rock Outcrop	0
Gravel	10
Logging	0
Fire:	0
Stand Age	2
Agriculture	0
Livestock	ACTIVE
Development	6
Wildlife	7
Recreation Severity	3
Recreation Type	4
Hydrology	2

Exotic Species

Noxious Exotic Plants
POBU
Other Exotic Plants
BRTE

Water:	3
Rock:	0
Talus:	0
Gravel:	10
Bare Ground:	5
Moss Lichen:	0
Litter:	82

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PIPO/SYAL/FEID-PSSP6		50	Large patch	Fair
Veg Community1:	PIPO/SYAL	Kagan, 2004			G4
Existing Veg2:	POTR5/SYAL-ROWO/PSSP6-LECI4		25	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3
Existing Veg3:	BEOC2-SALIX-COSE4/PHAR3-TYLA		25	Small patch	Fair
Veg Community3:	BEOC2-COSE16	Crawford, 2003			G3

Notes:

Polygon Number 40

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	100
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	100
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Water		100	Matrix	
Veg Community1:	Water	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 41

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	3
Dominant Graminoids	PHAR3, BRIN2, CAREX
Graminoids Perennial	3
Graminoids Annual	0
Forbs Total	3
Dominant Forbs	TYLA, POTAM
Forbs Perennial	3
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	0
Water	60
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	ACTIVE
Development	0
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants

Water:	60
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3-TYLA-CAREX		100	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Grazing occuring in wetland

Polygon Number 42

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	100
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	100
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Water		100	Matrix	
Veg Community1:	Water	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 43

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	3
Trees Total	2
Dominant Trees	PIPO
emergent	0
maincanopy	2
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SYAL, ERNI2, PRVI, CHVI8, PHLE4
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	BRTE, POBU, POSE, PSSP6
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	2
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
POBU
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	60
Gravel:	20
Bare Ground:	0
Moss Lichen:	0
Litter:	20

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		80	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNI2/POSE-BRTE		20	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 44

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	2
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	2
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ROWO, SYAL, CHVI8, SALIX
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PHAR3, POBU, BRIN2, LECI4, PSSP6, ELRE4
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	SIAL2, LIDAD, CHJU, ACMI2
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	ALL
Wildlife	7
Recreation Severity	2
Recreation Type	ALL
Hydrology	1

Exotic Species

Noxious Exotic Plants
BRTE, CHJU, PHAR3, HOJU
Other Exotic Plants
POBU, LIDAD

Water:	0
Rock:	5
Talus:	5
Gravel:	20
Bare Ground:	10
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed, disturbed sites, roads, development		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	POTR5/SALIX-ROWO/PHAR3		30	Large patch	Poor
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3
Existing Veg3:	PHAR3-BRIN2		10	Matrix	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA

Notes: ACCESS TO FISH LAKE-PARKING AREA; OLD DEVELOPED/DISTURBED SITE WITH SHRUB PATCHES-WEED INFESTED AREA. AND SOME SHRUB STEPPE PATCHES

Polygon Number 45

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	RO
Date	10/12/2008
Total Vegetation	5
Trees Total	2
Dominant Trees	POTR5, PIPO
emergent	0
maincanopy	2
subcanopy	1
Shrubs Total	3
Dominant Shrubs	PRVI, SYAL, CHVI8, ROWO
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POBU, ELELE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	LIDAD, LULE3, CHJU
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	15
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD, CHJU
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	15
Talus:	5
Gravel:	30
Bare Ground:	0
Moss Lichen:	1
Litter:	49

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	CHVI8-SYAL/PSSP6-BRTE		65	Matrix	Poor
Veg Community1:	SYAL/PSSP6 mosaic	PBI			~G3
Existing Veg2:	trail/rail bed		30	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	POTR5/PRVI-ROWO-SYAL		5	Small patch	GOOD
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes:

Polygon Number 46

ParkName:
Columbia Plateau Trail

Survey Intensity	4
Observer	HS
Date	8/26/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	home site		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 47

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	PIPO
emergent	0
maincanopy	3
subcanopy	1
Shrubs Total	2
Dominant Shrubs	ERNA10, SYAL
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	LASE, LIDAD
Forbs Perennial	2
Forbs Annual	2
Ferns Total	1
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	10
Gravel	10
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
LIDAD, LASE
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	10
Talus:	35
Gravel:	10
Bare Ground:	0
Moss Lichen:	5
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	POBU-BRTE-POSE		50	Matrix	Poor
Veg Community1:	Disturbed Grassland	PBI			NA
Existing Veg2:	trail/rail bed		25	linear	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	PIPO/POBU-BRTE		25	Large patch	Poor
Veg Community3:	PIPO/PSSP6	Kagan, 2004			G4

Notes:

Polygon Number 48

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/26/2008
Total Vegetation	5
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	5
Dominant Graminoids	PHAR3
Graminoids Perennial	5
Graminoids Annual	0
Forbs Total	2
Dominant Forbs	LEMI3
Forbs Perennial	0
Forbs Annual	2
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	5
Exotics Perennial	5
Exotics Annual	0
Water	10
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	7
Recreation Severity	0
Recreation Type	0
Hydrology	3

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants

Water:	10
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	90

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	PHAR3-LEMI3		100	Matrix	Poor
Veg Community1:	PHAR3	Crawford, 2003			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: SMALL POND-PHAR3 DOMINATED

Polygon Number 49

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	PIPO, POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	2
Dominant Shrubs	CHVI8, SYAL, PRVI
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	LASE, LIDAD, SIAL2, CHJU
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	10
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD, LASE
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	10
Talus:	5
Gravel:	40
Bare Ground:	5
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	POBU-BRTE-POSE		45	Large patch	Poor
Veg Community3:	Disturbed Grassland	PBI			NA
Existing Veg3:	POTR5/SYAL-ROWO/PSSP6-LECI4		5	Small patch	Fair
Veg Community3:	POTR5/SYAL	Crawford, 2003			G3

Notes:

Polygon Number 50

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	CHVI8, ERNI2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	1
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD, CHJU, LASE
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	5
Talus:	5
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	POBU-BRTE-POSE		40	Large patch	Poor
Veg Community3:	Disturbed Grassland	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes: HIGHLY DISTURBED

Polygon Number 51

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ROWO, SYAL, PRVI
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POBU, LECI4, PHAR3
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	HYPE, SIAL2, LASE, CIAR4
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	50
Logging	0
Fire:	0
Stand Age	0
Agriculture	OLD
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
BRTE, POBU, PHAR3, HYPE, CIAR4
Other Exotic Plants

Water:	0
Rock:	5
Talus:	0
Gravel:	50
Bare Ground:	0
Moss Lichen:	0
Litter:	45

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	BRTE-POBU-POSE		60	Matrix	Poor
Veg Community1:	Disturbed Grassland	PBI			NA
Existing Veg2:	LECI4-PHAR3-CIAR4		30	Large patch	Poor
Veg Community3:	LECI4	Kagan, 2004			G2G3
Existing Veg3:	ROWO-SYAL-EQHY		10	Small patch	Fair
Veg Community3:	ROWO	Crawford, 2003			~G2

Notes:

Polygon Number 52

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	old silos and development - RVs		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Occupied by buildings and trailers/RVs

Polygon Number 53

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	CHVI8, ERNI2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POBU, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	WEEDS
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	30
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	30
Talus:	10
Gravel:	20
Bare Ground:	0
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		65	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	BRTE-POBU-POSE		35	Large patch	Poor
Veg Community3:	Disturbed Grassland	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 54

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	CHVI8, ERNA10
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	10
Gravel	50
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants
LIDAD
Other Exotic Plants
BRTE, POBU, VETH

Water:	0
Rock:	10
Talus:	0
Gravel:	50
Bare Ground:	10
Moss Lichen:	0
Litter:	30

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10-CHVI8/POBU-BRTE-POSE		30	Large patch	Fair
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:			0		
Veg Community3:					

Notes: PARKING LOT TRAILHEAD

Polygon Number 55

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	CHVI8, ERNA10
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants
LIDAD
Other Exotic Plants
BRTE, POBU, VETH

Water:	0
Rock:	5
Talus:	40
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	15

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10-CHVI8/POBU-BRTE-POSE		30	Large patch	Fair
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:			0		
Veg Community3:					

Notes: Large artificial berm crossing small gorge

Polygon Number 56

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	LIDAD, LASE, CHJU
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	GRAZED
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LIDAD
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	25
Talus:	10
Gravel:	0
Bare Ground:	25
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/POBU-BRTE-POSE		40	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ROWO-SYAL/LECI4-PHAR3		10	Small patch	Fair
Veg Community3:	ROWO	Crawford, 2003			~G2

Notes: FENCE DOWN - Cattle Activity Evident

Polygon Number 57

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	5
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	4
Dominant Shrubs	SALIX, ROWO, SYAL
> 1.5' tall	4
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	LECI4, PHAR3, BRTE
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	5
Gravel	22
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	RECENT
Development	TRAIL
Wildlife	2
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
PHAR3, BRTE, SODU
Other Exotic Plants

Water:	0
Rock:	5
Talus:	3
Gravel:	22
Bare Ground:	10
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	SALIX-ROWO/LECI4-PHAR3		100	Matrix	Poor
Veg Community1:	Disturbed mixed shrub	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: ACTIVELY GRAZED

Polygon Number 58

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/25/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, ROWO, SALIX
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POBU, POSE, AGGI2, LECI4
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	20
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	ACTIVE
Development	TRAIL
Wildlife	3
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	20
Talus:	10
Gravel:	20
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	ERNA10/POBU-BRTE-POSE		60	Matrix	Poor
Veg Community1:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg2:	SALIX-ROWO/LECI4-PHAR3		10	Small patch	Poor
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:	trail/rail bed		30	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA

Notes: CATTLE PATH, ACTIVE GRAZING

Polygon Number 59

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SAEX, ROWO, ERNA10, RICE
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	POBU, BRTE, LECI4, PHAR3, POSE
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	5
Gravel	35
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	GRAZED ACTIVE
Development	TRAIL
Wildlife	3
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
PHAR3
Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	5
Talus:	0
Gravel:	35
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	SALIX-ROWO-LECI4-PHAR3		35	Large patch	Fair
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:	ERNA10/POBU-BRTE-POSE		15	Small patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3

Notes:

Polygon Number 60

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	3
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ARTR2, ERNA10, SALIX
> 1.5' tall	2
< 1.5' tall	3
Graminoids Total	3
Dominant Graminoids	POBU, POSE, BRTE, PSSP6, LECI4
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	2
Water	0
Rock Outcrop	25
Gravel	45
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
POBU, BRTE

Water:	0
Rock:	25
Talus:	0
Gravel:	45
Bare Ground:	0
Moss Lichen:	0
Litter:	30

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		30	Large patch	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ARTR2/POBU-POSE		20	Large patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4
Existing Veg3:	ERNA10/POBU-BRTE-POSE		50	Matrix	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3

Notes: INCLUDES SMALL PATCH POTR5/SALIX/LECI4 AND PHAR3 WETLANDS.

Polygon Number 61

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/26/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ARRI2, ERNA10
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	POSE, PSSP6, BRTE, LECI4, POBU
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRIAL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SIAL2
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	5
Talus:	5
Gravel:	30
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		45	Large patch	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/PSSP6-POSE-BRTE		40	Large patch	Fair
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARRI2/POSE-BRTE		15	Small patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4

Notes:

Polygon Number 62

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARRI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, BRIN2, LECI4
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SIAL2, LASE, SAKA, COCA5
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	10
Gravel	25
Logging	0
Fire:	0
Stand Age	0
Agriculture	OLD
Livestock	?
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
BRIN2, SIAL2, COCA5, SAKA, LASE
Other Exotic Plants
BRTE

Water:	0
Rock:	10
Talus:	5
Gravel:	25
Bare Ground:	10
Moss Lichen:	10
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	ERNA10/BRTE-LECI4-PSSP6		60	Matrix	Poor
Veg Community1:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg2:	trail/rail bed		30	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	ARRI2-ERNA10-POSE-BRTE		10	Small patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4

Notes: HIGH WEED COVER

Polygon Number 63

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	5
Trees Total	3
Dominant Trees	POTR5
emergent	0
maincanopy	3
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SALIX, ROWO, ELAN, COSE16
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	LECI4, PHAR3, BRIN2, BRTE, PSSP6
Graminoids Perennial	4
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	EQHY, URDI
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	5
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
PHAR3, BRIN2
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	5
Bare Ground:	5
Moss Lichen:	0
Litter:	90

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	LECI4-PHAR3		60	Matrix	Fair
Veg Community1:	LECI4	Kagan, 2004			G2G3
Existing Veg2:	PUTR2/SALIX-ROWO-COSE16/LECI4-PHAR3		30	Large patch	Fair
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:	ERNA10/BRTE-PSSP6-POSE		10	Small patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3

Notes:

Polygon Number 64

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	3
Dominant Trees	POTR5, ACNE2
emergent	0
maincanopy	3
subcanopy	0
Shrubs Total	4
Dominant Shrubs	SALIX AMAL2
> 1.5' tall	4
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	POBU, PHAR3, BRTE
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	SIAL2, LASE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	4
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	ACTIVE
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
ELAN, ACNE2, PHAR3
Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Large patch	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	POTR5-ACNE2/SALIX-ELAN		50	Large patch	Poor
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes: SURROUNDED BY WETLAND

Polygon Number 65

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	5
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ROWO, ELAN, PRVI, ARRI2, ERNA10
> 1.5' tall	3
< 1.5' tall	3
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, LECI4, PHAR3
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SIAL2, URDI, LASE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	15
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
SIAL2, ELAN, PHAR3
Other Exotic Plants
BRTE

Water:	0
Rock:	15
Talus:	0
Gravel:	20
Bare Ground:	5
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	ARRI2/BRTE-PSSP6-POSE		40	Matrix	Poor
Veg Community1:	ARRI2/POSE	Daubenmire, 1970			G4
Existing Veg2:	ROWO-ELAN/LECI4-PHAR3		30	Large patch	Poor
Veg Community3:	ROWO	Crawford, 2003			~G2
Existing Veg3:	trail/rail bed		30	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA

Notes: WET DEPRESSION AND ROCK OUTCROPS AND COMMUNITY DIVERSITY; HEAVY WEED COVER

Polygon Number 66

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ROWO, ELAN, ERNA10
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	PASM, BRTE, PHAR3, SCACA
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	0
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	ACTIVE
Livestock	ACTIVE
Development	ALL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
LASE, PHAR3
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed, Ag lands, roads		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PASM-BRTE-PHAR3		20	Large patch	Poor
Veg Community3:	PHAR3	Crawford, 2003			NA
Existing Veg3:	TYLA-SCACA-PHAR3		10	Small patch	Poor
Veg Community3:	TYLA-SCACA	Crawford, 2003			G5

Notes: SOME AG. FIELDS; FENCE/ BOUNDRY ISSUES; HIGHLY DISTURBED

Polygon Number 67

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, PRVI, RICE
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, LECI4, KOMA
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	TYLA, SIAL2, COCA5, VETH
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
COCA5, SIAL2
Other Exotic Plants
BRTE, VETH

Water:	0
Rock:	20
Talus:	10
Gravel:	20
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	ERNA10/BRTE-PSSP6-LECI4		65	Matrix	Poor
Veg Community1:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg2:	trail/rail bed		35	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes: WET MARGIN ALONG TRAIL EDGE; TRAIL CUT INTO GROUND

Polygon Number 68

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, ROWO, PRVI
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE, PHAR3
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	ACTIVE
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
BRTE, PHAR3, LUSE4, SIAL2
Other Exotic Plants
0

Water:	0
Rock:	20
Talus:	10
Gravel:	30
Bare Ground:	0
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	ERNA10/PSSP6-POSE-BRTE		50	Matrix	Poor
Veg Community1:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg2:	trail/rail bed		25	Large patch	Poor
Veg Community3:	Developed/Disturbed	PBI			NA
Existing Veg3:	ROWO/PHAR3		25	Large patch	Poor
Veg Community3:	ROWO	Crawford, 2003			~G2

Notes: HEAVILY GRAZED

Polygon Number 69

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	Water		30	Large patch	
Veg Community3:	Water	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 70

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARRI2, ROWO
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE, LECI4, PHAR3
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SIAL2, CHJU, LASE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	ACTIVE
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	3

Exotic Species

Noxious Exotic Plants
BRTE, SIAL2, PHAR3
Other Exotic Plants

Water:	0
Rock:	20
Talus:	10
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	30

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-PSSP6-LECI4		40	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARRI2/POSE-PSSP6-BRTE		10	Small patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4

Notes: HEAVILY GRAZED WETLAND ON MARGINS.

Polygon Number 71

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 72

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10,ERNI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE, KOMA
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	CHJU, ERCI6
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	20
Logging	1
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
CHJU, ERCI6
Other Exotic Plants
BRTE

Water:	0
Rock:	20
Talus:	0
Gravel:	20
Bare Ground:	10
Moss Lichen:	10
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-POSE-PSSP6		40	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:			0		
Veg Community3:					

Notes: SOME SMALL VERNA10L WETLAND PATCHES

Polygon Number 73

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 74

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2, ARRI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE, LECI4, POPR, KOMA, DISP
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
CHJU, POPR, SIAL2
Other Exotic Plants
BRTE, VETH

Water:	0
Rock:	25
Talus:	10
Gravel:	20
Bare Ground:	10
Moss Lichen:	5
Litter:	20

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PSSP6-POSE-BRTE		40	Large patch	Poor
Veg Community3:	PSSP6-POSE	Daubenmire, 1970			G4
Existing Veg3:	ARTR2/POSE-PSSP6-BRTE		10	Small patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4

Notes: SOME NICE SMALL PATCHES OF MEADOW AND ARRI2-POSE AND PSSP6-POSE THOUGH MANY WEEDS; SOME WATERBODIES

Polygon Number 75

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARRI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	CHJU, SIAL2
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	10
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE

Water:	0
Rock:	10
Talus:	0
Gravel:	40
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		90	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ARRI2/POSE-PSSP6-BRTE		10	Large patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4
Existing Veg3:			0		
Veg Community3:					

Notes: FLAT; DISTUBANCE EFFECT OF RAILROAD WIDE; HIGH WEED COVER

Polygon Number 76

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARRI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	CHJU, SIAL2
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	10
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE

Water:	0
Rock:	10
Talus:	0
Gravel:	40
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		90	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ARRI2/POSE-PSSP6-BRTE		10	Large patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 77

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARRI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	CHJU, SIAL2
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	10
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE

Water:	0
Rock:	10
Talus:	0
Gravel:	40
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		90	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ARRI2/POSE-PSSP6-BRTE		10	Large patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4
Existing Veg3:			0		
Veg Community3:					

Notes: FLAT; DISTUBANCE EFFECT OF RAILROAD WIDE; HIGH WEED COVER

Polygon Number 78

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2, ARRI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE, LECI4, POPR, KOMA, DISP
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
CHJU, POPR, SIAL2
Other Exotic Plants
BRTE, VETH

Water:	0
Rock:	25
Talus:	10
Gravel:	20
Bare Ground:	10
Moss Lichen:	5
Litter:	20

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	PSSP6-POSE-BRTE		40	Large patch	Poor
Veg Community3:	PSSP6-POSE	Daubenmire, 1970			G4
Existing Veg3:	ARTR2/POSE-PSSP6-BRTE		10	Small patch	Fair
Veg Community3:	ARRI2/POSE	Daubenmire, 1970			G4

Notes: SOME NICE SMALL PATCHES OF MEADOW AND ARRI2-POSE AND PSSP6-POSE THOUGH MANY WEEDS; SOME WATERBODIES

Polygon Number 79

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Trail goes through town and old fields/waste sites

Polygon Number 80

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SALIX, ROWO, ERNA10, ELAN
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	BRTE, POBU, LECI4, SCACA
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	SOCA6, URDI, TYLA
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		80	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	SALIX-ELAN-ROWO/TYLA-URDI-SOCA6		10	Small patch	Fair
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:	TYLA-SCACA-SOCA6		10	Small patch	Fair
Veg Community3:	TYLA-SCACA	Crawford, 2003			G5

Notes: TRAIL GOES THROUGH WETLAND COMPLEX, BUT RAISED RAIL BED MAKES UP MOST OF PARK PROPERTY.

Polygon Number 81

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ARTR2, ERNI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	BRTE, POSE, PSSP6, PASM
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	LASE, SAKA, CHJU
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LASE, SAKA
Other Exotic Plants
BRTE

Water:	0
Rock:	20
Talus:	10
Gravel:	30
Bare Ground:	10
Moss Lichen:	0
Litter:	30

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-PSSP6-POSE		25	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ERNI2/POSE-BRTE		5	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: SOME SMALL GOOD CONDITION PSSP6-POSE PATCHES, BUT NOT MANY.

Polygon Number 82

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Large Bridge

Polygon Number 83

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ARTR2, ERNI2
> 1.5' tall	2
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	BRTE, POSE, PSSP6, PASM
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	LASE, SAKA, CHJU
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LASE, SAKA
Other Exotic Plants
BRTE

Water:	0
Rock:	20
Talus:	10
Gravel:	30
Bare Ground:	10
Moss Lichen:	0
Litter:	30

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-PSSP6-POSE		25	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ERNI2/POSE-BRTE		5	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: SOME SMALL GOOD CONDITION PSSP6-POSE PATCHES, BUT NOT MANY.

Polygon Number 84

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/27/2008
Total Vegetation	4
Trees Total	1
Dominant Trees	POTR5
emergent	0
maincanopy	1
subcanopy	0
Shrubs Total	3
Dominant Shrubs	SALIX, ROWO, ERNA10, ELAN
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	BRTE, POBU, LECI4, SCACA
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	3
Dominant Forbs	SOCA6, URDI, TYLA
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	40
Bare Ground:	0
Moss Lichen:	0
Litter:	60

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		80	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	SALIX-ELAN-ROWO/TYLA-URDI-SOCA6		10	Small patch	Fair
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:	TYLA-SCACA-SOCA6		10	Small patch	Fair
Veg Community3:	TYLA-SCACA	Crawford, 2003			G5

Notes: TRAIL GOES THROUGH WETLAND COMPLEX, BUT RAISED RAIL BED MAKES UP MOST OF PARK PROPERTY.

Polygon Number 85

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARTR2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	BRTE, POSE, POBU, HECO26
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SIAL2, LASE, SAKA, HEAN3
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	0
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	OLD
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SIAL2, SAKA, LASE
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	30
Bare Ground:	20
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		65	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-PSSP6-POSE		30	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARTR2/BRTE-PSSP6		5	Small patch	Poor
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5

Notes:

Polygon Number 86

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 87

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Tunnel		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 88

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ARTR2
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	BRTE, POSE, POBU, HECO26
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SIAL2, LASE, SAKA, HEAN3
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	0
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	OLD
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SIAL2, SAKA, LASE
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	30
Bare Ground:	20
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		65	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-PSSP6-POSE		30	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARTR2/BRTE-PSSP6		5	Small patch	Poor
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5

Notes:

Polygon Number 89

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, ARTR2, ERNI2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, PSSP6
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	LUSE4, SAKA, SIAL2
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SIAL2, LUSE4
Other Exotic Plants
BRTE

Water:	0
Rock:	20
Talus:	10
Gravel:	30
Bare Ground:	5
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-POSE-PSSP6		30	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARTR2/BRTE-POSE-PSSP6		10	Small patch	Poor
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5

Notes:

Polygon Number 90

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/25/2008
Total Vegetation	3
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	3
Dominant Graminoids	POBU, BRTE, HOJU
Graminoids Perennial	3
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	SAKA, LASE, COAR4
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	3
Exotics Annual	2
Water	0
Rock Outcrop	0
Gravel	40
Logging	0
Fire:	0
Stand Age	0
Agriculture	ACTIVE
Livestock	0
Development	MULTIPLE
Wildlife	7
Recreation Severity	3
Recreation Type	6
Hydrology	1

Exotic Species

Noxious Exotic Plants
COAR4, LASE, SAKA
Other Exotic Plants
BRTE, POBU

Water:	0
Rock:	0
Talus:	0
Gravel:	40
Bare Ground:	10
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: HIGHLY DISTURBED, SURROUNDED BY AG. AND DEVELOPED SITES

Polygon Number 91

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ARTR2
> 1.5' tall	3
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE, LECI4
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	ARDR4, SAKA, LASE
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	20
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SAKA
Other Exotic Plants
BRTE

Water:	0
Rock:	25
Talus:	15
Gravel:	20
Bare Ground:	0
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/POSE-BRTE-PSSP6		40	Large patch	Fair
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 92

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, PASM, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	LASE, HEAN3, SAKA
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	0
Gravel	50
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
LASE, SAKA
Other Exotic Plants
BRTE

Water:	0
Rock:	0
Talus:	0
Gravel:	50
Bare Ground:	0
Moss Lichen:	0
Litter:	50

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	BRTE-PSSP6-POSE		30	Large patch	Poor
Veg Community3:	PSSP6-POSE	Daubenmire, 1970			G4
Existing Veg3:			0		
Veg Community3:					

Notes: WEED INFESTATION. ALONG HIGHWAY.

Polygon Number 93

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ARTR2, ERNA10, CHJU
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, PSSP6, POSE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	20
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants

Other Exotic Plants
BRTE

Water:	0
Rock:	20
Talus:	0
Gravel:	30
Bare Ground:	15
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		50	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ARTR2/BRTE-PSSP6-POSE		50	Large patch	Fair
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5
Existing Veg3:			0		
Veg Community3:					

Notes:

Polygon Number 94

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, ARTR2, CHVI8, ERNI2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	3
Dominant Graminoids	POSE, PSSP6, BRTE
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	2
Dominant Forbs	
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	30
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SOCA6
Other Exotic Plants
BRTE

Water:	0
Rock:	5
Talus:	15
Gravel:	30
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ARTR2-ERNA10/POSE-PSSP6-BRTE		40	Large patch	Fair
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5
Existing Veg3:			0		
Veg Community3:					

Notes: SOME GOOD CONDITIONS ARTR2/PSSP6; HEAD OF CANYON.

Polygon Number 95

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2, CHVI8
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, PSSP6, FEID
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SOCA6, SIAL2, ARDR4
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	25
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SOCA6, SIAL2, LUSE4
Other Exotic Plants
BRTE

Water:	0
Rock:	25
Talus:	15
Gravel:	25
Bare Ground:	0
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-POSE-PSSP6		20	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ERNI2/BRTE-POSE		10	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: Surrounding vegetation in good condition here

Polygon Number 96

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	Tunnel		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Trail goes through mountain - no vegetation

Polygon Number 97

ParkName:
Columbia Plateau Trail

Survey Intensity	2
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2, CHVI8
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, PSSP6, FEID
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SOCA6, SIAL2, ARDR4
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	25
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SOCA6, SIAL2, LUSE4
Other Exotic Plants
BRTE

Water:	0
Rock:	25
Talus:	15
Gravel:	25
Bare Ground:	0
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-POSE-PSSP6		20	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ERNI2/BRTE-POSE		10	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: ALONG STEEP WALL (CUT INTO HILLSIDE) ABOVE SNAKE RIVER - TRESTLES.

Polygon Number 98

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ERNI2, ARTR2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, HECO26, PSSP6
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	ACMI2, HEAN3, SIAL2, TRAE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	33
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
HEAN3, TRAE
Other Exotic Plants
BRTE

Water:	0
Rock:	5
Talus:	2
Gravel:	33
Bare Ground:	15
Moss Lichen:	5
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10-CHVI8/BRTE-POSE-PSSP6		35	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARTR2/BRTE-PSSP6		5	Small patch	Poor
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5

Notes: SOME VERY WEEDY PATCHES - TRAE

Polygon Number 99

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ERNI2, ARTR2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, HECO26, PSSP6
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	ACMI2, HEAN3, SIAL2, TRAE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	33
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
HEAN3, TRAE
Other Exotic Plants
BRTE

Water:	0
Rock:	5
Talus:	2
Gravel:	33
Bare Ground:	15
Moss Lichen:	5
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-POSE-PSSP6		20	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ERNI2/BRTE-POSE		10	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: HEAVY WEEDS COCA5, HEAN3, BRTE

Polygon Number 100

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	0
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	0
Dominant Shrubs	
> 1.5' tall	0
< 1.5' tall	0
Graminoids Total	0
Dominant Graminoids	
Graminoids Perennial	0
Graminoids Annual	0
Forbs Total	0
Dominant Forbs	
Forbs Perennial	0
Forbs Annual	0
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	0
Exotics Perennial	0
Exotics Annual	0
Water	0
Rock Outcrop	0
Gravel	0
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	0
Wildlife	0
Recreation Severity	0
Recreation Type	0
Hydrology	0

Exotic Species

Noxious Exotic Plants

Other Exotic Plants

Water:	0
Rock:	0
Talus:	0
Gravel:	0
Bare Ground:	0
Moss Lichen:	0
Litter:	0

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		100	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:			0		
Veg Community3:					
Existing Veg3:			0		
Veg Community3:					

Notes: Trail crosses Snake River - artificial berm

Polygon Number 101

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2, CHVI8
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, PSSP6, FEID
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SOCA6, SIAL2, ARDR4
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	25
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SOCA6, SIAL2, LUSE4
Other Exotic Plants
BRTE

Water:	0
Rock:	25
Talus:	15
Gravel:	25
Bare Ground:	0
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		70	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10/BRTE-POSE-PSSP6		20	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ERNI2/BRTE-POSE		10	Small patch	Fair
Veg Community3:	ERNI2/POSE	Daubenmire, 1970			G3

Notes: HEAVY WEEDS COCA5, HEAN3, BRTE

Polygon Number 102

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ERNI2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, HECO26, PSSP6
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	ACMI2, HEAN3, SIAL2, TRAE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	33
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
HEAN3, TRAE
Other Exotic Plants
BRTE

Water:	0
Rock:	5
Talus:	2
Gravel:	33
Bare Ground:	15
Moss Lichen:	5
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10-CHVI8/BRTE-POSE-PSSP6		40	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:			0		
Veg Community3:					

Notes: SOME VERY WEEDY PATCHES - TRAE

Polygon Number 103

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	3
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	SALIX
> 1.5' tall	2
< 1.5' tall	0
Graminoids Total	3
Dominant Graminoids	BRTE, PASM
Graminoids Perennial	2
Graminoids Annual	2
Forbs Total	2
Dominant Forbs	ACMI2, HEAN3, SIAL2, TRAE
Forbs Perennial	2
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	45
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	2
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	2

Exotic Species

Noxious Exotic Plants
HEAN3, TRAE
Other Exotic Plants
BRTE

Water:	0
Rock:	5
Talus:	0
Gravel:	45
Bare Ground:	10
Moss Lichen:	0
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	SALIX/BRTE-PASM		40	Large patch	Poor
Veg Community3:	Disturbed mixed shrub	PBI			NA
Existing Veg3:			0		
Veg Community3:					

Notes: Trail goes through pond.

Polygon Number 104

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	2
Dominant Shrubs	ERNA10, ERNI2, CHVI8
> 1.5' tall	2
< 1.5' tall	1
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, PSSP6, FEID
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	SOCA6, SIAL2, ARDR4
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	4
Exotics Perennial	3
Exotics Annual	3
Water	0
Rock Outcrop	25
Gravel	25
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
SOCA6, SIAL2, LUSE4
Other Exotic Plants
BRTE

Water:	0
Rock:	25
Talus:	15
Gravel:	25
Bare Ground:	0
Moss Lichen:	0
Litter:	35

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10-CHVI8/BRTE-POSE-PSSP6		40	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:			0		
Veg Community3:					

Notes: HEAVY WEEDS COCA5, HEAN3, BRTE

Polygon Number 105

ParkName:
Columbia Plateau Trail

Survey Intensity	1
Observer	HS
Date	8/28/2008
Total Vegetation	4
Trees Total	0
Dominant Trees	
emergent	0
maincanopy	0
subcanopy	0
Shrubs Total	3
Dominant Shrubs	ERNA10, CHVI8, ERNI2, ARTR2
> 1.5' tall	3
< 1.5' tall	2
Graminoids Total	4
Dominant Graminoids	BRTE, POSE, HECO26, PSSP6
Graminoids Perennial	3
Graminoids Annual	3
Forbs Total	3
Dominant Forbs	ACMI2, HEAN3, SIAL2, TRAE
Forbs Perennial	3
Forbs Annual	1
Ferns Total	0
Ferns Evergreen	0
Ferns Deciduous	0
ExoticsTotal	3
Exotics Perennial	2
Exotics Annual	3
Water	0
Rock Outcrop	5
Gravel	33
Logging	0
Fire:	0
Stand Age	0
Agriculture	0
Livestock	0
Development	TRAIL
Wildlife	7
Recreation Severity	3
Recreation Type	3
Hydrology	1

Exotic Species

Noxious Exotic Plants
HEAN3, TRAE
Other Exotic Plants
BRTE

Water:	0
Rock:	5
Talus:	2
Gravel:	33
Bare Ground:	15
Moss Lichen:	5
Litter:	40

Vegetation Types

			Percent	Pattern	Rank
Existing Veg1:	trail/rail bed		60	Matrix	Poor
Veg Community1:	Developed/Disturbed	PBI			NA
Existing Veg2:	ERNA10-CHVI8/BRTE-POSE-PSSP6		20	Large patch	Poor
Veg Community3:	ERNA10/PSSP6	Montana Natural Heritage Program, 2002			G3
Existing Veg3:	ARTR2/BRTE-PSSP6		20	Large patch	Poor
Veg Community3:	ARTR2/PSSP6	Daubenmire, 1970			G5

Notes: HEAVY WEEDS COCA5, HEAN3, BRTE