McGahan Stewardship Unit Trails Assessment

(Working Document Created by Hannah Carlos)

*Objective:*

Develop and implement a trails assessment that meets Columbia Land Trust’s information needs for maintenance and planning on the McGahan Stewardship Unit. Specific objectives include:

1. Collaborate with Land Trust staff to develop field protocols for data collection
2. Identify problem areas for immediate maintenance or that pose a public safety concern
3. Systematically assess trail conditions and identify future maintenance needs to guide long-term trail maintenance and planning
4. Map and assess existing trail system and develop recommendations for management, including managing impacts to natural resources, managing public use, changes to existing signage or other infrastructure, closing trail or limiting use, and/or creating new trails or rerouting sections of an existing trail
5. Identify potential opportunities for outreach related to the trails system, e.g. interpretive signage or other outreach materials, volunteer trail projects, etc.
6. Develop a document summarizing the results of the trail assessment and submit to Columbia Land Trust

*Method*

Trail assessment data is collected and stored into a Global Positioning System (GPS) device (tablet or handheld GPS device) provided by Columbia Land Trust. All existing primary, spur, and braided trails are recorded using GPS. Trail conditions and descriptive attributes are documented at intervals of a minimum of 20 feet. These attributes include tread type, trail class, slope, clearing height, and average width. Additionally, all identified trail issues are recorded as waypoints, using a predetermined series of codes. Digital fields coincide with each waypoint allowing the GPS user to record descriptive notes on each issue, priority level, an estimated amount of maintenance (in feet) required to resolve the issue, and potential prescriptions and actions. Signage and public access points are recorded separately. Digital fields regarding signage will include condition. Public access requires a digital field for comments regarding access description and location. Invasive plant species data is recorded within a 4 foot buffer on either side of all existing trails and are documented by individual species type. *See ‘Protocol’ section for photographic documentation instructions.*

*Overview*

Trail Uses - Walking / Hiking / Running/Mountain Biking

Difficulty- Easy

Length-■

Pets- Permitted on leash

Motorized vehicles Not Permitted

ADA Compliant- ■

Number of parking spaces■

***Protocol***

*Trail Condition Descriptions*

Trails Assessment begins at trail entrance along the south side of SE Heiple Road. Conditions are recorded within sections – minimum length is 20 feet.

**Width measurements** are taken at two locations within each section. Document width of the trail at the beginning of each 20 foot section and again at 10 feet of each section. This provides an average for each section.

|  |  |  |
| --- | --- | --- |
| Width | 0 inches | 10 feet |
|  | xxx | xxx |

**Vertical clearing height** of trails within the McGahan Unit is suggested to be 8 feet. If there is a clearing height issue, create a Trail Issue Waypoint and describe accordingly in the attribute table.

|  |  |
| --- | --- |
| Clearing Height | Yes/No |

**Slope calculations** are taken in each section using clinometer.

**Trail class** is entered into the assessment after collecting slope and width measurements to determine appropriate class and agreed system.

Trail Class 1: Minimal/Undeveloped Trail

Trail Class 2: Simple/Minor Development Trail

Trail Class 3: Developed/Improved Trail

Trail Class 4: Highly Developed Trail

Trail Class 5: Fully Developed Trail

**Tread type** is observed and documented within each section. The MaGahan Unit surface is considered a Natural Surface. Codes are as follows:

|  |  |
| --- | --- |
| N | Natural/Native Soil |
| G | Gravel |
| CG | Compacted Gravel |
| P | Pavement |
| M | Mud |

*Trail Issue Descriptions*

Waypoints are created using GPS when an issue is observed throughout the entire existing trail system. Digital fields describe each issue using codes with space for units\* and prescription field. For example:

|  |  |  |
| --- | --- | --- |
| Issue Code | Issue | Prescriptions |
| E | Erosion | Add drainage, reroute, fill existing trail with debris |
| R | Ruts (inches deep)\* | xxx |
| WO | Washout (length in feet)\* | xxx |
| O | Obstacle | xxx |
| BT | Braided Trail | xxx |
| WA | Wet Area (over 3ft. diameter) | xxx |
| BR | Brush growing in trail | xxx |
| U | User created trail | xxx |
| D | Drainage (add/remove) |  |

*Invasive Species*

Invasive plant species are identified and recorded on all existing trail within 4 feet of trails’ edge.

|  |  |
| --- | --- |
| Common Name | Species  |

*Signage*

All signage within the unit is documented as a waypoint with digital field regarding its condition.

|  |  |
| --- | --- |
| Sign Type  | Condition |

*Public Access*

Public entry locations are documented as separate waypoint with a digital field providing condition and parking information.

|  |  |  |
| --- | --- | --- |
| Public Access | Condition | Parking Space Availability |

*Tools/Equipment*

GPS device

Clinometer

Camera

Tape Measure

*Maintenance Prescription Examples*

Brushing/Clearing

Removal of downed trees or other obstacles

Slope revegetation

Backslope grooming

Grading tread

Surface Replacement

Trail deconstruction/decommission

Bevel cut logs across trail

Addition/Removal/Adjustment of corrals

Installation/Cleaning/Repairing of drainage structures

Retaining wall addition/repair

*Connectivity/Upgrades*

Trail system is to be user friendly with fluid connectivity. Rouge/spur trails leading to homeowner property are considered unsuitable for upgrades and elimination of user created trails is likely.

*Photographic Documentation*

I suggest photograph documentation for the following:

User made trails leading to/coming from homeowner property

Issues

Signage