

JULIA'S GULCH TRAIL DEVELOPMENT PROPOSAL

2011

DRAFT

OBJECTIVE:

This project will create a system of walking trails on properties owned by the City of Tacoma through out Julia's Gulch. These trails will provide people with recreational opportunities in an area of natural Northwest environment located in a much larger urban and industrial setting. The proposed trail system would consist of approximately 2.5 miles of primarily Class 2 or Class 3 trails having a wilderness trail character. The trail system would include and upgrade currently existing Class 1 trails, existing(unused) service roads and new trail construction.

SCOPE:

Design a system of trails using existing paths, existing unused service roads and new trail construction applying ADA standards where possible.

Reconstruct existing routes to meet Class 2 or 3 trail standards and construct new trail to meet Class 2 or 3 standards. Trails would be constructed with a minimum 3 foot tread width, adequate backslope(typ. 1:1), consistent grade, adequate tread out slope, necessary drainage structures(culverts, drain dips, ditches), using curvilinear alignment, have natural or graveled surfaces as needed and necessary signage.

Project will be accomplished in phases using resources such as volunteers and available grants.

DESCRIPTION OF GULCH:

Julia's Gulch is located immediately north of Hylebos Waterway running north to south for approx. .9 mi. along the east side of Norpoint Way Northeast. The City owned portion of the gulch is approx. .7 mile in length varies in width from about 175 ft. in the north to over 1,000 ft. at the south end. The floor of the gulch varies from 50 ft. to 300 ft. in width. The sides of the gulch generally slope steeply from the floor to the rim at about 70 to 80%. The floor of the gulch is primarily gray clay. Even though the clay is typically wet, there is no evidence of running water in the gulch. Two earthen dikes with culverts have, at some time in the past, been constructed across the floor of the gulch near its southern end. These dikes provide good trail routes for crossing the gulch and are included in one of the currently used trails. The area contains largely typical northwest flora. The floor and west slope of the gulch are forested primarily with Red Alder but

include some Bigleaf Maple and Black Cottonwood. Areas of the west slope are also densely covered with Himalayan Blackberry. The east slope of the gulch is forested with a typical mix of Pacific Northwest conifer and deciduous trees including Douglas Fir, Western Red Cedar, Western Hemlock, Madrone, Red Alder, Big Leaf Maple, Black Cottonwood and Vine Maple.

HISTORY OF GULCH:

The gulch is named for a native American, Julia Stanley Hughes. She owned property including the gulch and lived on a float house at the foot of the gulch in the early 1900's.

DESCRIPTION OF EXISTING TRAILS/ROUTES:

Access Trail

This existing trail begins at 460 ft. north of the north end of the parking lot in View Point Park(belonging to City of Tacoma DOT) following the rim of the gulch for about 150 ft. to a constructed view point with a bench. Near this point the trail descends rather steeply(about 14% grade) to the floor of the gulch. Total length of this trail from parking lot to floor of gulch is 1,000 ft. There is no defined or constructed trail from the parking lot for the first 460 ft. to the constructed trail. The route traveled here is over mowed lawn.

Southern Loop Trail

This section of trail could be considered to begin at the junction with the Access Trail. The Loop trail is about .3 mi. in length crossing the floor of the gulch on an earth dike to the east side of the gulch and descends steeply(up to 20%) along a "dozer" trail to the south following the base of the east slope of the gulch. Near the southern municipal property line the trail crosses back to the west side of the gulch on a second earth dike and follows a brushed-out route northerly to the beginning of the Loop and the junction with the Access Trail.

Northern Loop Trail

This section of trail begins on the Access Trail near the view point. The trail consists of a brushed-out path traveling north along the top edge of the west rim of the Gulch . Currently this loop follows undisturbed ridge line and an abandoned service road for about 2,000 ft. before turning east to cross the floor of the gulch and travel south along the base of the east slope of the gulch to connect with the Southern Loop Trail. The current Northern Loop trail is approx. .6 mi. long and has varying grades that range from 3% to 14% but the typical grade is 10% or more.

PROPOSED TRAILS FOR JULIA'S GULCH:

Access Trail

This trail could retain its current alignment even though the grades of the trail are excessive for ADA standards, they are consistent with the grades of existing trails in the Gulch and with the grades of abandoned service roads that make up about one third of this trail. The initial 500 ft. of trail from the Parking lot to the established viewpoint on the rim of the gulch can be constructed to meet ADA requirements. If the remaining 500 ft. of trail is retained it should be rebuilt using full-bench-cut to provide a tread width of 3 ft., a tread outslope of 2 to 5% and a backslope of approx. 100%. This trail is located close to the proposed Northshore Trail.

An option to consider would be to abandon the descending portion of the Access Trail and terminate it at a junction with the proposed Northshore Trail. This would almost double the length of the Southern Loop Trail and eliminate closely situated parallel trails.

Southern Loop Trail

Working in a clockwise direction this trail could retain its current alignment from the starting point at its junction with the current Access Trail for a 200 ft. across the dike. The trail then descends steeply south along the base of the east slope of the gulch. This section will require some filling and reshaping of the existing tread across the dike and along the "dozer" road leading down the hill.

From about 600 ft. to about 700 ft. the trail should be rerouted to bypass an abrupt change in terrain approaching the lower or 2nd dike. The new alignment should be laid out with a 10% grade to transition from current level of the trail to meet with the level of the 2nd dike.

From 800 ft. to approx. 1,500 ft. near the foot of the west slope of the gulch the current undeveloped trail should be realigned to establish a consistent grade and to avoid potential boggy areas that develop during the winter.

Given the steeper terrain and the use of former service roads that have grades of 15 to 20 per cent the ability to meet ADA standards along the Southern Loop Trail are not readily practical.

Northern Loop Trail

This trail would begin at a junction with the Access Trail near the viewpoint approx. .1 mi. from the DOT Viewpoint Park parking lot. Traveling north along the west rim of the gulch the trail would cross to the east side of the gulch approx. one-third of a mile south of the head of the gulch. The trail would then travel south to join the Southern Loop Trail.

The first .4 mi. of the initial loop trail would follow close to the rim of the gulch to maximize distance from Norpoint Way and to provide views into the gulch. From .39 mi. to approx. .43 mi. the trail will descend to near the floor of the gulch cross the gulch to the east side. The trail then runs south along the east wall of the gulch to mi. .75 where it joins the Southern Loop Trail. Approx. 900 ft. of this east wall section of trail should be relocated from the current location on the floor of the gulch to the lower slope of the east wall of the gulch. In addition the east slope of the gulch appears to consist of suitable soil and gravel for trail construction. While some of the route (approx. 1,800 ft.) along the west rim and along the southern most area of the east slope can be readily adapted to a trail by using abandoned service roads, most of this trail (approx. 2,200 ft.) will require new construction. One or more connecting trails crossing the floor of the gulch could provide alternatives to the approx. 2 mile loop.

The trail along the west side of the Gulch up to and including the crossing of the Gulch could meet some ADA standards. While the average grade is greater than 5% it appears that a grade of less than 8.3% could be constructed and necessary rest areas provided. This would result in another 2,200 ft. of ADA suitable trail. The east side of the Northern Loop trail descends too steeply to meet ADA standards without the incorporation of several switchbacks and substantially more new trail construction distance. Also, public ownership of the east side of the Gulch currently does not provide the necessary room for this additional construction.

Future additions to this loop could add .7 mi. by extending the trail north along the west rim or slope of the gulch, traversing the head of the gulch and travel south on the east side of the gulch to reconnect with the loop. This addition to the Northern Loop would likely include ADA standard trail along the west side of the Gulch.

Northshore Trail

This proposed trail which would traverse the bluffs along the north side of Commencement Bay would cross through Julia's Gulch as part of its course. The standards of the Northshore Trail would in part determine the location of the trail through the Gulch. A proposed route that meets ADA standards is included on the trail map. This proposed route assumes that the Northshore Trail would connect with Julia's Gulch at 19th St. N.E. This trail could also be incorporated into the Southern Loop and Northern Loop Trails

TRAIL CONSTRUCTION RECOMMENDATIONS

The east and west slopes of the gulch have the most suitable soils for trail construction while the floor of the gulch consists largely of clay. Minimizing trail on the floor of the gulch is recommended.

Trail tread constructed on side hills should be min. 3 ft. wide with a 2 to 5% outslope of the tread, be full-bench cut, have a 1:1 backslope and have a curvilinear alignment. Drain

dips, drain bars or other drainage facilities should be provided as needed, though there appears to be little drainage or runoff in the gulch.

The grades of the trails should not exceed ADA Standards. Those trails or trail sections that cannot meet ADA Standards and will be new construction should have relatively consistent grades not exceeding 10% if possible. Avoiding frequent grade changes or frequent up and down sections of trail provide a more enjoyable hiking experience.