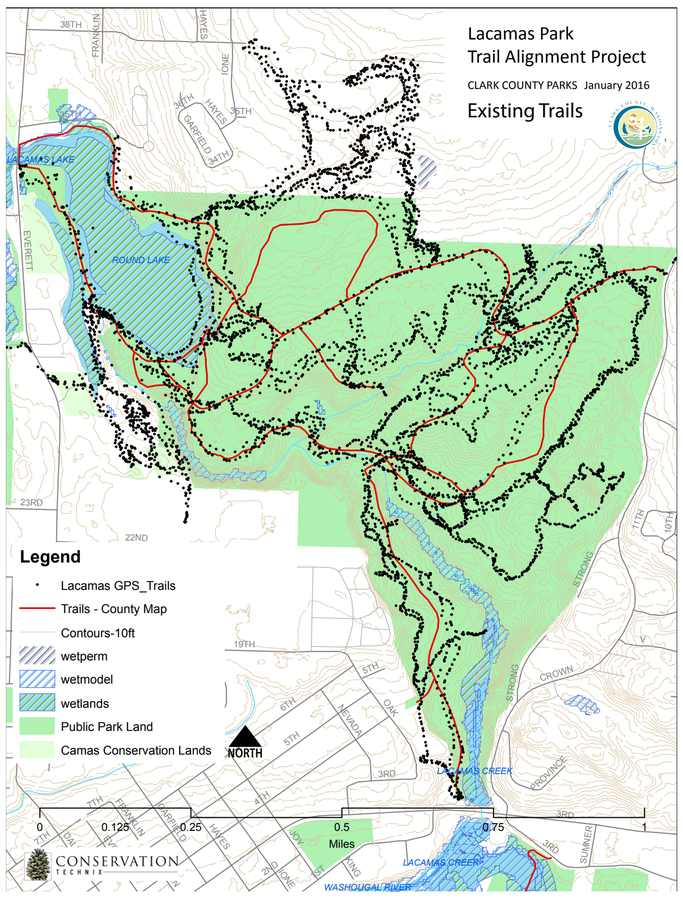
Lacamas Park Trail Alignment Study

Trail Evaluation Process



Volunteer Team - representative trail users

Ryan Ojerio, Washington Trails Association SW WA coordinator
Sean Vergillo, Lacamas Trails Advocacy Group and Camas Parks Board member
Jarred Jackman, mountain biker and member of Lacamas Trails Advocacy Group
Foster Nuffer, runner
David Stiles, Evergreen Mountain Bike Alliance and DNR liaison
Jason Multanen, mountain biker
Jamie Morin, walker

Trail Mapping - inventorying the existing

The county park maps showed trail locations from out-dated sources. New user-created trails covered new park areas. No accurate maps indicated where all the trail existed. Team members gathered GPS tracks and reviewed their accuracy to generate a more realistic view of the trail system.

Trail Criteria - determining what makes a good trail

Trail characteristics were examined to provide a basis for assessing the existing trails. With an eye out for unsafe conditions, trail damage and recurring maintenance challenges and recreational value, trail design evluation guided the team's field work.

Contouring	Trail always contours along a hillside Trail avoids flat ground or going up a hill along the fall line Sufficient cross slope that trail drains well and doesn't develop a trail edge berm Located far enough up a hillside that the tread can be re=benched multiple times
10%	The average steepness of the trail doesn't exceed 10% grade Average steepness as measured over logical sections of trail Trail steepness has the strongest effect on trail sustainability The closer the trail grade comes to zero % grade, the more sustainable the trail
15%	No individual section of trail greater than 15% grade Very short sections permitted at 15% grade Steeper than 15% in special circumstances (armored, steps, etc.)
Half-Rule	No contouring trail steeper than 50% of the cross slope grade The line between contouring and the fall line Violating half rule should be avoided on even low cross slope grade slopes
Grade Reversals	Regular grade reversals to force water off trail Grade reversals designed into original construction rather than later constructed Grade reversals are integrated into natural features and flow of trail

Trail Sustainability Report Card

Rule	F Grade	D Grade	C Grade	B Grade	A Grade
Contouring	trail is fall line on steep or moderate slope	trail is fall line on gentle slope or crosses flat ground	trail contours on low cross-slope hillside (<15%)	trail contours on moderate cross-slope hillside (15%-30%)	trail contours on relatively steep cross-slope hillside (>30%)
10 % Rule	grade over logical trail section greater than 20%	grade over logical trail section no greater than 15%	grade over logical trail section no greater than 10%	grade over logical trail section no greater than 6%	grade over logical trail section no greater than 3%
15% Rule	no single short section of trail steeper than 25%	no single short section of trail stepper than 20%	no single short section of trail steeper than 15%	no single short section of trail steeper than 10%	no single short section of trail steeper than 5%
Half Rule	trail grade same as slope grade	no trail grade steeper 3/4 ross slope grade	no trail grade steeper 1/2 cross slope grade	no trail grade steeper 1/3 cross slope grade	no trail grade steeper 1/4 cross slope grade
Frequent Grade Reversals	no grade reversals or high maintenance grade reversals like waterbars	some shallow natrual grade reversals or constructed dips	grade reversals designed into the layout of the trail	trail tread constantly reversing grade in a way unrelated to natural features	trail tread constantly reversing grade incorporating natural features

Source: Bruce Weidenhamer

Field Work - "boots on the ground" assessments

Individual trails were examined for how they met the trail criteria and whether minor or major "fixes" were necessary to met user needs for the type of trail. The essentail links and functions of a connected trail system were considered for potential decommissioning some trails and adding future new trails.

Additionally, team members shared their values for each trail, reflecting on how that trail contributed to the recreational experiences within the park.

		Keep			Remove	
Trail #*	**Trail "Name"***	Retain	Reroute	Repair	Restore	Values
1	Lacamas Park Path	X				Main Round Lake connection, leisure walk & ADA access, has potential for barrier-free trail,
2	Round Lake Path	X		x		Main Round Lake connection, main scenic route around lake, access for maintenance vihicles - loop around the lake opportunity,
3	Main Access Road	X		x		Maintenance/emergency access, popular with walkers, great to have a "main line" through the park that people can fall back to when they get lost,
4	Main Creek Trail	X	minor	x		Main trail, Heavy use, most scenic trail in park, excellent viewsheds of creek, waterfall, different habitat areas,

System-wide Planning - future users and trail resilience

The proposed trail system changes are designed to provide a variety of trail experiences to park users and establish a more resilient (lower maintenance) trail infrastructure. These changes will take years to implement and resources beyond the reach of county parks' budget.

		Keep			Remove	
Trail #*	**Trail "Name"***	**Retain**	**Reroute**	**Repair**	**Restore**	**Identified Repairs**
1	Lacamas Park Path	X				Propose a floating dock crossing in area of dams.
2	Round Lake Path	X		X		Steep grades are a barrier to some users and require annual maintenance, waterbars are a constant repair issue,
3	Main Access Road	X		X		Road bridge is timber is getting soft and slick. Potholes and runoff channels. Can flood during heavy rains.
4	Main Creek Trail	X	minor	X		one steeps section with exposed roots and one spot that needs a turnpike, some steep sections and major marshy areas, possible reroutes, armoring and replanting, lots of poison oak,

CLARK COUNTY PARKS

Open House Meeting
June 29, 2016

CONSERVATION TECHNIX