

Camp Hope Master Plan

DRAFT

August 2016



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Camp Hope Master Plan

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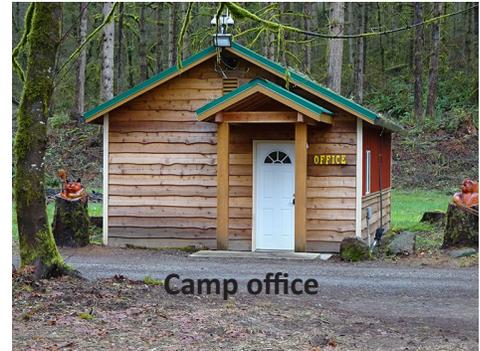
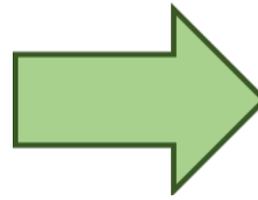
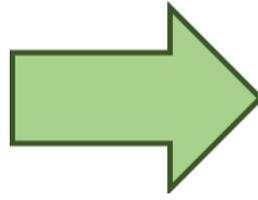
Clark County Parks

Camp Hope Master Plan

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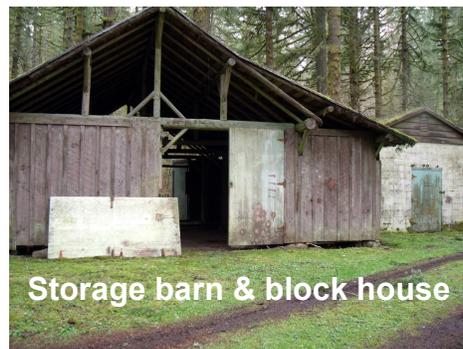
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Camp Hope Master Plan



The vision for Camp Hope transforms an outdated campground into a thriving and lasting outdoor recreation and environmental education facility that supports overnight group programming, primarily for youth from diverse backgrounds and needs.

Work has already begun to renovate existing structures into viable uses. The master plan provides guidance for the future redevelopment of the facilities to accommodate overnight and year-round programming.



Executive Summary

PURPOSE

The Camp Hope Master Plan provides direction for the adaptive re-use of the county special use facility along the East Fork of the Lewis River, formerly known as Camp Lewisville and Camp Julianna. The vision for Camp Hope seeks to create a thriving and lasting outdoor recreation and environmental education facility that supports overnight group programming, primarily for youth from diverse backgrounds and needs. While providing a complimentary special recreational use for the Clark County parks system, the master plan also proposes to respect the integrity of natural resource values and preserve the site's natural character reflective of its unique habitat and landscape character along the East Fork Lewis River Greenway.

BACKGROUND

The subject property is accessed from Lewisville Highway via NE Roper Road a paved then graveled one-lane county road that terminates inside the site's gate. Lewisville Park, a county regional park facility, is located across the River. The Girl Scouts of America leased the site for 50 years as an overnight camp until 1996 when the lease was not renewed. The property remained vacant and its buildings aged and deteriorated until a new lease was signed with the Camp Hope organization. Through voluntary efforts, Camp Hope has repaired and renovated many of the structures in the camp and now seeks to rebuild targeted facilities to adapt to the needs of contemporary overnight and year-round programming. While the users for Camp Hope focus primarily on youth, the site and its facilities could provide opportunities for other groups and organizations if its facilities are updated to accommodate a broader range of users.

ENVIRONMENT

Due to the proximity of the East Fork of the Lewis River (EFLR) with its sensitive riparian ecology and the steep slopes that encompass the east and south property borders, the property offers special physical characteristics that also restrict the feasibility of expansive land uses. The property contains several different priority habitats in addition to the EFLR riparian corridor, including old-growth forest, biodiversity areas, Oregon white oak woodlands as well as talus, cliffs and caves. The majority of the property contains mature forest that was identified by Washington Department of Fish and Wildlife as Biodiversity Area and Corridor. This diverse wildlife habitat comprised of native vegetation provides important ecosystem support for fish and wildlife. Any development within the special habitat must result in "no net loss" of ecological function. The master plan proposes a limited development "envelop" for the proposed renovation and replacement of existing buildings and support facilities that stay within the existing camp area. Some challenges may occur with proposed redevelopment due to the delineation of the ordinary high water mark (OHWM) in the relict EFLR channels that result in the 200' shoreline buffer extending well into the existing camp area within the loop road.

PROPOSED REDEVELOPMENT PLAN

The development program for Camp Hope seeks to improve and expand the facilities to accommodate more active programming for youth camps, environmental education, volunteer and community service, retreats, group camping, outdoor school, scouting and similar activities. In order to operate effectively, Camp Hope needs to reconfigure some existing amenities to provide for better, well-rounded programming functions. The proposed buildings would change the impervious building coverage from the existing 17,844 square feet to 35,128 sf, representing a 97% increase in building coverage. The most significant increases come from the replacement of the pit toilet structures with fully plumbed toilet/shower buildings for each of the four camping “pods”.

OUTDOOR RECREATION/EDUCATION

In addition to redeveloping the overnight lodging, programming and support buildings, the Camp Hope Master Plan provides for the outdoor recreational amenities that enhance organized group activities. The redevelopment of Camp Hope would add an obstacle course, zip lines & aerial tree canopy bridges, volleyball and disc golf holes to the existing archery range, amphitheater, and hiking trails. The master plan also calls for the gradual realignment of the existing trail system to remove wetland intrusions, avoid steep gradients and develop a more resilient and sustainable trail system.

IMPLEMENTATION

Camp Hope anticipates the redevelopment of the County’s special use facility to occur over the next decade through phases that respond to permitting requirements and fund-raising. The master plan recommends the negotiation of a development agreement will to facilitate this longer implementation period and clearly identify the roles and responsibilities for both Clark County Parks, as land manager, and Camp Hope, as lessee.

Project Background

PURPOSE

The Camp Hope Master Plan proposes a vision, mission and set of goals to guide the future re-development of the facilities and improve the capacity of the property for a variety of programs, events and activities within the sustainable carrying capacity of the site. These guiding principles seek to allow the development of adequate infrastructure to support viable outdoor recreation and environmental education programming while protecting the sensitive resources of the site's location on the East Fork of the Lewis River. The Camp Hope Master Plan intends to guide the redevelopment of the former Camp Lewisville site to create a viable recreational asset within the park, trail and open space infrastructure of Clark County.

VISION

Camp Hope will become a thriving and lasting outdoor recreation and environmental education facility that supports overnight group programming, primarily for youth from diverse backgrounds and needs.

MISSION

The county parks special use facility (currently Camp Hope) shall provide programming for environmental education and outdoor recreation that respects the integrity of natural resource values and serves to preserve the site's natural character reflective of the native habitat and landscape character of the East Fork Lewis River Greenway.

GOALS

Upgrade the existing facility and infrastructure to provide safe, year-round, all-weather, overnight amenities and flexible multi-purpose meeting/education indoor space.

Re-establish a supporting trail system and add "nature-oriented" activities to enhance complimentary outdoor recreation opportunities.

Restore the natural landscape to reflect the native ecosystem that provides wildlife habitat and protects water quality.

PLANNING PROCESS

The Camp Hope master Planning process follows a strategic path that is distinctly different from that of one of its typical public parks. The subject property is county-owned and currently classified as a special facility/special use area in the 2007 Vancouver-Clark Comprehensive Parks, Recreation and Open Space Plan and its classification was unchanged in the 2015 Clark County Parks, Recreation & Open Space Plan. Approximately 10 acres are currently developed within the 2 parcels totaling 107 acres. An additional 11-acre parcel is considered as a future addition to the designated special use facility and is currently held in ownership by the Columbia Land Trust.

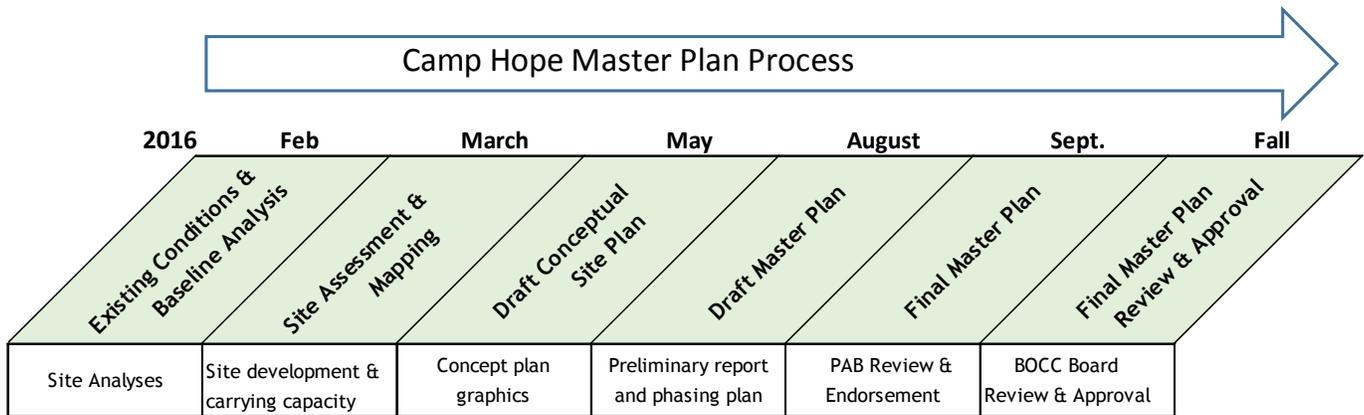
During a November 2008 work session, the Board of County Commissioners approved planning for the re-use of a special facility at the subject property, rather than developing the site as a public regional park. The extent of public outreach for the planning process was limited to targeted stakeholders. In 2009, an adaptive re-use feasibility study was conducted to direct the potential future uses for the property. The feasibility study recommended leasing the site to a single entity or organization for its operations and management with the intent that site programming could once again provide value to the overall outdoor recreation and conservation within the county park system. In 2012, the county leased the 107-acre property to Camp Hope, a non-profit organization tasked with restoration and operation of Camp Lewisville. The lease states the intended use of the property as a youth camp or for the purpose of youth enrichment, environmental education and/or life skills training. Since then, Camp Hope has restored the function of the camping pods, converted the former 'infirmary' to an office, renovated the caretaker's house, cleared overgrowth, resurfaced gravel paths, parking areas and loop road and rebuilt other dilapidated accessory structures and amenities. In 2015, funds from the first phase of timber harvest on the property were approved for expenditure to support the development of a master plan for the site.

Clark County, in partnership with Camp Hope of Southwest Washington, a 501.C.3 organization, intends to use this master plan to guide the future re-development of the facilities to modernize and improve the capacity of the property for a variety of programs, events and activities. Upon approval, the master plan will describe future planned improvements with recommendations for resource conservation and future connecting access. The master plan will also facilitate future site development plan review and permitting for those proposed improvements. The master plan will also propose distinct phases for implementation that can facilitate planning and sequencing for the property's sustainable use. Clark County Parks, a division of Public Works, oversees the partnership and lease agreement with Camp Hope. Parks recognizes the value of partnerships in providing specialized outdoor recreation and environmental education within its park system.

The chart (Figure 1.) outlines the planning process for the development of the Camp Hope Master Plan. Coordination meetings between project team members and the consultant occurred on a regular basis with additional meetings scheduled for conferences with county planning and development representatives. The master plan progress will be shared with the Parks Advisory Board (PAB) on an ongoing basis with a formal presentation of the draft master plan presented for their review and endorsement tentatively scheduled for Summer 2016. A work session with the Board of County Councilors (BoCC) may occur after PAB review followed by a public hearing for BoCC approval of the final master plan.

PLANNING PROCESS

Figure 1. The master planning process time line.



Throughout the planning process, continual coordination will occur between the Parks Division and Camp Hope Leadership, with collaboration occurring with county environmental services, community development and outside partners such as the neighboring Boys Scouts.

PROJECT TEAM/ KEY PARTICIPANTS

- Bill Bjerke, Clark County Parks Manager
- Karen Llewellyn, Clark County Parks Volunteer Program Coordinator
- Kevin Tyler, Clark County Vegetation Management Division Manager
- Brent Davis, Clark County Environmental Review Manager
- Susan Ellinger, Clark County Community Development Land Use Manager
- Jim Vandling, Clark County Natural Resource Specialist III
- Hunter Decker, Clark County Natural Resource Specialist II
- James Mattila, Camp Hope Board of Directors
- Chuck Cox, Camp Hope Board of Directors
- Jean Akers, AICP, RLA, Conservation Technix, Senior Associate

LOCATION

Camp Hope (formerly known as Camp Lewisville and Camp Julianna) is situated on the southern banks of the East Fork Lewis River, east of Lewisville Highway. The property is accessed from Lewisville Highway via NE Roper Road adjacent to the East Fork Lewis River. NE Roper Road is a graveled one-lane, no-outlet county road that terminates at the subject property.



Figure 2. Location of Camp Hope in Clark County, Washington.

REGIONAL CONTEXT

Situated across the river from Lewisville Regional Park, the Camp Hope property provides a natural background for the more developed regional public park setting. The subject property is one element in the contributing linear landscape of Clark County's East Fork Lewis River Greenway. The Clark County 2006 Regional Trail & Bikeway Systems Plan identified the East Fork of the Lewis River as part of a system of regional trails and greenways that enhance the community's transportation, recreation and environmental assets. The greenway provides a corridor for a future regional trail while protecting the aquatic habitat of the River. Camp Hope is only one of numerous properties along the Greenway that contribute to the ecological integrity of the East Fork and could be part of the future regional trail. The East Fork of the Lewis River Greenway provides a corridor for the regional trail from the confluence with the North Fork to the junction with the Chelatchie Prairie Rail with Trail. The Greenway is one of several open space corridors within Clark County that seeks to create an interconnected system of public lands for preserving natural environments and providing a regional trail system and public open spaces.

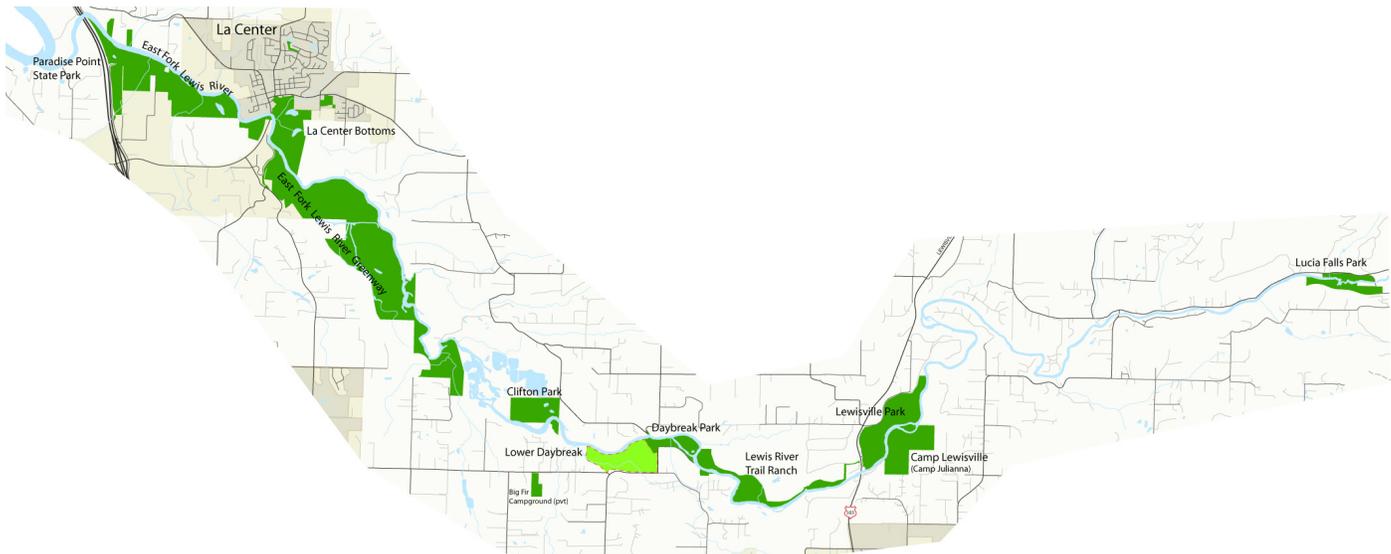


Figure 3. The East Fork Lewis River Greenway contains significant conservation lands to protect the River's sensitive and precious habitats.

This property provides a vital link in the public ownership along the East Fork of the Lewis River (EFLR), providing water quality, fish and wildlife habitat values, riparian greenway connections and potential recreational or timber uses. With the heavily-used Lewisville Park falling directly across the River, the visual aspects of both parcels have a direct relationship on each other. Any opportunities for the use of the Camp Lewisville (Camp Hope) property should compliment the active recreation at Lewisville Park.

REGIONAL CONTEXT

The county-owned property is also adjacent to the camp property owned and operated by the Boy Scouts of America (BSA), along the same side of the East Fork of the Lewis River. Boy scouting groups have been using the Camp Hope facilities as the recent restorations have created better accommodations for some of their camping programs. The BSA property contains significant acreage that contributes to the conserved lands along the EFLR. A previous alternative access study conducted by Vancouver-Clark Parks & Recreation Department (VCPRD) indicated potential feasibility of providing safer two-way vehicular access to Camp Hope through the BSA property as part of a long term plan to improve future accessibility and desired level of use.

SITE HISTORY

In 1936, a 90-acre parcel (of the 107-acre county-owned properties formerly called Camp Lewisville) was purchased as part of the 263-acre Lewisville Park acquisition. The Girl Scouts leased the site for their exclusive use from 1946 to 1996 at which time they chose not to renew their lease. During the Girl Scout occupancy, improvements were added to the property including: the four camping areas (each with four 3-sided sleeping shelters and covered kitchen/dining area) a central bathhouse, a first aid/nurse office, a caretaker's house, a small pole barn for equipment and a small building/sleeping quarters. For 50 years, Camp Lewisville served as the location for the Girl Scout's Camp Julianna, for their exclusive use as an overnight camping facility.

In 1996, the Girl Scouts went through a nation-wide reorganization. The lease was not renewed at that time due in part to the newly forming structure of the organization and their need to clarify their future directions.

After the cessation of the Girl Scout lease in 1996, a caretaker was retained on site for the security of the facility. A camping study was conducted in 1996 concluding that Camp Lewisville did not meet the location, spatial and physical characteristics for economically-feasible public campground use.

In 1997 the Board of County Commissioners (BOCC) determined that a master plan was necessary to determine the best use of the site. In 1998, the county forester prepared an assessment of timber health and drafted a timber management plan as an early effort in the master planning process. During this previous master planning process, both physical and environmental conditions were inventoried relative to potential development constraints. The planning project was put on hold in late 1999 when the Camp Bonneville project took priority. In 2001, the existing site conditions were presented to the BOCC and direction to further the master planning process was given to Parks. The feasibility, value and availability of acquiring the adjacent property (to the east) was added to the project's planning scope. Walker Macy, an independent consultant produced an initial Opportunities and Constraints map and outlined summary before this planning project was again put on hold early in 2001. In 2002, the septic system was upgraded to meet current public health standards. The lodge, in a state of disrepair, was demolished in 2003. Only its chimney currently remains.

SITE HISTORY



Figures 4 & 5. The old Camp Julianna lodge was demolished in 2003. The chimney and fireplace are all that remain.

In 2008, the Columbia Land Trust acquired an adjoining 11.8-acre parcel with the intent to eventually transfer ownership to the County to expand the conservation of lands along the Greenway.

In November 2008, the Board of County Commissioners approved the initiation of the master plan re-use feasibility study effort for Camp Lewisville (former location of Camp Julianna/current location of Camp Hope) as one of several Regional REET (real estate excise tax) funding priorities. The Board acknowledged that this special facility would not follow a typical public involvement process for a park development in light of the physical separation from easy public access and adjacent regional park facilities. The feasibility study sought to find the potential adaptive re-use of this county property to re-establish its role and value in the County's regional park and open space system.

The results of the re-use feasibility study were presented to the County Commissioners on August 25, 2009 in a work session with three recommendations for next steps:

1. Explore two long-term management models: either connecting to Lewisville Regional Park as an extension of public park access to recreation or leasing the site to a single operating entity.
2. Environmental education surfaced as the primary value for programming on the site with the need to upgrade facilities and add an indoor multi-purpose classroom building.
3. Cultivate "champions" since no single entity could be identified as a lessee. Without a single group, the need directed the creation of a "friends" group or coalition of interested parties that eventually support development, programming and management of the site.

Interim steps for property management and maintenance sought to involve volunteers and community service groups to attempt to protect the site's infrastructure from further neglect and deterioration. Commissioners endorsed the feasibility study as a precursor to a future master plan and recommended the exploration of potential feasibility for a future connection to 6.

SITE HISTORY

Lewisville Park or other alternative access to the site.

In 2012, the county leased the property to Camp Hope, a non-profit organization sponsoring camping and related programming activities primarily for youth. The organization has been steadily making repairs and renovations to the property to provide opportunities for education and recreation. The restored camping infrastructure currently supports a year-round facility for field trips, outdoor school, faith-based groups, day camps (seasonal), youth organization outings, work project opportunities and volunteer service activities. Any further improvements on the site to enhance and sustain its operations are dependent on the development and approval of a master plan.



Figures 6 & 7. The old camping shelters have been repaired, repainted and enclosed to help reduce weathering damage.

EXISTING INFRASTRUCTURE

The existing condition of NE Roper Road is a one-lane graveled county road with pull-outs and two private driveways (to residential neighbors). The cart path alignment is wedged between steep wooded slopes and the top of the river bank. Portions of NE Roper road are paved with asphalt up to the gate just beyond the neighboring residential driveway. The remainder of any vehicular access and site circulation is gravel.

An existing cart path creates a loop trail through the developed portion of the site. After recent 2014 logging operations and subsequent winter storm-damaged fallen trees, some portions of the cart path remain widened and surfaced with gravel that provides stable parking areas.

The site contains a significant number of basic camp structures including Adirondack shelters, restroom/shower building, pit toilets and program shelters that were maintained in adequate condition for use in a camp program. A 16-year vacancy resulted in deteriorated conditions. Their function was limited to seasonal use and specific programs. The remains of the chimney from the former lodge (demolished in 2003) still stand with some evidence of the former lodge foundation.

Extensive trails throughout the property were actively used during the Girl Scouts camping era. These trails have been re-traced and are being restored through the maintenance of undergrowth established after a logging operation thirty years ago and the cessation of active Girl Scout camping activities.

Figure 8. Map of Existing Conditions in Main Activity Area

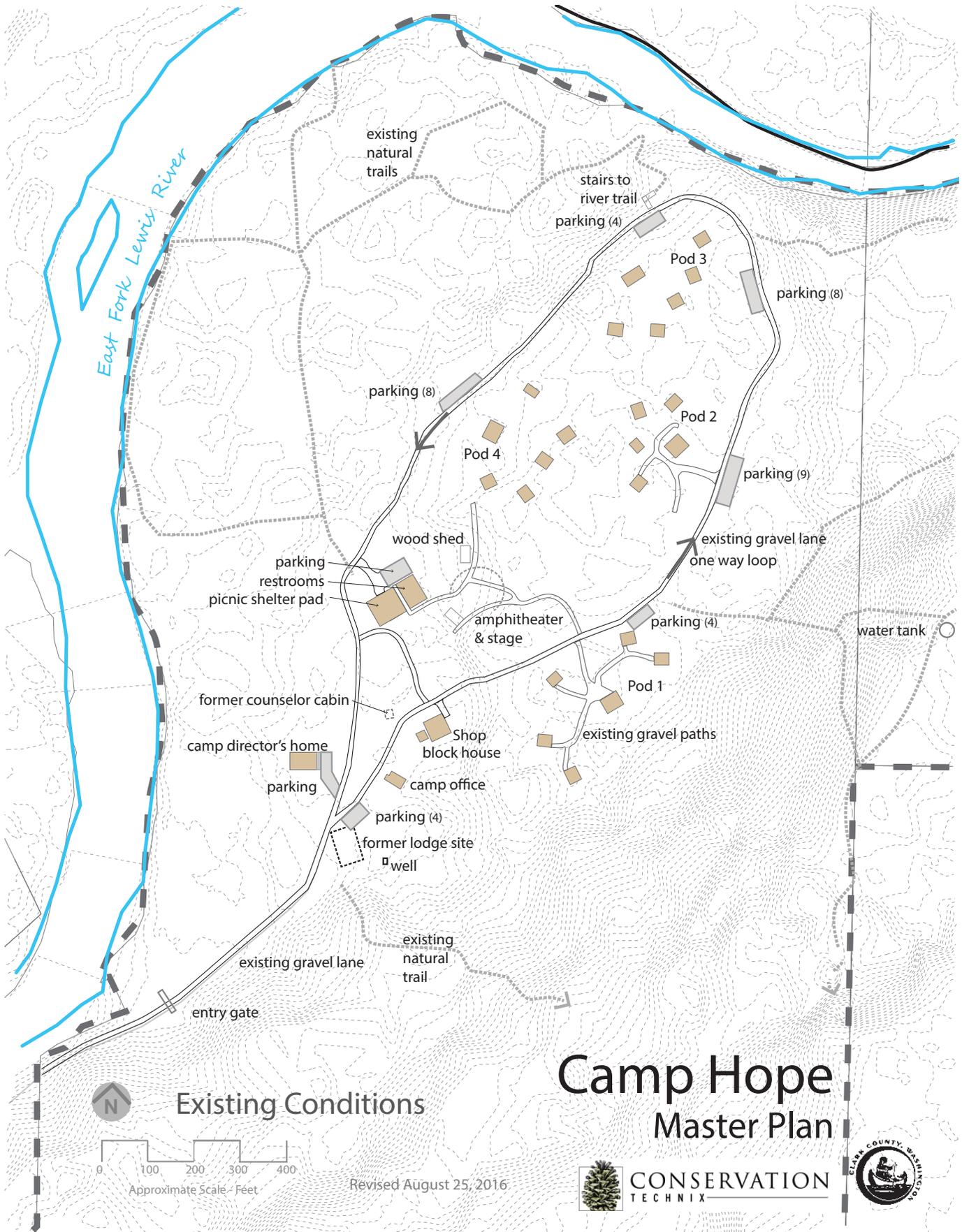
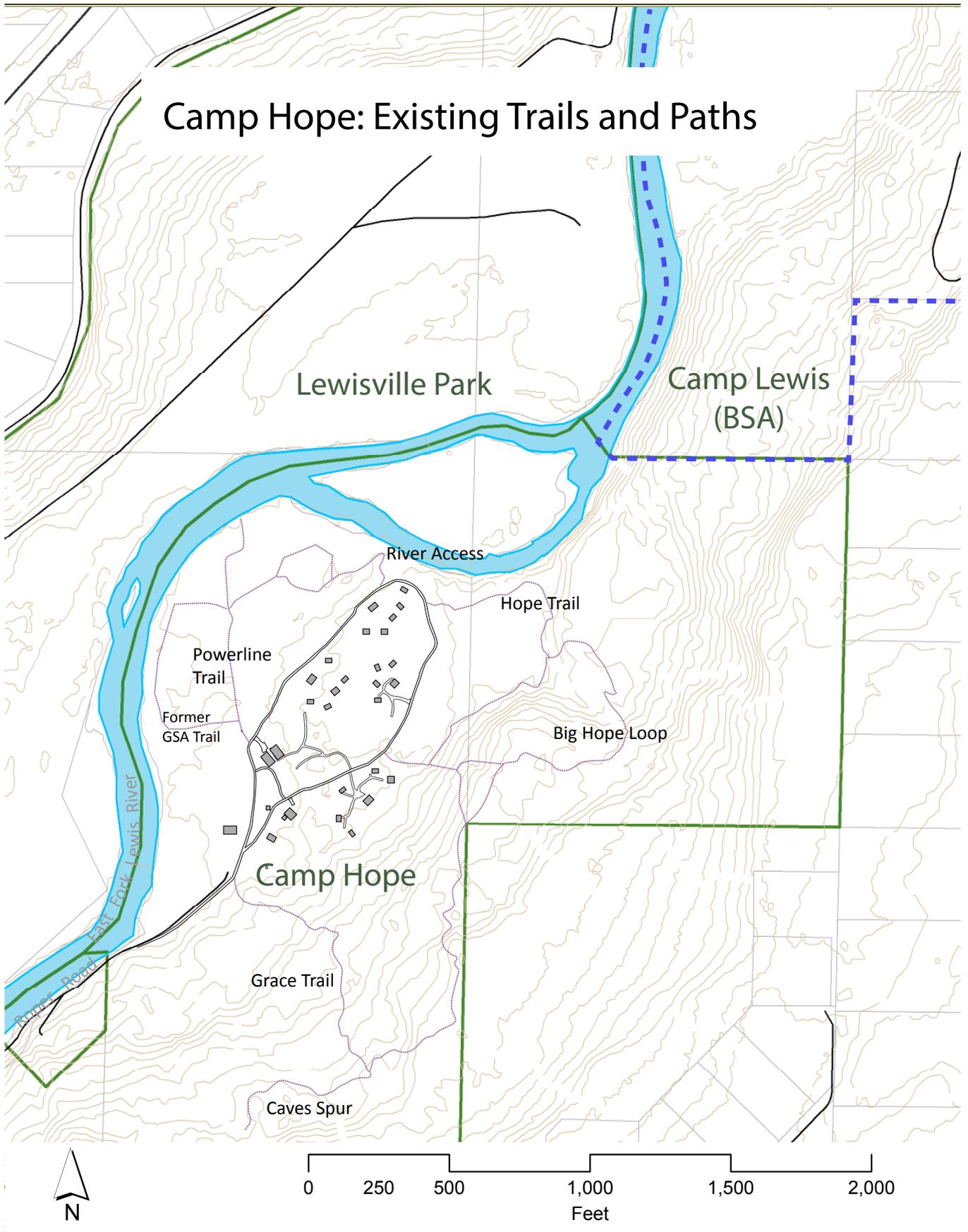


Figure 9. Existing Trails at Camp Hope



RECENT SITE IMPROVEMENTS

The new lease for Camp Hope and its reuse of the aging Adirondack camping structures has triggered needed improvements to treat mold/mildew conditions through cleaning and painting. The camping pod bunk houses have been enclosed to add weather protection for campers and protect the interior of the structures from further decay. Solar-powered lighting has been incorporated into the bunkhouses. Kitchen shelters have been cleaned and painted. Vault toilets for each camping pod now have exterior sinks.

The former dilapidated caretaker's house has been renovated into the camp director's residence. The former 'infirmary' building has been renovated into a camp office. The performance stage at the camp amphitheater area has been rebuilt.

The Camp Hope organization is ready to provide further site improvements to restore, re-adapt and add some new infrastructure to the former camping facility to enable more complete and functional outdoor recreation and environmental education uses on the property.

SPECIAL USE FACILITY CLASSIFICATION

Within the Clark County park system, the Camp Hope property is classified as a special use facility. This category of park is defined as a stand-alone facility that supports a specialized activity. Special use areas and facilities vary widely in function and generally are intended to function independently from the rest of the county park facilities. While special use facilities do not have designated or adopted level of service standards, their function is understood to target a focused segment of the park and recreation community. The intent of this master plan is to provide the highest value of special use activities while conserving the natural resource values of the site. Due to the age of the existing infrastructure, the need to ensure public health and safety and the demand for more year-round and all-weather facilities, Camp Hope needs to upgrade and expand the existing buildings and utilities.

The master plan for Camp Hope guides the path for future infrastructure development on a special use facility within the Clark County regional park system. After 50 years as a Girl Scout camp, Camp Julianna, the property was left vacant beginning in 1996. As a property supporting youth camping, environmental education and outdoor recreation programming, the Camp Hope facility can provide a significant contribution to the breadth of park and recreation services offered in the county. The Camp Hope organization has taken on the role of redeveloping the site with updated facilities to adapt to the needs of contemporary overnight and year-round programming. While the target users for Camp Hope focus primarily on youth, the site and its facilities can provide opportunities for other groups and organizations if its facilities are updated to accommodate a broader range of users.

Environmental Conditions

PURPOSE

To guide the future re-development of the facilities and improve the capacity of the property for a variety of programs, events and activities, the master plan for Camp Hope must first assess the physical and environmental conditions of the property. This environmental assessment sets the framework for determining the carrying capacity of the site, i.e. the extent to which new facilities can be added without radically altering the site's ecological functions.

BACKGROUND

During the environmental inventory and assessment, all ecological conditions available through Clark County GIS were mapped and considered relative to their effect on potential land use and future site development. These environmental features were then assessed in connection to regulatory requirements for buffer width and other protection measures. The level of protection was mapped and ranked to express the degree of constraints and how much impact that restriction could have on site development costs and related mitigation requirements. Due to the proximity of the East Fork of the Lewis River with its sensitive riparian ecology and the steep slopes that encompass the east and south property borders, the property offers special physical characteristics that also restrict the feasibility of expansive land uses.

Sensitive natural resources that are protected through development regulations and permitting requirements are mapped individually, then rated based on degree of potential impact and mitigation costs. Clark County Development Code (Chapter 40) may place certain restrictions on land development in environmentally sensitive or geologically hazardous areas to safeguard public health, safety and welfare consistent with The Growth Management Act and WAC 365-190-080.

HYDROLOGY

Shoreline

All uses and development activities in shorelines must be planned and carried out in a manner consistent with the Clark County Shoreline Master Program. The East Fork Lewis River has shorelines that are subject to the county shoreline program. The shore lands include:

1. Those lands extending two hundred (200) feet in all directions as measured on a horizontal plane from the ordinary high water mark (OHWM);
2. Floodways and contiguous floodplain areas landward two hundred (200) feet from such floodways;
3. The full extent of floodplains; and
4. All wetlands and river deltas associated with the streams and lakes that are subject to the Program.

HYDROLOGY

The shoreline designation for Camp Hope is Rural Conservancy Resource Land. The “Rural Conservancy – Resource Lands” shoreline designation purpose is to protect shoreline ecological functions, conserve existing natural resources and valuable historic and cultural areas in order to provide for sustained resource use, achieve natural floodplain processes and provide recreational opportunities. Examples of uses that are appropriate in a Rural Conservancy – Resource Lands shoreline designation include low-impact outdoor recreation uses, timber harvesting on a sustained-yield basis, agricultural use, and other natural resource-based uses.

Management policies applicable to Camp Hope include:

- Water-dependent and water-enjoyment recreation facilities that do not deplete the resource over time are preferred uses, provided adverse impacts to the shoreline are avoided and unavoidable impacts are minimized and mitigated; and
- Open space and recreational uses consistent with protection of shoreline ecological functions and personal safety considerations.

Any development within the shoreline jurisdiction must obtain a substantial development permit or an exemption statement prior to any disturbance within the designated shoreline area. Within shoreline jurisdiction, development may be allowed for those uses in the Shoreline Master Program (Clark County Development Code, Chapter 40.460) either through a statement of exemption or through an application with a geohazard review as part of the shoreline permit process. Provisions for adequate public access are encouraged to be incorporated into all shoreline development proposals and erosion control measures that involve public funding, consistent with provisions in Section 40.460.540 Public Access. See Shoreline Master Program Map in Appendix.

Flood Hazards

Land adjacent to the shoreline of the East Fork of the Lewis River is within Flood Hazard Areas. These zones along the river are identified by the Federal Emergency Management Agency (FEMA) in the Flood Insurance Rate Maps for Clark County. The designations include floodway, floodway fringe, flood transition area and the flood plain.

Land uses in flood hazard areas are subject to additional regulations to preserve the capacity of the river to discharge its base flood waters without increasing the surface water elevation more than one (1) foot. Section 40.420 of the Clark County Unified Development Code outlines the applicability, development standards, and review process for any proposed work within the flood hazard area. See Flood Plain Map in Appendix.

Wetlands

The National Wetland Inventory (NWI) and the Clark County Wetland Inventory indicate the presence of potential wetland areas within the boundary of Camp Hope. The majority of the GIS-

12.

HYDROLOGY

mapped wetland areas are associated with the East Fork of the Lewis River. Some small, isolated wetland areas (indicated on GIS mapping inventory) are situated along the upper slopes on the east and southern property boundaries.

A predetermination for existing wetlands was conducted by the County wetland biologist to identify additional wetlands on-site and determine their wetland categories ratings. Wetland buffer widths are based on the resource's rating category, protection of habitat, water quality functions and the intensity of the proposed land use. Tables 2, 3 & 4 in Section 40.450.030 (Clark County Development Code) of the Wetland Buffers Requirements establish the width of recommended buffers to protect water quality and habitat functions based on the category of wetlands and the proposed intensity of land use or site development. The mapping for wetlands and their required buffers is included in the critical constraints mapping as 50-foot buffer widths for all wetlands (assuming low intensity land uses or development) and in the moderate constraints mapping as 100-foot buffer widths for all wetlands (assuming variable levels of site development in different locations). See Wetlands Map in Appendix.

GEOLOGY & SLOPES

The Camp Hope property is located in the northeast part of the Portland basin where a series of Neocene to Quaternary Age river and glacial deposits were deposited on the eroded surface of bedrock comprised of Paleocene age lava flows. The northern portion of the property is situated on the lowest river terrace surface and flood plain adjacent to the East Fork of the Lewis River.

The Paleocene lava flows formed in the ancestral Cascade volcanic arc during Eocene and Oligocene periods of the Paleocene. The slopes rising in the southern and eastern portions of the property are underlain with bedrock from the Pleistocene-Pliocene basalt flows of Battle Ground.

The Portland Basin formed beginning in late Miocene time and continuing to present where a great thickness of chiefly fluvial deposits accumulated. The older alluvium is mapped as the Troutdale Formation was derived partly from distant eastern sources via the paleo-Columbia River drainage and proximal sources from the Cascade Range. The higher terrace surfaces on the site are underlain by Missoula Flood deposits and older alluvium sediments. The Missoula Floods sediments were derived from a series of catastrophic flood events that occurred at the end of the last ice age between approximately 12,000 and 14,000 year ago. Since that time, the lower East Fork of the Lewis River has eroded, re-worked and deposited recent sediments in the current flood plain environment along the river edge of the property. The young alluvium mapped by Howard is dominantly composed of sand, gravel, and cobbles. Glacial deposits of Late-Quaternary age are also present in the site vicinity to the north where glacial drift is present. Groundwater occurs in the alluvium beneath the site at varying depths. Hydraulic continuity exists between the groundwater system and the river.

GEOLOGY & SLOPES

Geologic Hazard Areas

Geological hazards include areas with steep slopes, historic or active landslides, areas of potential instability, and areas with severe erosion potential. Clark County GIS identifies bands of severe erosion hazard areas running from the north east to the southwest across the site. These areas are associated with steep slopes and historic landslide debris.

Seismic hazard areas are present on the site as soils with high liquefaction potential, located along the inside curve of the East Fork in the flatter lands in the central northwest portion of the property. Further detailed site analysis will be required to determine how soils and structures will respond to a particular site. Site investigation requirements of the International Building Code are used to ensure that structures are built to minimum safety standards based on existing knowledge of earthquake hazard. Section 40.430.020 of the Clark County Unified Development Code provides further articulation of the standards for development activities in geologic hazard areas.

Landslide Hazard

Landslide hazard areas are mapped based on a combination of historic or active landslides and slopes greater than 15%. This hybrid Clark County GIS mapping layer was created as one of the coverage layers for the Geologic Hazards ordinance. See Landslide Hazard Map in Appendix.

Erosion Hazard

Geologic Hazards Ordinance: Erosion component. Soil erosion involves the breakdown, detachment, transport, and redistribution of soil particles by forces of water, wind, or gravity. See Clark County Code Chapter 40.430 for more details. See Erosion Hazard Map in Appendix.

Slopes

A large percentage of this site contains steep topography and heavily wooded terrain. While this diverse terrain provides a high degree of interest for trails and outdoor recreation, it poses certain limitations for site development. The existing camp improvements are located on a shelf adjacent to the River, which partially falls within the 100-year flood plain and habitat protection zones.

The steeper slopes are covered with soils that may be unstable when bare and should be protected from erosion hazards by maintaining vegetative cover. The steeper slopes are also within areas of older landslides and may contain rock debris and talus that is unsuitable for most types of development. The existing trail system traverses significant sections of steep slopes with some portions of trails going directly along the fall line (straight up or down steep slopes). To avoid erosion from wet weather or heavy trail use, these trail sections should be re-aligned for more resilience and sustainable trail management. See Steep Slopes Map in Appendix.

GEOLOGY & SLOPES

Aquifer Recharge

Critical aquifer recharge areas (CARAs) are designated to protect groundwater wells from possible contamination. The entire project site is within a Category II CARA, a primary critical aquifer recharge area that represents the ten (10) year time-of-travel for Group A water wells. A Category I CARA is defined as the highest priority critical aquifer recharge area. Two areas within the project site contain Category I CARAs. Section 40-410, Critical Aquifer Recharge Areas, of Clark County’s Unified Development Code outlines the applicability, development standards, permitting and review process for any proposed activities within Categories I and II CARAs. Activities and uses commonly associated with park development, including stormwater collection systems, are typically exempt from requiring a CARA permit from Clark County.

SOILS

Several soils are mapped within the property. The soils on the slopes and ridgetop tend to have erosion hazards with moderate surface runoff. The soil on the steep slopes is rated primarily as suitable for timber and wildlife. Soils on the alluvial terraces are sandy to gravelly loams with varying degrees of permeability based on slopes and clay layers. All soils on site are classified as non-hydric.

<i>Map symbol</i>	<i>Map unit name</i>	<i>Rating</i>
OhD	Olequa silty clay loam, heavy variant, 3 to 20 percent slopes	Not Hydric
OmE	Olympic stony clay loam, 3 to 30 percent slopes	Not Hydric
OrC	Olympic very stony clay loam, shallow variant, 5 to 15 percent slopes	Not Hydric
PuA	Puyallup fine sandy loam, 0 to 3 percent slopes	Not Hydric
Rk	Rock land	Not Hydric
SiD	Sara silt loam, 8 to 20 percent slopes	Not Hydric
WaA	Washougal loam, 0 to 3 percent slopes	Not Hydric
WgB	Washougal gravelly loam, 0 to 8 percent slopes	Not Hydric
WgE	Washougal gravelly loam, 8 to 30 percent slopes	Not Hydric

The Olequa soil series consists of deep, well-drained, soils on terraces above flood plains, ridgetops and benches. These are loamy soils that formed in parent material largely of basic igneous material. Olequa silty clay loam (OhD) is somewhat poorly drained and easily tilled. Permeability is moderately slow above the clay horizons. The available water capacity is high and fertility is moderate. Surface runoff is slow to medium and erosion hazard is slight to moderate. A high water table is common in winter.

The Olympic soil series consists of well-drained, gently sloping to very steep soils underlain by basalt bedrock at a depth of 40 inches or more. Olympic very stony clay loam (OrC) is in mountainous terrain on ridgetops and benches with a surface that is very stony. Timber is suitable to this soil. Olympic clay loam (OpC) is on benches that are dissected by steep and very steep

SOILS

slopes that lead into creeks and drainage ways. This soil is well-drained and moderately slowly permeable. Roots penetrate to the bedrock. The soil is well suited to timber.

The Puyallup soil series consists of somewhat excessively drained, mostly level to gently sloping soils that are shallow or moderately shallow over sand and gravel. Puyallup fine sandy loam (PuA) is on low terraces along the East Fork of the Lewis River. The soil is somewhat excessively drained with permeability as moderately rapid. Surface runoff is very slow and there is no erosion hazard. The available water capacity and fertility are moderate.

The Washougal soil series consists of somewhat excessively drained, nearly level to very steep soils underlain by sand and gravel at a depth of 26-40 inches. Washougal gravelly loam (WgB) is on gravelly stream terraces and is somewhat excessively drained. Roots penetrate to the gravelly sand layer. Surface runoff is slow and hazard of erosion is slight. The soil occurs at an elevation that is high enough in most places to be above the normal high water of adjacent rivers. Washougal loam (WaA) is in the same areas as Washougal gravelly loam and is similar except for a surface layer that is free of gravel and the soil has a higher water capacity. Washougal gravelly loam (WgE) is on terrace front along the East Fork of the Lewis River and is generally thinner than Washougal gravelly loam (WgB). This soil is used almost exclusively for timber.

The Sara soil series consists of deep, moderately well drained, nearly level to very steep loamy soils that formed on terraces in old alluvial deposits that contained volcanic ash in the upper part. Sara silt loam (SID) is on the edges of ridges and on side hills. Surface runoff is medium and erosion hazard is moderate.

Rock land consists of steep and very steep areas made up largely of rock outcrops and very shallow soil. Most of this land type is in the mountainous eastern and northeastern parts of Clark County. These areas are valuable for recreational purposes, wildlife habitat and water yield. On this property, these rock lands consist of the cliffs and portions of adjacent rocky lava fields in the eastern and southeastern boundaries of the site. See Soils Map in Appendix.

FOREST

Forestry Resources

A previous forest management plan was prepared by the County Forester in 1998. That older plan proposed timber stand improvement activities and subsequent timber harvests to maintain and enhance both riparian and upland forest habitat types while generating modest solid wood fiber production. These forestry activities were proposed to be compatible with future recreational programs for the property.

A more recent Forest Stewardship Plan for Camp Hope (formerly Camp Lewisville) was completed by the Clark County Department of Environmental Services in December, 2012. The general forest management plan approach is to improve or protect wildlife and plant habitat,

FOREST

maintain diverse forest, assure a healthy, sustainable forest and reach ecological objectives. Revenues incidental to timber harvest are to be earmarked for management of the property. Timber harvest will be conducted to enhance habitat and biodiversity and sustain forest health. The report reveals that 28% of the property was shelterwood-cut approximately 30 years ago and four acres were clearcut 12 years ago.

Conditions in the forest resources at Camp Hope have reported occurrences of laminated root rot that kill Douglas fir (primarily). Douglas fir bark beetle is also reported as present in the immediate area. Dead and dying trees are classified as a public hazard given the proximity of diseased trees to the recreational activities on the site. Infected trees and the immediate forest soils carry the pathogenic agents to healthy trees so reducing the spread of disease requires harvesting an outer buffer of uninfected trees when planning a timber harvest to maintain forest health.

To re-establish healthy and sustainable forest conditions, the forest stewardship plan recommends three equally spaced harvests within the first decade in each of the five mapping units in 92 acres of the 107-acre site. The 15-acre section along the East Fork Lewis River is excluded from the forest stewardship and timber harvest mapping for long term shoreline and riparian protection. In forest mapping unit 100, the primary objective for timber harvest in the first decade is to remove infested and risk trees. In the other mapping units, silvics objectives are to remove at risk trees and open the forest for understory development.

Since the report, one phase of timber harvest has been implemented on the site. For more details see the Forest Stewardship Report in the Appendix.

HABITAT

Aquatic Habitat Resources

The riparian corridor portion of the site contains significant habitat for a range of species, including spawning habitat for salmonids. A wide corridor along the Lewis River has been identified as priority habitat area by WDFW and Clark County. Development restrictions apply within and adjacent to these identified aquatic habitat zones.

Fish

The Washington Department of Fish & Wildlife (WDFW) Priority Habitat and Species (PHS) report identifies fish present in the East Fork Lewis River. The East Fork Lewis River supports several populations of salmonid species listed as threatened by the federal Endangered Species Act (ESA). Chinook salmon, coho salmon, chum salmon, and steelhead are all listed and potentially present in the vicinity of the property. Other fish species, including cutthroat trout, are likely present in the East Fork Lewis River.

HABITAT

Riparian Zones (RIPAR)

Riparian Habitat Conservation Areas are those areas adjacent to aquatic systems with flowing water containing elements of both aquatic and terrestrial ecosystems that mutually influence each other. Riparian habitat begins at the ordinary high water mark and extends to that portion of the terrestrial landscape influenced by, or directly influences, the aquatic ecosystem. Riparian habitat includes the entire extent of the floodplain and riparian areas of wetlands directly connected to stream courses.

The East Fork Lewis River riparian habitat corridor extends along the northern and western perimeter of the site. The East Fork Lewis River riparian area is described as providing high quality habitat with a multiple layered canopy.

Terrestrial Habitat Resources

A biological review of Locally Important Habitat was conducted in January 2000 by Dave Howe, habitat biologist in the County Department of Community Development. The biological review outlined the natural history of the site, existing plant species diversity, animal species composition and existing habitat conditions. The report found the site highly suitable for species adapted to mature and old growth stands. Further the report stated:

“The presence of a large block of relatively unfragmented mature timber is unique to this area of Clark County. Additionally, the existence of cliff, snag, and talus features adds habitat structural and functional diversity, which intensifies species use and complexity. Future management must focus on maintaining the above-mentioned forest attributes and species use.”

The report recommended the adoption of LIH (Locally Important Habitat) designation under the Habitat Conservation Ordinance. The Board of County Commissioners did not adopt this specific designation for the terrestrial habitat.

An additional habitat areas overview was conducted by the County habitat biologist in May 2009. The attached 2009 Habitat Map designates the locations that are under the jurisdiction of the habitat ordinance and a few areas that are exempt from those habitat ordinance requirements. This habitat areas overview designates a 250-foot riparian zone extending from the ordinary high water mark restricts development to four-foot natural trails. The bulk of the upland areas on the entire property contain habitat features which qualify as PHS mature forest, talus, snag, and cliff habitat. Site development (as in picnic tables) is allowed within existing open areas only. In all other locations only four-foot natural trails and trail signs are permitted without the need for mitigation of habitat disturbance. Remodel or replacement of existing buildings within the 1997 footprint is exempt from the habitat ordinance. Any other site development would require review under the permitting process and likely engage some level of mitigation for any disturbance or alteration of existing habitat functional value. This 2009 habitat assessment occurred prior to the recent 2014 logging operation and the clearings that resulted from those activities.

HABITAT

Since the previous habitat assessments, the forestry management plan implemented its first phase of logging operations to remove dead, dying and overcrowded timber from the immediate area of the camp structures. This first phase cleared a considerable area within the active portions of the property. The second phase of timber harvest anticipated within one to two years is expected to remove additional forest areas that have been severely affected by root rot disease. The dying, dead and infected trees would be removed, opening up more of the forested area. This dramatic change in vegetative cover should alter the assessment of existing terrestrial habitat.

A current habitat areas overview is being conducted to revise the assumptions for the habitat ordinance jurisdiction on existing habitat.

ARCHEOLOGY

Clark County GIS indicates the probability of containing archeological resources since it is likely that the Chinook, Klickitat and Cowlitz peoples historically used areas along waterways within Clark County. The GIS data indicates that there are no registered historic sites on the subject property.

More than half the property is identified as having at least a moderate-high (60-80%) and up to high (80-100%) probability of cultural resources existing on the site. An archeological predetermination will dictate whether or not a full archeological survey would be necessary prior to any site development or project actions which could impact cultural resources. See Archeological Probability Map in Appendix.

CARRYING CAPACITY

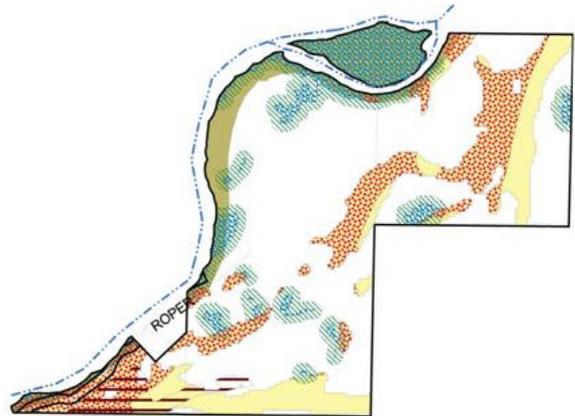
Mapping Overlays

The property contains an array of ecologically sensitive areas and physical conditions that indicate the need to limit excessive site development. The site's environmental character provides its uniqueness and should be conserved to support the different camp programs that are suitable for outdoor environmental education and recreation programming. Environmental regulations could trigger higher costs for any proposed development beyond the existing footprints of previous buildings. As such consideration has been given to finding the most suitable areas within the site where some degree of additional infrastructure could be feasible to help improve the types of camp programming necessary to support a successful future for the property. To find the most developable areas within the site, a combination of the environmental, physical and regulatory limitations have been overlaid to indicate those areas where development is not recommended or likely to be sustainable.

CARRYING CAPACITY

Critical Constraints

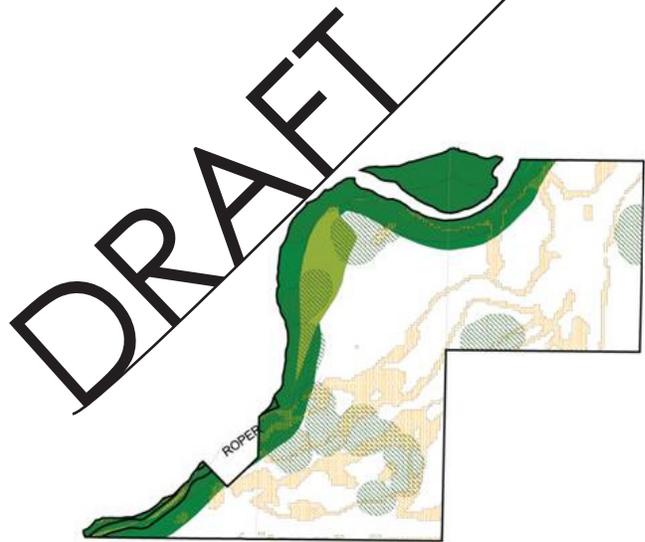
These areas contain Category II & III wetlands with 50' buffers, floodways, and areas with severe erosion hazards, potential landslide instability and very steep slopes (>25%). Approximately 46% of the site contains critical environmental areas. Approximately 55 acres of the site are within critical environmental areas. Any proposed disturbance, construction or site improvements within the boundaries of a critical constraint could significantly increase the cost of that activity.



Any disturbance or added improvements within the critical constrained area would vastly increase the cost for any proposed development. As a guiding principle, this site's re-use and any proposed site improvements should avoid intrusion into critical & sensitive environmental zones.

Moderate Constraints

These areas encompass wetlands within 100' buffers, floodway fringe, riparian habitat zones and steep slopes (>15%). Approximately additional 28 acres of the site are within moderately-constrained environmental areas. Approximately 24% of the site contains moderately-constrained environmental areas. The moderately constrained areas should be avoided to limit the cost of any future proposed site improvements. These moderate constraints are in addition to the critical zones, their overlain combination would cover approximately 70% of the total site.



The remaining areas within the Camp Hope property are within the regulatory areas for aquifer recharge areas, habitat areas and areas with moderate to high liquefaction potential.

Carrying Capacity

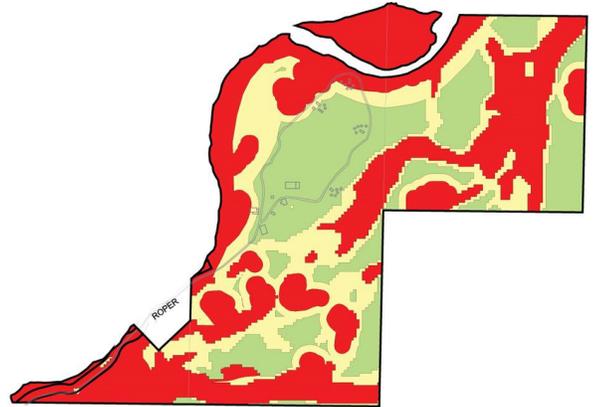
Areas with few or no development constraints (shown in green) allow for more cost effective site improvement options. Approximately 1/2 of the 36 acres of "developable" areas are isolated by wetlands, very steep slopes, or other constraining factors. The isolation of these areas may render their use for future development as impractical since access could be prohibitive. At least 15% of the site is reasonably "developable". The areas in green would still require specific design techniques to avoid impacting the aquifer recharge potential, avoid degrading the habitat

CARRYING CAPACITY

value and overcome any soil limitations for structural foundations and/or on-site septic treatment.

Potential Development Opportunity

The environmental assessment provides a framework for the areas where change or expansion or existing facilities could occur without undue impacts to the ecological role of the site. Based on the environmental assessment, the most defined and unified developable area is situated within the “built envelop” of existing facilities accessed from the loop road. Improvements within this north-central area (shown in green on above map) could be integrated into the Camp Hope campus without sacrificing the natural ambiance of the site or significantly impacting wildlife habitat.



DRAFT

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Special Use Program

OVERNIGHT CAMPING FACILITIES

As a special use facility within the Clark County parks system, Camp Hope offers organized group camping accompanied by programmed activities and events. In the Park Planning Guidelines manual by George Fogg (published by the National Recreation and Park Association in 2000), campgrounds providing fewer than 100 sites are questionably viable due to high operating costs. The Girl Scouts' Camp Julianna overnight camping program provided 128 bunks within the sixteen primitive Adirondack-style shelters. General Park Planning Guidelines also assume that organized group camping facilities provide "complete lodging and dining facilities". Camp Julianna contained "outdoor kitchen" picnic shelters for each of the four camping pods.

Planning guidelines from Fogg's manual recommends that parking spaces for organized group camping should be calculated using twenty percent (20%) of the number of beds with overflow parking for an additional ten percent (10%). If Camp Hope consists of 128 beds for its camping participants, 26 parking spaces should be provided with an additional 13 spaces in an overflow area.

BUILDING INFRASTRUCTURE REDEVELOPMENT

The development program for Camp Hope seeks to improve and expand the facilities to accommodate more active programming for youth camps, environmental education, volunteer and community service, retreats, group camping, outdoor school, scouting and similar activities. In order to operate effectively, Camp Hope needs to reconfigure some existing amenities to provide for better, well-rounded programming functions. Additionally, support facilities such as an indoor cafeteria and multipurpose spaces are needed to allow for the potential range of programming. A summary of the expanded facilities are listed in Table 1.

Several modifications to existing buildings are being considered to provide for adequate operations of outdoor camp activities.

The small existing sleeping cabins which provided eight (8) bunk platforms each would be consolidated into half as many larger cabins, each providing 16 ground-level beds with an interior central space for gathering and group interaction. The diagram and image below illustrate the proposed updated housing style.



Figure 10. Proposed cabin style with 16 beds.

BUILDING INFRASTRUCTURE REDEVELOPMENT

Table 1. Comparison Redevelopment of Building Infrastructure.

Camp Hope Master Plan Development Program

	Existing Facilities	Square Feet	Proposed Facilities	Square Feet	% Increase
	Camping Clusters		Camping Clusters		
Pod 1	Storage Building (1) - 22x28'	616	Storage Building (1) - 864' w/ 12' porch	1,152	87%
	Four (4) Cabins - 336sf each	1,344	Two (2) Cabins - 1,760 w/ porch	3,840	186%
	Bathroom (1) - 10x20'	200	Bathroom/shower building (1) - 28-36'	1,008	404%
Pod 2	Storage Building (1) - 22x28'	616	Storage Building (1) - 864' w/ 12' porch	1,152	87%
	Four (4) Cabins - 336sf each	1,344	Two (2) Cabins - 1,760 each w/ 12' porch	3,840	186%
	Bathroom (1) - 10x20'	200	Bathroom/shower building (1) - 28-36'	1,008	404%
Pod 3	Storage Building (1) - 22x28'	616	Storage Building (1) - 864' w/ 12' porch	1,152	87%
	Four (4) Cabins - 336sf each	1,344	Two (2) Cabins - 1,760 each w/ 12' porch	3,840	186%
	Bathroom (1) - 10x20'	200	Bathroom/shower building (1) - 28-36'	1,008	404%
Pod 4	Storage Building (1) - 22x28'	616	Storage Building (1) - 864' w/ 12' porch	1,152	87%
	Four (4) Cabins - 336sf each	1,344	Two (2) Cabins - 1,760 each w/ 12' porch	3,840	186%
	Bathroom (1) - 10x20'	200	Bathroom/shower building (1) - 28-36'	1,008	404%
	Major Facilities		Major Facilities		
	Old Lodge (demolished) - 36x48'	1,728	Camp Lodge_multi-purpose	2,880	67%
	Camp Director's Home - 24x48'	1,152	Camp Director's Home - w/ 12' porches	1,728	50%
	Camp Counselors' Cabin (demolished)	400	(not replaced)		
	Shop - 32x36'	1,152	New Shop - 36x50'	1,800	56%
	Bath House/central shelter - existing slab	4,080	Bath House/Central shelter	4,080	0%
	Camp Office - 16x22'	352	Infirmary - 16x22'	352	0%
	Support Facilities		Support Facilities		
	Pump House - 6x8'	48	Pump House - 6x8'	48	0%
	Wood Shed - 8x12'	96	Wood Shed - 8x12'	96	0%
	Block House - 14x14	196	New Wood Shed - 12x12	144	-27%
	Existing Building Footprints	17,844	Proposed Building Footprints	35,128	97%

The addition of more functional bath houses (replacing the current primitive pit toilets) in each camping pod allows the facilities to be updated and provide a more universally accessible and attractive overnight accommodation.

An indoor cafeteria also allows the overnight camp to extend its programming throughout the year and offer a broader variety of group events and activities. These updates would provide a more attractive camp program that accommodates greater accessibility.

BUILDING INFRASTRUCTURE REDEVELOPMENT

The addition of the multi-purpose classroom building and rebuilding of the former lodge into a general purpose welcome center will allow programs to run through-out the year since they will provide for all-weather activities.



Figure 11. Proposed dining shelter.

The proposed expansions increase the existing building coverage from 17,444 square feet to 34,200 square feet, representing a 96% change in total building coverage. The previous 2009 Camp Lewisville feasibility study concluded that this special use property would benefit from the addition of more functional and multi-purpose indoor spaces to provide for year-round programs, activities and events. The rebuilding of the former lodge into a “welcome center” and the addition of a multi-purpose classroom building would help support the variety of potential user groups ready to engage their programming at Camp Hope.

OUTDOOR RECREATION AMENITIES

In addition to redeveloping the overnight lodging and support buildings, Camp Hope will need to restore, upgrade and create additional recreational amenities for the organized group activities. The archery range has been set up and the outdoor campfire/amphitheater/stage area has been restored to accommodate group gatherings but other former amenities from the Girl Scout program times have long since faded away. Camp Hope proposes to provide an obstacle course, improved trail system, zip lines, aerial canopy bridges (see photo), disc golf and other types of outdoor recreation amenities that supplement environmental education and outdoor recreation programming.



Figure 12. Type of tree-based recreation amenity: aerial bridges and zip line.

OUTDOOR RECREATION AMENITIES

Table 2. Outdoor Recreation Amenities: Existing & Proposed.

Existing Outdoor Amenities	Proposed Outdoor Amenities
Hiking Trails	Hiking Trails
Riverfront Access	Riverfront Access
Amphitheater	Amphitheater
Platform Stage	Platform Stage
Fire Pits	Fire Pits
Archery Range	Archery Range
	Obstacle Course
	Zip Line
	Volleyball
	Disc Golf (practice holes)



Figure 13. Sample of aerial bridge used in outdoor recreation programming

Figure 14. Zip lines can provide outdoor recreation value within the existing forest and without needing a cleared understory.



Design & Redevelopment

ENVIRONMENTAL CONSIDERATIONS

To assess the feasibility for continuing and future re-use of the property, a summary of environmental and physical constraints were considered as integral to this planning process. While the site may offer significant opportunities for environmental education and/or specialized recreation, the realistic permitting and development costs due to location, access and environmental regulations weigh in to the evaluation of alternative options for this property's future development and more expansive role in the County's park, trail and greenway system.

The mapping of critical, moderate and low constraints to site development improvements has provided direction for the location for future land uses and activities on the site. Due to the environmental, vehicular access and topographic conditions of the site, the potential of developable activities may be limited. In the determination of additional facility locations, the existing (and past) building footprints and circulation should be retained to reduce the extent of required mitigation for site disturbance as much as feasible. Where additional impervious coverage is being proposed, removal of older or unused impervious surfaces should be considered where feasible.

Critical constraints include those site characteristics that require both more arduous permitting processes and trigger significant mitigation costs if any proposed site development encroaches on those mapped resources. In the Environmental Assessment, the mapped critical constraints include wetlands (with a 50-foot buffer), areas of severe erosion hazard and landslide instability, floodways, and slopes with greater than 25% steepness. Any disturbance of these areas should be avoided as much as possible. Where disturbance may be unavoidable, the potential disturbed area should be as small as feasible to limit the degree and cost of required impact mitigation.

Moderate constraints are designated as those site traits that trigger regulatory requirements as well as increase development costs through both added permitting and physical characteristics. These moderate constraints were identified as the floodway fringe, riparian habitat zone, 100-foot wetland buffers, and slopes ranging from 15-25% steepness. To limit the incurrence of unnecessary site development costs, disturbance in these areas should be avoided as much as feasible in future site development and use.

Because the property contains a combination of recharge areas, predictable archeological value and habitat resource areas, the entire site has some degree of constraints or restrictions that must be taken into account for future site development or proposed land uses. Most of these characteristics must be considered in the specific design of any proposed facilities to avoid impacts to the protected resources. The development review and permitting process will consider the proposed site design to ensure that archeological resources are protected during development and wellhead protection is protected during the construction process. Any alterations to habitat function that may result from proposed improvements would need to be addressed during the review process with any necessary impact mitigation incorporated into the plans.

ACCESS LIMITATIONS

Camp Hope is currently accessed from the one-lane Roper Road which contains several pull-outs to allow any two-way traffic to pass. Roper Road joins the Lewisville Highway just south of the bridge over the East Fork. Portions of NE Roper road are paved with asphalt up to the gate just beyond the neighboring residential driveway. The access road does not meet the standards for a county road and constrains the ability of Camp Hope to provide for safe access for their programming and emergency access in the event of injury, fire, or other occurrence demanding critical timing. Much of the entry road is within critical environmental lands that would prohibit any widening to facilitate two-way vehicular traffic. The remainder of any vehicular access and site circulation is gravel.



Figure 15. Roper Road provides the only vehicular access into Camp Hope.

If the site is to be developed for expanded uses, the entrance road may be required to be sized to adequately accommodate additional traffic and emergency vehicles. Defined parking areas will need to be more clearly established. The entire access portion of Roper Road is within the highly restrictive shoreline buffer and riparian habitat conservation areas. Portions of the road are situated immediately adjacent to the top of the riverbank. Steep slopes and potential soil instability adjacent to the road limit widening capabilities.

Access road improvement requirements for proposed site development will depend on the level of development intensity and how many vehicle trips would be generated. A “primitive road” standard applies to roads with less than 100 trips per day (both in and out of the site). Private roads or driveways also have lower standards. The physical location and alignment of the existing access road would prohibit necessary improvements to meet public road standards. Stormwater runoff treatment will be required for any road improvements and would be challenging to accommodate in the environmentally sensitive situation.

ALTERNATIVE ACCESS

The physical and environmental limitations posed by the location of Roper Road suggest the exploration of alternative access locations for Camp Hope. During the 2009 Camp Lewisville feasibility study, some exploration of alternative access eliminated several considerations due to the significant constraint of steep sheer cliffs between private residential roads and the southern boundaries of the county property. The feasibility study also offered a brief exploration of the potential to connect via pedestrian bridge to Lewisville Park. That bridge option was deemed unreasonably expensive and would have radically altered the regional park without providing vehicular access to the county camp property.

Another alternative access alignment that was considered focused on a connection between the county property and the Boy Scout Camp Lewis site to the north. Both camp properties are constrained by their own single ingress/egress road. This limitation can create congestion during camp start and finish times. More importantly the single road characteristic is not optimal for emergency situations, particularly in the event of a forest fire.

Clark County Parks and the Cascade Pacific Council of the Boys Scouts of America recognized the mutual interest of pursuing a direct vehicular access connection between their respective properties. The Council endorsed an assessment for a potential alignment and granted permission for the County to survey the topography for assessing the potential road connection between the two camps. The County conducted a survey of the potential road alignment through the least physically constrained sections of land from one camp property to the other. Consideration was given to how future phasing of logging operation might provide a reasonable road alignment after the completion of proposed timber harvest phases. Unfortunately, the steep talus and rock cliff traits on the connection alignment combined with existing thin forest canopy on these upper slopes negated the potential value of coordinating forestry activities with a future vehicular link to Camp Lewis.

ACCESS MANAGEMENT / TRAFFIC CONTROL

Camp Hope controls access to the site using existing gates and communicating concerns about vehicular traffic and Roper Road characteristics with their registered program participants. Since the programming creates a controlled use of the facility, the organization can intentionally manage the degree and timing for operations and to some degree control the predicted traffic flow. The policies for managing safety on Roper Road may benefit from becoming more formalized through adopted procedures and practices. During site plan review for future development projects, the county may require evidence of the Camp's traffic control process to mitigate for the lack of full two-way road width from Lewisville Highway into the camp property.

CIRCULATION

While the existing Roper Road profile does not lend itself to accommodating two-way traffic for its entire length, a number of pull-outs have been wedged between the existing riverbank and the base of the steep slope to provide for passing vehicles in and out of the camp. Roper Road is a county-owned road and has accommodated camp operations for over six decades. The operational program for Camp Hope does not intend to exceed the past level of programming use provided by the GSA camping operations. If occasional special events being conducted at the site might trigger too much traffic or a parking shortage, the camp operators may need to provide an alternative parking area (likely closer to Battle Ground) where a shuttle system could be implemented to offset the access constraints and manage the temporary increased traffic.

PARKING

Reducing the impact of vehicular traffic extends beyond the constraints of Roper Road. Current travel and parking patterns allow for cars to drive around the main loop road within the camping facilities and park in one of several different gravel pull-offs. The existing parking spaces, including the camp director's house and bathhouse pad, provides 41 spaces. Based on park planning guidelines for organized group overnight camping facilities, parking for the 128 campers should provide for 26 parking spaces and 13 overflow parking spaces. The proposed development plan locates a 40-space lot behind the proposed lodge. The parking lot would be constructed using permeable pavers to capture and immediately infiltrate any stormwater.

The parking lot also becomes the final vehicular access point for regular camp participants. The current main loop road through the camping pods becomes the main walking trail. No more cars (except maintenance and emergency vehicles) have access to the camping cabins.

Deliveries for the future picnic shelter/cafeteria and access to the camp director house are directed to the left of the future lodge. Parking spaces are provided for the camp director house and both the shop and picnic shelter as well as a loading spot for the shelter.

BUILDING LAYOUTS

The proposed buildings provide an updated infrastructure for the County's special use facility and for Camp Hope's operational effectiveness. As described in the Program section, a new lodge serving as a multi-purpose building for educational and recreational programming and housing the camp office is proposed for the foundation of the former Girl Scout lodge site. This location provides immediate visual orientation for camp visitors and serves as the hub for activities. The camp director's home continues in its current function. Once the lodge is built, the current camp office can be converted to a camp infirmary or other functional use for operations and programs. The existing camp counselors' cabin has already been removed, its function is replaced with the updated cabins. The old barn (shop) and block house are removed and a new shop is located between the camp director's house and the future picnic shelter/cafeteria building. Vehicular

BUILDING LAYOUTS

access is only provided for the main day use buildings (lodge, cafeteria and shop). Camping cabins are walk-to only.

The camping cabins are arranged in tighter “pods” centered around a group campfire circle. Existing 8-bunk Adirondack shelters are replaced with more “climate-controlled” cabins that also provide central seating areas for the 16-bunk spaces. In each pod, two new cabins replace the four existing sleeping shelters. Each camping pod also contains a storage building constructed in a similar pattern to a picnic shelter. A fully plumbed bathroom building would also replace the existing pit toilet for each pod cluster.

To capture natural light and potential warmth from the sun, the buildings within each pod are arranged with orientation to the south to allow windows to receive maximum sunlight in winter months. Since the site must also protect and restore its habitat value, it is acknowledged that existing and future large canopy trees may reduce the energy efficiency for building orientation. New building orientation and placement must consider the retention and protection of existing healthy trees when being clustered together and re-aligned from existing spacing.



Figure 16. Cabins will be oriented to capture sunlight in winter and shade in summer.

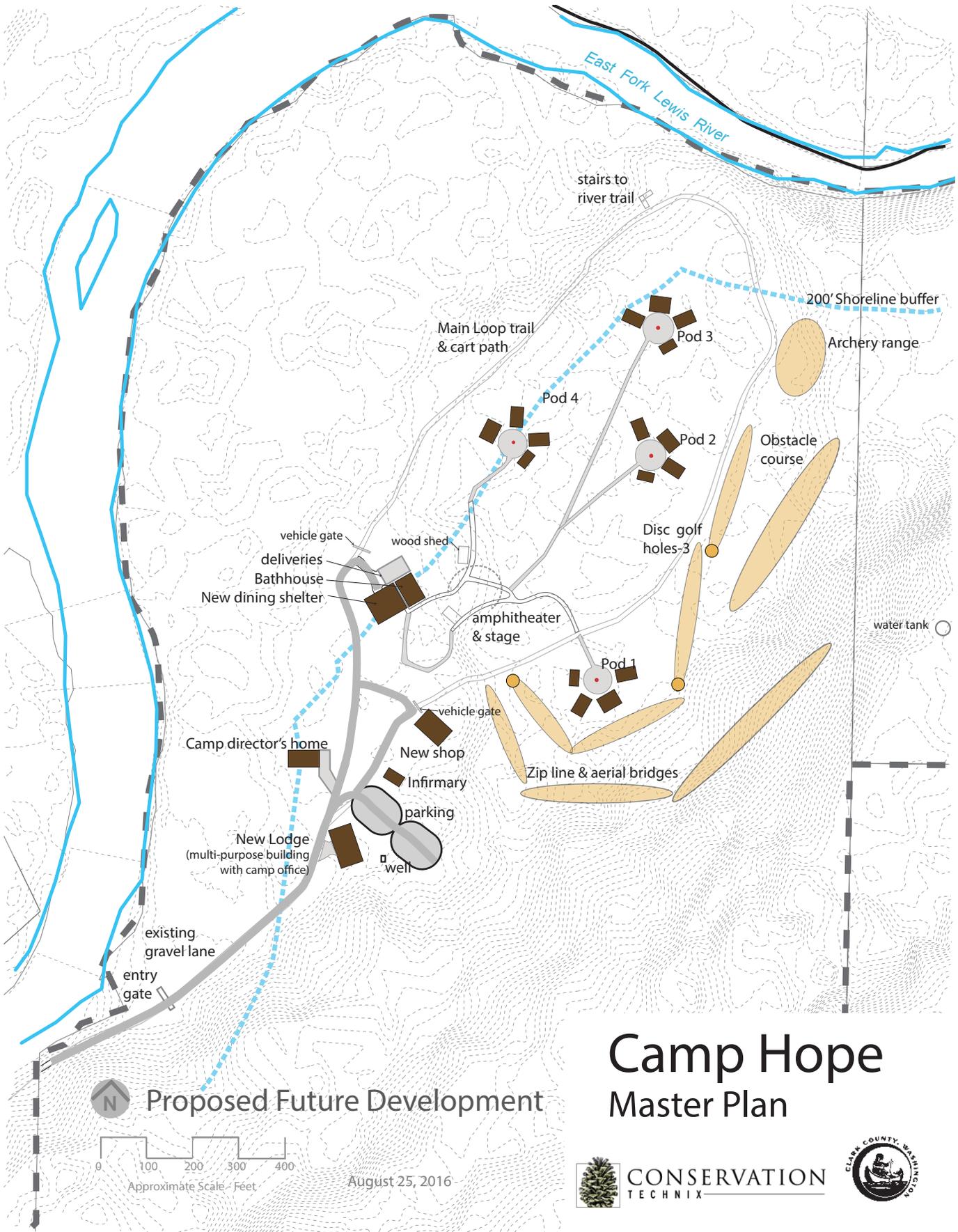
The picnic shelter (and storage) building would be located between the two cabins in each pod arrangement with the restroom building off to one side. The main trail to each pod leads to the campfire circle then radiates out to each building in the pod.

Wherever feasible, proposed new buildings have been located outside of the more restrictive environmental areas and their assigned buffer zones. The existing northernmost camping pod (Pod 3) and portions of Pod 4 currently spill into the shoreline buffer. Replacement cabins and associated structures would be located further to the south or east outside the shoreline designation.

LANDSCAPE PLAN

Camp Hope is located within the Rural Conservancy Resource Land designation of the Clark County Shoreline Master Program. Appropriate uses within this shoreline designation include

Figure 17. Proposed Site Development for Camp Hope



low-impact recreation uses, timber harvesting on a sustained-yield basis and other natural resource-based uses to protect shoreline ecological functions and conserve existing natural, historic and cultural areas. The camp operations propose a low-impact form of outdoor recreation while providing a continuation of a special use experience for the youth of Clark County. The camp site also sits within a priority habitat area on the East Fork Lewis River corridor. The new building footprints will require permitting under the habitat ordinance and likely engage some level of mitigation for altering or disturbance of any existing habitat value. Since the recent timber harvest much of the existing forest canopy within the developed camp area has been thinned and fragmented. During removal of many tree stumps, the shrub layers were also lost. The proposed landscape planting and management plan for Camp Hope seeks to fulfill many of the anticipated habitat mitigation requirements while also creating the desired setting of the camp in the woods surrounded by natural landscape and “wilderness”.

With the construction of each new building and camping pod, new native trees, shrubs and groundcover planting should be re-established. The landscape planting palette should consist exclusively of native plants fostering an eventual healthy forest canopy, sub-canopy, shrub and groundcover layers. The shrub layer component of habitat restoration should be carefully and intentionally located to allow for important sight lines and circulation patterns that support camp program operations. Any mown grass areas will be limited to active recreational use zones (such as the archery range) where native groundcovers would not be likely to withstand the typical foot traffic.

Placement of deciduous and evergreen canopy trees near the camp buildings should also be intentional to maximize sunlight exposure in winter and shade provision during the summer months. Deciduous trees can be located to the southeast – southwest sides of buildings while evergreen canopy trees can provide year-round shade along the north sides of structures.

Low plantings provide the natural setting in the areas proximate to the firepit circles to allow for open views to and from the camping cabins and avoid heat or smoke damage to young canopy trees.

To help guide the planting decisions, a native planting list has been provided in the Appendix.

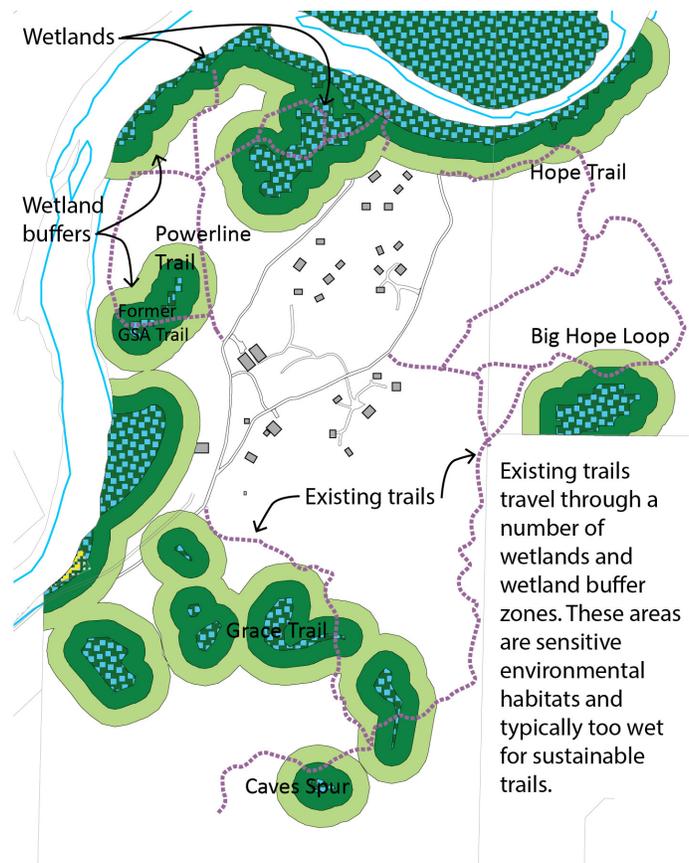


Figure 18. Cabins are clustered around the Pod campfire circle. Native plants blend the buildings into the surrounding landscape.

PROPOSED TRAIL SYSTEM

The existing system of trails allow access to the East Fork Lewis River and provide exploration of the upper slopes on the Camp Hope property. Many of the trails follow the former GSA trail alignments leading to the water tank, former tent sites and water front “beach” zones. Existing trail alignments were captured using a hand-held GPS in March 2016 and mapped with the updated existing site plan. An overlay of the known wetlands and their wetland buffer zones were compared to the existing trail locations. Several trail alignments travel directly through wetland areas or skirt the edges of wetland buffers. The seasonal or year-round wetland soil and hydrology traits that are typical of known wetland areas are not sustainable locations for trails and generally should be avoided. Locating trails on drier stable soils will allow for more resilient trail surfaces, better hiking experiences and reduced maintenance resources. Beyond the environmental regulatory requirements to protect and avoid wetland areas from disturbance, trails provide better access and recreational value when kept out of wetlands.

Figure 19. Existing trails shown with wetlands and their buffer zones.



The proposed Camp Hope trail system addresses existing shortcomings and encompasses a broader range of site exploration and connections to support the recreational programming and environment educational opportunities on the property.

The proposed trail system map (Map ___) depicts a trail layout that intends to:

- Improve existing trail alignments to meet more resilient and sustainable trail characteristics.
- Expand existing routes to provide for more recreational value, connections and activities.
- Reroute existing trails that currently exist in identified wetlands and their buffer zones.

PROPOSED TRAIL SYSTEM

The trail system design works to achieve three primary goals:

1. Establish a sustainable system of trails that meet trail user recreational needs and do not exceed park management and maintenance & operations capacities.
2. Reduce any environmental impact of trails on sensitive resources, habitats, riparian areas and special-status plant and animal species.
3. Improve the outdoor recreation experience and trail user safety.

The proposed trail realignments follow a system design using a series of loops to provide access to points of interest and to create different landscape settings for a variety of trail experiences. The series of trail loops lead:

- into the riparian forest along the East Fork of the Lewis River providing access to the water's edge,
- up to the water tank at the property corner,
- through portions of the upland forested slopes, avoiding the patches of wetlands and seeps,
- to the base of the cliff lava formations to allow for interpretation of the unique geology and habitat, and
- to a hiking trail connection to the adjoining Boy Scouts camp.

These diverse loops provide alternative routes, each with its own distance and grade change level of difficulty and landscape character. Trail users can choose multiple loops to create contiguous hiking adventures without having to double-back or retrace their steps to return to the main camp loop. See Figure 20. Trail System Loop Design.

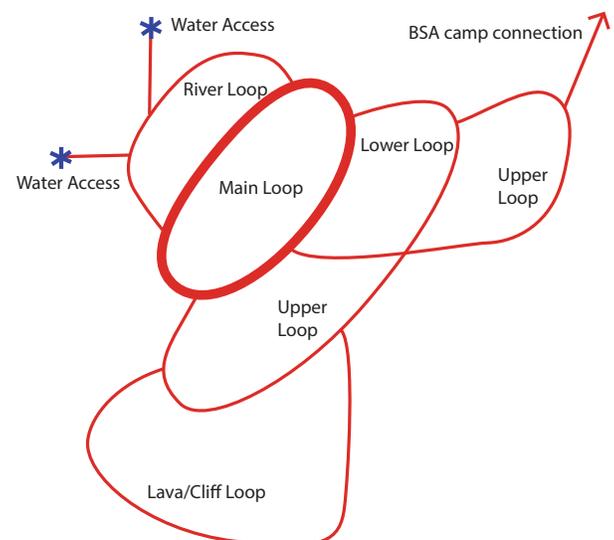


Figure 20. Trail System Loop Design.

PROPOSED TRAIL SYSTEM

The looped arrangement connects to the main loop trail (in place of the current camp loop road) whose width and relative flatness can accommodate a variety of trail users without creating conflicts. See Figure 21. Main loop trail cross section.

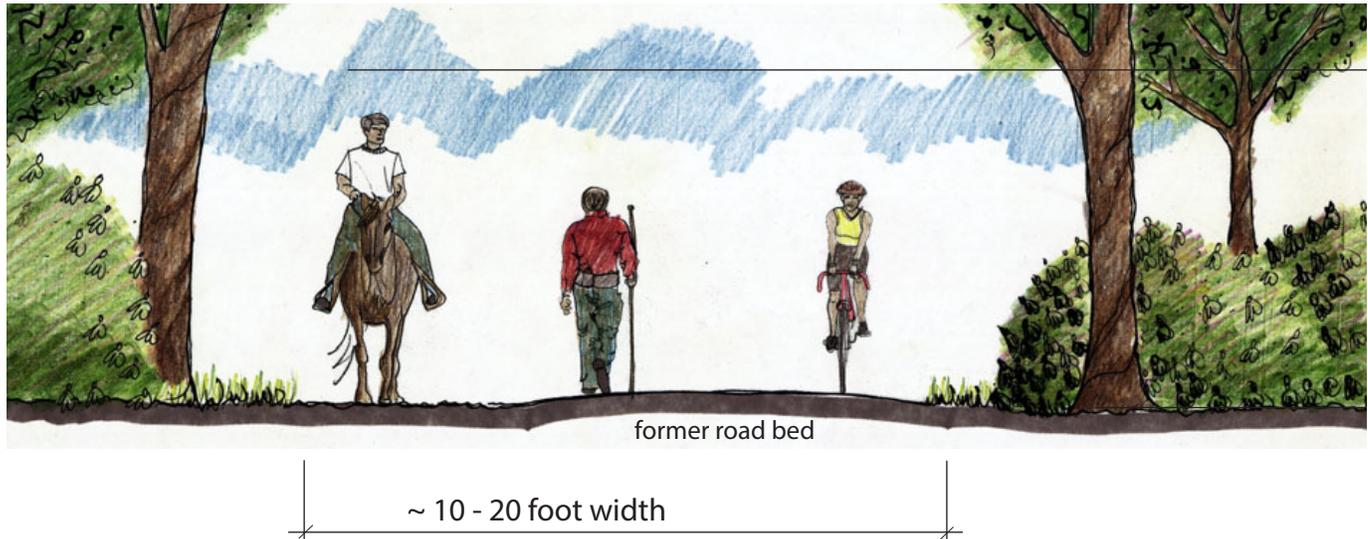


Figure 21. Main loop trail cross section.

Much of the trail system is comprised of natural surface trail treads with widths limited to less than three (3) feet, enough to accommodate single-file hikers. The tread may vary in roughness based on terrain and the grade will vary as the trails lead into the upper forested slopes or out to the river’s edge. While the trail should be maintained with a three to four foot clearance from encroaching vegetation, some tree trunks can be allowed to intrude into the trail’s edge to add interest and visual character.

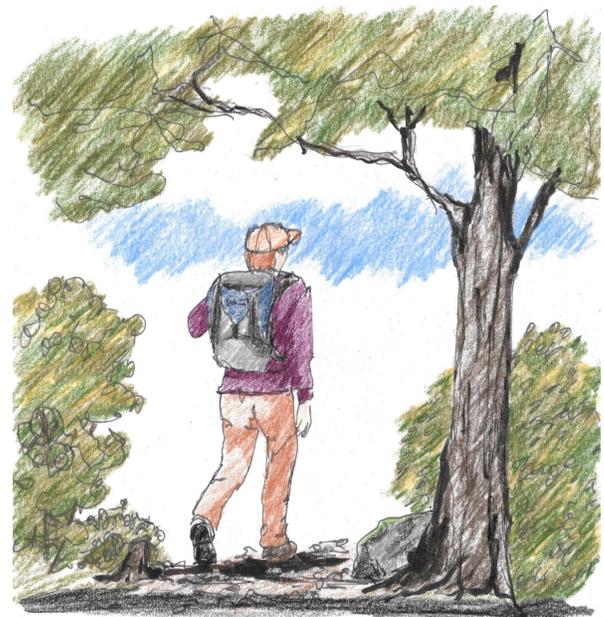


Figure 22. Hiking trails within forested zones.

The trail design standard follows some basic rules of sustainable trail design. Five fundamental traits comprise a resilient trail that requires minimal maintenance mostly brush cutting and log-outs. The traits listed in Table 3., describe the characteristics of grading, cross slopes, steepness and grade reversals that create a good trail tread and alignment. Camp Hope should adopt these fundamentals to guide their realignment of existing and layout for future trails.

PROPOSED TRAIL SYSTEM

Table 3. Trail Design Standard

Sustainable Trail Design Rules

Source: Bruce Weidenhamer

<u>Contouring</u>	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
<u>10%</u>	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
<u>15%</u>	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.)
<u>Half-Rule</u>	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
<u>Grade Reversals</u>	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

COMPATIBLE FACILITIES CONNECTION

Camp Hope shares its northern border with Camp Lewis, the Boy Scout of America camp property. Since their original acquisitions in the late 1930's, the BSA site and Camp Hope site have been developed for focused youth camping programs. Their isolation helped foster natural environmental programs and forest character.

The County initiated discussions with BSA to explore the feasibility of connecting to Camp Lewis. Initial considerations targeted the objective of vehicular access across the two properties to provide for alternative access, circulation and public safety. However, the severe talus slopes, basalt cliffs and unique habitat discourage the consideration of a future road alignment. The planned logging on Camp Hope does not propose timber harvests on the upper slopes where the forest canopy is thinner and the higher logging road construction costs negate any timber harvest value. While a vehicular road connection has been ruled out, a trail connection could provide added value for both properties and their programs to enhance connectivity for potential expanded programs and events and facilitate partnership opportunities for sharing facilities, programs, and infrastructure. The Camp Lewis property of the BSA Cascade Pacific Council endorsed the concept of pursuing a connection between the BSA camp and the Camp Hope property.

VOLUNTEER TRAIL CREW RESOURCES

Clark County has a well-developed volunteer program that has been able to foster partnerships with existing volunteer trail organizations including the Washington Trails Association (WTA) and the Chinook Trail Association (CTA). These two groups are very active in SW Washington providing needed attention to federal, state and local trails systems where land managers face shortages of maintenance resources. While these groups limit their sponsored trail planning, design and maintenance activities to publically-accessible trail systems, their members are often available and willing to work on more restricted lands to help with trail needs. Some active WTA members have expressed the willingness to provide their trail skills for helping Camp Hope upgrade, realign and build a more resilient trail system.

Implementation of the proposed trail system should first prioritize the most immediate existing trail issues: highly erosion fall line alignments and wetlands crossings. Practicing a type of trail triage can prevent further damage and spend maintenance resources wisely.

Trail Triage

1. Correct truly unsafe conditions. As examples, repair impassable washouts along a cliff and remove blowdown from a steep section of a trail used by packstock.
2. Correct problems that are causing significant trail damage, such as erosion.
3. Restore the trail to the planned design standard. The ease of finding and traveling the trail should match the design specification for the recreational setting and target users. Actions can range from simply adding reassurance markers along a full-blown reroute of poorly designed sections of eroded trail.

Source: Trail Construction and Maintenance Notebook. US Forest Service. 2007

Because the proposed trail system layout is designed with a series of interconnected loops, trail work projects can easily be planned in well-defined phases, allowing work projects that still keep the rest of the trail system open for users. Realignment can be phased over a period of years, gradually creating a cohesive and resilient trail system. The actual trail work projects could be the focus of trail crew training events and coordinated through WTA or CTA in their trail skills courses.

As the redevelopment of Camp Hope progresses through its site plan review and permitting processes, some attention to the need for rerouting some trails could dictate the request for a programmatic permit as part of the overall site improvements. Programmatic permits for other county trail system improvements have enabled volunteer projects to be implemented more rapidly and with less time required for county project management staffing.

VOLUNTEER TRAIL CREW RESOURCES

The implementation of the proposed trail system can be phased over several years to realistically engage volunteer resources and also to use the facility and its trail system as an outdoor education site. Trail building skills could be taught as part of the trail improvements program. The county volunteer program and Camp Hope program organizers could encourage WTA, CTA and other trail-oriented organizations and BSA to use the proposed trail re-alignments and new trail connections as a training ground for developing trail building and maintenance programs and events.

Figure 23. WTA crew members working on public park trails.

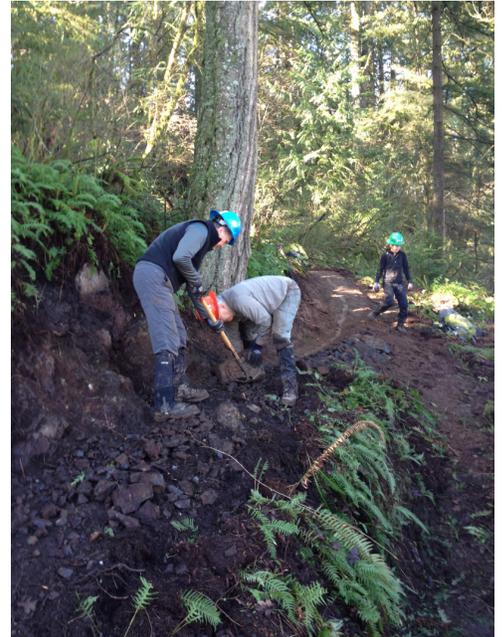
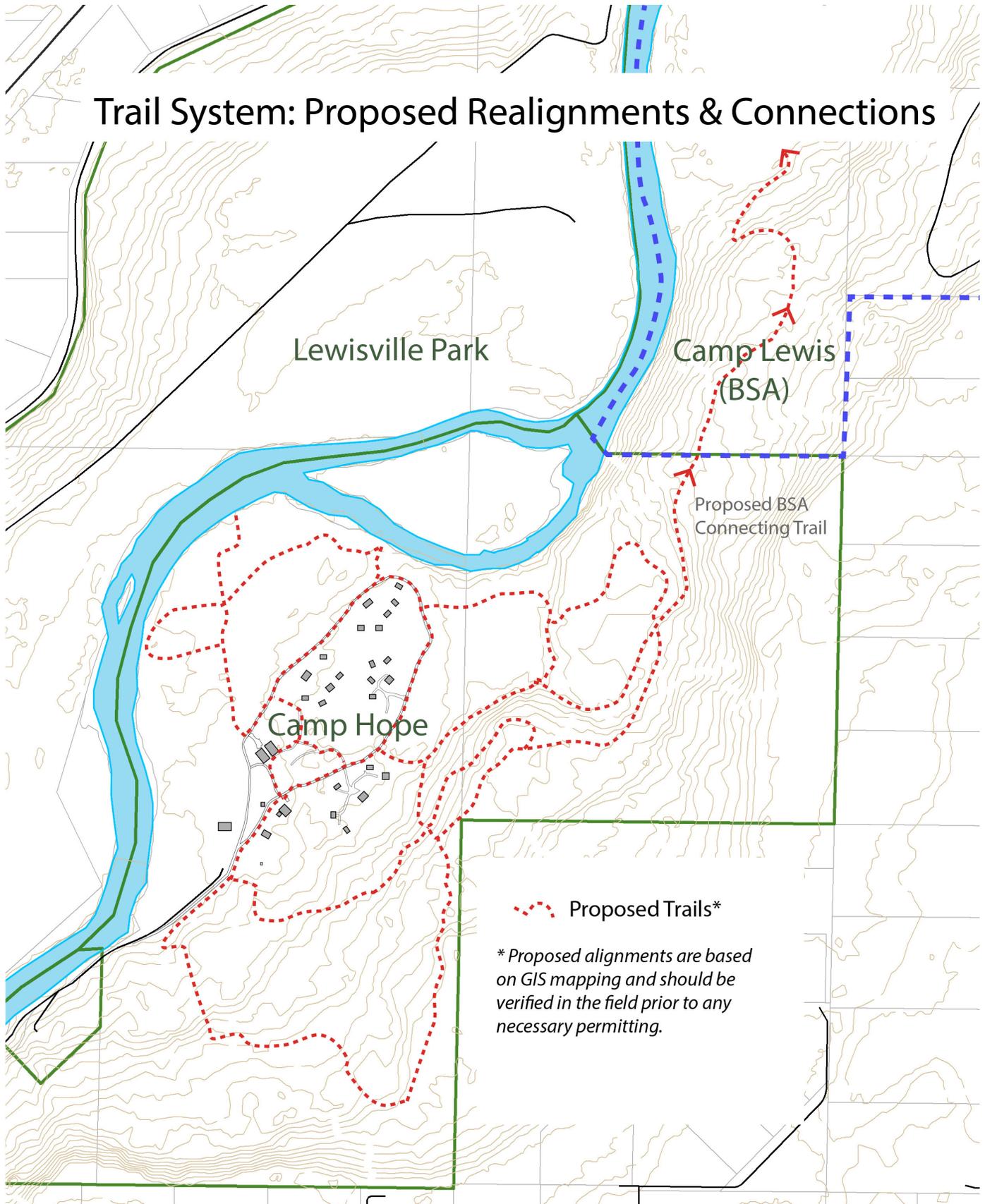


Figure 24. Proposed Trail System Plan



Implementation

PHASING PLAN

Acknowledging that a significant amount of investment is being proposed for upgrades to the site's infrastructure, both Camp Hope and Clark County recognize that the implementation of the master plan's site improvements will require a phased approach. Redevelopment of this special facility will be phased over a number of years and will require fundraising, grants and volunteer resources in addition to the environmental and site plan permitting requirements. Major elements in the master plan improvements involve new buildings that replace former or current structures on the site. The trail system is to be significantly realigned and outdoor recreation amenities added to enhance the recreational programming for campers.

To date, the Camp Hope improvements have already added value to the property's infrastructure by stabilizing the camping shelters, renovating the camp director house, renovating the camp office, installing the archery range, maintaining existing trails and other maintenance operations. Next steps for enhancing the site's value as a special camping facility require the direction of this master plan and are part of this proposed phasing delineation.

Phasing of the camp improvements may not necessarily follow in an assigned sequence since fundraising, permitting and grant cycles may warrant capturing opportunities for individual improvements when the situation is suitable. The phasing plan outlined below may predict the likely sequence, however in most instances, each phase is proposed as an independent step in the overall improvement plan.

Currently the camp operations are constrained by the lack of a common gathering and dining area where large groups using the facility can convene, eat and interact. The first phase of master plan redevelopment focuses on the construction of a communal dining area in the location of the existing concrete slab constructed by the Girl Scouts for a planned large picnic shelter. The new structure would house a full commercial kitchen for food preparation and a partially open air dining area. The location is immediately adjacent to the existing bathhouse and restrooms. During this first phase of the master plan, vehicular use of the roadway would be officially cut off from loop access with the construction of a formal parking area in front of the existing camp office. The addition of the camp shop building - replacing the existing block structure but relocated to the area between the camp director's house and the bathhouse/restroom building - would be a separate phase, independent of the sequence of other redevelopment activities. The shop serves to provide for camp repairs as well as skills training space for some camp programming. The shop may have carpentry or other equipment that is not portable enough to allow for training inside the proposed lodge that can serve as a classroom.

The proposed new lodge is situated on the footprint of the former lodge and would rely on the new parking lot located behind it. If the funding for the new lodge is amassed prior to funding for the dining shelter, the parking lot would be included in this development phase as well as the change of vehicular access to the existing main loop road. The parking lot would integrate permeable pavement techniques to eliminate any generated stormwater runoff. Only vehicles associated with camp staff, deliveries and emergencies would be permitted to use the existing gravel roadway beyond the proposed new parking lot.

PHASING PLAN

Camp cabins and the re-orientation of the camping pods into tighter clusters would be phased as financial and volunteer resources are available, likely targeting one “pod” at a time. Camp Hope anticipates this phasing may occur over the next ten years. Pods 3 and 4 may be last camping cabins to be rebuilt due to likelihood of more difficult environmental permitting and mitigation requirements.

Outdoor recreation amenities that require any permitting such as the zip lines and any structural portions of the obstacle course are also phases that can be independent of other redevelopments. All amenities that require any clearing of vegetation or construction of impervious surfaces will likely require habitat permits even when located outside other environmentally sensitive areas. The trail system realignments and future connection to the BSA Camp Lewis are proposed for over a period of many years when volunteer resources and funding for required permitting is available. The trail system’s redevelopment phase could be concurrent and independent of the other camp’s site redevelopment.

The phasing plan depicts the independent site improvements that may be implemented at different times during this master plan redevelopment. In most cases, each phase can be independent of the other phases with the exception of the roadway and access improvement which would likely be required in any first phase.

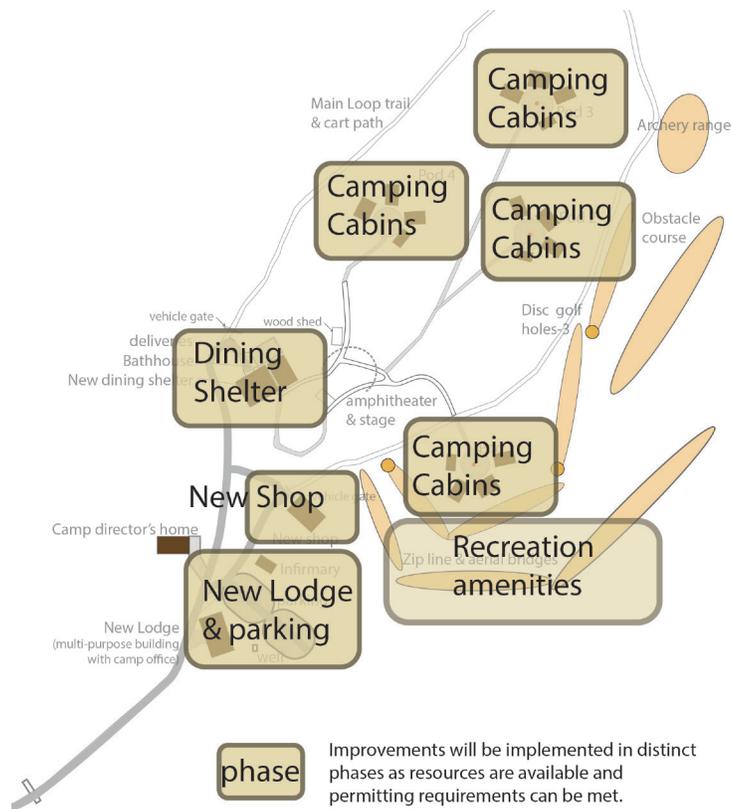


Figure 25. Phasing Diagram

PHASING PLAN

Proposed Phases:

Access and Group Dining

- Realigned vehicular access
- New parking lot
- Main loop closed to vehicles
- Proposed dining shelter on site of concrete slab originally installed for future picnic shelter

Welcome Center: Lodge and Office

- New lodge as multi-purpose meeting room
- Camp office transferred to lodge building

New Shop

- Shop structure added
- Old block building demolished
- Parking/delivery space provided for new shop

Camping Cabin Pods

- Implemented on a pod-by-pod basis
- New 16-bed cabin replaces two 8-bunk Adirondack shelters
- Old kitchen shelters replaced with picnic structures
- Pit toilets replaced with fully-plumbed restrooms
- Campfire space formally laid out
- Plantings added to enhance natural landscape

Outdoor Recreation Amenities

- Obstacle course, aerial bridge and zip line specific elements designed
- Building permits obtained for larger structural elements
- Disc golf holes laid out
- Habitat permits for proposed OR amenities
- Construction of proposed outdoor recreation features

Trail System

- Proposed trail delineations flagged for review
- Priority given to sections of existing trails that cross wetlands and descend steep slopes
- Programmatic permit obtained for entire site to enable phases of volunteer work
- Engagement of volunteer trail crews to implement trail re-routes

PERMITTING REQUIREMENTS

The implementation of this master plan proposes considerable redevelopment of the building infrastructure for the county special use facility. This redevelopment of the site will require permits from a number of local, state and federal agencies. The required permitting process can be expensive, time-consuming and somewhat difficult to predict. Construction of camp facilities will require several local, state and potentially federal permits. The following jurisdictions and agencies have permitting authority depending on the type and location of the proposed activity: Clark County, Washington State Department of Fish and Wildlife, Washington Department of Ecology, U.S. Army Corps of Engineers, National Marine Fisheries Service, and the U.S. Fish and Wildlife Service. Activities associated with camp redevelopment that may trigger a permit include but are not limited to, filling, grading, work within wetlands or their buffers, construction of buildings and structures and disturbance of existing habitat areas.

Local Permitting

Site Plan Review

Development permits will be required from Clark County for the proposed site improvements, particularly for proposed new buildings, other structures and parking. The Camp Hope site is currently within the Parks/Wildlife designation in the county comprehensive plan. No accompanying zoning district is specifically assigned to this land designation. Existing county code is unclear on the required process for site plan review for this special parks and recreation facility. A Clark County Type II Site Plan Review process seems the most appropriate for this project based on its level of use and proposed degree of redevelopment that remains within its current operational capacity. The proposed improvement plans and supporting documents necessary for application submittal can be determined during a pre-application conference with Clark County Community Development. Since the master plan will likely occur beyond 5-7 years, a development agreement is recommended to allow for the build-out phasing terms (10-20 years) predicted for master plan implementation. The development agreement may work in concert with the site plan review process to clarify redevelopment requirements for the implementation of this master plan.

Critical Areas

The Washington State Growth Management Act (GMA) identifies the protection of five critical areas as necessary for protection of the natural environment and the public's health and safety. The County has responsibility to identify, designate, and protect those critical areas found in their local environment. The identified critical areas include fish and wildlife habitat conservation areas, wetlands, frequently flooded areas, critical aquifer recharge areas, and geologic hazard areas. While the master plan outlined these critical areas through mapping to avoid impacts from proposed redevelopment, supporting documentation is required for many of the Clark County critical areas permits. This documentation could include any of the following: no rise certification; wetland delineation; habitat impact assessment and mitigation; wetland mitigation plan; rare plant survey; geologic hazard area study; buffer impact mitigation; historical and cultural resources survey; or a biological assessment.

PERMITTING REQUIREMENTS

A programmatic permit may be the best option for permitting actions within the habitat conservation areas. Since the proposed building redevelopment and re-aligned trail system is likely to occur in phases, the programmatic permit could allow the entire site to be permitted for five years with the ability to reauthorize annually, assuming performance standards are being met.

Shorelines

Under the Washington State Shoreline Management Act (SMA) the county must administer a "Shoreline Master Program" (SMP) that applies zoning and development code requirements specific to shoreline areas. The shoreline designation for Camp Hope is Rural Conservancy Resource Land. Activities within shoreline areas must comply with the applicable SMP.

State Environmental Policy Act Environmental Checklist

The Washington State Environmental Policy Act (SEPA) requires submittal of an environmental checklist to evaluate the environmental consequences of a proposal and determine if it will have any "significant adverse environmental impact." The agency reviewing the checklist will issue a determination of non-significance (DNS), a mitigated DNS, or a determination of significance (DS).

Archeological and Cultural Resources Review

Clark County regulates archeological and cultural resources through the SEPA process. The predictive model is used to determine if an archeological review is needed to obtain a development permit. The need for an archeological predetermination is determined based on the probability index (e.g., low, moderate, high) and the potential for impacts by the proposed action. An archeological predetermination is a method to determine whether cultural resources exist in a particular site without requiring a full archeological survey. While no registered historic sites are on the subject property, more than half the property is identified as having at least a moderate to high (60-80%) and up to a high (80-100%) probability of cultural resources existing on the site.

Stormwater and Erosion Control

Generally, a stormwater and/or erosion control permit is required for any development activities that result in the creation of greater than 5,000 feet of impervious surface in a rural area. The ordinance provides design standards for water quality treatment and water quantity control. The application of best management practices (BMPs) will help limit the potential impact of the proposed improvements to stormwater management.

PERMITTING REQUIREMENTS

State Regulatory Authorities

Washington State Department of Ecology: Section 401 Water Quality Certification

The federal Clean Water Act allows states to approve, condition, or deny projects proposed to be built in wetlands or other waters of the U.S. Projects requiring a Section 404 permit from the U.S. Army Corps of Engineers also require a Section 401 water quality certification from the Washington Department of Ecology. Conditions of the state certification that the proposed project will meet state water quality standards and other aquatic protection regulations will become conditions of the federal permit.

NPDES Construction Stormwater General Permit

The Clean Water Act identifies the discharge of stormwater as a point source of pollution triggering the requirement of a NPDES permit. The goal of a construction general stormwater permit is to reduce or eliminate stormwater pollution and other impacts to surface waters from construction sites. The permit is required when a project disturbs soil areas of one or more acres or where stormwater will be directly discharged into receiving waters.

Washington State Department of Natural Resources

The Washington State Department of Natural Resources (DNR) administers the Washington Natural Heritage Program (NHP) providing information related to rare plant species and natural ecosystems. Clark County provides protection of critical habitat as one of its critical conservation areas through its habitat protection ordinance.

Washington State Department of Archeology and Historic Preservation

The Washington State Department of Archeology and Historic Preservation (DAHP) works with agencies, tribes, private citizens and developers to assure protection of Washington's cultural heritage. The environmental laws (National Environmental Policy Act, National Historic Preservation Act, and State Environmental Policy Act) require impacts to cultural resources be considered during the public environmental review process.

Federal Regulatory Authorities

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (Corps) issues permits for certain activities related to water or wetlands. A Section 404 permit is required for and dredge or fill activities into special aquatic areas such as wetlands. Any impacts to wetlands will require the submittal of a wetland delineation report and a compensatory mitigation plan for any unavoidable impacts to wetlands or waterways.

PERMITTING REQUIREMENTS

National Marine Fisheries Service & U.S. Fish and Wildlife Service

Section 7 of the federal Endangered Species Act (ESA) requires federal agencies to consult with National Marine Fisheries Service and/or U.S. Fish and Wildlife Service on any activities that may affect a listed species. If a listed species should be determined on the project site, a biological opinion may be necessary followed by a biological assessment with a permit application.

Mitigation

Wherever permitting reviews reveal impacts to existing resources, mitigation is likely to be required as part of the permit process. The degree of required mitigation varies with the level of resources protection and amount of discerned impact to the resource. The proposed improvements for the Camp Hope master plan make every effort to minimize impacts to the existing resources and to work within the existing developed area for proposed replacement facilities and recreation amenities. One exception to this strategy is tied to maintaining and enhancing human access to the East Fork of the Lewis River. The existing trails near the River are located in the shoreline and some trail sections travel across existing wetlands. To maintain the recreational value of riverfront access and reduce the impact to wetland areas, some of these existing trail should be realigned. That permitting process may trigger the need for mitigation beyond simple restoration of decommissioned trail sections.

DEVELOPMENT AGREEMENT

The implementation of the master plan site improvements for the proposed redevelopment of the Camp Hope special use facility will likely take more than a decade to complete. Many permits and site plan approvals require a shorter implementation term. A development agreement between Clark County and the Camp Hope organization could be negotiated to allow for the reasonable implementation of the master plan with predictable regulatory requirements that provide some degree of assurance for successful redevelopment.

Of particular value to this master plan, a development agreement could help clarify the permitted uses and development standards that should be applied to this special use facility since the county code is unclear on the most applicable path for site plan review for the project. Because the proposed improvements are on county-owned land and contribute to the overall range of recreational opportunities to county residents, the proposed improvements would upgrade the special use facility to provide a more functional program.

The development agreement could also define the most appropriate phasing of the project if value is added to the permitting conditions of site development and potentially some shared responsibilities for county road improvements.

DEVELOPMENT AGREEMENT

According to the Municipal Research and Services Center (MRSC):

A development agreement is a voluntary contract between a local jurisdiction and a person who owns or controls property within the jurisdiction, detailing the obligations of both parties and specifying the standards and conditions that will govern development of the property. Although the agreements are voluntary, once made they are binding on the parties and their successors.

A development agreement provides assurances to the developer that the development regulations that apply to the project will not change during the term of the agreement. The city or county may require conditions to mitigate project impacts, as well as clarification about project phasing and timing of public improvements. RCW 36.70B.170 describes the type of development standards that are appropriate in a development agreement.

Examples of development agreements that have been negotiated in Clark County are often focused on vesting of transportation concurrency or transportation impact fee credits for off-site improvements. Terms in a development agreement can help extend the period of site plan approval to meet the economic reality of the proposed development beyond the county development code standards.

Development agreements can spell out the roles and responsibilities for proposed developments where the developer and the county share a common goal and are targeting a public infrastructure improvement. While these public infrastructure improvements have usually involved roadway and intersection improvements or regional stormwater facilities, a park and recreation special use facility could be the subject of a mutually beneficial development agreement.

The development agreement could also provide for a longer term for vesting the site plan approvals, development standards and other permitting (stormwater regulations are often excluded from vesting) requirements. This longer term would provide Camp Hope with the assurance that all their fundraising efforts and infrastructure investments would still allow their viable use of the site for special recreation and education programming well into the future. For Camp Hope, any development agreement should be specific to the county-owned special use facility property in the unlikely event that another organization replaces Camp Hope in the distant future.

The development agreement could include a requirement that the parties involved (Parks and Camp Hope) establish a cooperative process for assuring successful implementation of the terms of the proposed development.

A development agreement must go through the public hearing process prior to approval by the elected body. A development agreement must set forth the development standards and other provisions that shall apply to and govern and vest the development, use, and mitigation of the development of the real property for the duration specified in the agreement. A development agreement shall be consistent with applicable development regulations adopted by a local government planning.

OPERATIONAL AND MANAGEMENT CONSIDERATIONS

Primary Operator

The County has leased the special use facility property to the Camp Hope organization to operate and manage the property as a special group camping site. The county has provided the site with its basic existing infrastructure while allowing the Camp Hope organization to conduct its programming and make infrastructure improvements that enhance that programming. With the implementation of the master plan, the site's infrastructure is expected to improve significantly over the upcoming years. The Revised Code of Washington (RCW 36.34.180) sets forth the terms for leasing county-owned public property for specific purposes. The code provides that when lease term conditions are not being met, the county can cause the lease to be forfeited and all improvements on the site are also forfeited to the county. During the terms of the lease, Camp Hope has the primary responsibility for maintaining security and access management for the property. The camp director resides on the site to ensure that programming is not disrupted by unexpected access or unauthorized activities. Camp Hope is the operator of the facility's access gate and the manager of the site's infrastructure and general programming.

Fees and Other Revenues

As a special use facility, Camp Hope can operate its programming through a reasonable fee structure and charge fees for special events and activities on the site. As a non-profit, the fees should be consistent with the intended target participants and within the range consistent with other county park facilities for similar events and activities. The current camp and daily use fee structure being applied at Camp Hope is below the market rate for similar facilities in the region and represents a valuable asset for Clark County.

Monitoring and Reporting

To help ensure the success of the Camp Hope youth camping program and operations, county parks should establish a monitoring process and review period. This review process would help outline a communications and reporting process with a regular site inspection interval to provide feedback regarding environmental permitting compliance and expected adherence to the adopted master plan. Since the county has engaged in the lease to facilitate the operation of a special facility for youth camping, some basic reporting should be negotiated to demonstrate the activities of the programs and the impact of the provided special recreation activities to Clark County residents.

Restoration and Habitat Improvements

Camp Hope is in charge of the ongoing care, maintenance and management of the special use facility and will need to be especially cognizant of the need to meet the performance standards for habitat protection and restoration and the care of any required mitigation plantings for the site's development. Clark County will work to be an effective and supportive partner in the overall improvements for the site but does not expect to be actively participating in specific building projects or site improvements except as outlined and assigned in the development agreement.

OPERATIONAL AND MANAGEMENT CONSIDERATIONS

Since performance standards will be a requirement for permitting within critical conservation areas, it is in the interest of county parks to monitor general operations and management of the site. Periodic inspections, regular meetings between Camp Hope and County Parks should be established as this master plan is implemented.

Restoration and habitat improvements, including some level of reforestation plantings should be a responsibility shared with the county. The Camp Hope role is focused primarily on the use and operations of the site. While some mitigation for development will likely be tied to restoration requirements, other landscape plantings, forest canopy regeneration and riparian enhancement plantings could be part of the county's overall environmental stewardship program. As the site plans move through permitting and development requirements, Camp Hope and County Parks should continue to delegate responsibilities for future site management according to the development agreement and the lease.

Coordination with Agencies, Non-Profits and Volunteers

In the past the special use facility has provided a unique venue for agencies like fire and rescue to operate training exercises. The Boys Scouts have conducting camping programs. Groups of Conservation Corps members, outdoor schools, community service volunteers, churches, and youth organizations have benefited from access to the facility to provide volunteer service or conduct their own programming. The master plan expects that coordination and collaboration with other groups and organizations will continue as part of the programming that is available at Camp Hope.

The Camp Hope property can benefit from the potential involvement and contributions from state or local agencies that focus on East Fork Lewis River habitat restoration. Opportunities to partner for enhancing both aquatic and terrestrial habitat should be encouraged. With habitat enhancements, the value of on-site environmental education can be increased.

The Washington Trails Association is another volunteer-based organization that could become partners with Camp Hope. While official WTA trail improvement projects are not likely to be planned on the site due to its controlled or restricted public access, the site could accommodate special trail training events and activities that provide mutually beneficial results for both WTA and Camp Hope. Demonstrating and practicing good trail building skills on Camp Hope's trail system could help implement the needed trail system re-alignments. Pursuit of such bilateral partnerships is encouraged.

Appendices

Environmental GIS Mapping

Wetland and Habitat Determination - 2016

Native Planting List

Roper Road Documents