Final Environmental Assessment

Souse Gulch Volunteer Village, Libby Dam

Lincoln County, Montana

August 2014

US Army Corps
of Engineers®
Seattle District

Construction of a Full-service Volunteer Village at Souse Gulch Recreation Area, Libby Dam

Final Environmental Assessment
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Responsible Agencies: The agency responsible for this project is the U.S. Army Corps of Engineers, Seattle District (Corps)

Summary: The Corps is proposing to construct a new, full-service volunteer village at the Libby Dam Souse Gulch Recreation Area (Souse Gulch). The volunteer village will include up to nine total campsites with full utility hookups, RV parking, an existing dock facility, and an expansion to an existing on-site parking lot. Souse Gulch is located on Corps property just north and west of Libby Dam (Lincoln County, Montana) where there is currently a day-use area. The volunteer village will be constructed to the east of the existing road that accesses the picnic areas. This undertaking will create a designated campground for volunteers who currently provide visitor center staffing, janitorial and maintenance support work for Libby Dam. Tree removal and construction work on the volunteer village will be initiated in the summer of 2014 and will be slated for completion by winter 2015. Subsequent road paving and native plantings may occur in the volunteer village area in the years following construction.

In accordance with the National Environmental Policy Act (NEPA), this document evaluates the potential environmental impacts of the proposed construction alternatives. The Corps will use best management practices to minimize potential adverse effects to aquatic, terrestrial, and historic and cultural resources. Impacts to air quality, noise, and water quality will generally be highly localized and short in duration. There are no water or wetland impacts associated with this project.

This document is available electronically at under the project name "Final EA for the Volunteer Village Souse Gulch Project":
http://www.nws.usace.army.mil/Missions/Environmental/EnvironmentalDocuments/2014EnvironmentalDocuments.aspx

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1 INTRODUCTION AND BACKGROUND

This Environmental Assessment (EA) evaluates the potential environmental effects of the proposed construction and use of a full-service volunteer village at the Souse Gulch Recreation area at Libby Dam, Lincoln County, Montana. Currently the U. S. Army Corps of Engineers (Corps) has two volunteer campsites located at the north end of the Souse Gulch Recreation Area. The proposed volunteer village will expand upon the existing two volunteer campsites currently located in the Souse Gulch area. This will increase Libby Dam's capabilities to attract seasonal volunteers by providing full-service amenities such as electricity and sewer for up to nine total campsites designated for volunteers. This project will provide the only camping opportunity for Corps volunteers on the shore of Lake Koocanusa. The purpose of this EA is to provide information to the public about this project's environmental effects and to solicit public comments on the proposed action.

1.1 LOCATION

Libby Dam is located at river mile 218.9 on the Kootenai[1] River in Lincoln County, Montana; 40 miles south of the international boundary between the United States and Canada (Figure 1). The dam is approximately 48 miles west of Kalispell, Montana; 11 miles east of the town of Libby, Montana; and 218.9 miles upstream from the confluence of the Kootenai River with the Columbia River.

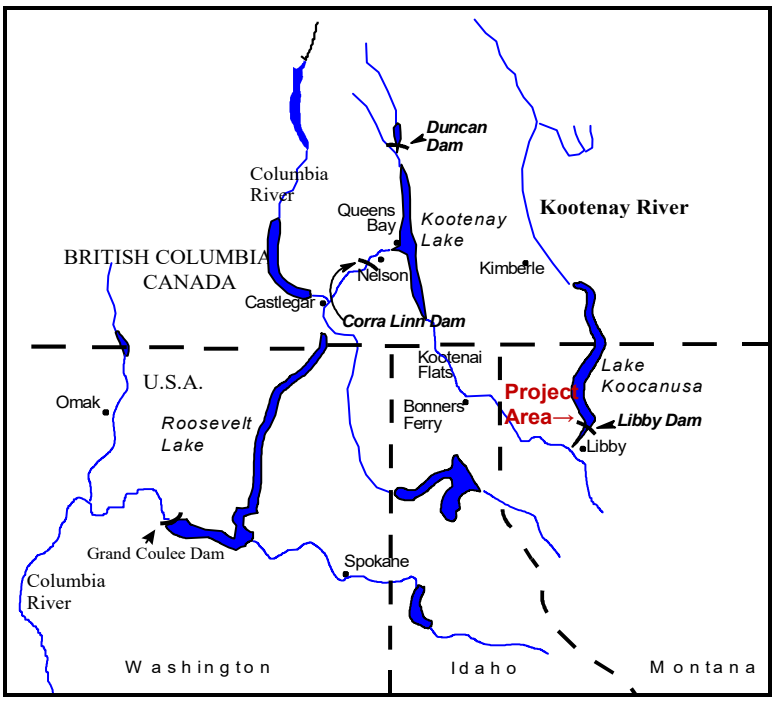

Figure 1: Libby Dam Vicinity Map

The volunteer village is proposed within the Souse Gulch Day Use area. The 78-acre Souse Gulch Day Use Area is located on the right bank (southwest shore) of Lake Koocanusa just

[1] Kootenai River is the American spelling. The same river is spelled "Kootenay" in Canada.

upstream of Libby Dam and is adjacent to and north of the Libby Dam Visitor Center (see figure 2). The site is located within ¼ mile of the dam and is accessible by Forest Development Road 228 (T31N, R29W, Section 6; coordinates 115° 18'56.614 W, 48° 25'19.09N (NAD83)).

1.2 PROJECT BACKGROUND

Recreation facilities associated with Libby Dam include primitive campgrounds, day-use areas, a visitor center, a playground, boating and fishing docks, and various hiking trails and nature areas. The Corps depends on seasonal volunteers to help support staffing, janitorial and maintenance needs associated with the recreational programs and facilities at Libby Dam. Currently there are an insufficient number of full-service campsites available for volunteers that can accommodate large recreational vehicles (RVs) in the vicinity of the dam. The Souse Gulch Day Use Area already provides existing recreational amenities for the public. That, coupled with its proximity to the dam and visitor center, makes it an ideal location to expand volunteer camping opportunities by creating a volunteer village. By recruiting and retaining volunteers, the Corps can provide better long-term support for ongoing public recreation programs and services at Libby Dam.

1.3 PROJECT NEED

Federal budgets are continuing to decline and resources to support the recreational mission at Libby Dam are constrained. Volunteers provide services that enable recreational programs to flourish and expand in the face of such a limited fiscal environment, rather than be reduced in scope. Without volunteers, recreation areas at Libby Dam may be closed or severely limited in the future. The proposed volunteer village at Souse Gulch will help to alleviate the potential shortfall from the loss of seasonal Corps staffing and should still enable high-quality visitor programs, services and recreational opportunities for the public at Libby Dam.

1.4 PROJECT PURPOSE

The project purpose is to meet the current demand for full-service camping opportunities for seasonal volunteers in the vicinity of Libby Dam, and thus, continue to provide high-quality recreational opportunities at Libby Dam. Based on long-term trends, it is anticipated that the nine to eighteen additional volunteers staying in the new volunteer village will provide staffing support for visitor services and facility maintenance assistance equivalent to that of approximately ten seasonal employees. Campsites located in the new volunteer village will not be available for general public use.

Libby volunteers typically reside in large RVs during their three to four month stay in this relatively isolated area; therefore, they also seek out modern conveniences, such as running water, cable and electricity during the duration of their stay. A recent Corps assessment of private and federally-owned campground use around Lake Koocanusa and the Kootenai River indicated that full-service campgrounds that offer RV hookups are in relatively higher demand compared to semi-developed or primitive campsite. These "modernized" campgrounds are frequently occupied all season long and may be reserved up to several years in advance (USACE 2012). The minimal availability of RV sites in the area indicates an evident demand for full-service campsites of the type anticipated to be preferred by Libby Dam volunteers. Additionally, because volunteers frequently provide services in or around the visitor center at Libby Dam, RV camping at Souse Gulch (a location in the vicinity of the visitor center) adds additional appeal, increasing the likelihood volunteers will commit to staying for the duration of the season.

1.5 AUTHORITY

Libby Dam was authorized by Public Law No. 81 – 516, the Flood Control Act of 17 May 1950, substantially in accordance with the plan set forth in House Document 531 (81st Congress, Second Session) as part of the comprehensive plan for water resource development of the Columbia River and tributaries. House Document 531 indicates that Libby Dam is intended to provide benefits of flood control, power generation, navigation, fish and wildlife conservation, and recreation. Libby Dam is also the only project located in the United States that is the subject of the Columbia River Treaty between the United States and Canada (1964). The Columbia River Treaty provides for coordination between Canada and the U.S. on flood risk reduction and power generation and imparts significant mutual benefits across the Columbia River Basin. The reservoir created by Libby Dam was designated Lake Koocanusa by Public Law No. 91-625 dated 31 December 1970. This EA is being prepared pursuant to Sec. 102(C) of the National Environmental Policy Act (NEPA) of 1969.

2 ALTERNATIVES

In order to comply with the NEPA, the Corps performed an analysis of potential alternatives to meet the purpose and need of this project. The following four alternatives are analyzed in this EA: No Action, full-service volunteer village (designed to maximize benefits to volunteers), a full-service public campground (designed to maximize public recreation opportunities), and a primitive volunteer village (designed to minimize construction costs). The preferred alternative is the full-service volunteer village with a specific alignment designed to minimize any environmental impacts.

2.1 NO FEDERAL ACTION

The “no action” alternative will not alter the existing recreation infrastructure or ecosystem at Libby Dam, and will leave the Souse Gulch Day Use Area as it currently exists (without a volunteer village). Existing picnic shelters, restrooms, boating and fishing areas, horseshoe pits, and the playground located within Souse Gulch will remain. No additional parking will be created near the public mooring dock at the north end of the Day Use Area and the existing loop road will remain unchanged. Existing primitive hiking trails, forested habitats, and natural features will remain unaffected. Noxious weed management and hazard tree removal in public areas will likely continue. The two existing volunteer sites currently located in Souse Gulch will remain; however, Libby Dam’s ability to provide high-quality recreational services and programs will decline and closures of public facilities and services will likely occur in the near future without additional volunteer support. Maintenance of existing features throughout of Libby Dam project area may be deferred or stopped if volunteer assistance is not available to provide ongoing maintenance and upkeep.

2.2 PRIMITIVE VOLUNTEER VILLAGE ALTERNATIVE

Under this alternative, nine primitive campsites (intended to support 9 to 12 volunteers) will be constructed in the Souse Gulch area. Access to these primitive campsites will occur via new dirt and gravel road ways. This volunteer village will be constructed without concrete pads, electricity, or sewer facilities. Basic amenities such as picnic tables, fire pits will be added to volunteer sites. These sites will not accommodate large RV use. Thus, a primitive campground will not be attractive to typical seasonal volunteers that work at Libby Dam.

The Corps already maintains 23 primitive campsites in three public recreation areas within one to three miles downstream of the Souse Gulch Day Use Area. However, these primitive sites are not used by volunteers because they lack electrical hook-ups, running water and sewer or a dump station. Because Libby Dam is a remote site, it requires a long-term commitment of its volunteers, who generally prefer RV accommodations for the duration of their stay over primitive tent camping. Based on past usage trends, it is anticipated that future volunteers willing to travel and stay at Libby Dam for the season will travel in large RV units and require at a minimum running water, sewer, and electricity for long term commitments.

This alternative was considered but eliminated from further consideration because it will not provide an attractive site location for volunteers, and thus will not address the project purpose to help further the project's recreational purpose. This alternative was eliminated from further discussion.

2.3 Full-service "Class A" public campground alternative

Under this alternative, the Corps will construct a full-service public campground with approximately 30 campsites. This campground will be constructed to meet with federal Recreation Facility Standards for a "Class A" campground (USACE 2004). A 4-stall shower house and gatehouse will also be constructed. Two additional campsites will be reserved for full-time attendants (or campground hosts). Full-service RV hook-ups, including sewer, will be available for campground hosts and for nine additional sites, to address public demand for such camp sites (USACE 2012). Because of the limited seasonal construction window in northern Montana, the Corps will construct the campground in five phases over the course of five years.

High initial construction costs, coupled with the continued operation and maintenance of a public campground may exceed future federal budgets and become fiscally burdensome over time. Additionally, the requirement to secure five consecutive years of federal funding was deemed unfeasible in our current budget climate. Because a public campground was determined to be too expensive with no guaranteed way to offset future costs and this alternative does not meet the project purpose, this alternative was eliminated from further discussion.

2.4 Full-service volunteer village alternative (Preferred)

Under this alternative, the Corps will construct a full-service volunteer village that will include electrical, water, and sewer hookups for RVs. Each of the up to nine new campsites will include a hardened living area, fire pit, lantern holder, and a picnic table. The volunteer village will be accessible via paved roads. New paved parking will be added within the existing road loop at the north end of the Souse Gulch Day use area for use by the public and to accommodate any overflow volunteer parking needs.

The Corps will start tree removal and camp site construction in 2014 and plan to complete construction by winter 2015. Plantings and paving will occur in spring 2016, or as soon as is feasible. Once completed and fully operational, the volunteer village will offer full-service camping spots to seasonal volunteers who support Libby Dam facilities and natural resource programs across Corps-administered lands.

This was selected as the preferred alternative because it will allow the Corps to attract volunteers from across the country in a timely manner, and continue to offer high – quality recreational public services at Libby Dam in the face of fiscal constraints.

3 PROJECT DESCRIPTION

3.1 PROJECT SETTING

Libby Dam is located in the Kootenai River Valley of northwest Montana within the Kootenai National Forest. Figure 1 shows a vicinity map of Libby Dam and the Kootenai River drainage. The area is characterized by high, rugged, forested northwest-trending mountain ranges separated by narrow linear valleys. Downstream from Rexford, Montana, Lake Koocanusa occupies a narrow gorge, averaging one mile in width, between steep, coniferous forest-covered mountains with flat benches at the mouths of tributary streams. Above Rexford to the Canadian border, the reservoir is approximately two miles wide and the character of the shoreline changes to generally sloping, rolling terrain with extensive flat areas at or above the reservoir level.

The proposed volunteer village will be situated within Souse Gulch Day Use Area approximately ¼ mile upstream of Libby Dam. Day use facilities at Souse Gulch complement the visitor facilities available at the visitor center and the dam. Existing amenities include picnic shelters; flush rest rooms; a playground; a disc golf course; a boat ramp; floating boat moorage dock; and associated parking. Other features found in the area that contribute to visitor comfort and recreational opportunities include three horse shoe pits, picnic tables, water fountains, trash receptacles, and fireplace units. A network of nature and hiking trails extends along much of the shoreline and through the wooded areas of the site and provides a link to the visitor center area.

In addition to its value as a recreation area, Souse Gulch, with its varied topography and diversity of vegetation, also supports relatively large numbers of animals. The area receives relatively heavy use by deer and elk during the winter. Other mammals, including black bear, red squirrels, and Columbia ground squirrels, also use the area on a regular basis. The area contains a number of snags and fallen logs which provide habitat for several cavity-nesting species of birds and mammals. There are also two sensitive areas containing yellow lady's slippers and a bald eagle nest.

The proposed project site is situated adjacent to an existing paved road in the undeveloped forest portion of Souse Gulch. Figure 2 provides an overview of the project setting and shows proximity to Libby Dam and the Visitor Center. Currently there are no public camp sites within Souse Gulch. Construction will occur east of and down slope from Forest Development Road 228. The volunteer village will be located outside of any environmentally sensitive areas.

Figure 2: Setting of the proposed volunteer village (in red) adjacent to existing Souse Gulch picnic areas. General boundaries for the Souse Gulch Day Use area are outlined in light blue. A portion of Libby Dam is shown in the lower right of the photo.

3.2 Proposed Volunteer Village Features

The proposed project involves construction of a new, full-service volunteer village across a 2.3-acre area in the forest adjacent to the existing Souse Gulch day use access road. The volunteer village campsites will be situated on the opposite side of the access road providing visual isolation from the existing Souse Gulch Day Use Area features described in Section 3.1.

The plan calls for up to nine additional campsites, each of which will include a hardened surface for vehicle/RV parking, a picnic table and tent site on a hardened surface, a water faucet, fire pit and cooking grill, and lantern holder. The new campsites will include electrical, water, and sewer hook ups that will be available for use by each of the volunteer hosts. An additional 0.25-acre parking lot to accommodate overflow parking and boat trailers will be paved within the road loop located at the north end of the Souse Gulch day use area. A drafted layout of the proposed utility and camp site alignment is provided in figure 3 and 4. An overview map of the proposed

volunteer village emphasizing updated road alignments, new parking, and historic architectural features is shown in figure 5.

The selected placement of camp sites and road locations are largely fixed for the following reasons: 1) The amount of land available for the project is constrained by Corps property boundaries and the desire to keep a majority of the surrounding landscape available for passive recreation. 2) All new roads must be routed around the drip lines of existing large conifer trees that will be retained. 3) Exclusion buffer zones were placed around any special status species documented in the vicinity of the proposed volunteer village (nesting bald eagles and lady slipper orchids) to avoid impacts. 4) Volunteer village sites follow the contour of the existing roadway where utilities are already established making it easier to connect with existing utilities.

A new road spur (shown in blue on Figure 5) will be constructed to isolate the campsites from the rest of the day-use area. The Corps will eventually pave all existing gravel roads in the Souse Gulch recreation area to enhance public accessibility to the area features and improve the quality of the recreational experience.

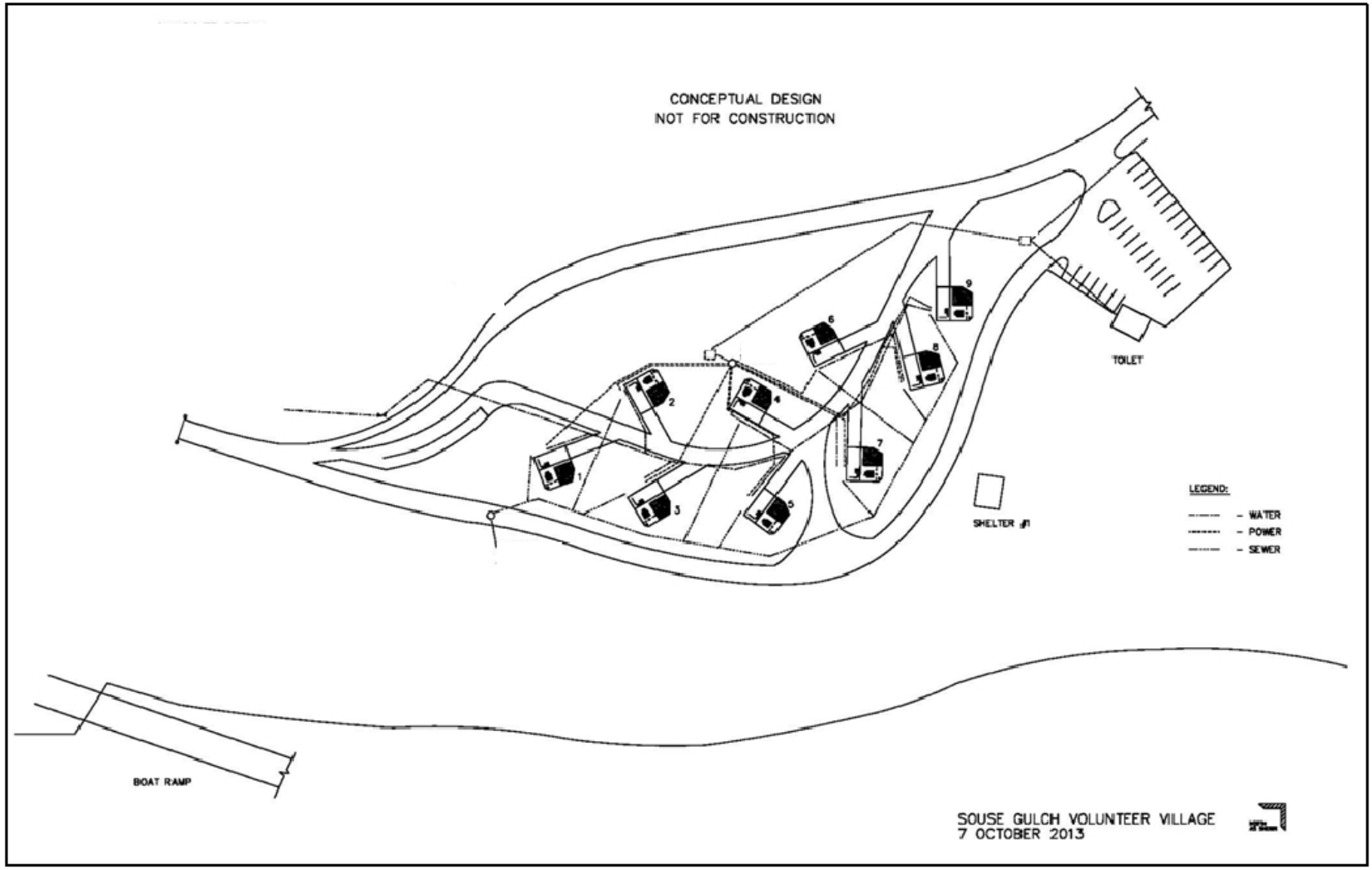

Figure 3. Plan view of the volunteer village showing campsites and utility line locations.

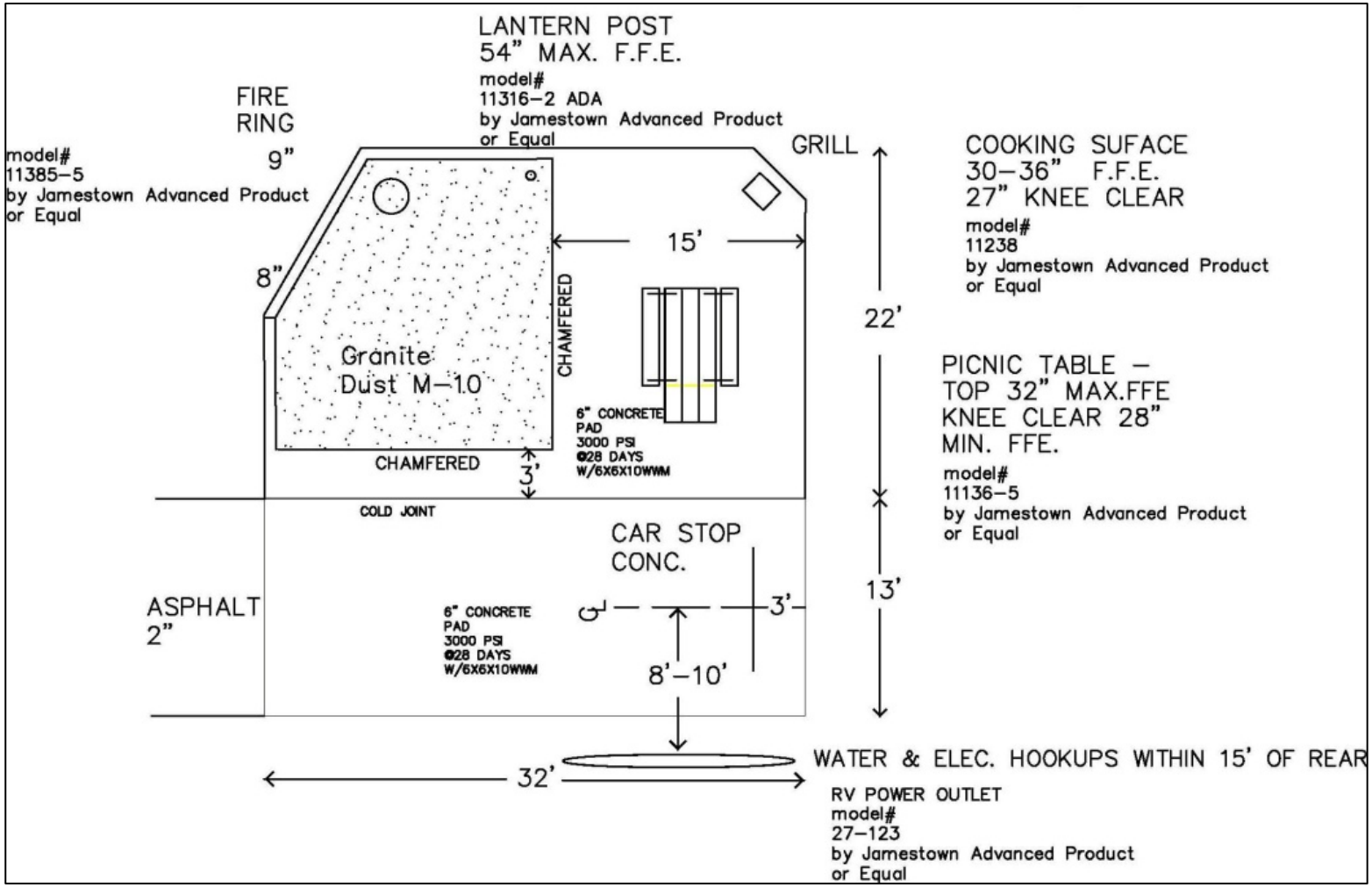

Figure 4. Proposed campsite layout detail.

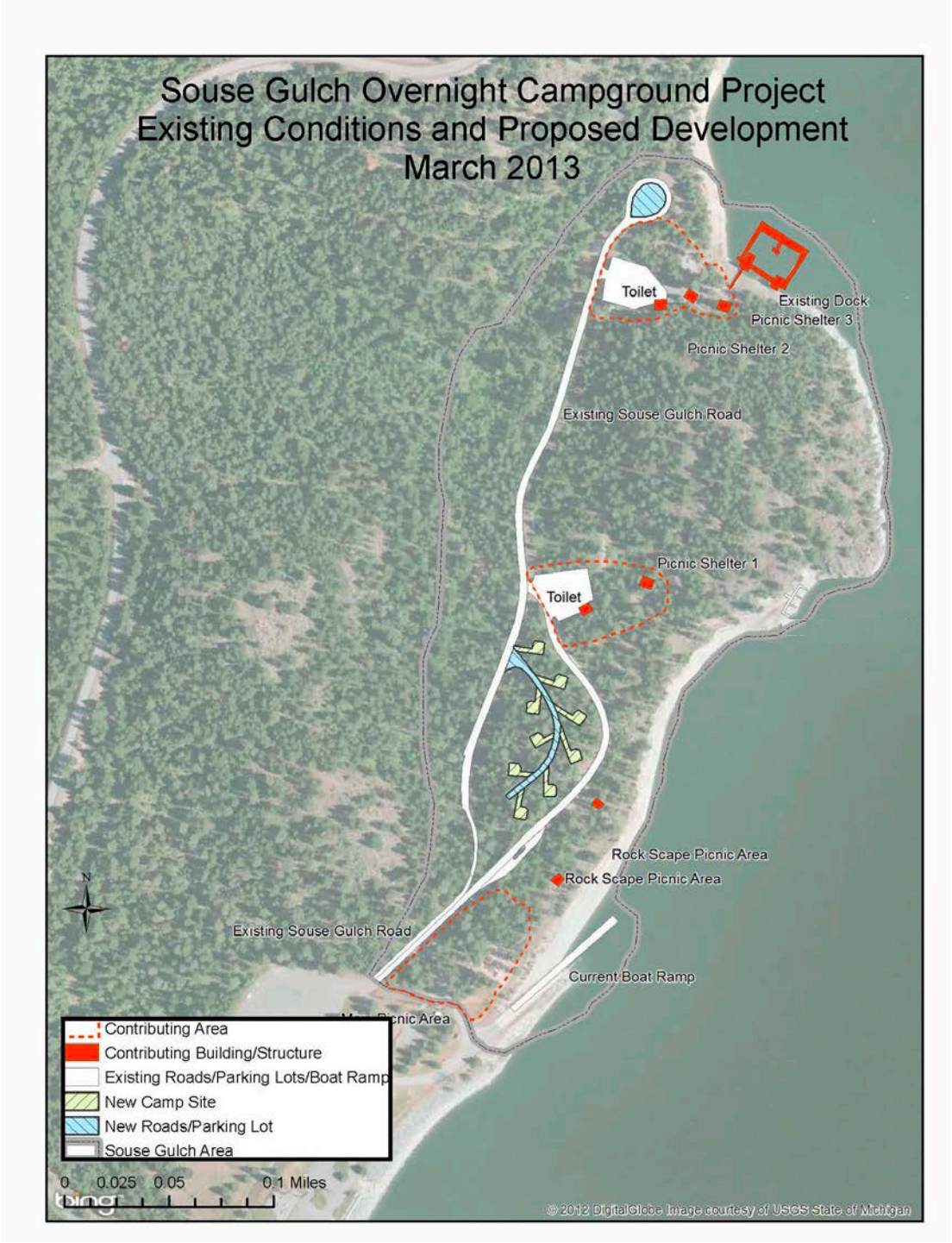

Figure 5. Proposed volunteer village placement showing the existing (white) and new road alignments and parking lot (in blue). Structures and features contributing to the Libby Dam Historic District are shown in orange.

3.3 CONSTRUCTION SEQUENCING

Tree removal and construction will be scheduled to start in the summer of 2014. The construction of the volunteer village camp sites will be slated for completion by winter 2015, although paving and planting work may extend beyond that date. Construction includes clearing, grubbing, and grading of the new roads and campsites, installation of utilities (water, electric, and sewer), installation of campsite features, as well as adding amenities such as pathways. Some tree removal will occur, where warranted, for campsite access and road ways. Paving of roads, campsite spurs, and parking areas will be completed during the next paving contract period at Libby Dam. This may occur after 2015 but within a 5-year period following campground completion. Native vegetation will be replanted around the developed campsites within one year of construction to assist in regrowth of the area. The Corps will be responsible for implementing annual weed control measures throughout the volunteer village.

Tree removal and vegetation clearing will occur during winter months outside of the breeding bird season. Where feasible, construction work will occur in the winter and during wet weather conditions to reduce dust, with the exception of features requiring dry, unfrozen ground for digging and trenching. Construction will require the closure of the gravel access road to the east of the proposed volunteer village. This will not affect recreation and public use of Souse Gulch because all recreational traffic travels down the paved roadway on the west side of the proposed volunteer village.

3.4 CONSTRUCTION SPECIFICATIONS

Operation and maintenance of the volunteer village will be the responsibility of the Corps. Design of the volunteer village is predicated on minimizing the need for maintenance in future years. For example, paving materials will be chosen that will best withstand the freezing and thawing conditions typical of the region and will thus have the longest life and require infrequent maintenance.

Upon completion, the new volunteer village will be incorporated into the next revision of the Libby Dam Master Plan, which outlines long-term planning and management for the overall Libby Dam operating project. It is anticipated that long-term maintenance and oversight of the volunteer village may be managed though the help of volunteer staff that will be living in the new village on a seasonal basis.

4 EXISTING ENVIRONMENTAL CONDITIONS

This section describes various environmental resources and provides a baseline of existing conditions in the proposed project area.

4.1 BASIN OVERVIEW

The Kootenai River basin encompasses 16,180 square miles. Basin elevations range from more than 11,000 feet above sea level on many of the peaks along the Continental Divide to 1,500 feet in the lowest valleys. In terms of runoff volume, the Kootenai River is the second largest Columbia River tributary and the basin ranks third in terms of watershed area at 8.96 million acres.

The Kootenai River originates in Kootenay National Park, British Columbia, Canada, and flows south within the Rocky Mountain Trench into Montana. At river mile (RM) 222 (48 miles south of the international boundary), Libby Dam impounds Lake Koocanusa, which is 90 miles long at full pool. Downstream of Libby Dam the Kootenai River follows a free-flowing meandering course, dropping about 5 feet per mile. At RM 204 the river turns to the northwest, then turns north near Bonners Ferry, Idaho (RM 153), and flows back into British Columbia at RM 106. Nine miles west of the town of Libby, Montana, the river passes over scenic Kootenai Falls which forms a natural barrier to upstream fish migration. The floodplain area downstream of Libby Dam is characterized by relatively flat terraces which lie at intervals between the riverbanks and steep mountain slopes. The floodplain is relatively narrow on either side of the river between Libby Dam and Bonners Ferry, where the floodplain begins to widen.

4.2 Geology, Soils and Topography

The majority of the Kootenai River basin is within the Columbia Mountains/ Okanogan Highlands physiographic province, a complex of high glaciated mountains with narrow plateaus to the south. Mountains in the subbasin are composed of folded, faulted, and metamorphosed blocks of Precambrian sedimentary rocks of the Belt Series and minor basaltic intrusions. Primary rock types are meta-sedimentary argillites, silts, and quartzites, which are hard and resistant to erosion.

Variability of topsoil within the project area is great due to the mixing action of both glaciation and subsequent melt periods. Stratified and unstratified glacial sediments composed of glacial till and other forms of drift and lacustrine deposits form the bulk of surface soils in the project area. The topsoil is composed of sandy, silty gravels and frequently contains cobbles and boulders. Intermixed with these materials are occasional silt and fine sand deposits. Local soil is naturally held in place by existing vegetation in the proposed project area. Loose, fine organic material has naturally accumulated in depressions and along the base of tree roots.

Topography is primarily controlled by bedrock structure modified by glacial erosion and sedimentation. The basin is characterized by high, rugged, forested northwest-trending mountain ranges separated by narrow linear valleys. The topography of the area around Libby Dam ranges from 2,100 feet elevation near the Kootenai River to over 3,000 feet elevation east of Montana State Highway 37. Typically the land rises steeply from the river (and reservoir) on both sides. Microtopography in the proposed project area includes minor swales and depressions caused by natural long term soil erosion, vegetative structure, weathering and settling, that has occurred within a relatively flat area over geologic time.

4.3 Climate

The Kootenai River basin is influenced by a modified west coast marine and continental climate. Pacific air masses help moderate temperatures, although continental Canadian systems periodically move into the area in the winter and bring subzero temperatures. Average annual temperature (Fahrenheit) is in the middle 50s, with the average high temperatures in the 80s in the summer and near freezing in the winter (U.S. Climate Data 2013). Precipitation generally exceeds 20 inches per year throughout the Kootenai River basin.

4.4 HYDROLOGY

In general, steep, forested mountain canyons and valleys dominate the Kootenai River basin. Tributaries to the Kootenai River tend to have very high channel gradients. The porous nature of the rock and glaciation have profoundly influenced basin and channel morphology, resulting in steep canyon walls and confined stream reaches. Kootenai River basin hydrology is driven by snowmelt runoff. Mean annual stream flow since Libby Dam construction is approximately 13,800 cubic feet per second (cfs), as measured at the USGS gage at Leonia, Idaho (USFS 2002; USGS 2013). Highest flows typically occur in May, June, or early July. Maximum pool elevation for Lake Koocanusa is elevation 2459 feet and minimum operating pool is elevation 2287 feet.

Souse Gulch is named for an ephemeral drainage that flows east, downhill from Forest Development Road 228 and terminates outside the north end of the proposed project area. No other drainages or sources of water are known on the slopes above the Souse Gulch Day Use Area.

4.5 VEGETATION AND WETLANDS

The Kootenai River basin in the vicinity of Project lands is characterized primarily by coniferous forests. Vegetation along the river and tributary streams (called "riparian") is primarily deciduous woodlands dominated by cottonwoods. The Kootenai River flows south through the reach bordered by the Project. Consequently, the forested slopes above the river are predominately east- and west-facing slopes, with relatively few south- and north-facing slopes. The aspect of slopes is a particularly important factor controlling vegetation associations in an area where the summers are hot and dry, which characterizes the project area. Thus, the south-facing slopes receive sun for a large portion of each day and are the hottest and driest slopes. They are typified by a sparse growth of ponderosa pine and relatively few understory plants. At the other extreme, north-facing slopes receive little to no direct sun and tend to be cooler and do not become as dry, typically receiving moisture from morning dew. Hence, vegetation is denser and lusher, usually showing a greater diversity of species. These slopes tend to be dominated by Douglas fir and western larch, with a large number of understory plants. The east- and west-facing slopes tend to show a gradation of community makeup as it changes from ponderosa pine on south-facing slopes to Douglas fir and western larch on north-facing slopes. They include plants common to both north- and south-facing slopes and usually have the greatest diversity of vegetation and animal species.

A Corps forester made an assessment of this area in September of 2013 and stated that the composition of the mature stand is generally in good health and vigor. Within Souse Gulch mature trees (defined as 12 inches diameter at breast height (dbh)) are spaced at approximately 20 to 30 feet apart, with roughly 85 trees per acre (TPA). The volunteer village will be constructed on relatively flat ground at the base of an east-facing slope. The site is comprised of secondary, mixed coniferous forest. Dominant vegetation includes Douglas fir (*Pseudotsuga menziesii*) and ponderosa pine (*Pinus ponderosa*), with a few Western larch (*Larix occidentalis*) interspersed. Understory plants consist of ninebark (*Physocarpus capitatus*), snowberry (*Symphoricarpos albus*), kinnikinnick (*Arctostaphylos uva-ursi*), Oregon grape (*Mahonia repens*), ocean spray (*Holodiscus discolor*), mock azalea (*Menziesia ferruginea*), golden currant (*Ribes aureum*), wild roses (*Rosa spp*), and serviceberry (*Amelanchier alnifolia*). Existing habitat and site conditions are shown in figure 6 and 7 photos.

Figure 6. Representative existing site conditions in the proposed Volunteer Village project setting at Souse Gulch.

Figure 7. Existing picnic area setting at south end of the Souse Gulch Day Use Area.

While there is an ephemeral drainage that terminates northwest of the project area, no wetlands, seeps or drainages occur within the proposed project footprint. Wetland vegetation is not a prominent feature anywhere within the project boundary. Corps biologists conducted a site inspection in August 2012 to verify a delineation of wetlands was not warranted; no jurisdictional wetlands or waters were found to occur within the proposed project boundary.

4.6 FISH

Fish species that are located within Lake Koocanusa and may occur within the project area vicinity are listed in Table 1.

Table 1. Fish species in Lake Koocanusa in the upstream vicinity of Libby Dam.

Species	Native/Introduced	Kootenai River Basin Location
Redband trout, *O. mykiss gairdneri*	Native	Throughout
Westslope cutthroat trout, *O. clarki lewisi*	Native	Throughout
Kokanee salmon, *O. nerka*	Native[1]	Throughout
Bull trout, *Salvelinus confluentus*	Native	Throughout
Mountain whitefish, *Prosopium williamsoni*	Native	Throughout
Burbot, *Lota lota*	Native	Throughout
Redside shiner, *Richardsonius balteatus*	Native	Throughout
Peamouth chub, *Mylocheilus caurinus*	Native	Throughout
Northern pikeminnow, *Ptychocheilus oregonensis*	Native	Throughout
Largescale sucker, *Catostomus macrocheilus*	Native	Throughout
Longnose sucker, *Catostomus catostomus*	Native	Throughout
Rainbow trout, *Oncorhynchus mykiss*	Introduced	Throughout
Brook trout, *S. fontinalis*	Introduced	Lake Koocanusa
Brown trout, *Salmo trutta*	Introduced	Kootenai Falls through Kootenay Lake
Northern pike, *Esox lucius*	Introduced	Lake Koocanusa
Yellow perch, *Perca flavescens*	Introduced	Lake Koocanusa

[1] Kokanee are native to Kootenay Lake but did not occur in the Kootenai River above Kootenai Falls until their introduction to Lake Koocanusa in the late 1970s. Entrained kokanee from Lake Koocanusa represent the large majority of kokanee occurring in the Kootenai River below Libby Dam.

Sources: NPPC 2004; BPA *et al.* 1995

Construction of Libby Dam created a barrier to upstream fish passage, separating two different aquatic environments, a regulated river downstream from the dam and a fluctuating reservoir upstream from the dam, each with its distinctive fish community. The establishment of the dam converted riverine spawning, juvenile rearing, migratory passage, and resident fish habitat to a lake environment. This created abundant silt- and mud-dominated substrates in the reservoir. Water level fluctuations greatly influence biological production and available fish habitat in Lake Koocanusa. Due to fluctuating water levels, the lake generally lacks well established riparian zones and backwater areas; much of the reservoir lacks shoreline vegetation that will naturally provide cover and support nutrient input and insect prey. With the change in available habitat types, the fish assemblage in the reservoir has shifted over time. Westslope cutthroat trout, mountain whitefish, and rainbow trout abundances have declined from early post-impoundment levels, while northern pikeminnow and peamouth chub numbers have substantially increased

(Dalbey and Marotz 1997). Kokanee salmon introduced to the reservoir in the 1970s have become abundant and self-sustaining due to exploitation of the niche provided by the reservoir environment. Genetically pure stocks of fluvial and adfluvial westslope cutthroat trout occur in the headwaters of Lake Koocanusa.

4.7 WILDLIFE

Wildlife species occupying the area include birds, bats, small terrestrial mammals and other species common to the region. Deer and elk eat the twigs and foliage of Oregon grape, ponderosa pine, and Douglas fir, as well as shrubs such as snowberry. White-tailed deer show a preference for kinnikinnick, the fruit of which is also eaten by blue grouse. Red squirrels are insectivorous during spring and summer, but turn to the seeds of Douglas fir and ponderosa pine during fall and winter. Black bears utilize these areas as well, feeding on berries, tubers, insects, small mammals, and honey. Several species of bats breed in the area and are a common sight at dawn and dusk when they are out foraging for insects. Although the understory vegetation is diverse, the overstory vegetation is mostly composed of coniferous trees, and the bird life is therefore representative of a coniferous forest, including such species as mountain chickadee, red-breasted nuthatch, northern flicker, American robin, and dark-eyed junco. Most of these species are insectivorous, but the nuthatch also eats the seeds of Douglas fir and ponderosa pine.

A pair of bald eagles routinely nests within the boundaries of the Souse Gulch recreation area. The nest is located approximately 837 feet away from the closest volunteer site. This pair constructed its nest in 1995 and is accustomed to human activities. The pair begins courtship around mid-February of each year, with egg-laying around mid-March, and nestlings in mid- to late-April, which usually fledge (leave the nest) around late July. Construction activities will need to consider the presence of, and minimize disturbance to, the pair.

4.8 THREATENED AND ENDANGERED SPECIES

In accordance with Section 7(a)(2) of the Endangered Species Act of 1973, as amended, federally funded, constructed, permitted, or licensed projects must take into consideration effects to federally listed and proposed threatened or endangered species. Table 2 lists the sensitive species that may be present in the vicinity of Souse Gulch, their ESA or other federal listing status, and their likelihood of occurrence in the project area.

Bull trout and Canada lynx are the only ESA-listed species with a potential to occur near Libby Dam. Of these two species, only the Columbia Distinct Population Segment of bull trout are likely to occur in the Project area vicinity. However, effects to bull trout are not expected as there will be no in-water work associated with campground construction.

Moderately suitable Canada lynx habitat is present, although the elevation in and around Souse Gulch is lower than the typical range for the species, and thus, lynx are not anticipated to occur. While lynx have not been documented in the proposed construction area, a single sighting was made during the winter of 1999 within five miles of Souse Gulch.

Suitable flammulated owl foraging and nesting habitat is present in and around Souse Gulch. Although the species has not been documented in the proposed construction area it may occasionally fly through or forage in the vicinity.

Townsend's big-eared bats are suspected of utilizing the Souse Gulch recreation area. Surveys in 2011 found one positive reading for a Townsend's big-eared bat in the downstream area below Libby Dam (Lenard and Hendricks 2012). Bats are likely to forage near the reservoir at dusk and may use trees as night roosts.

Small yellow lady slipper orchids are documented by several occurrences in the vicinity of Souse Gulch Day Use Area at Libby Dam (Vanderhorst 1996, USACE 2010). Typical bloom season for *C. parviflorum* is May through June, although bloom may be delayed at higher elevations and during heavy snowfall years. Populations in the USFS Libby Ranger District are typically found in calcareous wetlands (Vanderhorst 1996). At Souse Gulch this species is found in ephemeral seeps or near geological fracture planes where groundwater reaches the surface soil.

Gray wolves are also becoming more prominent in the area around Libby Dam. Although the species has not been documented in the proposed construction area, incidental sightings of gray wolves have occurred on roadways near project lands.

Table 2. Special status species that may occur in the vicinity of the proposed project area.

COMMON NAME	SCIENTIFIC NAME	FEDERAL LISTING STATUS	OCCURANCE IN PROJECT AREA
Bull Trout	*Salvelinus confluentus*	ESA Threatened species	Found in Lake Koocanusa and in some tributaries.
Bald Eagle	*Haliaeetus leucocephalus*	USFS sensitive species	Several occupied nests on project lands. No activity planned in immediate vicinity of known nest tree.
Flammulated Owl	*Otus flammeolus*	USFS sensitive species	Specific distribution is unknown; no nest sites found at Souse Gulch
Townsend's Big-eared Bat	*Corynorhinus townsendii*	ESA Candidate species; USFS sensitive species	Confirmed to occur on project lands during 2011 bat surveys.
Small Yellow Lady Slipper	(*Cypripedium parviflorum[calceolus] var. parviflorum*)[2]	USFS sensitive species	An area adjacent to proposed village supports this species.
Canada lynx	*Lynx canadensis*	ESA Threatened species	October 1999 sighting at USFS, McGillivray Campground less than 5 miles from site.
Gray wolf	*Canus lupus*	USFS sensitive species	Confirmed winter sighting near BPA substation in 2013.

[2] *Cypripedium parviflorum* found in North America is divided into three currently recognized varieties: var. *parviflorum*, var. *makasin*, and var. *pubescens* (Sheviak 2002). All three varieties can be quite similar in morphological appearance depending on habitat conditions. Hybrids among the varieties also appear quite similar in morphology. Currently the identification and taxonomy of *C. parviflorum* has not been resolved for western plants (Mergen 2006). *Cypripedium parviflorum* is treated at the species level for this assessment because of the recent changes and uncertainty of the sub-specific classification

Other ESA-listed threatened or endangered wildlife species that occur in the Kootenai River Basin include the Kootenai River white sturgeon, woodland caribou, North American wolverine, and grizzly bear. However, these species do not occur within the project area, nor have they been documented in similar habitat within five miles of the project area, and therefore no impact to these species will occur. Because there will be no effect on these species by any of the alternatives evaluated, they are not considered further.

4.9 Historic and Cultural Resources

The project's area of potential effect (APE) for historic and cultural resources encompasses the proposed volunteer village and the existing day use area. The APE is contained within the boundaries of two separate but overlapping historic properties, the Middle Kootenai Archaeological District and the Libby Dam Historic District. Most of the buildings and structures in the day use area contribute to the Libby Dam Historic District and the relatively undeveloped forest at the proposed volunteer village is a significant landscape component of the area and the district. No other cultural resources, including archeological sites, have been previously recorded in the APE.

In fall 2012 the Corps contracted an archeological survey of parcels of Corps fee land at Libby Dam, one of which included the entire APE for the volunteer village project. No archaeological sites were identified within volunteer village project APE. However, the CKST have indicated that the Souse Gulch vicinity is an archaeological and culturally sensitive area. The Corps is coordinating with the CKST to identify areas of the APE that will require archaeological monitoring and/or tribal cultural monitoring during all ground disturbing work.

An architectural historian with the Corps conducted a reconnaissance-level inventory of the APE's built environment and landscape qualities. The inventory determined that almost all of the day use buildings and structures dating to the historic district's period of significance survive, retain historic integrity, and easily recall their important architectural values as the design product of one of the Northwest's most noted practitioners of Mid-Twentieth Century Modernism, Seattle architect Paul Thiry. Additionally, the APE continues to display Thiry's landscape design for Libby Dam which called for preservation or restoration of as much of the area's forest and other natural features as possible.

4.10 Water Quality

The Federal Clean Water Act (CWA) requires that states and/or certain federally recognized tribes that have assumed this delegated responsibility from EPA restore and maintain the chemical, physical, and biological integrity of the nation's waters within their jurisdictional boundaries. States, pursuant to Section 303 of the CWA, adopt water quality standards necessary to protect fish, shellfish, and wildlife, while providing for recreation in and on the nation's waters whenever possible. Subsection 303(d) of the CWA establishes requirements for states to identify and prioritize water bodies that have impaired water quality (i.e., water bodies that do not meet water quality standards) within their borders. States must periodically publish a priority list (a "§303(d) list") of these impaired waters within their jurisdiction. For waters identified on this list, states must develop a total maximum daily load (TMDL) for the pollutants, set at a level to achieve water quality standards.

The Montana Department of Environmental Quality (MDEQ) under Section 303 (d) of the CWA lists the Lake Koocanusa as impaired for selenium from an unknown source "outside state jurisdiction or borders". This pollutant was listed for Lake Koocanusa for the first time in 2012, and is listed as a low priority on the TMDL schedule. It is the only listed impairment for Lake Koocanusa. Despite the presence of selenium, the state indicates that the water quality is classified as B1, suitable for drinking, culinary and food-processing services after conventional treatments [to remove naturally present impurities], and is fine for swimming, bathing, aquatic life, and other uses. Several tributaries to Lake Koocanusa are listed as impaired due to sedimentation/siltation, although this impairment is not listed for the reservoir.

4.11 Air Quality and Noise

Air resources describe the existing concentrations of various particulate pollutants and the climatic and meteorological conditions that influence the quality of the air. Precipitation, wind direction, wind speed, and atmospheric stability are factors that determine the extent of pollutant dispersion. The Environmental Protect Agency (EPA) is the federal agency responsible for National Ambient Air Quality Standards and designates localities that exceed these maximum levels as non-attainment areas. For the area around the city of Libby, two non-attainment areas have been designated, but neither includes Libby Dam or Lake Koocanusa. Airborne toxins, chemicals and hazardous materials are discussed below in section 4.15.

Noise levels are consistent with "natural wilderness" conditions. Aside from occasional recreational boat motors, vehicle traffic, day use visitors, or maintenance equipment (such as lawn mowers) human-caused noise disturbance is minimal.

4.12 Utilities and Public Services

Some utilities are already present in the vicinity of the proposed volunteer village, including water, sewer, and electrical service.

4.13 Land Use

Land around Lake Koocanusa primarily consists of coniferous forest, most of which is managed and maintained by the U.S. Forest Service (USFS). Private forests managed for merchantable timber are also extensive in the area. Most of the land parcels managed by the Corps for mixed use are surrounded by USFS land. A few residential homes and commercial businesses are scattered along the Kootenai River downstream of the dam near the town of Libby.

The Corps owns, operates, and maintains Libby Dam and several hundred acres of associated service roads, campgrounds, and recreation areas in the immediate dam vicinity. The proposed volunteer village is located within the Souse Gulch Day Use Area currently managed by the Corps for public recreation. This area includes a paved access road with five parking lots, a boat ramp, dock facilities, playgrounds, picnic shelters, a disc golf course and hiking trails. Visitors also have access to the Libby Dam visitor center and Libby Dam viewpoints overlooking the dam. Currently the entire site is day-use only and available to the public free of charge.

4.14 Recreation

Year-round outdoor recreation is a primary attraction for locals and visitors alike. The Corps maintains boat ramps allowing access to both Lake Koocanusa and the Kootenai River. Additionally, two primitive overnight camping sites and portable toilets are available in the

Alexander Creek Recreation Area, while Blackwell Flats and Dunn Creek Recreation Areas contain semi-developed campsites with gravel parking pads, picnic tables and fire rings. All existing overnight camping areas are located downstream of the dam. Hiking, fishing, hunting, skiing, snowmobiling, and camping are also common activities in area (USACE 2012).

4.15 Hazardous, Toxic and Radioactive Waste

There are no known disposal sites at the project locations that have any hazardous, toxic, or radioactive waste. There is however an environmental condition that may raise a potential Human Health concern that should be understood. The Libby Dam Project including the proposed Souse Gulch volunteer village is located on the eastern border of Operable Unit 3 (OU-3) of the Libby Asbestos Superfund site. The EPA delineates Superfund Sites into separate study areas based on common features or expected similar remediation requirements. These study areas are known as operable units. OU-3 is a roughly fifty square mile study area of forested land encompassing the Grace Mine site (Figure 8). The Souse Gulch proposed volunteer village is about three and a half miles east of the inactive mine site known locally as "the Grace Mine", which has been a source of widespread naturally occurring asbestos contamination. The EPA began response actions to control asbestos hazards in the Libby area in 2000 and listed contamination from Grace Mine on the National Priorities List in October 2002. Expedited response including source control measures have been initiated by EPA at the mine site, and in residential and commercial areas around Libby that received vermiculite from the mine. Much of the asbestos contaminated source material has been removed; however residual levels of asbestos contamination from the mining activity exist throughout the area adjacent to the mine. The magnitude of the health risk has not been fully evaluated by EPA nor has a final mitigation plan and Record of Decision been made for all of the Libby Superfund site operable units including OU-3.

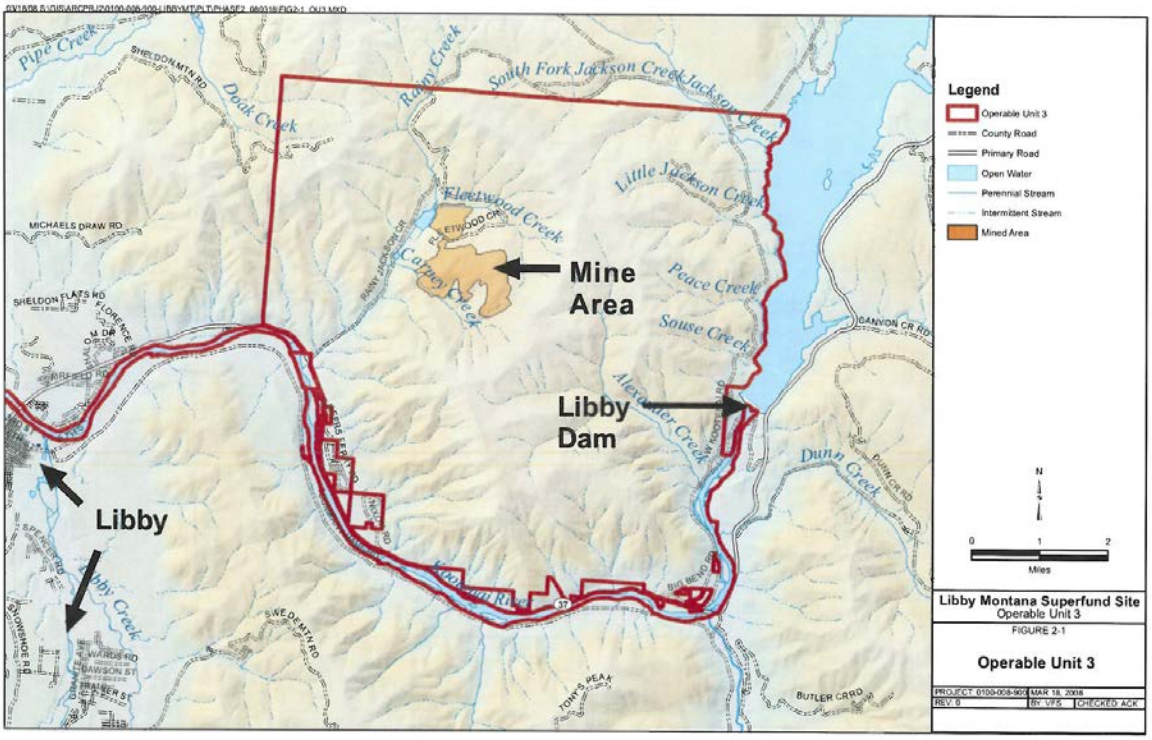

Figure 8. Map of OU-3 boundary showing mine location and Libby Dam. The Proposed volunteer village is located approximately 4 miles east of the boundary of the mined area.

Asbestos is a known carcinogenic agent for mesothelioma and lung cancer, and is also a causative factor in lung scarring, pleural abnormalities, and asbestosis. Asbestos is regulated for worker protection by the United States Department of Labor under the Occupational Safety and Health Act (OSHA) through title 29 of the code of federal regulations (29 CFR). OSHA currently has established a permissible exposure limit (PEL) of 0.1 fibers per cubic centimeter of air exposure on an 8 hour time weighted average.

An initial risk assessment for the Libby OU-3 site was conducted by EPA (2007) as part of a Human Health Risk Assessments to help determine appropriate clean up levels. Results of this sampling revealed that contamination extends well beyond areas that were historically actively mined (EPA 2013a). However, the extent of asbestos contamination in the Libby area is unknown. In 2013 EPA conducted an additional study (EPA 2013b) to characterize the nature and extent of contamination in forested areas surrounding OU-3. The results from this duff and tree bark sampling indicate that the asbestos concentrations are in line with other areas within OU-3 sampled by EPA that are about 4 miles from the mine site (Figure 9). This is important in consideration of data interpretation as it shows asbestos concentrations drop significantly at this distance compared to concentrations near the mine site. To date EPA has not published an asbestos exposure risk assessment for health hazards other than cancer, at Libby or elsewhere. A risk assessment for the Libby area that includes short and long-term exposure scenarios and their associated health risks is underway by EPA. Results are expected to be available by October 2014.

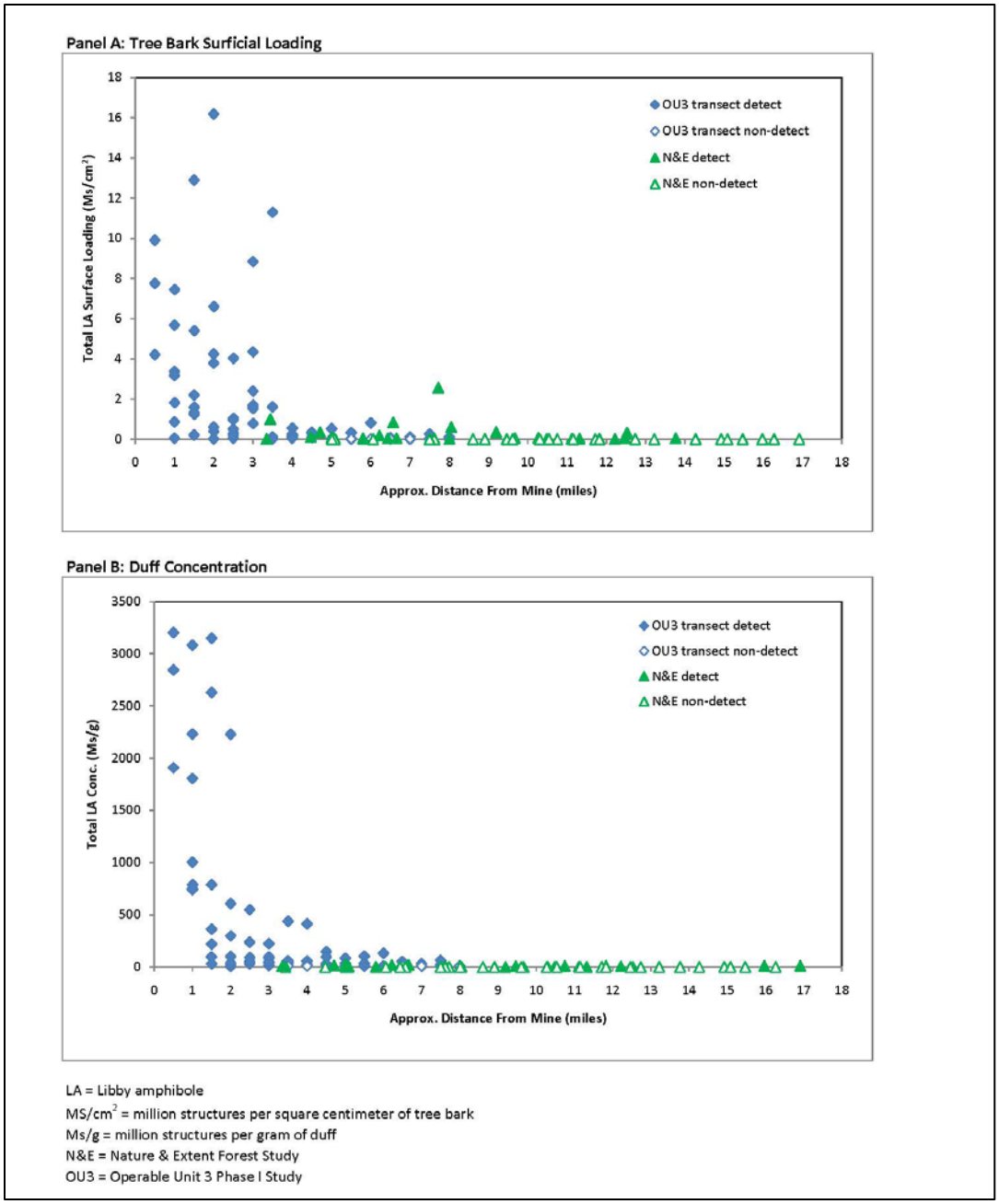

Figure 9. Tree bark and duff asbestos levels as a function of distance from the mine. As shown, tree bark surface loading values and duff concentrations tend to be highest in samples collected closest to the mine (within about 3-4 miles) with levels generally less than 1 Ms/cm2 for tree bark and 100 Ms/g for duff at distances beyond about 4 miles. Figure from EPA 2013b.

4.16 AESTHETICS

The Souse Gulch area is dominated by a mature forest, with views of Lake Koocanusa and Libby Dam, and the surrounding mountain ranges. Within the Day Use area, territorial views are generally obscured by forest vegetation.

5 ENVIRONMENTAL CONSEQUENCES

This section provides a comparative assessment of the environmental consequences of implementing the "preferred" alternative and the "no action" alternative. Factors for selecting the recommended plan include identifying which alternatives are the most effective in meeting the project's purpose and need, cost-effectiveness, and least environmentally damaging. Because the primitive volunteer village and full-service "Class A" public campground alternatives did not meet the long term volunteer demand for full-service camping, they were eliminated as viable alternatives and are not addressed further in this section.

5.1 Resources Not Affected by the Alternatives

None of the alternatives and associated actions is expected to affect regional or local climates or geology in the Kootenai River basin. These resources are not analyzed further herein.

5.2 Soils and Topography

No Action Alternative

Under the No Action Alternative, Souse Gulch will remain as day-use only with no provision for camping. No construction will be undertaken and the current soil conditions and topography will not be impacted.

Preferred Alternative: Provide Full-Service volunteer village

Construction of the volunteer village will disturb soils during new road construction, trench digging for utility lines, and campsite construction, including campsite spurs. Trenching will result in the temporary placement of soils on the surface adjacent to the trench. Once the utility lines are constructed, the soil material will be pushed back into the trench. New materials (gravels, etc) used in the construction of road beds and tent camping pads will be brought into the site.

The resulting topography of the 2.3-acre site may be altered slightly from the preconstruction condition. However, average overall topography of the area is unlikely to vary more than +/- 1 foot in elevation. No hydric soils are evident within the project area footprint. Overall project effects to soils and topography will be insignificant.

5.3 Hydrology

No Action Alternative

Under the No Action Alternative, no additional construction will occur in the Souse Gulch area. There will be no effect on area hydrology.

Preferred Alternative: Provide Full-Service volunteer village

The volunteer village will be sited between two existing roadways. Runoff and seepage are minor, and any ponding will be expected to be minor and short-term, as the soils in the area are coarse and well-drained. If the ponding occurred at one or more campsites, then additional measures will be required to eliminate the ponding. No work will occur in the Souse Gulch ephemeral drainage or in seep areas. No ephemeral, seasonal or permanent hydrology is evident within the project area footprint. Overall project effects to hydrology will be insignificant.

5.4 VEGETATION AND WETLANDS

NO ACTION ALTERNATIVE

If no action is taken Souse Gulch will remain a day-use area only and will have no effect on vegetation or wetlands other than the current impacts from day-use activities (e.g., trampling, breaking of limbs, temporary disturbance of wildlife during daylight hours, etc).

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE

The proposed project will result in a minor, short-term disturbance to adjacent vegetation during campsite development (trampling, breaking of limbs and increased dust), and a permanent loss of trees, shrubs and herbaceous plants within the construction footprint. Until the road and campsite footprints are located on the ground it is impossible to give a precise number of trees and shrubs that will be eliminated. For the sake of this analysis, it is assumed that approximately 50 mature trees (12 inches DBH or greater) will need to be removed for volunteer village road and campsite construction. Another 11 mature trees are slated for removal to accommodate the parking lot proposed at the north end of the Souse Gulch Area. Additional trees will only be removed if they are found to be unhealthy or are within the construction footprint and cannot be avoided. The loss of these trees and shrubs is insignificant relative to the enormous number found in the adjacent forest lands of the Kootenai National Forest. This vegetative loss will have discountable impacts and is not likely to affect the regional ecosystem.

Per Corps recreation facility engineering guidelines (USACE 2004), replacement trees will be planted at the time of, or prior to, disturbance at a minimum of 2:1 replacement ratio. Plantings will occur at or near site of disturbance. Where feasible, Corps succession tree planting guidelines will be employed in accordance with federal policy.

5.5 FISH

NO ACTION ALTERNATIVE

The no-action alternative will have no effect on fish in Lake Koocanusa.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE

Construction activities will all be upland and will not affect any streams or surface water. The nearest campsite will be about 200 feet from Lake Koocanusa, with an existing road between the volunteer village and the reservoir. Thus, neither construction nor use of the volunteer village will have any impacts to fish in the short or long-term time periods.

5.6 WILDLIFE

NO ACTION ALTERNATIVE

Under the no action alternative Souse Gulch will remain a day-use area only. Disturbance to wildlife will therefore continue to be only during daylight hours, with no increase in disturbance since no change to the human use of the area is anticipated.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE

Establishment of a volunteer village will mean humans will be present in the vicinity 24 hours/day, seven days per week, May through September. This human presence might restrict wildlife movements and alter their behavior in the hours after daylight. Some species might cease to use the area altogether. Other species, such as black bear, white-tailed deer, and raccoon, might become nuisances to campers due to the ready availability of food. Construction of the volunteer village will result in the loss of trees and shrubs, which means a change of habitat structure for birds and mammals. Some of these trees may provide nest cavities for several species of birds and bats. Similarly, some of the shrubs that will be cleared likely provide nesting habitat for birds and cover and food for mammals.

Direct impacts to breeding birds and bats are likely to be avoided as all potential nesting and roosting vegetation will be cleared and grubbed outside the primary breeding season (typically mid-May through mid-August). Due to the densely forested nature of this area, the permanent removal of 50 or more trees will likely be a discountable loss to wildlife, which will still have an abundance of habitat immediately adjacent to the volunteer village. Similarly, even though all shrubs will be eliminated, this loss of potential nesting habitat is insignificant. It is unlikely that a substantial amount of nesting will occur even if some shrubs were to be retained, due to human activity. On the whole, the addition of a volunteer village to the Souse Gulch recreation area is expected to result in insignificant impacts to wildlife.

The Corps will establish an avoidance buffer of 350 feet surrounding the nest tree of a pair of bald eagles during construction activities to minimize disturbance to nesting pair. These eagles are accustomed to regular recreation activities near their nesting tree and are located over 800 feet away from the closest volunteer site. The distance and the buffer zone are expected to shield the pair from stress resulting from construction. No take or disturbance, as defined under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c) is expected to result from the action.

5.7 THREATENED AND ENDANGERED SPECIES

NO ACTION ALTERNATIVE

The no-action alternative will retain current day-use functions at Souse Gulch and will result in no additional impacts to federally listed or otherwise special status species.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE

Effects of the proposed project on federally listed species have been researched and evaluated by the Corps. Bull trout, gray wolf and Canada lynx are the only ESA-listed species that may be found in the vicinity of the volunteer village. The Corps found that construction and use of the proposed volunteer village will have *no effect* on any of these species. No other ESA species occur in the proposed project area, and thus also will not be affected by the project. Detailed information on the Corps assessment of potential impacts for each special status species is below.

BULL TROUT

Construction and use of the volunteer village will not result in any adverse effects to bull trout in Lake Koocanusa, or to bull trout's designated critical habitat.

FLAMMULATED OWL

The flammulated owl is not known to occur at Souse Gulch and would have left for wintering grounds by the time activities that could impact it will start. If the species is found to be present during preconstruction surveys, construction activities or plans will be adjusted as necessary to minimize or eliminate any impacts. The volunteer village is not expected to have an adverse impact on the flammulated owl.

TOWNSEND'S BIG-EARED BAT

The addition of a volunteer village has the potential to disrupt bat activities in the evening, when campfires and human activities might disturb the normal hunting habits of the bats. However, this effect is likely to be minimal as bats will be able to relocate to alternative areas. The volunteer village is not expected to have an adverse impact on overall bat populations in the project area.

SMALL YELLOW LADY SLIPPER

Small yellow lady slipper is not listed as a Federal Threatened or Endangered species under ESA but is classified as sensitive by the US Forest Service (USFS). Current plans for the volunteer village place it more than 700 feet from where this sensitive species has been observed. While the volunteer village placement is close to the orchid's occurrence, the existence of dense undergrowth and shrubby vegetation surrounding the orchid's location will likely inhibit human movement through the area and reduce potential threats to the plant, such as trampling, cutting, and removal.

CANADA LYNX

This species is not documented at Souse Gulch and is not expected to be in the project area. The majority of Canada lynx documentations in the North Cascades and Northern Rocky Mountains are found above 4,000 feet in elevation. The volunteer village is not expected to impact Canada lynx.

GRAY WOLF

The prevalence of gray wolf in the Kootenai drainage and tributaries has been on the rise. Although the species is not documented at Souse Gulch, it has been sighted on nearby fee-owned lands. Gray wolves are not likely to be impacted by a volunteer village as they will alter their routes to avoid human contact. The region is full of locations where human contact can be minimal. The volunteer village is not expected to have an adverse impact on overall gray wolf populations in the project area.

5.8 Historic and Cultural Resources

No Action Alternative
The No-Action Alternative will have no effect on historic and cultural resources. The current historic architectural and landscape values of the Souse Gulch day use area and Libby Dam Historic District will not be diminished. Additionally, no archaeological resources will be disturbed by construction activities.

Preferred Alternative: Provide Full-Service volunteer village
The Corps has reviewed the project to comply with Section 106 of the National Historic Preservation Act and found that the construction of the volunteer village will adversely affect the historic architectural and landscape values character of the Souse Gulch day-use area and the Libby Dam Historic District. Additionally, the Corps is coordinating with the CKST to identify areas within the APE of archaeological and/or cultural sensitivity that will require archaeological monitoring and/or tribal cultural monitoring during construction activities. The Corps and the Montana SHPO have signed a Memorandum of Agreement (MOA) pursuant to 36 C.F.R. § 800.6 to resolve the adverse effect and meet Corps responsibilities under Section 106 (Appendix A). The Corps will implement the stipulations and mitigation measures of the MOA to resolve the adverse effect and reduce the impacts of the proposed action below the threshold of NEPA significance. See section 7 for specific Section 106 stipulations and mitigation measures.

5.9 Water Quality

No Action Alternative
Water quality in the Souse Gulch area, and in Lake Koocanusa, will not be affected under the no action alternative, other than by current on-going uses of the area.

Preferred Alternative: Provide Full-Service volunteer village
Water quality is not anticipated to be affected or altered by construction activities. There are no surface waters (streams) in the vicinity of the volunteer village that could be affected by sediment inputs. Lake Koocanusa is over 200 feet from the nearest proposed campsite, and will not be affected by any construction activities of the village facilities. During construction, best management practices for equipment operation and storage and use of hazardous materials will be employed. Therefore, no leakage or spills of hazardous materials into Lake Koocanusa are anticipated to occur.

No ground disturbance work will occur in wetland or waters of the U.S. Therefore the work is outside of the jurisdiction of from Section 404 of the CWA and does not require a Section 401 water quality certification from MDEQ (Pers comm. Ryan 2012). Nor does the work require a turbidity permit under Montana Section 318 (Pers comm. Ryan 2012).

5.10 Air Quality and Noise

No Action Alternative
No effects to air quality will result from the No-Action Alternative.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE
During construction, there may be a temporary and localized reduction in air quality due to emissions from heavy machinery operating during clearing, road construction, and campsite construction. These emissions will not exceed EPA's *de minimis* threshold levels (100 tons/year for carbon monoxide and 50 tons/year for ozone). Therefore, effects of construction will be insignificant. Campfires will result in smoky air in the immediate vicinity where none is present now. But the limited number and size of campfires will result in an insignificant impact on the environment.

Ambient noise levels will increase slightly while construction equipment is operating and during the recreation season. However, these effects will be localized. As a result, effects are anticipated to be insignificant.

5.11 UTILITIES AND PUBLIC SERVICE

NO ACTION ALTERNATIVE
The No-Action Alternative will not alter any of the existing utilities.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE
If the volunteer village is constructed, water, sewer, and electrical power will be provided to each of the campsites. Per Corps of Engineers guidelines for Class A campgrounds, the host campsite(s) must be supplied with a sewer line. The proposed volunteer village will extend the sewer line to all nine of the new sites. Construction of the new utility lines will require trenches to be dug along the access roads and into each campsite. Trenching will result in loss of some shrubs and trees and other plants and result in compaction of soil after soil is replaced, perhaps slowing down the recovery of plant life. The trenches will be re-seeded with a mixture of native grasses and herbs that fit with the plant life found at the Souse Gulch recreation area. The relatively small and temporary loss of plants is considered to be insignificant.

5.12 LAND USE

NO ACTION ALTERNATIVE
The No-Action Alternative will maintain all current land uses in the area, but will not provide a full-service volunteer village in the vicinity of Libby Dam.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE
The project will have no affect on private land use, and will assure that current public land access and recreational uses will continue to remain available.

5.13 RECREATION

NO ACTION ALTERNATIVE
The No-Action Alternative may result in deferred maintenance of existing features and fewer public recreation opportunities. Without expanded camping to accommodate additional volunteers, Corps programs, public facilities and services will likely be reduced in many areas.

A modified Day Use Area at Souse Gulch will likely continue to be open seasonally and free of charge to the general public.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE
The volunteer village will help keep the natural resource management program viable at Libby Dam by attracting (and retaining) more seasonal volunteers. The overall regional and cumulative effect is considered to be insignificant. With the addition of a volunteer village at Souse Gulch, approximately 2.3 acres of land currently available to the public will be closed off and dedicated for exclusive use by volunteers for camping purposes.

5.14 HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE

NO ACTION ALTERNATIVE
The No-Action Alternative will have no effect on hazardous, toxic, and radioactive waste levels currently present in the area. There will be no increased short term effect from land disturbing activities such as clearing and grubbing.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE
The project will not introduce new hazardous, toxic, or radioactive waste to the area. Particulate asbestos is known to occur in trees, duff, and soils in the Souse Gulch area; however EPA has not yet made a determination of health risk for the OU-3 area. The Corps will establish volunteer village maintenance and activity guidelines to minimize any public health risks during construction and/or operation of the volunteer village, if such precautions are determined to be warranted by OSHA standards. It is unknown whether short-term asbestos exposure may be increased during construction or land disturbing activities such as clearing and grubbing. These activities will require monitoring and possible mitigation to control exposure to workers.

Upon volunteer village completion, the preferred alternative may provide individual hosts using the new facilities reduced exposure over the long-term to asbestos currently present in area soils and vegetation because it will have some surface contamination areas removed (via vegetation clearing) or covered with asphalt, relative to a primitive campsite. Based on the best available information to date, the Corps anticipates the health risks to visitors will not be significant.

5.15 AESTHETICS

NO ACTION ALTERNATIVE
The No-Action Alternative will have no effect on aesthetics.

PREFERRED ALTERNATIVE: PROVIDE FULL-SERVICE VOLUNTEER VILLAGE
Construction of a new volunteer village will result in the loss of some trees and shrubs, perhaps resulting in a loss of aesthetic appearance of the area. Alternatively, some might view the removal of a few trees as an improvement in aesthetics by giving the area a more open feel, as fire suppression practices have halted the thinning that will naturally occur in a forest of this stage.

The addition of paved roads may detract from the forest aesthetics. However, the overall forested nature of the site will remain unchanged. Thus it is difficult to gauge whether the new volunteer village results in a negative or positive effect on aesthetics. The overall regional and cumulative effect on aesthetics is considered to be insignificant.

6 UNAVOIDABLE ADVERSE EFFECTS

Unavoidable adverse effects associated with this project may include the following:

- A localized increase in noise during the short-term during construction of the volunteer village area may disrupt wildlife in the area. There may also be a localized long-term increase in noise due to use of the project site by volunteers which also may disrupt wildlife in the area. These may perhaps lessen the quality of recreating by day visitors to the Souse Gulch recreation area. It is anticipated that most wildlife currently occupying the area will relocate to quieter areas if noise is distressing.
- A change in hydrology may result in ponded water accumulating after rain because the topography of the site has been altered. This is will be short-term and temporary following construction, as further topography work will be done to minimize any ponding, if warranted.
- Mortality of some trees and shrubs will occur within the project site. The project has been designed to avoid native trees to the extent possible, but some trees will have to be removed. New native plantings onsite will compensate for this impact over the long-term, but not the short-term.
- A temporary and localized disruption to wildlife will occur during construction. Most wildlife species are anticipated to avoid the area while work is in progress. However, it is likely that some small mammals (moles, mice, voles, etc.) will be killed by equipment during construction. Additionally some animals may be permanently displaced through the loss of habitat or disturbance from the increased human presence, especially after dark.
- Human use of the area (fishing, dog walking) is expected to increase after project completion. This may have minor adverse or cumulative effects on aesthetics, utility usage, fish populations, vegetation, wildlife distributions, noise, increases in artificial light, and soil erosion in the immediate area.
- Public land use availability in the Souse Gulch area will be altered slightly. The overall acreage dedicated to day use will decrease by approximately 2.3 acres and a paved road will be constructed through the volunteer village sites.
- In the short-term, construction, vegetation removal, and ground disturbance from human activities may cause a temporary increase to exposure of airborne particulate asbestos that occurs in area soils. It is unknown whether this may result in a human health effect as exposure risk thresholds to the type of asbestos present at Souse Gulch have not been established by EPA (the federal agency responsible for making such determinations.)
- The Project is likely to affect the important architectural and landscape character of the Souse Gulch day-use area, a contributing component of the Libby Dam Historic District.
- The Project will not affect any recorded archaeological sites but may affect areas of archaeological and/or cultural sensitivity to the CKST.

Given the temporary, localized, and minor nature of these effects, the Corps has determined that the proposed project will not result in significant adverse environmental impacts.

7 AVOIDANCE AND MINIMIZATION MEASURES

Adverse impacts will be avoided and minimized by using Best Management Practices (BMPs). The following steps will be taken to reduce or off-set the above adverse affects:

- During construction all stockpiled materials will be protected against surface run-off using measures such as erosion control blankets, plastic sheeting, and perimeter silt fencing.
- Refueling will occur away from the reservoir and construction equipment will be regularly checked for drips or leaks. At least one fuel spill kit with absorbent pads will be onsite at all times.
- The Construction Lead is responsible for implementing safety and sediment control measures as needed per relevant and applicable Montana State requirements. As site conditions change (i.e. rain) implementation of other measures, or a halt in construction activities may be necessary.
- Ground disturbance, vehicle movement corridors and vegetation trampling will be minimized to reduce the introduction of noxious weeds.
- All work conducted under this project will be done using appropriate air monitoring, administrative controls, engineering controls and personal protective equipment to ensure that no worker is exposed above the OSHA permissible exposure limit for asbestos.
- All wetlands and jurisdictional waters will be avoided during construction as none are located within the footprint of the planned volunteer village.
- Sensitive species populations, such as small yellow lady's slipper, will be avoided during construction
- Replacement trees will be planted at a 2:1 ratio to compensate for any mature trees removed. Replanting will occur in accordance with Corps guidelines in EM 1110-1-400 using native species.
- All vegetation will be cleared and grubbed outside of the breeding bird season. In rare cases where this is not possible, preconstruction breeding bird surveys will be conducted prior to and within 10 days of vegetation removal. If nesting birds are found during surveys, avoidance buffers will be implemented to minimize impacts under the federal Migratory Bird Treaty Act.
- Occupied eagle nests will be avoided and a 350-foot mechanical equipment avoidance buffer will be established to minimize disturbance during the nesting period.
- Ground disturbed during construction will be replanted or seeded with native plant species, where necessary.
- Active weed control, including hand spraying, will be performed annually to control invasive species in the construction area vicinity
- Following construction, if flooding or ponding is found to occur regularly or hydrology changes result in other negative effects, additional measures will be undertaken to eliminate any adverse effects but are not currently anticipated.

- The Corps will complete a preservation masonry evaluation for the Thiry-designed concrete structures and buildings at the historic day-use area and the other historic visitor facilities at Libby Dam. The Corps will retain a noted professional in the field of historic materials conservation to develop cleaning, repairing and stabilizing methods consistent with preservation standards.
- The Corps will develop a public interpretive program which emphasizes the architectural and landscape design concept developed by Paul Thiry for Libby Dam. Work will involve preparation of a narrative summary of Thiry's concept, and a list of the Thiry-designed buildings and structures, complete with details about their distinctive architectural qualities.
- The Corps shall submit all documents relating to mitigation of adverse effects required by this MOA to the consulting parties in complete but draft form for review. Consulting parties will be afforded forty-five (45) days following receipt of a draft document to submit written comments to the Corps unless otherwise mutually agreed to by the consulting parties. The Corps will provide consulting parties with written documentation indicating whether and how the document will be modified in response to comments. Unless a consulting party objects to the revisions in writing to the Corps within thirty (30) days following receipt of the revised document, the Corps may finalize the document. The Corps will provide a copy of final documents to the consulting parties.
- The Corps will ensure archaeological monitoring is conducted during all ground disturbing work within archaeological and/or culturally sensitive areas at Souse Gulch by a Corps (or Corps appointed) archaeologist. In addition, the Corps shall notify the CSKT in advance of such work, and the Tribe may elect to also send out a CSKT appointed tribal cultural monitor to observe the work. Archaeological monitoring, tribal cultural monitoring, and any post-review discovery or unanticipated effects on historic properties will follow procedures and protocols specified Appendix A.

8 CUMULATIVE EFFECTS

Council on Environmental Quality (CEQ) regulations implementing NEPA require that the cumulative impacts of a proposed action be assessed (40 CFR Parts 1500-1508). Cumulative impacts are those changes to the physical, biological, and socioeconomic environments, which will result from the effects of a proposed action when added to other past, ongoing, and reasonably foreseeable actions, regardless of what agency of government or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place. As such, they include the impacts of this volunteer village considered in conjunction with current and future projects constructed or planned within the Libby Dam and upper Kootenai River areas.

Minimal construction is planned above the dam in this relatively remote area. Examples of ongoing Corps activities include riparian plantings, primitive campground maintenance and bank stabilization work on the banks of the Kootenai River below the dam. One action the Corps does intend to do is the thinning of all fee-owned project lands to reduce fuel loads that have accumulated over the last 40 years. Similarly, BPA conducts routine tree thinning and maintenance within their high voltage power line easement areas that transect the river below the

dam. Less environmentally beneficial activities include agriculture, commercial timber harvest, and urban development near the town of Libby, all of which may degrade habitat conditions along the Kootenai River.

The USFS is planning to conduct timber thinning in portions of the Kootenai National Forest adjacent to Corps lands and Lake Koocanusa. The plan includes controlled burns to reduce fuel loads and may also include some manual logging and timber removal. While a temporary decrease in air quality may result from controlled burning, the USFS actions are not anticipated to have negative impacts on the proposed volunteer village project or the ability of the public to recreate the area. The USFS plan is designed to result in an overall net benefit to plants and animals in the area by replicating more natural forest habitat conditions and reducing the potential for future catastrophic fires. While the specific USFS actions may have locally significant effects on forest health in the region, the cumulative effects of tree removal from the Corps' preferred alternative volunteer village does not meet the threshold of significance because the number of trees removed will be relatively minute on a regional landscape level. It is probable the existing levels of asbestos currently in the Kootenai National Forest and OU-3 thinning areas may actually decrease (through soil and vegetation removal) as a result of these projects. Asbestos has a potential to become airborne during timber thinning, burning or ground disturbance activities, however the potential human health risks associated with these short-term actions are unknown. It is anticipated EPA will release health risk assessment findings for Libby Montana and the OU-3 area in June 2014.

Negative effects during construction of the proposed project add to the cumulative negative effects in the area. These negative effects, resulting from the construction, are temporary and are expected to occur only during and shortly after the actual construction of the project. The combination of best management practices reduces the cumulative, short-term construction related impacts of this action to an insignificant level. Negative environmental effects of human use in the area resulting from the project would increase, but is not expected to increase dramatically. However, the recreational value and use of the site will benefit. Based on the information currently available, the Corps assumes that cumulative impacts will be negligible and below the threshold of significance.

9 COORDINATION

The USFS, Montana Historic Preservation Officer (SHPO), Advisor Council for Historic Preservation (ACHP), Confederated Salish and Kootenai Tribes (CSKT), U.S. Fish and Wildlife Service (USFWS), Montana Department of Fish, Wildlife and Parks (MFWP), and the Montana Department of Environmental Quality (MDEQ), were notified of the proposed volunteer village work (preferred alternative) prior to or during the EA preparation process.

On 29 April 2014 the Corps sent out a Notice of Availability (NOA) stating that a draft EA was available for public review, at which time comments were requested during a 15-day period. Local and other interested parties were notified of this action. One comment from the Corps Omaha District was received. A copy of the final EA will be made available on the Corps' public website. A copy of the NOA is located in Appendix B and a copy of the Omaha District comment and the Corps response is in Appendix C.

10 ENVIRONMENTAL COMPLIANCE

10.1 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

As required by NEPA, this EA describes existing environmental conditions at the project site, the proposed action and alternatives, potential environmental impacts of the proposed project, and mitigation measures to minimize environmental impacts. The Corps invites submission of factual comment on the environmental impact of the proposed project.

10.2 ENDANGERED SPECIES ACT (ESA)

In accordance with Section 7(a)(2) of the Endangered Species Act of 1973, as amended, federally funded, constructed, permitted, or licensed projects must identify and evaluate any threatened and endangered species, and their critical habitat, that may be affected by an action proposed by that agency. The Corps conducted an assessment of potential effects to listed species from the proposed project. This was based on finding from similar projects and informal coordinated with USFWS (Flory pers. comm 2012). The only species listed under ESA with a potential to occur in the project area vicinity are bull trout, gray wolf and Canada lynx. Because the preferred alternative does not involve in-water construction work and the terrestrial species prefer locations where interface with the public is minimal, the Corps' evaluation of the proposed project is that it will have *no effect* on endangered or threatened species or their critical habitats designated under the Act. Section 7 consultation with the Services is not required.

10.3 CLEAN WATER ACT (CWA)

The Clean Water Act governs water pollution, protecting the physical, chemical, and biological integrity of the waters of the USA. Sections 401, 402, and 404 of the CWA are not applicable. The proposed project is consistent with provisions of the CWA. No wetland fill will result from volunteer village construction and no work will occur below ordinary high water. Water quality will not be impacted by volunteer village construction, maintenance or continued use. No further documentation or coordination is necessary.

Section 402(p) of the CWA provides that stormwater discharges associated with industrial activity that discharge to waters of the United States must be authorized by an National Pollutant Discharge Elimination System (NPDES) permit when construction footprints exceed one acre. The term "discharge" when used in the context of the NPDES program means the discharge of pollutants (40 CFR §122.2). The project would not require a NPDES permit for the construction activities because the area of disturbance is less than one acre (a maximum of 0.97 acres, including 0.65 acres for the volunteer village and 0.32 acres for the parking area).

10.4 CLEAN AIR ACT

Section 176 of the Clean Air Act prohibits Federal agencies from approving any action that does not conform to an approved state or Federal implementation plan. During construction of the volunteer village emissions will not exceed EPA's de minimis threshold levels (100 tons/year for carbon monoxide and 50 tons/year for ozone). Ambient noise levels will increase slightly while construction equipment is operating. Air effects will be temporary, localized, and insignificant; increases in construction noise will be temporary and localized, and are anticipated to be less than significant.

10.5 NATIONAL HISTORIC PRESERVATION ACT (NHPA)

The NHPA of 1966 (16 U.S.C. §470), as amended through 1992 (Public Law 102-575) requires Federal agencies to account for the indirect, direct, and cumulative effects of their undertakings on historic properties. Undertakings include actions that are federally funded, mandated, permitted, licensed, or otherwise regulated. Section 106 and its implementing regulations at 36 CFR Part 800 establish procedures for federal agencies to follow in identifying historic properties, and assessing and resolving effects of their undertaking on them, in consultation with the Advisory Council on for Historic Preservation, State Historic Preservation Officers, Indian tribes, Native Hawaiians, and Tribal Historic Preservation Officers as, as appropriate. Other parties may participate in the Section 106 consultation process, including but not limited to applicants for federal assistance, permits and licenses, certified local governments, and other groups or individuals with an economic, social, or cultural interest in a project. Maximum public involvement in the process is encouraged.

The analysis for cultural resources under NEPA for the volunteer village was coordinated and integrated with agency responsibilities to consider effects to historic properties under Section 106 of the NHPA. Impacts to cultural resources as a result of the project, with the addition of mitigation, are anticipated to be less than significant.

Correspondence relating to the Section 106 consultation process is included in Appendix A.

10.6 Migratory Bird Treaty Act of 1918 (MBTA)

The Migratory Bird Treaty Act (16 U.S.C. §§ 703-711) establishes that the intentional or unintentional “take” of migratory birds, nests, eggs or bird parts is unlawful at any time. Take is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, collect, or possess, or any attempt to carry out these activities." A take does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. Additionally, Executive Order 13186 states that it is the responsibility of Federal Agencies to protect migratory birds in coordination with the U.S. Fish and Wildlife Service.

The Corps anticipates there will be very minimal, if any, impacts to migratory birds as a result of the proposed project. Trees that need to be removed will be taken outside of the breeding bird season. Therefore, there will be no nests present. In rare cases where this is not possible, preconstruction breeding bird surveys will be conducted prior to and within 10 days of vegetation removal. If nesting birds are found, avoidance buffers will be implemented to avoid impacts under the federal Migratory Bird Treaty Act.

10.7 Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d)

The Bald and Golden Eagle Protection Act protects these two predatory birds from abuse, interference with its substantial lifestyle, including shelter breeding, feeding, or nest abandonment. The project is located more than 830 feet at its nearest point from a bald eagle nest built by a pair that have been nesting in the area for a while. A nesting buffer of 350 feet will be established around this known nest, or any others discovered, to minimize disturbance to breeding eagles during construction. The project is not expected to disturb the nesting pair. No further documentation or permit is required.

10.8 Executive Order 12898, Environmental Justice

Executive Order 12898 directs every federal agency to identify and address disproportionately high and adverse human health or environmental effects of agency programs and activities on minority and low-income populations. The project does not involve the positioning of a facility that will discharge pollutants or contaminants, so no human health effects will occur. Therefore, the proposed action is in compliance with this order.

10.9 Executive Order 11988, Floodplain Management, 24 May 1977

Executive Order 11988 requires federal agencies to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy of the floodplain, and to avoid direct and indirect support of floodplain development where there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains." The proposed action will not create a change that will affect occupancy of the floodplain because the project does not occur in a floodplain.

10.10 Coastal Zone Management Act (CZMA)

The Coastal Zone Management Act of 1972, as amended (15 CFR 923), requires Federal agencies to carry out their activities in a manner, which is consistent to the maximum extent practicable with the enforceable policies of the approved State Coastal Zone Management Program. CZMA is not applicable here as the project does not occur in the coastal zone; no further coordination is required.

11 CONCLUSION

Based on the information in this environmental assessment, the actions proposed and evaluated in this EA will not result in significant adverse environmental impacts. Accordingly, preferred alternative is not a major Federal action significantly affecting the quality of the human environment, and therefore does not require preparation of an environmental impact statement.

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13 APPENDIX A

Letters to SHPO and CSKT
Memorandum of Agreement

RECEIVED
JUN 09 2014
BY: SHPO

2014060709

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

- KATHRYN
- DOP/COE
- Libby Dam
Souse Gulch
Volunteer Village
campground

JUN - 5 2014

FINAL MOA

Environmental and Cultural Resources Branch

Dr. Mark Baumler
State Historic Preservation Officer, Montana Historical Society
225 North Roberts, Post Office Box 201202
Helena, Montana 59620-1202

Dear Dr. Baumler:

The Seattle District, U.S. Army Corps of Engineers has been working to develop a Memorandum of Agreement (MOA) to address adverse effects to historic properties caused by the proposed construction of a nine-site campground called the Volunteer Village at the Souse Gulch day-use recreation area at Libby Dam in Lincoln County, Montana. The MOA is required by 36 C.F.R. § 800.6 implementing Section 106 of the National Historic Preservation Act and primarily addresses impacts caused by the visual intrusion of the modern campground into the immediate view shed of the historic Paul Thiry designed day-use recreation area and the loss of the historic district's natural forest setting at the Volunteer Village campground site. Additionally, the MOA includes protocols and procedures for archaeological and Tribal monitoring of construction activities. My staff has been working over the last several months with your staff and the Confederated Salish and Kootenai Tribes of the Flathead Reservation (CSKT) and I am pleased to enclose the final MOA for your signature.

I greatly appreciate the time and effort your staff has put into reviewing and commenting upon project proposals, the archaeological inventory performed for the project, potential mitigation measures, and drafts of the MOA and monitoring plan via mail and email. The feedback and suggestions received from Mr. Stan Wilmoth and Ms. Kathryn Ore have resulted in the elimination of potential negative impacts to two recorded archaeological sites and greatly improved the terms of the MOA and the monitoring plan.

I have signed the MOA and invite you to execute the MOA as a signatory party. Enclosed with this letter you will find three copies of the signatory party signature page with the original signatures of the signatory parties. Please sign on all three pages and return two of these originals back to Ms. Elizabeth Ellis in the enclosed envelope. Please keep one signed original signatory signature page with the copy of the executed Agreement for your records. My staff will distribute the pages with original signatures to the other signatory parties and file the MOA with the Advisory Council on Historic Preservation. The CSKT has been invited to sign the MOA as a concurring party. My staff will forward you a signed copy of the concurring party signature page should the CSKT elect to sign.

I thank you for your contributions during the development of the MOA and especially for your ongoing interest in the Libby Dam and Lake Koocanusa Co-operating Group. I look forward to continuing to work with you and your staff to implement the terms of the MOA. If you have any questions, please contact Ms. Elizabeth Ellis at (206) 764-3634 or via email at elizabeth.a.ellis@usace.army.mil.

Sincerely,

Bruce A. Estok
Colonel, Corps of Engineers
District Commander

Enclosures

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

REPLY TO
ATTENTION OF

Environmental and Cultural Resources Branch

JUN - 5 2014

The Honorable Ron Trahan
Chairman, Confederated Salish and Kootenai Tribes
Post Office Box 278
Pablo, Montana 59855

Dear Chairman Trahan:

The Seattle District, U.S. Army Corps of Engineers has been working to develop a Memorandum of Agreement (MOA) to address adverse effects to historic properties caused by the proposed construction of a nine-site campground called the Volunteer Village, at the Souse Gulch day-use recreational area at Libby Dam in Lincoln County, Montana. The MOA is required by 36 C.F.R. § 800.6 implementing Section 106 of the National Historic Preservation Act and primarily addresses impacts caused by the visual intrusion of the modern campground into the immediate view shed of the historic Paul Thiry designed day-use recreation area and the loss of the historic district's natural forest setting at the Volunteer Village campground site. Additionally, the MOA includes protocols and procedures for archaeological and Tribal monitoring of construction activities. My staff has been working over the last several months with your cultural resource staff and the Montana State Historic Preservation Officer and I am pleased to enclose the final MOA for your signature.

I greatly appreciate the time and effort your staff has put into reviewing and commenting upon the project proposals, the archaeological inventory performed for the project, and drafts of the MOA and monitoring plan via mail, email, and co-operating group discussions. The feedback and suggestions received from Mr. Francis Auld, Ms. Loretta Stevens, Mr. Ira Matt, and Mr. Kevin Askan have resulted in the elimination of potential negative impacts to two recorded archaeological sites and greatly improved the terms of the MOA and the monitoring plan. Changes made to the draft monitoring plan to address comments and concerns raised by your staff include the addition of a requirement to notify your staff of any ground-disturbing work at Souse Gulch so Tribal monitors have the opportunity to observe construction work if your staff elects to do so and the addition of monitoring protocol and procedures to be followed in the unlikely event that cultural materials are encountered during or following construction. My staff has also revised the MOA to further clarify that its purpose is to resolve adverse effects to the Libby Dam Historic District associated with the Volunteer Village Campground Project and that agreeing to the terms of the MOA does not imply acceptance or limit consideration of future actions to resolve adverse effects associated with the Libby Dam, Montana.

I invite you to sign the MOA as a concurring party. Enclosed with this letter you will find three copies of the concurring party signature page. Please sign on all three pages and return them to Ms. Elizabeth Ellis in the enclosed envelope. Once the MOA has been executed by the signatory parties, my staff will distribute a final copy with original signatory and concurring party and file the MOA with the Advisory Council on Historic Preservation.

I thank you for your contributions during the development of the MOA and especially for your ongoing interest and participation in the Libby Dam and Lake Koocanusa Co-operating Group.

Copies of this letter with enclosures will be furnished to Mr. Francis Auld, Confederated Salish and Kootenai Tribes, Tribal Heritage Resource Office, P.O. Box 278, Pablo, Montana 59855 and Mr. Mike Durglo, Sr., Confederated Salish and Kootenai Tribes, Tribal Heritage Resource Office, P.O. Box 278, Pablo, Montana 59855. If you have any questions, please contact Ms. Elizabeth Ellis at (206) 764-3634 or via email at elizabeth.a.ellis@usace.army.mil.

Sincerely,

Bruce A. Estok
Colonel, Corps of Engineers
District Commander

Enclosures

MEMORANDUM OF AGREEMENT
BETWEEN THE
U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT,
AND THE
MONTANA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE VOLUNTEER VILLAGE CAMPGROUND PROJECT
AT LIBBY DAM, LINCOLN COUNTY, MONTANA

WHEREAS, the U.S. Army Corps of Engineers, Seattle District (Corps) proposes to construct a full-service campground (Project), referred to as the Volunteer Village, in the vicinity of the historic Souse Gulch Day-use Recreation Area at Libby Dam, Lincoln County, Montana; and

WHEREAS, the Project consists of construction of a campground facility on 2.3 acres of undeveloped Corps fee land and will involve development of up to nine new campsites with full utility hookups, recreational vehicle parking, tent pads, picnic tables, fire pits, and cooking grills, construction of a road to the campground and individual campsites, expansion of an existing parking, and construction of a dock facility (Figure 1); and

WHEREAS, the Corps has determined that the Project is an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f), and its implementing regulations under 36 C.F.R. Part 800 (2004); and

WHEREAS, the Souse Gulch Day-use Recreation Area is a contributing element to the Libby Dam Historic District, which is eligible for the National Register of Historic Places (NRHP); and

WHEREAS, the Souse Gulch Day-use Recreation Area embodies significant architectural and landscape values under criterion C of the NRHP as an example of the design work of Seattle architect Paul Thiry, who was a preeminent leader of the Mid-Twentieth Century Modernism architectural movement in the Pacific Northwest.

WHEREAS, the Corps has determined and documented the area of potential effect (APE) as an approximately 40 acre tract encompassing the historic Souse Gulch Day-use Recreation Area, the Project site (Figure 1); and

WHEREAS, the Corps has determined that the undertaking may have an adverse effect on the historic Souse Gulch Day-use Recreation Area and Libby Dam Historic District and has consulted with the Montana State Historic Preservation Officer (SHPO) pursuant to 36 C.F.R. Part 800, of the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f); and

WHEREAS, the Corps has notified and invited the Confederated Salish and Kootenai Tribes of the Flathead Reservation to participate in consultation on the undertaking and sign this Memorandum of Agreement (MOA) as a Concurring Party.

WHEREAS, this MOA is specifically designed as a resolution of adverse effects to the Libby Dam Historic District associated with the Volunteer Village Campground Project, and agreeing to the terms of this MOA does not imply acceptance or limit consideration of future actions to resolve adverse effects associated with the Libby Dam, Montana.

WHEREAS, pursuant to 36 C.F.R. § 800.6(a)(1), prior to beginning consultation to resolve adverse effects, the Corps notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding by providing the documentation specified in 36 C.F.R. § 800.11(e), and as per their letter dated August 20, 2013, the ACHP declined to participate; and

WHEREAS, the Corps has consulted in accordance with 36 C.F.R. § 800.6(b)(1), "Resolution without the Council;" and,

WHEREAS, in accordance with 36 C.F.R. § 800.6(b)(1)(iv), the Corps will submit this MOA, along with the documentation specified in 36 C.F.R. § 800.11(f), to the ACHP prior to approving the undertaking in order to meet the requirements of Section 106 and 36 C.F.R. § 800.6(b)(1);

NOW, THEREFORE, the Corps and the SHPO (hereinafter, "signatories") agree that undertakings shall be implemented in accordance with the following stipulations in order to take into account the effects on historic properties.

STIPULATIONS

The Corps shall ensure that the following measures are carried out:

I. MITIGATION OF ADVERSE EFFECTS

In order to mitigate the visual intrusion/obstruction of a modern campground into the immediate view shed of the historic day use recreation area, and the loss of the historic district's natural forest setting at the volunteer village campground site, the Corps will ensure the following are carried out:

1) The Corps will complete a preservation masonry evaluation for the Thiry-designed concrete structures and buildings at the historic day-use area and the other historic visitor facilities at Libby Dam. The Corps will retain a noted professional in the field of historic materials conservation to develop cleaning, repairing and stabilizing methods consistent with preservation standards.

2) The Corps will develop a public interpretive program which emphasizes the architectural and landscape design concept developed by Paul Thiry for Libby Dam. Work will involve preparation of a narrative summary of Thiry's concept, and a list of the Thiry-designed buildings and structures, complete with details about their distinctive architectural qualities.

3) The Corps shall submit all documents relating to mitigation of adverse effects required by this MOA to the consulting parties in complete but draft form for review. Consulting parties will be afforded forty-five (45) days following receipt of a draft document to submit written comments to the Corps unless otherwise mutually agreed to by the consulting parties. The Corps will provide consulting parties with written documentation indicating whether and how the document will be modified in response to comments. Unless a consulting party objects to the revisions in writing to the Corps within thirty (30) days following receipt of the revised document, the Corps may finalize the document. The Corps will provide a copy of final documents to the consulting parties.

II. ARCHAEOLOGICAL MONITORING, POST-REVIEW DISCOVERIES OR UNANTICIPATED EFFECTS

The Corps will ensure archaeological monitoring is conducted during all ground disturbing work within archaeological and/or culturally sensitive areas at Souse Gulch by a Corps (or Corps appointed) archaeologist. In addition, the Corps shall notify the CSKT in advance of such work, and the Tribe may elect to also send out a CSKT appointed tribal cultural monitor to observe the work. Archaeological monitoring, tribal cultural monitoring, and any post-review discovery or unanticipated effects on historic properties will follow procedures and protocols specified in the appended plan, dated April 21, 2014.

III. PROFESSIONAL QUALIFICATIONS

All actions prescribed by this MOA shall be carried out by or under the direct supervision of a person or persons meeting, at a minimum, the *Secretary of the Interior's Professional Qualifications Standards* for archaeology, history, or architectural history, as appropriate (48 FR. 44739).

IV. REPORTING

By March 31 of each year following the execution of this MOA until it expires or is terminated, the Corps shall provide all parties to this MOA a summary report detailing work undertaken pursuant to its terms. Such reports shall include any scheduling changes proposed, any problems encountered, and any disputes and objections received in the Corps's efforts to carry out the terms of this MOA.

V. DISPUTE RESOLUTION

Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the Corps, shall consult with the objecting party(ies) to resolve the objection. If it is determined, within thirty days, that such objection(s) cannot be resolved, the Corps will:

1) Forward all documentation relevant to the dispute to the ACHP in accordance with 36 CFR Section 800.2(b)(2). Upon receipt of adequate documentation, the ACHP shall review and advise the Corps on the resolution of the objection within 30 days. Prior to reaching a final decision on the dispute, the Corps shall prepare a written response that takes into account any timely advice or comments provided by the ACHP, and all timely comments from the signatory and concurring parties to this Agreement, will be taken into account by the Corps in reaching a final decision regarding the dispute.

2) If the ACHP does not provide its advice regarding the dispute within 30 days after receipt of adequate documentation, the Corps may make a decision regarding the dispute and proceed accordingly. Prior to reaching such a final decision, the Corps shall prepare a written response that takes into account all timely comments regarding the dispute from the signatory and concurring parties to this agreement, and provide them and the ACHP with a copy of such written response.

3) The Corps' responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. The Corps decision will be final.

VI. DURATION

This MOA will expire if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the Corps may consult with the other signatories to reconsider the terms of the MOA and amend it in accordance with Stipulation VII below.

VII. AMENDMENT AND TERMINATION

1) If a change occurs in the undertaking that creates new circumstances that the Corps must address, or, if the Corps determines that it cannot carry out the terms of this Agreement, any signatory party to this Agreement may request an amendment. However, only the signatories may amend the Agreement in accordance with 36 CFR 800.6(c) (7).

2) The Corps, in consultation with SHPO, has determined and documented the APE. If the Corps determines that unforeseen changes to the undertaking may cause effects to historic properties in a geographic area or areas beyond the extent of the established APE, then the Corps shall determine and document the adjusted APE in consultation with SHPO and notify consulting parties of the adjustment. Adjustment of the APE shall not require amendment of this MOA.

3) This MOA may be amended when agreed to in writing by all signatories. The amendment will go into effect on the date of the last signature of the signatory parties. A copy of the amended MOA will be filed with the ACHP.

4) If any signatory party determines that the terms of this Agreement cannot be or are not being carried out, that party shall immediately consult with the other parties to attempt to develop an amendment. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the MOA per 36 CFR 800.6(c) (8).

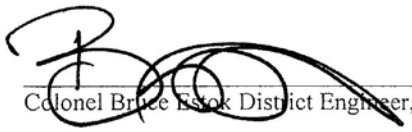
5) Once the MOA is terminated, and prior to work continuing on the undertaking, the Corps must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, taken into account, and respond to comments of the ACHP under 36 CFR §800.7.

6) The refusal of any concurring party invited to concur in this Agreement does not invalidate the Agreement or any future amendments per 36 CFR §800.6(c) (3).

Execution of this MOA by the Corps and SHPO and implementation of its terms evidence that the Corps has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES:

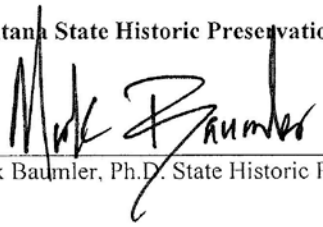
U.S. Army Corps of Engineers, Seattle District



Date 30 may 2014

Colonel Bruce Estok District Engineer, Commanding

Montana State Historic Preservation Officer



Date 6/11/2014

Mark Baumler, Ph.D. State Historic Preservation Officer

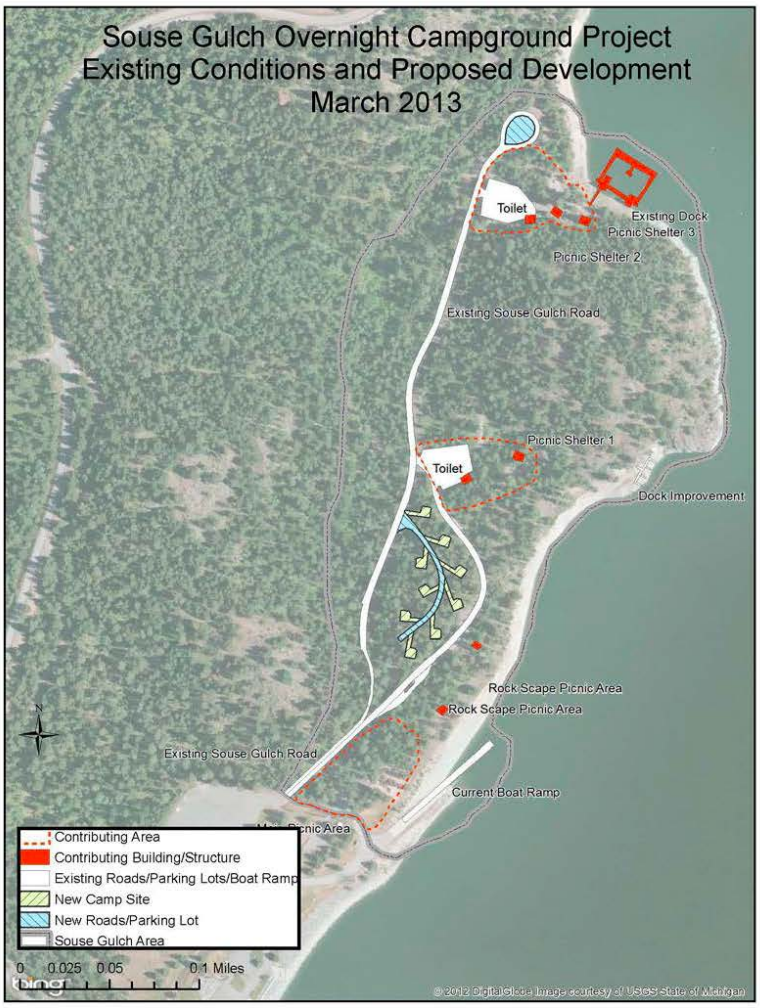


Figure 1. Map showing Area of Potential Effect (gray line) for the Volunteer Village Campground Project. Existing roads, parking lots and boat ramp in white. New roads and parking lots in blue. Individual buildings/structures and concentrations of buildings/structures contributing to theLibby Dam Historic District in orange.

APPENDIX

Souse Gulch Volunteer Village
Draft Procedures and Protocol for Archaeological Monitoring, Post-Review Discovery, and Unanticipated Effects
05 May 2014

1. Archaeological monitoring is required during all ground disturbing work within archaeological and/or culturally sensitive areas at Souse Gulch by a Corps (or Corps appointed) archaeologist (see archaeological and culturally sensitive areas map). In addition, the Corps shall notify the CSKT in advance of such work, and the Tribe may elect to also send out a CSKT appointed tribal cultural monitor.

2. The on-site Corps construction manager will provide a general work schedule, periodic schedule updates, and all schedule revisions to the Corps archaeologist, archaeological monitor and tribal monitor. When ground disturbing work within 30 feet of archaeological and/or culturally sensitive areas at Souse Gulch occurs, the Corps archaeological monitor will be present to monitor work as scheduled by the construction contractor. In the event the archaeological monitor is not present for scheduled work, the construction contractor will make a good faith effort to reach the Corps Seattle District archaeologist. If the Corps (or other Corps appointed) archaeologist cannot be reached, the Corps on-site construction manager may authorize the contractor to work in their absence.

3. Prior to beginning the archaeological monitoring at Souse Gulch, the on-site Corps construction manager will brief the archeologist and tribal monitor on any health and safety elements associated with the monitoring. The archaeologist and/or tribal monitor will provide the proper personal protective equipment (e.g., hard hat, steel toed shoes, and safety glasses) required for project health and safety.

4. In advance of conducting any ground-disturbing work at Souse Gulch, the on-site Corps construction manager will arrange for the Corps archaeologist or Natural Resource Manager to brief the construction supervisor(s) about the applicable cultural resource protection laws, cultural sensitivity of the area, and the procedures for the event of encountering archaeological deposits and human remains described herein.

5. The on-site Corps construction manager will authorize the Corps archaeological monitor to pause construction periodically if needed for a closer examination of sediments and/or historic-period and pre-contact period artifacts or faunal materials.

6. When monitoring the work at Souse Gulch, the archaeological monitor will record the daily progress of the construction and monitoring work. At the completion of the archaeological monitoring for this project, the Corps archaeological monitor will prepare a brief report on the methods and results of the work, illustrated with maps, drawings, and photographs as appropriate.

7. After archaeological monitoring has been completed, the final disposition of any artifacts or other cultural material collected will be determined by the Corps in consultation with the Confederated Salish and Kootenai Tribe and the Montana State Historic Preservation Officer.

Protocol for Recording of Incidental Features and Artifacts

If incidental or demonstrably non-NRHP eligible cultural materials or features are discovered during construction, the archaeological monitor will immediately notify the on-site Corps construction manager who will immediately pause work at that location and will allow the archaeological monitor to inspect the area to determine if potentially eligible resources are present. The archaeological monitor will then provide a verbal notice to proceed to the construction manager once the inspection has concluded. Incidental or demonstrably non-NRHP eligible cultural materials or features include—but are not limited to—isolated pre-contact or historic period artifacts, and cultural materials younger than 50 years old. The archaeological monitor will thoroughly document and sample the cultural material. A buffer zone may be established by the archaeological monitor around the discovery area to allow archaeological investigations to proceed safely while allowing construction activities to resume outside the buffer.

Protocol for Post-Review Discovery and Unanticipated Effects to Potentially NRHP Eligible Cultural Resources

If potentially NRHP eligible cultural resources are discovered during or after construction, or in the event an unanticipated effect is found to have occurred on a historic property, then the archaeological monitor will immediately halt work at that location and notify the on-site Corps construction manager. Potentially NRHP eligible cultural materials include; evidence of in-tact prehistoric or historic features including postholes/molds, hearths, pits, walls, foundations, and other evidence of structural remains; shell midden, non-human bone, lithic debitage, in situ formed-stone –bone –shell –wood or –fiber implements, historic-period glass and ceramics. The discovery area and a surrounding buffer zone will then be delineated with flags tied to long stakes that are driven in to the ground. These stakes shall not be removed. The buffer zone established around the discovery zone shall be large enough to allow archaeological investigations to proceed safely while allowing construction activities to resume outside the buffer. The archaeological monitor will then coordinate with the on-site Corps construction manager to determine whether further impacts to the NRHP eligible cultural resources can be avoided in which case the archaeological monitor will thoroughly document and sample the disturbed cultural material. If further impacts to the NRHP eligible cultural resources cannot be avoided, the archaeological monitor shall contact the Corps Archaeologist, Libby Dam local Point of Contact, the MT SHPO and the CSKT. The Corps will determine the next course of action in consultation with the MT SHPO and the CSKT.

Protocol for Inadvertent Discovery of Human Remains.

Any time that a bone, which may or may not be human, or any funerary object is discovered, construction activity will cease immediately to allow the archaeological monitor to conduct a preliminary analysis to determine if the remains are human. Funerary objects can include, but are not limited to, items made of copper; shell and ground-stone beads; ground-stone, carved-bone, and shell adornments; and carved/ground objects representing people or animals. Upon such a discovery, no additional excavation or stockpiling of materials will occur and the area of discovery and a surrounding buffer zone shall then be delineated with flags tied to long stakes driven into the ground. These stakes shall not be removed. The buffer zone established around the discovery area shall be large enough to allow archaeological investigations to proceed safely while allowing construction to resume activities outside of the buffer. The archaeological monitor shall proceed with the following steps:

1. If the material is determined to be human or possibly human, the archaeological monitor will immediately notify the on-site construction manager, the County Sheriff and County Coroner, and

Seattle District archaeologist. The Seattle District archaeologist shall contact the Libby Dam local Point of Contact, the MT SHPO, and the CSKT consistent with NAGPRA procedures.

2. The treatment and disposition of all human remains will be determined in accordance with all applicable state and federal laws.

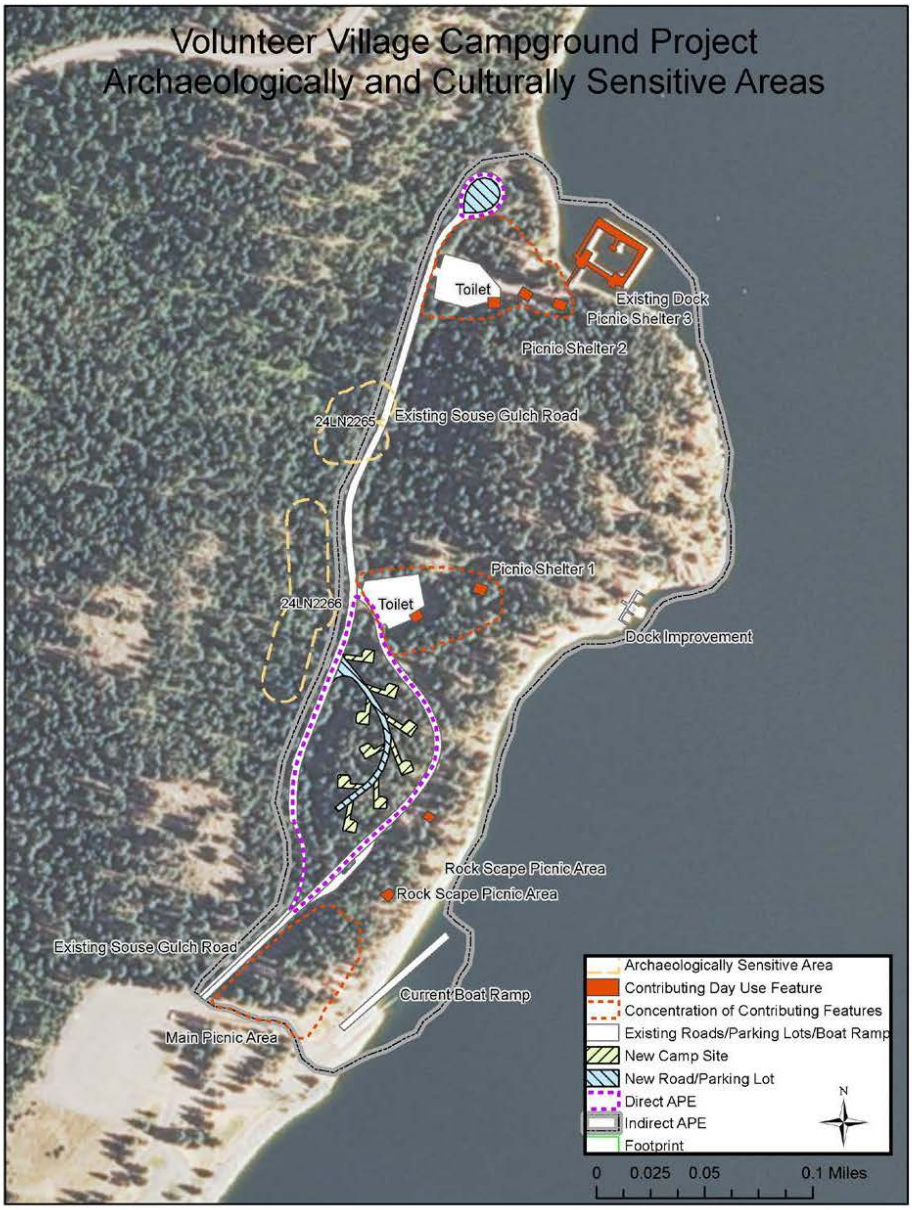
3. Exposed human remains and any associated or non-associated funerary objects will be treated with dignity and respect.

4. Ground disturbance activities within the discovery area and the buffer shall not resume until, the Chief of the Environmental and Cultural Resources Branch, Seattle District, in consultation with the County Sheriff and County Coroner, MT SHPO, and CSKT, has given permission to the construction manager, in writing, to notify the contactor to proceed.

5. The monitoring archaeologist will prepare a brief letter report that describes the discovery, notification of concerned parties, steps taken in response to the discovery, and the location of the remains.

Contact List

Function	Name	Phone Number	Cell Phone Number
Construction Manager	TBD	206-764-3406	
Construction Oversight	TBD	206-764-6937	
Cultural Resources/Corps Archaeologist	Lyz Ellis	206-764-3634	206-961-6800
Archaeological Monitor	Lyz Ellis	206-764-3634	206-961-6800
Tribal Monitor	TBD		
CSKT Point of Contact	Francis Auld	406-675-2700 x1076	
Libby Dam Local Point of Contact	Alana Mesenbrink	406-293-7751 (252)	406-291-0926
Libby Dam, Alternate Local Point of Contact	Greg Hoffman	406-293-7751 (255)	406-283-1090
Libby Dam, Natural Resources Manager	Joshua Baltz	406-293-7751 (251)	
Lincoln County Sheriff	Non-Emergency	406-293-4112	
Lincoln County Coroner	Steve Schnackenberg	406-293-4134	


Volunteer Village Campground Project
Archaeologically and Culturally Sensitive Areas
Toilet
Existing Dock
Picnic Shelter 3
Picnic Shelter 2
24LN2265
Existing Souse Gulch Road
Picnic Shelter 1
24LN2266
Toilet
Dock Improvement
Rock Scape Picnic Area
Rock Scape Picnic Area
Existing Souse Gulch Road
Current Boat Ramp
Main Picnic Area
Archaeologically Sensitive Area
Contributing Day Use Feature
Concentration of Contributing Features
Existing Roads/Parking Lots/Boat Ramp
New Camp Site
New Road/Parking Lot
Direct APE
Indirect APE
Footprint
N
0 0.025 0.05 0.1 Miles

14 APPENDIX B

Notice of Availability

Notice of Availability

US Army Corps
of Engineers
Seattle District

ECRB Branch, USACE
P.O. Box 3755
Seattle, WA 98124-3755
ATTN: (EN-ER)

Public Notice Date: April 29, 2014
Expiration Date: May 14, 2014
Reference: EN-ER-4-29-14
Project Name: Souse Gulch Volunteer Village Campground, Libby Dam, MT

Interested parties are hereby notified that the U.S. Army Corps of Engineers, Seattle District (Corps) has prepared, pursuant to the National Environmental Policy Act, a draft environmental assessment (EA) for a proposed "Volunteer Village" Campground in the Souse Gulch Recreation Area at Libby Dam, Montana. This project would construct full-service RV campsites exclusively for volunteer use to help alleviate the shortage of such campgrounds in the vicinity of Libby Dam.

AUTHORITY

Construction of Libby Dam, Kootenai River, Montana, was authorized by the Flood Control Act of May 17, 1950, 81st Congress (Public Law 81- 516), in accordance with the plan set forth in House Document 531, 81st Congress, Second Session. The project is authorized for multiple uses, including flood control, power generation, recreation, navigation, and fish and wildlife conservation. A new volunteer village campground is intended to fill an existing need for additional full-service camping sites for long-term volunteers working at Libby Dam. It is anticipated that additional volunteer support will allow the Corps to continue to offer visitor services and recreation facilities at Libby Dam in a fiscal climate of increasing budgetary uncertainties.

PROPOSED ACTION

The Corps would construct a full-service volunteer village that would include electrical, water, and sewer hookups for RVs. Each of the up to nine (9) new campsites would include a hardened living area, fire pit, lantern holder, and a picnic table. Once completed and fully operational, the volunteer village would offer full-service camping spots to seasonal volunteers who support Libby Dam facilities and natural resource programs across Corps-administered lands.

Multiple alternatives are under consideration, including the No Action alternative. A similar proposal for a 30-unit public campground was circulated in September 2013; however, since that time construction and long-term operations costs of a public campground were determined not to be cost-effective. The public campground is no longer being considered.

The Corps' preferred alternative is to construct the volunteer village campground in the forested area to the west of the existing Souse Gulch day use access road. The volunteer village would be accessible via paved roads. New paved parking would be added within the existing road loop at the north end of the Souse Gulch Day use area for use by the public and to accommodate any overflow volunteer parking needs. The layout of the proposed utility and camp site alignment is provided in the attached figures.

TIMELINE

The Corps would start tree removal and camp site construction in 2014 and plan to complete construction by winter 2015. Plantings and paving would occur in spring 2016, or as soon as is feasible.

ANTICIPATED IMPACTS

The Corp's preliminary analyses of the principal effects from the full-service campground construction are summarized as follows.

Mortality of approximately 100 mature conifer trees and shrubs would occur within the project site. The project has been designed to avoid native trees to the extent possible, but some trees would have to be removed.

A temporary and localized disruption to wildlife would occur during construction. Some animals may be permanently displaced through the loss of habitat or disturbance from the increased human presence. However, the total wildlife impact is not expected to be significant.

Human use of the area (fishing, camping, dog walking) is expected to increase after project completion. This would have beneficial effects on public recreation and may have minor adverse or minor cumulative effects on aesthetics, utility usage, fish populations, vegetation, wildlife distributions and soil erosion in the immediate area.

The Corps has reviewed the Project to comply with Section 106 of the National Historic Preservation Act and found that the Project would adversely affect the historic architectural and landscape character of the Souse Gulch day-use area, a historic property and contributing component to the Libby Dam Historic District. The Corps is has developed a Memorandum of Agreement (MOA) pursuant to 36 C.F.R. § 800.6 to resolve the adverse effect and meet its responsibilities under Section 106 (Appendix C in draft EA). The Corps intends to implement the stipulations and mitigation measures of the MOA to resolve the adverse effect and reduce the impacts of the proposed action below the threshold of NEPA significance, should it decide to proceed to implement the preferred alternative.

Public land use availability in the Souse Gulch area would be altered slightly. The overall acreage dedicated to day use would decrease and a paved road would be constructed that segregates the day use and camping areas. The Corps would construct less than two (2) acres of increased impervious surface as camping pads and paved roads as a result of the preferred alternative.

Construction, vegetation removal, and ground disturbance from human activities may cause a temporary increase in airborne particulate asbestos that currently is present in the soil, duff and vegetation. All work conducted under this project would be done using appropriate air monitoring, administrative controls, engineering controls and

Personal Protective Equipment consistent with the Occupational Safety and Health Act (OSHA) permissible exposure limit for asbestos. Exposure risk thresholds to the type of asbestos present at Souse Gulch have not been established by EPA, but based on the available information to date the Corps anticipates the health risks to visitors would not be significant. The Corps will establish campground maintenance and activity guidelines to minimize any public health risks, if such precautions are determined to be warranted under OSHA.

No in-water work would occur as a result of this project. There are no wetlands present where construction would occur. Thus, no resources protected under the Clean Water Act would be impacted as a result of this project. Lake Koocanusa supports bull trout, listed as threatened under the federal Endangered Species Act (ESA). Construction and use of the campground would not result in any significant impacts to ESA species in Lake Koocanusa or in the adjacent forest.

EVALUATION

The Corps has made a preliminary determination that the environmental impacts of the proposal can be adequately evaluated under the National Environmental Policy Act through preparation of an environmental assessment (EA). Based on the information currently available, the Corps believes the proposed full-service campground is not expected to result in significant adverse environmental impacts. The Corps has prepared a draft EA addressing potential environmental impacts associated with the Souse Gulch Campground project. The draft EA is available for public review and comment at the following website:
http://www.nws.usace.army.mil/Missions/Environmental/EnvironmentalDocuments/2014EnvironmentalDocuments.aspx
under "Souse Gulch Draft Environmental Assessment".

The Corps invites submission of factual comment on the environmental impact of the proposal. The Corps will consider all submissions received before the expiration date of this notice. The nature or scope of the proposal may be changed upon consideration of the comments received. The Corps will initiate an Environmental Impact Statement (EIS), and afford all appropriate public participation opportunities attendant to an EIS, if significant effects on the quality of the human environment are identified and cannot be mitigated.

Submit comments to this office, Attn: Environmental Resources and Cultural Branch, no later than May 14, 2014 to ensure consideration. In addition to sending comments via mail, comments may be e-mailed to rhonda.s.lucas@usace.army.mil. Requests for additional information should be directed to Rhonda Lucas at 206-764-3512 or the above e-mail address.

15 APPENDIX C

Public Comments & Responses

Classification: UNCLASSIFIED
Caveats: NONE

Mr. Wilson,

Reference is made to the recent NWS Public Notice requesting comments on the Draft Environmental Assessment (EA) for the Souse Gulch Libby Dam Volunteer Village RV Camp Improvement project. Thank you for notifying the Omaha District of this upcoming work, and for allowing the opportunity to provide comments. Comments were requested NLT 14 May 2014.

As you know, the Kootenai River and Lake Koocanusa are regulated under both Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. While Omaha District manages the Corps Regulatory Program in Montana, it is acknowledged that this project is being undertaken by the USACE Seattle District (NWS) and therefore NWS will follow its own established procedures for documenting compliance with all applicable laws and regulations.

The Draft EA was reviewed, and it appears that there is little potential for adverse impact on aquatic resources. This is based on information provided by NWS stating that an ephemeral drainage that terminates northwest of the project area, no wetlands, seeps or drainages occur within the proposed project footprint; wetland vegetation is not a prominent feature anywhere within the project boundary; and Corps biologists conducted a site inspection in August 2012 to verify a delineation of wetlands was not warranted. Further, it was stated that no jurisdictional wetlands or waters were found to occur within the proposed project boundary.

Additionally, it is predicted that the work would have No Effect on the listed bull trout and other aquatic species are not expected as there will be no in-water work associated with campground construction.

Comment 1	There is work mentioned on Lake Koocanusa as part of a dock facility improvement or modification, but work of this nature is typically minor and has little risk of adverse impact if limited in scale and scope.

Comment 2	As a reminder, it may be necessary to obtain permits for this work from other Agencies such as Montana Fish, Wildlife and Parks; Lincoln County; the US Forest Service; the Montana Department of Environmental Quality; or other state, local, or tribal agencies.

Thank you again for the opportunity to review the Draft EA and for soliciting our comments, and let me know if you have questions or need additional information.

Todd N. Tillinger, P.E.
Montana Program Manager
US Army Corps of Engineers
Omaha District - Regulatory
10 West 15th Street, Suite 2200
Helena, Montana 59626

Phone 406-441-1376
Blackberry/Cell 406-422-7527
Fax 406-441-1380

http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Montana.aspx

Response to Comment 1: The dock facility is currently existing and the proposed project would not modify it. The EA has been revided to clearly describe this detail.

Response to Comment 2: The Corps has completed all required permits and consultations with other agencies.