RECLAMATION

Managing Water in the West

DRAFT ENVIRONMENTAL ASSESSMENT

GOOSE BAY MARINA MODERNIZATION AND LONG-TERM CONCESSION CONTRACT

U.S. Department of the Interior
Bureau of Reclamation
Great Plains Region
Montana Area Office

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Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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1.0 NEED FOR PROPOSED ACTION

1.1 INTRODUCTION

This environmental assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 USC, §4321 et seq.; the Council on Environmental Quality regulations for implementing NEPA, 40 Code of Federal Regulations (CFR), Parts 1500-1508 Department of Interior NEPA procedures (43 CFR Part 46). Through the process of developing the EA, the Bureau of Reclamation (Reclamation) will determine the potential for effects to the environment due to the Proposed Action. The process also serves as a method of informing the public about project alternatives and impacts, and allows for public input on the Proposed Action.

Overview of this EA

Reclamation's goal is to have a modernized marina that protects the environment (no more faulty septic systems entering the groundwater) and allows for a safe (no more overworked electric systems leaving units without electricity, boarded up stairs, and aging docks) and affordable outdoor experience with concessions available during the 2015 Recreation Season.

Public outreach has shown us the folks who use this area, love this area. Goose Bay Marina (Figure 1) is part of their history and part of who they are. Unfortunately, we cannot continue to provide exactly that lifestyle that folks have come to know and love. That loose stair some know about is an unknown to 8-year-old running down to the dock to meet grandpa for her first boat ride. Canyon Ferry is a popular destination, the reasons interested parties are reading this know exactly why that is: the sunsets, the seasons, the migrations, the fishing, the views, the access to nature and trails, and everything else this public land and water provides. Thank you for reading, and taking your time to help guide Goose Bay Marina into the future.

As with any change, there are impacts that will affect people's lives and how they recreate at Canyon Ferry.

- Goose Bay Marina would be closed through July 2015, including the boat ramp and all facilities past the Marina entrance sign.
- Heavy equipment operation would likely cause delays and nuisance noise to neighboring properties. Gas and land line communications would not be available.

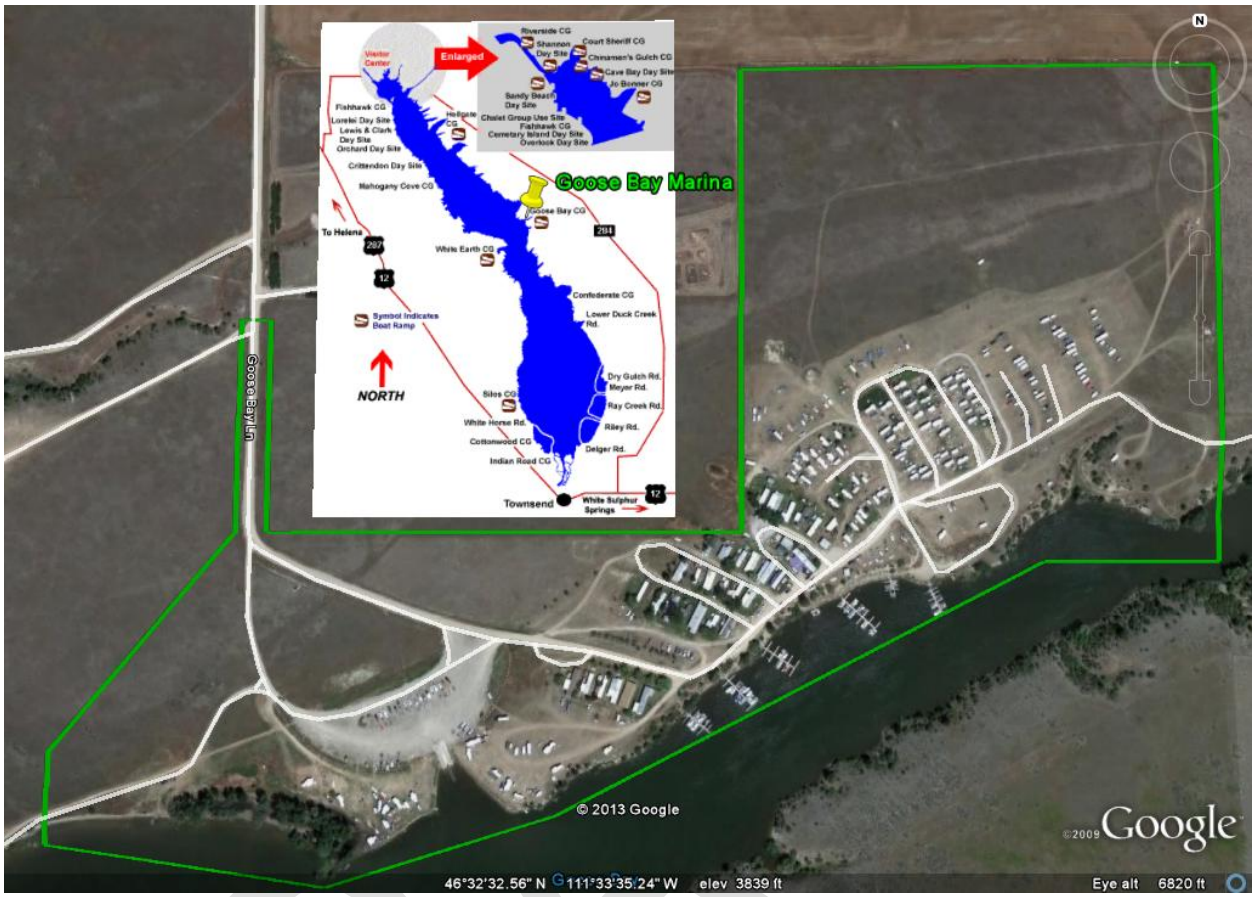

FIGURE 1: GOOSE BAY LOCATION AND BOUNDARY MAP.

- The seasonal campers would not be provided interim seasonal use at another location. Reclamation is working aggressively toward the goal of having Goose Bay Marina open for the 2015 recreation season. The timeline is tight, the budget is tight, and any changes or modifications that impact the timeline are unacceptable to Reclamation. Some night time construction is already a possibility to meet our goals. Trying to keep existing areas open during construction is not feasible, nor would it be a safe or enjoyable camping experience. Spending additional dollars on a precedent-setting interim seasonal use cuts from an already strained budget – and then the cleanup starts again, because scores of trailers in one location for five will have environmental impacts, no matter how responsible the parties involved.

This project will be permitted through all local, state, and federal environmental laws, including the Clean Water Act. All stipulations of all local, State and Federal permits will be included in construction contracts and will be followed at the construction site. This action is similar in nature to construction activities on the scale of several large houses or a small subdivision over the short term. In the long term, the modernization will provide additional trees and shade with

drip irrigation, attracting wildlife, providing cooling shade, and convincing those winter winds to leave a little snow behind to nourish the landscape.

We hear you loud and clear on the washboard between the highway and marina. The road is rough, the road is dusty. Reclamation has talked to the County and will continue to talk to the County. The road will be used during construction by heavy equipment, construction contacts will require upkeep and replacement at existing levels. Safe access via the road ranks right up there with safe docks and stairs. Somebody should be responsible and we are working that out amongst ourselves with your encouragement.

We are at a 60% Design, and expect to get to a 90% design in January. At that time a NEPA Review meeting will be held to openly discuss your questions and comments that have arisen during this NEPA review. Demolition of some infrastructure has already begun under direction of the concessionaire and Reclamation. This work was approved under a Categorical Exclusion, which allows certain minor activities having minimal impacts to proceed.

The Elkhorn Mountains are still there, reflecting the rising sun into the lake. The Big Belts stand behind, stretching the sunset into day. Please give this project utmost consideration and help us get from the designs and plans inside this document to a place we can be proud to introduce to recreationists. A place a family can get away and experience something natural with a campfire under the stars. That is what Goose Bay stands for and should always stand for.
The environmental assessment contains information about the proposed action, the purpose, the need and background information (Chapter 1).

Chapter 2 is a short description of the proposed development with some general drawings that are still preliminary and are malleable. Appendix B contains design drawings of the site.

Chapter 3 is the existing conditions and the environmental impacts. If you disagree, or if something is missing that is near and dear to your heart, please provide us with that information.

Photographs and designs are included in the appendices to help describe the general footprint of the area, highlight some features and to help explain the existing conditions of Goose Bay Marina in 2013.

1.2 BACKGROUND AND LOCATION

Canyon Ferry

Canyon Ferry Dam impounds the Missouri River forming Canyon Ferry Reservoir in Montana. The dam and roughly one-quarter of the reservoir are located in Lewis and Clark County with the remainder of the reservoir located in Broadwater County. The reservoir has 33,500 water surface acres at elevation 3797 feet, extending upstream about 19 miles from the dam to the point the Missouri River enters the reservoir. Additionally, there are 9,360 acres of lands and 96 miles of shoreline associated with the project and under the jurisdiction of Reclamation.

The Canyon Ferry Unit of the Pick-Sloan Missouri Basin Program was authorized by the Flood Control Act of December 22, 1944, Public Law 534. The Canyon Ferry Unit is a multiple-purpose project with benefits of electrical production, flood control, municipal water supply, and irrigation. The passage of the Canyon Ferry Reservoir, Montana Act of 1998 (Title X, Public Law 105-277) provided Reclamation with specific authority to plan, develop, operate and maintain recreation and fish and wildlife resources as part of the Canyon Ferry Unit.

As one of the primary purposes, recreation is a key management consideration at Canyon Ferry Reservoir. The reservoir provides a wealth of both land and water based recreation activities, including, among other things, camping, day use, boating, and fishing. Management of the reservoir and associated recreation opportunities are primarily managed by Reclamation, three concessionaires, Broadwater County and Montana Fish, Wildlife and Parks (FWP).

Following initial filling of the reservoir in 1955, Reclamation and FWP partnered under a Memorandum of Understanding to allow FWP to manage Reclamation lands surrounding Canyon Ferry Reservoir. Numerous campgrounds, cabin sites, boat ramps, and day use areas were developed around the reservoir, including three concession operations: Kim's Marina on the northeastern shore; Yacht Basin on the northwestern shore; and Goose Bay Marina on the eastern shore of the reservoir between the north and south ends of the reservoir. This MOU was effective February 21, 1957 through September 30, 1993, at which point general land management was transferred back to Reclamation.

Goose Bay Marina

Goose Bay is located on the east side of Canyon Ferry Reservoir approximately two miles south of State Highway 284 along Goose Bay Lane and approximately 15 miles north of Townsend, Montana. The Marina is located in the North ½ Section 14, Township 9 North, Range 1 East, Broadwater County, Montana.

Goose Bay was developed under direct management of FWP from 1957 to 1995. The Goose Bay Marina was originally permitted through a lease issued by FWP. Reclamation assumed management of the concession contract in 1996 and continued through November 1, 2013. At this time, the concession contract has expired and all concession operations at Goose Bay have ended. In recent years, Goose Bay Marina has provided general camping amenities to the public, including operation of a concession store, short-term and seasonal camping, boat ramps, boat docks, RV and boat storage, on-water fueling, showers and restroom facilities. In addition, the marina leased 31 mobile home sites. The operation of Goose Bay Marina provided the only source of on-water fueling in the southern end of the reservoir. It also provided a safe harbor for boaters on the southern end of the reservoir.

1.3 PROPOSED FEDERAL ACTION

Reclamation proposes to remove the remaining structures and infrastructure associated with the Goose Bay Marina and Recreation Area, modernize the area through construction of new facilities and improvements, and issue a long-term (20 year) concession contract for operation and maintenance of the area.

The proposed development would meet current Federal, State and local standards and would provide enhanced and increased recreational opportunities to the public.

1.4 PURPOSE AND NEED FOR ACTION

This EA will be used to gather public input on modernization plans, construction of facilities, and ultimately management of commercial services at Goose Bay Marina in accordance with policies and directives administered by Reclamation.

The purpose of this Federal action is to provide modernized marina and recreation facilities at Goose Bay Marina. Reclamation is seeking to provide visitors with new and improved site facilities and provide enhanced opportunities for visitation at Goose Bay Marina.

This Federal action is needed to:

1) Remedy existing health and safety concerns associated with remnant mobile home infrastructure, marina buildings, access trails, boat docks and storage areas.
2) Issue a long term marina concession contract to provide services at Goose Bay. Reclamation uses concession agreements to achieve needed recreational support services, programs, and facilities.
3) Provide modern recreation facilities to support public recreation and meet public demand for access to the lake and its associated recreational opportunities.

1.5 PUBLIC INVOLVEMENT

Goals:

- The goal of Reclamation's public outreach is to ensure key stakeholders, Congressional representatives, special interest groups, media outlets, the public, and interested/affected parties are provided an array of opportunities to be briefed and involved during the development of the Goose Bay Marina Modernization Plan.
- Reclamation conducts public involvement under the guidelines of the NEPA. Through public meetings, mailings, websites, media outreach, and other methods, Reclamation provides opportunities for interested and affected parties to understand the NEPA process, including the purpose and methods used to gather public comment.

Reclamation has engaged with the public in multiple forums since 2009, when the Master Planning effort for Goose Bay Marina was initiated. Reclamation's goal through public involvement is to maximize public use and develop alternatives that align with public expectations for the future of Goose Bay Marina. A public outreach summary is included in Section 5.0 at the end of this EA.

Reclamation will be accepting comments on this EA until **December 14, 2013**. Three public meetings will be held at:

- Bozeman at the Holiday Inn, 5 Baxter Lane, on Tue., Nov. 19;
- Townsend at the Ambulance Training Room (directly across from American Federal Bank), 417 Broadway, on Wed., Nov. 20;
- Helena at the Montana Association of Counties, 2715 Skyway Dr., Suite A, on Thur., Nov. 21.

The meetings will be an open-house format, with technical experts, engineers and project managers available to answer questions and explain the NEPA process. Doors open at 6 p.m., and the public is welcome any time between 6-8 p.m.

Reclamation expects to receive the 90% Design Submittal in late Jan. 2014, with final specifications to be completed in late Feb. to early March. Reclamation anticipates that Goose Bay Marina will be closed during the 2014 season for construction, with a concessionaire in place during the 2015 recreation season.

For the latest information or to provide comments on the Goose Bay Modernization Plan, please visit www.usbr.gov/gp/mtao/canyonferry/goosebay/. Comments will be accepted until Dec. 14, 2013.

Additional information on public scoping efforts can be found in Reclamation's Communications Plan, Goose Bay Marina Modernization Project, Canyon Ferry Montana, last updated July 2013 and available by request or at the above website.

2.0 DESCRIPTION OF ALTERNATIVES

This chapter describes the alternatives that have been formulated to meet the Purpose and Need for Action. NEPA requires the consideration and evaluation of a range of reasonable alternatives that meet the purpose and need for the proposed Federal action while minimizing or avoiding environmental impacts. In addition to the action alternatives, NEPA requires consideration of a No Action Alternative that describes the management of the areas absent implementation of the Proposed Federal Action.

Reclamation presented two modernization alternatives during public scoping in June 2013, including, the Low Level Development Alternative and High Level Development Alternative. Input from Recreation Specialists and the public resulted in Reclamation selecting options from each of the alternatives to meet needs in the area. Details of this hybrid alternative are included as the Proposed Action Alternative. Appendix B provides a series of drawings presenting the general layout of campground and marina features.

The alternatives being analyzed in this document include:

- No Action
- Proposed Action Alternative - Marina Modernization and Issuance of Long Term Concession Contract

2.1 NO ACTION ALTERNATIVE

The area would not be modernized and a long-term concession contract would not be issued under the No Action Alternative. Reclamation would need to perform some essential site rehabilitation as part of this alternative because existing conditions are unacceptable for a number of reasons, including: public safety, sanitation, and visual appearance. The following action items would occur to provide basic and minimal access opportunities at the reservoir:

- Demolition and/or removal of remaining marina and mobile home infrastructure, including, but not limited to, outbuildings, docks, wooden decks, framing and roofing materials, exposed utilities, concrete slabs, septic tanks, existing signs, and miscellaneous debris.
- Removal of substructure associated with the marina facilities, including, but not limited to, buried conduits, water and septic pipelines, RV hook-up boxes and various wiring and cabling to 3-feet below grade.
- Removal of abandoned vehicles, motor homes, campers, and additional miscellaneous debris in the long-term parking and storage area.
- Removal of road surface aggregate in roads to be abandoned.
- Following removal of the existing infrastructure noted above, Reclamation would provide basic and minimal access opportunities to the recreating public. Reclamation would operate and maintain the boat ramp and parking area, the existing western camping to loop with campground host, and vault toilets. The remainder of the area would be re-contoured to near natural slopes and reseeded with vegetation native to the area.

There would be no additional services provided under this alternative.

2.1 PROPOSED ACTION ALTERNATIVE

The proposed action can generally be broken into demolition, modernization, and issuance of a long term concession contract.

Demolition

The proposed action alternative would include demolition and removal very similar to No Action, including:

- Demolition and/or removal of remaining marina and mobile home infrastructure, including, but not limited to, outbuildings, docks, wooden decks, framing and roofing materials, exposed utilities, concrete slabs, septic tanks, existing signs, and miscellaneous debris.
- Removal of substructure associated with the marina facilities, including, but not limited to, buried conduits, water and septic pipelines, RV hook-up boxes and various wiring and cabling to 3-feet below grade.
- Removal of abandoned vehicles, motor homes, campers, and additional miscellaneous debris in the long term parking and storage area.
- Removal of road surface aggregate in roads to be abandoned or moved.
- Removal of specified trees and brush as needed to accomplish the associated work.

Demolition is expected to begin in the winter of 2013-14.

Modernization

Additionally the area would be modernized with updated facilities that would include:

- A new 1050 square foot store.
- A new 400 square foot maintenance/storage building.
- A separate flush toilet/shower facility constructed near the main parking lot.
- New vault toilets in the campgrounds.
- Concrete handicapped accessible trails along the shoreline connecting features of the campground.
- Gangways to docks.
- Campsites will be constructed that include: full service (water, sewer, and electrical service (~45 sites); electrical service only (~30 sites); no service (20 sites); and tent camping (6 sites).
- New underground telephone service will be provided to the store, concessionaire residence, maintenance building and a potential satellite store.
- An underground water storage tank will be installed.
- A building for treatment and pumping of the water will also be constructed.
- Four leachfields will be constructed for treatment of septic waste, and future replacement areas identified.
- A holding tank will be installed for a new RV pumpout station.
- Group use shelters will be installed throughout the area.
- Approximately 210 trees will be planted throughout the site.

- New gravel road alignments will be constructed.
- Concrete curbing and plantings will be installed around the parking lot.
- An invasive species inspection pullout (for Fish, Wildlife and Parks inspections) will be installed at the entrance to Goose Bay Marina.
- A new well may need to be installed with associated piping and electrical service.

Modernization activities are expected to begin in the spring of 2014 and continue through approximately July of 2015.

Some modifications are expected as the design and construction process proceeds. The descriptions of the work are not intended to be all inclusive. Modifications could change locations and types of facilities, but they will be within the overall designated construction area.

Appendix B provides drawings from the Forest Service Teams 60% Design Submittal. Figure 1 is the general layout of the construction area. Figures 2-7 provide additional detail and follow progression of the project from west to east.

West Campground Loop – This loop would provide approximately 20 back-in spurs, two of which will meet accessibility requirements; a covered group use shelter sized approximately 32' x 49' with pedestal grill, utility table and picnic tables, and two double vault toilet. An accessible crushed gravel walkway will connect this area with the parking area and tie into the concrete shoreline walkway.

Main Hub - The main hub encompasses the boat ramp and main parking area, store, and flush toilet/shower facility. This area would provide parking for the boat ramp; a Day Use area consisting of parking, picnic pads with 16' x 20' shelters and picnic tables, an RV dump station and water fill station, three single vault toilets, and a potential 30' x 64' group use shelter with pedestal grill, utility table and picnic tables. A fish cleaning station may be developed in this area in the future. The eastern side of the parking area would feature a 1050 square foot marina store, a flush toilet and shower facility, and a potential 30' x 34' day use pavilion with group fire ring, pedestal grill, utility table and picnic tables. Picnic pads with 16' x 20' shelters would also be in this area. This area will also accommodate a future fueling station. Accessible parking will provide access to the shoreline trail. The short term parking area would consist of a fenced aggregate parking surface with 23 75' delineated parking spaces.

Central Campground - The central campground encompasses the area that was formerly occupied by the majority of mobile homes and the former marina store. This campground would provide approximately 30 back-in spurs, two of which will meet accessibility requirements, a covered group use shelter sized approximately 30' x 34' with pedestal grill, utility table and picnic tables, and two double vault toilets. A walkway will wind through the area and connect with other areas.

East Campground - The east campground encompasses the area that was formerly occupied by the seasonal campers. This campground would provide approximately 27 back in spurs and 14 pull thru sites with electric, water and sewer hookups, four of which will meet accessibility requirements, a 30' x 34'group use shelter with pedestal grill, utility table and picnic tables, and

three double vault toilets. Walkways will provide connectivity in this area and connect to other areas. Accessible parking will provide access to the accessible docks.

Walk-In Tent Sites and Short Term Storage - This area encompasses land previously used for long and short term storage. The tent campground would provide six sites with 20' by 20' tent pads with picnic table and fire ring, two of which would be accessible. A walkway will provide connectivity in this area and will tie into the concrete shoreline walkway. The short term parking area would consist of a fenced area for boats and trailers.

Issuance of Long Term (20 year) Concession Contract

The final action to improve recreation access and services to the recreating public will be the issuance of a long term concession contract. Reclamation proposes to award a new concession agreement for improvement, development and management of the Goose Bay Marina Recreation Area. The new agreement would provide a full range of concession opportunities and would have a term of 20 years. The new long-term concession contract would be advertised and awarded through a competitive bidding process in accordance with Reclamation Manual, Directives and Standards LND 04-01. A concession contract is anticipated to be awarded to allow the marina to be operating in July 2015.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the existing affected environment and the most likely environmental impacts of the alternatives being considered. The affected environment is considered to be the existing condition and the environmental consequences portion analyzes the environmental impacts of implementing the proposed action alternative.

It is assumed that recreation Canyon Ferry Reservoir will continue to increase, including visitation to the Goose Bay area. It is also assumed that the proposed action alternative will moderately increase overall visitation to this area above historic numbers.

Please note, the short term environmental impacts associated with either alternative are spatially similar, in that the removal of existing infrastructure associated with the Goose Bay area will require removal of substantial surface and subsurface infrastructure encompassing the majority of the lands as identified in this EA.

Affected Environment Section 3.1, 3.2, 3.3, 3.4, 3.5, 3.8, 3.9, 3.10, 3.11 are borrowed in part or whole from Reclamation's *Recreation Master Plan Goose Bay Planning Area Draft Environmental Assessment* prepared for Reclamation by Aukerman, Haas and Associates (Aukerman, 2009).

Photographs of existing conditions are included in Appendix A to illustrate the diversity of existing conditions existing at the Goose Bay Marina during the summer of 2013.

3.1 Geology

3.1.1 Affected Environment

Four major geological units are found in the Canyon Ferry Reservoir area: Tertiary lakebeds, igneous formations, Quaternary alluvium, and sedimentary formations. Tertiary lakebeds are the most visible geologic unit in the general area, with Quaternary alluvium occupying the drainages on the east shore of the reservoir.

Canyon Ferry lands are part of the intermountain basin knows as the Townsend Basin, a northwest-southeast trending valley between the Big Belt and Elkhorn Mountains. These mountains are considered to be subsidiary ranges of the Rocky Mountains. The Townsend Basin lies in a structural depression formed by the downwarping of pre-Cambrian and Cambrian sedimentary formations. These ancient sedimentary rocks have been intruded by masses of granite rocks. The basin is partially filled with water-lain Tertiary volcanics and Quaternary alluvium.

The eastern shore of the reservoir, encompassing the project area, occupies coalescing alluvial fans that rise gently eastward to their source in the Big Belts. These alluvial fans extend south to the town of Townsend

The Goose Bay area is composed primarily of alluvium fans of the Quaternary age and consists of thinner and finer textured material closer to the valley floor.

3.1.2 Environmental Consequences

3.1.2.1 *No Action Alternative*

Under the No Action Alternative, there would be minor impacts to geologic resources through site modifications, including leveling, grading and removal of development related substructure. Lands in this area have been heavily disturbed through development and recreation use. Designs and construction would maintain the natural geology of the area.

3.1.2.2 *Proposed Action Alternative*

The impacts of the proposed action alternative are slightly higher than under the No Action. This alternative would require additional leveling and grading of the boat and RV parking areas. Lands in this area have been disturbed through development and recreation use. Designs and construction would maintain the natural geology of the area.

3.1.2.3 *Cumulative Impacts*

No cumulative environmental affects have been identified for either alternative in consideration.

3.2 Soils and Topography

3.2.1 Affected Environment

Information for this section was obtained from the Soil Survey of Broadwater County Area, Montana (Natural Resources Conservation Service, April 1977, formerly the Soil Conservation Service). Since the Planning Area is located entirely within Broadwater County, the soil associations located in Lewis and Cark County and other areas within Broadwater County are not described or analyzed in this section.

A soil associating is a landscape that has a distinctive proportional pattern of soils. Each association normally consists of one or more major soils and at least one minor soil and is named for the major soil that is present. The soils within an association typically have a common management capability. Therefore, knowing the soil associations within the Planning Area are useful in planning for development of the facilities. The slope of the surrounding landscape is an important consideration in developing recreation facilities. Disturbance of steep slopes is associated with potential erosion and/or slope failure.

From the Magpie Creek drainage south along the east shore of the reservoir to the Gurnett Creek drainage, the Amesha-Brocko-Mussel soil association dominates the landscape and is located on intermediate terraces and fans. Amesha soils consist of deep, well-drained soild formed in strongly calcareous stratified alluvium. The permeability of this soil type is moderate, and runoff is medium to slow. When the surface soil is loam or silt loam, the hazard of blowing soil is rated as severe; otherwise, it is considered to be moderate.

The Goose Bay Campground on the north side of the bay appears to be located on a narrow band of Scravo cobbly loam. Scravo soils are used primarily for range, while the Amesha soils are typically used for dry land winter wheat, some irrigated crops, and range. The Amesha soils transition to the steeply sloping loam soils on the terrace edges along the shoreline. In this transition from land to the edge of the water, runoff is rapid, and the chance of erosion is high.

3.2.2 Environmental Consequences

3.2.2.1 *No Action Alternative*

Under the No Action Alternative, there would be minor short term impacts to soils and topography during leveling, grading and removal of development related substructure. Lands in this area have been heavily disturbed through development and recreation use. The area would be managed to provide basic and minimal facilities for recreation, this limited management may result in an increase in OHV and other recreational uses that may increase impacts to soils and topography.

3.2.2.2 *Proposed Action Alternative*

Under the Proposed Action Alternative, there would be minor short term impacts to soils and topography during leveling, grading and removal of development related substructure. These impacts will be minor and short term. Lands in this area have been heavily disturbed through development and recreation use. The area would be managed to provide developed recreational opportunities, the increased presence of signage and on-site management would likely decrease impacts to soils and topography as OHV and other unauthorized recreational uses would be minimized.

To minimize erosion of soils, slope and erosion protection would be applied to prevent overland water flow in the demolition and construction area. Additionally, careful design and proper maintenance of constructed features would minimize erosion.

3.2.2.3 *Cumulative Impacts*

No cumulative environmental affects have been identified for either alternative in consideration.

3.3 Water Resources

3.3.1 Affected Environment

Underlying the Townsend Valley is a large, confined aquifer composed of Quaternary and Tertiary deposits. The aquifer supplies water primarily for domestic and irrigation uses within the valley. Deep percolation from rainfall and snowmelt recharges the aquifer in the mountain ranges surrounding the valley. Perennial streams and seepage from irrigation canals and laterals also recharge the groundwater in the valley.

Well record data from the Montana Department of Environmental Quality show that wells on the east side of Canyon Ferry are generally 100-feet or less in depth with a yield between 10 and 40 gallons per minute.

The wells for the recreation areas are considered to be non-community, public water supplies and require monthly testing when open for public use. Occasional evidence of coliform bacteria has occurred. Chlorination of the well or temporary shutdowns of the wells has mitigated the problem.

The Missouri River is the primary source of inflow to Canyon Ferry. There are 11 perennial streams that also provide inflow, with much of this water being diverted for irrigation and only small amounts reach the reservoir.

Water quality in the reservoir is generally suitable for the propagation of cold-water fish species, safe for water sports, and potable after adequate filtration and treatment. The water flowing into the reservoir is a productive, calcium bicarbonate type (hard and nutrient rich), and has a high phosphorous level. The pH, dissolved oxygen content, and water temperatures produce conditions favorable to cold-water fisheries. The salinity of the water is low and aside from arsenic, heavy metals are not a problem because of their low concentrations and high alkalinity of the reservoir water.

Arsenic and phosphorous occur naturally in the reservoir and are considered the two primary contaminants. Soil and water in southwest Montana is generally rich in phosphorous and contributes to the nutrient load in the reservoir. The combination of phosphorous and nitrogen with hot, dry and still conditions has resulted in the algae blooms, some of which are toxic. Arsenic is carried to the Missouri River via the Madison River, a tributary that receives large amounts of arsenic-bearing thermal waters from Yellowstone National Park. Total recoverable arsenic concentrations measured in the Missouri River near Toston have typically ranged from 10 to 50 micrograms per liter, exceeding the State's ambient water standard for human health of 20 micrograms per liter about half the time. This is well below the State's maximum acute arsenic level of 340 micrograms per liter and the maximum chronic level of 150 micrograms per liter for aquatic life.

Streamflow alteration, metals, nutrients, and suspended solids were designated as parameters of concern for the Missouri River above the reservoir. Several tributaries entering the reservoir were listed as water quality impaired by the State under Section 303(d) of the Clean Water Act.

Designating a body of water as impaired requires the State to set a priority for determining the total maximum daily load (TMDL) of a pollutant that the water body can receive and still met water quality standards set for the designated uses of the water body. However, the State has set a low priority for developing TMDLs for the reservoir and streams entering the reservoir. The State will develop a comprehensive program for the prevention, abatement and control of water pollution as mandated by the Clean Water act and the Montana Water Quality Act.

3.3.2 Environmental Consequences

3.3.2.1 *No Action Alternative*

Under the No Action alternative, Reclamation would likely maintain a non-community, public water supply well at Goose Bay. Water use would go down over historic uses. There would be no septic systems or RV dump stations provided and the risk of lake contamination from illegally dumped camper holding tanks would be of concern due to the low level of management.

3.3.2.2 *Proposed Action Alternative*

Under the proposed action, Reclamation would provide adequate water supplies for the Marina store, the flush toilet and shower facility, approximately 45 of the camping spots, and for drip irrigation, among other things. This water use would be higher than the No Action, but would likely be very similar to the historic water use at the site. Additionally, an RV dump station would be available on-site and sewer hookups would be available for camping spots receiving water. Increased management presence and availability of facilities would limit the likelihood of camper holding tanks contaminating lake waters.

It is anticipated that the construction company who is chosen for this project will need approximately 2 acre-feet of water from the reservoir in 2014 and 2015. That water would likely be provided by Reclamation from Reclamation storage, likely via a pumper trucks using the existing boat ramp or by a pump run from the bank to a temporary filling station. 2 acre-feet of annually will not significantly impact the water resources of the project area.

Best management practices would be included during demolition and construction to minimize sedimentation into the lake. Additionally, septic and RV dump stations would be sited and managed to minimize potential contamination of lake waters. Clean Water Act permits would secured and abided by prior to construction to minimize impacts.

3.3.2.3 *Cumulative Impacts*

No cumulative environmental affects have been identified for either alternative in consideration.

3.4 Air Quality

3.4.1 Affected Environment

Air quality is determined by ambient concentrations of pollutants that are known to have harmful effects on human health and the environment. The United States Environmental Protection Agency (EPA) has developed national ambient air quality standards for six common criteria pollutants: carbon monoxide, nitrogen dioxide, particulate matter, ozone, sulfur dioxide, and lead. When compared to other counties throughout the United States, and according to the Broadwater County Scorecard, the county ranks as one of the cleanest/best counties and falls well within the standards for these six common pollutants.

Minor sources of air pollution in the Goose Bay areas consist of vehicular traffic, home heating, and mine exploration activities. On occasion, the area is subject to dust storms, especially in exposed areas that have highly erodible soils. Exposed areas include roads, plowed fields, and exposed reservoir flats during low water events. These events occurred primarily in the spring prior to the reservoir filling. Reclamation, in cooperation with FWP has mitigated some of the negative impacts from the dust storms by construction wildlife ponds on the southern end of the reservoir.

3.4.2 Environmental Consequences

3.4.2.1 *No Action Alternative*

Minor air pollution from vehicle traffic, nearby home heating, and ongoing mine exploration would continue at present levels. There will be temporary impacts to air quality during construction activities. These impacts will be minimal and short term and are not likely to cause air quality to exceed threshold levels for targeted pollutants.

3.4.2.2 *Proposed Action Alternative*

Minor air pollution from vehicle traffic, nearby home heating, and ongoing mine exploration would continue at present levels or may slightly increase as access and visitation to the Goose Bay area increases due to the gravel access road. There will be temporary impacts to air quality during construction activities. These impacts will be minimal and short term and are not likely to cause air quality to exceed threshold levels for targeted pollutants.

Reclamation is aware the road to Goose Bay Marina is graveled and dusty at times and will continue discussions with Broadwater County to seek resolution to the dust problem. Best Management Practices, including, watering the construction site and access roads as needed during hot and dry months would minimize fugitive dust. A Reclamation water service contract would be an available avenue for water.

3.4.2.3 *Cumulative Impacts*

No cumulative impacts have been identified.

3.5 Vegetation

3.5.1 Affected Environment

The Goose Bay area consists mainly of grasslands and trees planted by concessionaires and others using the area. Most of the grassland area is composed of the needle-and-tread, blue gram habitat, which dominates the central and southern portions of Reclamation lands surrounding the reservoir.

The noxious weeds populations in the vicinity of Goose Bay are Russian knapweed (< 5 acres), whitetop (<5 acres), spotted knapweed (<5 acres), Canada thistle (>5 acres), field bindweed (>5 acres), leafy spurge (<5 acres), perennial pepperweed (<5 acres), and dalmation toadflax (<5 acres).

3.5.2 Environmental Consequences

3.5.2.1 *No Action Alternative*

Under the No Action Alternative, there would be extensive leveling and grading, care will be taken to avoid native trees and a mix of native vegetation will be planted and monitored for success. The area would be managed to provide basic and minimal facilities for recreation, this limited management may result in an increase in illegal OHV use which could further spread the infestations. Reclamation would likely provide funding to Broadwater County to provide weed management at the Goose Bay Recreation Area.

3.2.2.2 *Proposed Action Alternative*

Under the Proposed Action Alternative, there would be approximately 40 acres of grasslands removed during construction of the eastern campground and the long term parking area and a total of approximately trees (many of which are the invasive Russian olive) to accommodate project features. Lands in this area have been heavily disturbed through development and recreation use. The area would be managed to provide developed recreational opportunities, the increased presence of signage and on-site management would likely decrease the spread of noxious weeds by OHV use and other unauthorized recreational uses. The Concessionaire would be responsible for weed management in the project area.

To minimize erosion of soils, slope and erosion protection would be applied to prevent overland water flow in the demolition and construction area. Additionally, careful design and proper maintenance of constructed features would minimize erosion. 270 native trees with drip irrigation would be placed throughout the campground to improve biodiversity, provide shade and increase esthetics. All disturbed areas will be reseeded and monitored to ensure success, providing a vegetative buffer between the proposed development and Canyon Ferry Reservoir waters providing protection from run off.

3.5.2.3 *Cumulative Impacts*

No cumulative environmental affects have been identified for either alternative in consideration.

3.6 Fish and Wildlife

3.6.1 Affected Environment

The diversity of environments in the Goose Bay area ranging from open water to mountaintop provides for a great diversity of wildlife species.

3.6.1.1 Fish

The fishery at Canyon Ferry is managed by FWP, the following is verbatim from the Statewide Fisheries Management Plan, Upper Missouri River Drainage (pp250-254) and includes information on the basin, fisheries management, habitat access, and special management issues. The Management Plan is available at:
http://fwp.mt.gov/fishAndWildlife/management/fisheries/statewidePlan/default.html

Physical Description

The Upper Missouri River drainage includes the Missouri River and tributaries from the confluence of the Jefferson, Madison and Gallatin rivers (near the town of Three Forks), downstream 110 river miles to Holter Dam. The upper river reach extends from the headwaters 43 river miles to the upper end of Canyon Ferry Reservoir. Toston Dam, located 23 miles upstream from Canyon Ferry, is a barrier to upstream fish movement. The dam creates a small, run-of-the-river irrigation storage reservoir that has been retrofitted for hydro-power generation.

Riparian vegetation is limited to a narrow band along the river, except for the lower 10 miles above Canyon Ferry Reservoir where the river channel is braided and the bottomland is extensively vegetated with willows and cottonwoods. Width of the channel varies from 300 to 1,200 feet, the average gradient is 5.6 feet per mile, and the sinuosity is 1.6. Bottom substrate varies from sand-silt to cobble, but the majority is gravel-cobble. Tributaries originate mainly from the east and most are totally diverted during late summer for irrigation. Major tributaries of the Missouri River between Three Forks and Canyon Ferry Reservoir include Sixteenmile, Deep, Dry, Crow, Sixmile, Indian, Greyson and Warm Springs creeks. Many of these tributaries are chronically dewatered during late summer for irrigation. Water to irrigate about 555,400 acres is diverted above this reach. Thus, flow can be severely depleted during the summer irrigation season. Flows in this reach are partially regulated by a number of upstream reservoirs.

The remainder of the mainstem of this drainage is dominated by a reservoir complex that includes three reservoirs: Canyon Ferry, Hauser, and Holter. Canyon Ferry Reservoir is the first major storage impoundment on the Missouri River. Hauser and Holter reservoirs lie about 3 and 30 miles downstream from Canyon Ferry, respectively. Canyon Ferry Dam and Reservoir is operated by the BOR for power production, flood control, irrigation, recreation, and as a

municipal water source. At full pool, Canyon Ferry has a surface area of 35,200 acres and a volume of nearly 2 million acre-feet and provides virtually all the storage available in the reservoir complex. Rapid filling of the reservoir begins in early May with peak storage occurring in late June to early July. Major tributaries to the reservoir include Duck Creek, Confederate Gulch, Hellgate Creek, Avalanche Creek, Magpie Creek, and Beaver Creek. The two reservoirs below Canyon Ferry are Hauser and Holter and are operated by PPL Montana. They differ significantly from Canyon Ferry Reservoir in that they are "run-of-the-river" facilities. Hauser Reservoir has a surface area of about 3,800 acres and stores approximately 98,000 acre-feet of water at full pool. The reservoir is about 15.5 miles in length and is relatively narrow, ranging from about 0.1 to 1.1 miles in width. Important tributaries to Hauser Reservoir include Prickly Pear, Silver, Trout, Spokane and McGuire creeks. A biologically important feature of Hauser is Lake Helena, which is a large (surface area of 2,100 acres), shallow water body connected to the Causeway Arm by a narrow channel which was created when Hauser Dam inundated the lower reach of Prickly Pear Creek.

A 4.6-mile reach of the Missouri River is located between Hauser Dam and Holter Reservoir. This unique segment of river flows through a narrow, high-walled gorge for most of its length prior to entering upper Holter Reservoir. Productivity in this river segment is affected by the two upstream reservoirs, which creates tailrace conditions where water temperatures are moderated and the water is enriched with nutrients.

Holter Reservoir has a surface area of about 4,800 acres, stores 243,000 acre-feet of water at full pool and is 25 miles long with widths ranging from 0.1 to 1.1 miles. The 4.6 mile segment of free flowing river located upstream of Holter Reservoir provides very important spawning habitat to migrant salmonids. Beaver Creek, a tributary to this river segment, is the principal spawning stream for reservoir fish, especially in the spring. Cottonwood and Willow creeks are also important tributaries that empty directly into Holter Reservoir.

Fisheries Management

The Missouri River drainage contains fish species common to southwestern Montana. The native species found here include westslope cutthroat trout, mountain whitefish, mountain sucker, longnose dace, longnose sucker, Rocky Mountain sculpin, stonecat and white sucker. Non-native species are the rainbow trout, brown trout, brook trout, northern pike, yellow perch, walleye and common carp. Hybrids of rainbow trout and westslope cutthroat trout are also found in the drainage.

The Missouri River drainage upstream of Canyon Ferry Reservoir is managed as a wild trout fishery, emphasizing natural reproduction. The basin is also suitable for westslope trout recovery efforts in many locations. Upstream from Toston Dam, the fisheries resources are sparse, due to the poor quality of the river system in terms of temperature and physical habitat. Up until the early 1990s, the fishery downstream from Toston Dam was seasonal and characterized by spawning runs of large rainbow and brown trout from Canyon Ferry Reservoir; however, resident brown trout fishing was also an attraction during this time period. Then, a variety of factors began to modify the composition of the fish community, including the expansion of walleye into Canyon Ferry Reservoir, changes in temperatures and flow, hydroelectric retrofits

of Toston Dam, expansion of pelicans and cormorants, whirling disease, and the introduction of northern pike in Canyon Ferry Reservoir. All of these factors caused a significant reduction of spawning trout in the Missouri River downstream from Toston Reservoir, and as a result, angling use of this 21-mile stretch of the Missouri River for trout angling has declined substantially. Over the past decade, angler use of the Missouri River reach downstream from Toston Dam has varied from 2,594 angler days in 2005 to 8,939 angler days in 2009. Upstream from Toston Dam to the Confluence of the Madison and Jefferson rivers, angling pressure over the past decade has varied from 1,564 angler days in 2007 to 3,837 angler days in 2001. The Central Fishing District Standard regulations govern the Missouri River upstream from Canyon Ferry Reservoir. Exceptions include restricted harvest opportunities for brown trout, no limit on northern pike, and size and number exceptions for walleye downstream from Toston Dam.

Fishing Access

The reach on the Missouri River above Canyon Ferry Reservoir has good access for recreationists, and access points are well placed for floaters. These points include the Toston, York's Island and Townsend access sites. In addition, ample opportunities for walk-in access exist within the Canyon Ferry Wildlife Management area.

The reservoir complex has good access for recreationists and access points are well placed for boaters and campers. The BOR, Broadwater County, and private marinas provide access to Canyon Ferry Reservoir throughout its length. The BOR manages recreational areas, including campgrounds, boat ramps, and day-use areas around the reservoir. FWP administers six FASs on Hauser and Lake Helena. The BLM also has two recreation areas that provide access to Hauser and Lake Helena, and three recreation areas that provide access to Holter Lake.

Special Management Issues

Unauthorized introductions of predatory species have significantly changed the characteristics of the fishery throughout this drainage. The Upper Missouri River Reservoirs Fisheries Management Plan 2010-2019 guides management within the plan area, which extends from Toston Dam through the reservoir complex down to Holter Dam, including short sections of the Missouri River between Canyon Ferry Reservoir and Toston Dam. In 2012, FWP initiated an environmental assessment to remove northern pike from the entire basin upstream from Holter Dam.

The Upper Missouri River drainage is also home to several conservation populations of westslope cutthroat trout, providing opportunities to conserve this native species in the drainage. The long-term goal of cutthroat conservation in the Upper Missouri River Drainage is to have approximately 20% of the historically occupied habitat restored to secure conservation populations of cutthroat trout (see Part 1: Trout: Westslope and Yellowstone Cutthroat Trout for details).

Additional information on Management Direction for the Upper Missouri Basin, Canyon Ferry Lake is also included in the document available above (page 256).

3.6.1.2 Wildlife

Canyon Ferry Reservoir and the surrounding lands provide a wide variety of habitats for an array of species. The list is extensive, your input into local populations of wildlife and migratory bird use is in the area of construction is greatly appreciated.

Fish, Wildlife and Parks manages the south end of Canyon Ferry as a Wildlife Management Area. Additional information on the recreation opportunities and wildlife values present in this area can be found on their website at: http://fwp.mt.gov/fishAndWildlife/wma/siteDetail.html?id=281291.

FWP also manages the overall wildlife populations in the Region, species specific information can be obtained at: http://fieldguide.mt.gov/

3.6.2 Environmental Consequences

3.6.2.1 *No Action Alternative*

Fish and wildlife management will continue at Canyon Ferry Reservoir under the direction of FWP. The No Action Alternative would temporarily displace wildlife in the immediate area of access and construction and would not impede FWP management efforts. Long-term, the area may experience a slight increase in wildlife use due to the smaller footprint of development.

3.6.2.2 *Proposed Action Alternative*

Fish and wildlife management will continue at the reservoir under the direction of FWP. The Proposed Action Alternative would temporarily displace wildlife in the immediate area of access and construction and would not impede FWP management efforts. Long-term , the area would support access to fish and wildlife much as it has in recent history. Reclamation will be working with FWP to develop a monitoring station for aquatic invasive species. Increased management presence would allow for controlled development and minimal overall impacts on fish and wildlife.

Smooth wire fencing would be used, where necessary, to minimize impacts to wildlife.

3.6.2.3 *Cumulative Impacts*

No cumulative environmental affects have been identified for either alternative in consideration.

3.7 Threatened and Endangered Species

The Endangered Species Act seeks to recover and conserve listed species and the ecosystems on which they depend. The action area defined for this action, includes the access road, the Goose Bay Marina Area and the bay itself. All lands within this action area are within Broadwater County. The species listed below are from the United States Department of the Interior Fish and Wildlife Service website at:

http://www.fws.gov/montanafieldoffice/Endangered_Species/Listed_Species/countylist.pdf. The species list was updated July 2013 and accessed on October 24, 2013.

Broadwater County ESA Listed Species		
Scientific Name	**Common Name**	**Status**
Spiranthes diluvialis	Ute Ladies' Tresses	Threatened
Lynx canadensis	Canada Lynx	Threatened
Anthus spragueii	Sprague's Pipit	Candidate
Pinus albicaulis	Whitebark Pine	Candidate
Gulo gulo luscus	Wolverine	Proposed

The action area does not provide the habitat necessary for Canada Lynx, Wolverine or Whitebark Pine. There would be No Effect to any of the above listed species or their preferred habitats as a result of No Action or the Proposed Action.

Ute Ladies' Tresses are perennial orchids which grow near the base of the Rocky Mountains in Montana and have been documented in the upper Missouri River and its tributaries. This species is restricted to a highly specialized and limited habitat and is typically dependent upon unaltered, high-quality habitat, typically moist streambanks, wet meadows, and abandoned stream channels. These habitat types are not present in the highly disturbed action area, as such, there would be No Effect upon Ute Ladies' Tresses as a result of the No Action or Proposed Action.

Sprague's Pipit is an endemic grassland bird which prefers native vegetation and requires large areas of appropriate habitat. The highly disturbed action area does not provide suitable habitat for the pipit. There would be No Effect upon the Sprague's Pipit as a result of the No Action or Proposed Action.

3.8 Recreation

3.8.1 Affected Environment

Canyon Ferry Reservoir offers a variety of recreation opportunities for the visiting public to enjoy. The total visitation at the reservoir from 2008 was 327,699 and has increased steadily over the years (Reclamation, 2009c). The recreation facilities are primarily operated and maintained by Reclamation and other entities. Under an agreement with Reclamation, there are three concessionaires that offer recreation-related goods and services to the public.

The reservoir has 33,500 water surface acres with 96 miles of shoreline and 9,360 acres. Nearly all the water surface acres (dam safety buoy area excluded) and approximately 1,000 developed land acres are open for public use. The remaining 8,360 land acres are undeveloped, but offer dispersed recreation opportunities such as wildlife observation, hiking, and photography.

The primary developed facilities include 11 campgrounds with 233 campsites, 11 day use areas, 6 picnic sites, 11 boat launch ramps, and 9 swim beaches. There is no fee charged from entry into the reservoir areas, but 7 of the 11 campgrounds charge a camping fee for use of facilities.

There are also five group use areas with shelters that can be reserved for a fee from May through September on a first-come, first-served basis (Reclamation, 2009b).

Goose Bay Marina was located on the east side of the reservoir off of State Highway 284. Services and facilities at the marina include a boat ramp, boat slips and connecting docks, marine fuel service, store, restroom facilities, RV campsites with full hookups, dry storage, and 31 mobile sites. At this time, the Goose Bay Marina concession contract has expired pending the outcome of the EA and other environmental permitting.

Pursuant to the Canyon Ferry Shoreline Management Plan (Reclamation, 2012), Reclamation lands adjacent to the Goose Bay Marina have been categorized as undeveloped/limited access. By definition, undeveloped areas provide dispersed recreation opportunities and provide valuable riparian and upland game habitat for a variety of upland game birds, waterfowl, deer, antelope, and other wildlife species. Although established roads access some undeveloped areas, motorized access is typically prohibited to reduce user conflicts and protect natural resources.

The lands within the Canyon Ferry Reservoir area are closed to OHV use pursuant to 43 CFR, Part 420. According to the CFR, all Reclamation lands are closed to OHV use unless the lands are officially designated as open. No formal process has been initiated for legally opening reservoir lands to OHV users; therefore all lands under the jurisdiction of Reclamation at the reservoir are currently closed to OHVs.

To assist in determining the overall affected recreation environment, it is important to understand how the public perceives the existing environment. In 2003, Reclamation contracted with the University of Montana for completion of a recreation survey during the summer recreation season (May to September) are summarized below (Dvorak, et al, 2004):

- Most of the visitors were Montana residents.
- Nonresident visitors came mainly from Washington, Arizona and Idaho.
- Less than one-third of the visitors were visiting the reservoir for the first time.
- The primary reasons for visiting particular recreation sites were:
  - Close to home.
  - Good fishing.
  - Scenic beauty.
- Overall, visitors were satisfied with their visit to a particular site.
- Visitors were generally satisfied with conditions at the overnight and day use sites, especially campsites and picnic areas, maintenance of facilities, cleanliness of the area, privacy, natural features, and opportunities to view wildlife.
- The majority of visitors to most sites thought that additional facilities were needed, and suggestions included showers, electrical hookups, dump stations, dock maintenance, and restrooms.
- In general, visitors did not mind seeing various recreation types and resource uses at the reservoir; however, jet skiing was disliked the most among visitors who encountered them, followed by shoreline development.

The majority of respondents to the 2004 survey expressed a need for more facilities. This is approximately 10-12 percent higher that a survey conducted in 1995 by the University of Montana. The facility needs cited most from summer visitors included showers, restrooms, electrical hookups, dump stations and dock maintenance. Fall/winter visitors cited the need for restrooms and boat ramps. This differs from 1995 when visitors wanted covered picnic tables most, followed by RV facilities and dump stations, beach areas, running water, and docks. As the results of the survey indicate, visitors were very satisfied with the visit to the reservoir and the condition of existing facilities and opportunities.

Overall, the recreation activities with the highest participation levels at the reservoir in 2003-04 were swimming, fishing, and auto/RV camping. Other activities with participation levels included boating and sailing. These findings are consistent with national, regional, and State findings and trends.

It is important to understand what the public perceives the recreation condition to be. Following are some of the comments provided by the general public from the 2004 recreation survey regarding condition of the Goose Bay Marina area.

- Goose Bay has a lot of potential – current concessions will never make major improvements.
- Needs to be managed better. Nobody obeys the no-wake in the bay, and the campground bathrooms, boat docks, and walkways could use some improvements.
- Goose Bay is fine the way it is.
- Everything is good, and we come to this site because we have fun here and there are no fees to camp.
- The more development any place has takes away from the experience nature can offer. Making areas more accessible brings more people, and is counterproductive.
- Stronger rules are needed.
- Too much dust in the area.
- Much more could have been done over the years to enhance Goose Bay Marina.
- The new government boat ramp and, finally gasoline, have made this one of the best on the lake.
- Handicapped facilities are needed.
- The campground is unkempt, there are no trees to speak of, no grass, and the sewer system is always plugged.

Overall, the public surveyed in 2004 perceived the Goose Bay areas as having potential for enhancing recreational opportunities; however, the existing facilities are in need of repair. Some respondents felts more management was necessary within the area, while others believed that the area should be left as it is today.

During the public scoping meetings held to solicit comments on the proposed RMP, the following summarizes some of the major concerns and issues collected during those meetings. (Reclamation, 2009d).

- There is too much uncontrolled use within the planning area.

- The planning area should remain somewhat primitive and managed but not overdeveloped.
- OHVs are environmental, fire, and safety problem and need strict controls.
- A range of opportunities and camping experiences should be provided.
- A sewage and grey water dump station should be provided.
- Access to the area should be controlled and enforced.
- Facilities that are accessible for persons with disabilities should be provided.
- Group use and day use shelters are needed.
- Additional facilities are needed, including a swim beach and fish cleaning station.
- The area should be managed solely by a concessionaire.

3.8.2 Environmental Consequences

3.8.2.1 *No Action Alternative*

The Goose Bay Marina, boat ramp and all public lands behind the entrance sign would be closed through approximately July 2015 to minimize conflicts between recreationists and construction crews. Campers accustomed to using this area will be displaced from this area. The remaining access opportunities provided by Reclamation at Canyon Ferry will remain open and available for public use. The existing opportunities in the surround recreation areas managed by other state and Federal agencies will not be impacted by this action.

Reclamation would like your input into what consequences you envision if we do not have a Marina in the short and the long term and how the displaced campers will disburse.

3.8.2.2 *Proposed Action Alternative*

The Goose Bay Marina, boat ramp and all public lands behind the entrance sign would be closed through approximately July 2015 to minimize conflicts between recreationists and construction crews. Campers accustomed to using this area will be displaced from this area. The remaining access opportunities provided by Reclamation at Canyon Ferry will remain open and available for public use. The existing opportunities in the surround recreation areas managed by other state and Federal agencies will not be impacted by this action. Abundant recreational opportunities are located in the Canyon Ferry Reservoir area.

3.8.2.3 *Cumulative Impacts*

No cumulative environmental affects have been identified for either alternative in consideration.

3.9 Land Use

3.9.1 Affected Environment

The 9,630 acres of land and the 33,500 water surface acres were acquired as part of the canyon Ferry Unit of the Pick-Sloan Missouri Basin Program. The total of approximately 42,500 acres is under the jurisdiction of Reclamation.

Reclamation has entered into an agreement with FWP for management of the the WMA located at the south end of the reservoir. FWP has the responsibility to manage public use and the wildlife resources within the WMA. The WMA includes dust abatement dikes with waterfowl nesting habitat, land for wildlife production, about 1,000 acres of ag leases, irrigation canals, and access roads. FWP also provides overall fish and wildlife management and enforcement of State hunting, fishing, boating at Canyon Ferry Reservoir.

Reclamation has a 10-year agreement with Broadwater County to manage part of the Silos Recreation Area for public recreation. While Reclamation retains primary jurisdiction of the Silos Recreation Area, Broadwater County is authorized to operate and maintain existing facilities, collect user fees, develop new facilities, and develop and operate commercial services in the area covered by the agreement.

Canyon Ferry Reservoir provides water for the Helena Valley west of the reservoir for the primary purposes of supplying irrigation and municipal water for Helena, MT. The Helena Valley Irrigation District is responsible for O&M of the distribution facilities beyond the point of delivery by Reclamation.

Currently two concessions have agreements with Reclamation to operate commercial businesses and to provide recreation opportunities for the public at the reservoir. As described in the Proposed Action, a new concession agreement is proposed at the Goose Bay Marina.

The remaining lands are managed solely by Reclamation and are primarily used for outdoor recreation purposes and open space within the following exceptions:

- Canyon Ferry Dam and Power Plant
- Offices and Buildings associated with management of the reservoir.
- Cabin sites
- Legalized uses that have been granted by Reclamation or managing partners through issuance of use authorizations.

For the most part, the lands under the jurisdiction of Reclamation are surrounded by private lands consisting of residential uses at the north and south ends of the reservoir, primarily farming and ranching on the east and west sides along with a limited number of second home developments. Ultimately, as private land around the reservoir is developed for residential use, the visual character of the landscape will likely change to a landscape more suburban in nature.

The Bureau of Land Management has jurisdiction over lands adjacent to Reclamation lands primarily on the west side of the reservoir and north of Beaver Creek and White Earth Recreation Area. The State of Montana has several parcels of land that border the reservoir area. The U.S. Forest Service manages the nearby Helena National Forest.

3.9.2 Environmental Consequences

3.9.2.1 *No Action Alternative*

The Goose Bay Marina, boat ramp and all public lands behind the entrance sign would be closed through approximately July 2015 to minimize conflicts between recreationists and construction crews. Campers accustomed to using this area will be displaced from this area. The remaining access opportunities provided by Reclamation at Canyon Ferry will remain open and available for public use. The existing opportunities in the surround recreation areas managed by other state and Federal agencies will not be impacted by this action. There will be damage to the existing access road during and after construction due to heavy equipment use.

3.9.2.2 ***Proposed Action Alternative***

The Goose Bay Marina, boat ramp and all public lands behind the entrance sign would be closed through approximately July 2015 to minimize conflicts between recreationists and construction crews. Campers accustomed to using this area will be displaced from this area. The remaining access opportunities provided by Reclamation at Canyon Ferry will remain open and available for public use. The existing opportunities in the surround recreation areas managed by other state and Federal agencies will not be impacted by this action. There will be damage to the existing access road during and after construction due to heavy equipment use.

Construction contracts will require roads be maintained and repaired in similar condition as they exist. Reclamation will work with the County to work toward long-term maintenance of the road into Goose Bay.

3.9.2.3 ***Cumulative Impacts***

No cumulative environmental affects have been identified for either alternative in consideration.

3.10 Heritage Resources

3.10.1 Affected Environment

Both intensive and nonintensive surveys have been conducted at Canyon Ferry Reservoir since the mid-1940s. Most of these surveys were undertaken to comply with one or more of the Federal laws and regulations that direct Federal agencies to manage Heritage resources and consider the effects of certain actions on prehistoric and historic remains.

Pursuant to Federal regulations and laws, detailed information the actual location of heritage resources is not public information. Not all heritage resources receive the same level of protection. Following is a breakdown of how heritage resources are protected (Reclamation, 2009a):

- Sites that are on or have been determined eligible for listing on the *National Register of Historic Places* receive the highest level of protection. Damage to these types of properties must be avoided or mitigated through a formal process.
- Sites that have not had a "determination of eligibility" for the *National Register* require a determination before they can be disturbed by a Federal action.
- Sites that have been determined "not-eligible" for the *National Register* are not considered to be "historic properties" and do not require consideration.

Prior to construction of Canyon Ferry Dam and Reservoir, the River Basin Survey of the Smithsonian Institution conducted heritage work at the reservoir. In addition, the University of Montana and the National Park Service (NPS) conducted reconnaissance level archeological surveys for the proposed location of the reservoir. After the recon surveys, Montana State University tested and/or excavated sites that would eventually be flooded by the reservoir.

During the 1980s, several archeological surveys sponsored by the NPS and Reclamation were conducted at the reservoir. A Class III inventory (intensive) for prehistoric and paleontological resources was conducted pursuant to a contract issued by Reclamation (Greiser, S.T., et al., 1987). Numerous historic, prehistoric, and paleontological sites were recorded around the reservoir, many of which are now inundated. In 1987, a contract issued by Reclamation for analysis of a collection of artifacts from the reservoir revealed that the Missouri River in the area of the reservoir was inhabited or used intermittently for at least 10,000 years (Greiser, S.T., et al., 1987).

Since the 1980s, heritage resource surveys have focused on reservoir lands that would be impacted by recreation use. In 2008, Reclamation contracted with John Brumley for a Class III Survey of White Earth, Hellgate, and Goose Bay Campgrounds. The presence or absence of heritage resources within the area was recorded, if appropriate. If the actions contemplated in this EA have the potential to impact any identified cultural resources, Reclamation will implement the most appropriate protection measure.

3.10.2 Environmental Consequences

3.10.2.1 *No Action Alternative*

This information is currently being discussed between Reclamation Archeologists and the Montana State Historic Preservation Office.

3.10.2.2 *Proposed Action Alternative*

This information is currently being discussed between Reclamation Archeologists and the Montana State Historic Preservation Office.

3.11 Climate Change

Climate change has the potential to affect not only temperatures, but precipitation quantity, and runoff timing, which in turn impacts water storage and water delivery needs. Additionally, the

No Action and Proposed Action Alternative would release carbon dioxide emissions into the atmosphere. A climate change analysis has not yet been completed, but will be available in the Final EA to analyze these effects. It is not anticipated that significant issues will be identified.

Executive Orders

Executive Order 11990 – Protection of Wetlands
Federal agencies shall avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities.

Both the No Action and the Proposed Action are in compliance with the Executive Order.

Executive Order 11988 – Floodplain Management
Federal agencies shall avoid to the extent possible the long and short term adverse impacts associated with the occupancy and modification of floodplains and to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains in carrying out the agency's responsibilities.

Both the No Action and the Proposed Action are in compliance with the Executive Order.

Executive Order 13186 – Protection of Migratory Birds
The United States has ratified international, bilateral conventions for the conservation of migratory birds. These international migratory bird conventions impose substantive obligations on the Unities States for the conservation of migratory birds and their habitats, and through the Migratory Bird Treaty Act (16 U.S.C. 703-711) (Act) will implement these conventions. This Executive Order directs Federal agencies to take certain actions to further implement the Act.

Both the No Action and Proposed Action are in compliance with this executive order.

Executive Order 13007 – Indian Sacred Sites
Federal agencies shall, to the extent practicable, and not clearly inconsistent with essential agency function; accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sacred sites.

Both the No Action and Proposed Action are in compliance with this executive order.

Executive Order 12898 – Environmental Justice
Federal agencies need to ensure their actions do not disproportionately impact minority and disadvantaged populations or communities.

The No Action and Proposed Action would comply with this Executive Order.

4.0 CONSULTATION AND COORDINATION

Discussions with the following have begun to occur or will soon be occurring as Reclamation begins the permitting and approval processes required under law. This chapter will document these discussions as we work to provide responsible recreation development at Goose Bay.

Montana State Historic Preservation Office

United States Fish and Wildlife Service

Montana Fish, Wildlife and Parks

Montana Department of Environmental Quality

Broadwater County Commission

U.S. Army Corps of Engineers

Others as identified

5.0 PUBLIC OUTREACH SUMMARY

- Reclamation initiated a master planning effort in 2008 to assess the public demand and help the agency prepare for the future of the Goose Bay Marina. That effort culminated in the *Draft Goose Bay Master Plan and Financial Feasibility Report* that was released for public comment in Sept. 2009.
- The *Draft Goose Bay Master Plan and Financial Feasibility Report* identified future recreation opportunities, facilities and services that could be provided by Reclamation, a concessionaire, or both, within the Goose Bay Planning Area.
- On Feb. 3, 2009, a scoping letter was mailed to 207 people on the Canyon Ferry Working Group mailing list. The letter announced the planning process, the public meetings, and requested comments during a 60-day comment period. The letter and comment form were also posted on the Reclamation's Canyon Ferry website.
- Public meetings were held on Feb. 18 & 19, 2009, in Townsend and Helena, Mont., to initiate the public comment period and planning process.
- On Oct. 15, 2009, the Draft Recreation Master Plan, EA and public comment form were posted on Reclamation's Canyon Ferry website. A second letter was mailed to the project mailing list; including those who participated in the first public comment period. This mailing initiated a second 60-day public comment period from October 15 through December 15 of 2009.
- On November 4, 2009, an open house meeting was held in Townsend, Mont., to obtain public input on and provide information about the Draft Master Plan, the five Alternatives presented within the Draft Plan and the EA.
- In preparation for issuing a solicitation for a new, long-term concession contract for the future operation of the Goose Bay Marina, Reclamation arranged for a comprehensive compliance review of the facility during calendar year 2010.
- In December 2012 a *Conceptual Project Approach to Schematic Design* was prepared and submitted to Reclamation. The document included three potential approaches to a schematic layout at the site (layouts A, B, and C) with the option to institute a low, medium, or high level of development within any of the three layouts.
- The existing concessionaire contract expired on December 31, 2012, and the existing 31 mobile homes authorized under the concession contract were required to be removed in 2013.
- Public meetings were held on Jan. 30 & 31, 2013, in Townsend and Helena, Mont., to gather comments on the Goose Bay Modernization Plan. Both meetings used a traditional forum method for interacting with the public, which included a formal presentation, visual aids showing site proposals, followed by a Q&A session. Of primary concern at these meetings was the removal of the mobile homes.
- In a written decision issued April 22, 2013, Senior U.S. District Court Judge Charles Lovell affirmed that Goose Bay mobile home owners were in trespass after May 1, 2013.
- On May 17, 2013, Reclamation issued a news release announcing the award of an interim contract to operate Goose Bay Marina through Sept. 30, 2013.
- On June 12, 2013, Reclamation released *Feasibility (30%) Design: Goose Bay Concession Area Modernization Study* for public comment.

- Public meetings were held on June 26, 27 & 28, 2013, in Bozeman, Townsend and Helena, Mont., to gather public comments on Reclamation's 30 percent feasibility study for the Goose Bay Modernization Plan at Canyon Ferry, Mont.
    - In preparation for public meetings, Reclamation engaged in a comprehensive public outreach effort to refocus attention on the Goose Bay Modernization Plan Study. News releases & PSA's were issued to more than 200 media outlets the week prior to the meeting, and more than 100 personal contacts via phone were made with private individuals, special interest groups, Congressional staffers and media outlets.
    - Reclamation was active on social media, including the national website, Facebook and twitter.
    - These meetings were conducted in an open house format, with separate stations staffed by subject-matter experts in NEPA and Recreation Planning, as well as the Montana Area Manager, Canyon Ferry Assistant Manager and Regional public affairs staff.
    - The primary goal of these meetings was to direct the public's attention to the modernization plan, and gather comments to aid Reclamation planners as they move forward.
    - Discussion was favorable in regards to the planning, construction and modernization of Goose Bay.
    - Primary areas of concern appeared to be interim seasonal camping and the closure of the boat ramp. At the Bozeman meeting, Reclamation offered to schedule a separate public meeting to specifically discuss these issues with the "Save Goose Bay Marina" representatives. Other comments included:
        - Goose Bay is a very important location for many short term and seasonal campers.
        - A great interest was shown in keeping the boat ramp open and allowing some seasonal camping in or near Goose Bay.
        - Concern was expressed with the use of 20 x 60' back-in spurs being too small to handle a camper, a truck, a boat and an RV, which is what many of the seasonal campers typically have onsite.
        - Concerns were expressed with having items stolen from boats left in dock slips overnight.
        - There was general interest in improving the area, but many were interested in keeping the rustic feel of the area.
        - Accessible parking, restrooms, walkways and docks were of interest to many parties.
        - Concerns that the area would be closed for more than one season.
    - A "trap-line" was also conducted while on site at Canyon Ferry. Reclamation staff drove to businesses, campgrounds and other areas around Canyon Ferry Reservoir, including Kim's Marina, Yacht Basin and Goose Bay Marina. The purpose was to ensure an awareness of the public meetings, and answer questions or respond to concerns.
- The June 26-28, 2013, public meetings generated significant positive media coverage from a variety of outlets.

- A feature length article appeared in the Helena Independent Record on Jun. 20, *Latest Plan for Goose Bay marina unveiled*, which was later posted to the wire and carried by other major outlets in the state including the Billings Gazette (Jun. 21).
- PSA's were run by radio stations in major target markets, including Billings, Bozeman, Helena and Butte.
- All four of the primary targeted daily newspapers – Butte Standard, Bozeman Chronicle, Helena IR and Great Falls Tribune, ran at least one story prior to the public meetings.
- Three on-camera interviews were conducted on June 27 and June 28. Including an on-site interview at the Canyon Ferry Field Office by Beartooth NBC, Helena.
- One on-air radio interview was conducted on June 25 with KZVK "The Eagle" in Bozeman.

- The Goose Bay website proved a useful tool. After the initial news release was distributed on June 14, unique hits on the website increased substantially, ending the month of June with 453 visitors to the main page, and 67 visitors to the comment page.

  Comparably, the website received 189 visits the previous month (May 2013).

  The site was used and referred to extensively by both media and members of the public as a useful resource for information on the Goose Bay Marina Modernization Plan.

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Appendix A: Existing Conditions at Goose Bay Marina, June 2013.

FIGURE 1: PHOTOGRAPH LOOKING EAST ACROSS THE EXISTING BOAT RAMP IN JUNE 2013.

FIGURE 2: PHOTOGRAPH SHOWING TYPICAL CONDITIONS OF MOBILE HOME LOCATIONS FOLLOWING REMOVAL IN MAY AND JUNE 2013.

FIGURE 3: PHOTOGRAPH OF GOOSE BAY MARINA CONCESSION BUILDING IN JUNE 2013.

FIGURE 4: PHOTOGRAPH OF SHOWER FACILITY PROVIDED BY GOOSE BAY MARINA.

FIGURE 5: PHOTOGRAPH OF WATER-SIDE FUELING STATION PROVIDED BY GOOSE BAY MARINA IN JUNE 2013.

FIGURE 6: JUNE 2013 PHOTOGRAPH SHOWING CONDITIONS OF UNSAFE SHORELINE ACCESS STAIRS REQUIRING REPLACEMENT.

FIGURE 7: PHOTOGRAPH OF EXISTING BOAT DOCKS SHOWING AGING, UNSAFE AND POORLY MAINTAINED CONDITIONS IN JUNE 2013.

FIGURE 8: PHOTOGRAPH SHOWING NEWER DOCKS MANAGED BY GOOSE BAY MARINA AND ACCESS STAIRS REQUIRING REPLACEMENT.

FIGURE 9: PHOTOGRAPH SHOWING STORAGE AREA ON EASTERN SIDE OF GOOSE BAY IN JUNE 2013.

FIGURE 10: PHOTOGRAPH SHOWING STORAGE AREA ON EASTERN SIDE OF GOOSE BAY IN JUNE 2013.

CONTROL POINTS				
CP#	NORTH	EAST	ELEV.	DESCRIPTION
GBM1	42868.18	50350.40	3929.50	BRONZE CAP
GBM2	43909.09	52678.02	3864.46	ALUM CAP

PRIVATE PROPERTY

GBM2
3864.46

A CX.X GOOSE BAY ENTRANCE SIGN

BEGIN ROAD CONSTRUCTION

SHORT TERM STORAGE [23 SPACES] A CX.X

EAST CAMPGROUND
FULL SERVICES [45 SITES]

ROAD WIDENING FOR FUTURE BOAT INSPECTION AREA

PRIVATE PROPERTY

2–LANE DUMP STATION AND WATER FILL STATION A CX.X

GBM1
3929.50

2007 SURVEY

DISPERSED CAMPING AREA

WALK–IN TENT CAMPING
[6 SITES]

CENTRAL CAMPGROUND
ELEC ONLY SERVICES [30 SITES]

FUTURE FISH CLEANING STATION

WEST CAMPGROUND
NO SERVICES [20 SITES]

ACCESSIBLE GANGWAY TO CONCESSIONAIRE PROVIDED DOCKS, SEE STRUCTURAL DRAWINGS

ACCESSIBLE SHORELINE TRAIL WITH OVERLOOKS

STAIRS AND GANGWAY TO CONCESSIONAIRE PROVIDED DOCKS, SEE STRUCTURAL DRAWINGS

DAY USE AREA

CENTRAL HUB
- STORE
- FLUSH TOILETS
- FEE–BASED SHOWERS
- SELF–SERVICE FEE STATION WITH KIOSK
- FUEL STATION [FUTURE]

EXISTING BOAT RAMP WITH CONCESSIONAIRE PROVIDED LOADING DOCK

GOOSE BAY

GENERAL NOTES

1. NO ACTUAL STRIPING IN PARKING AREAS, JUST SHOWN TO DESIGNATE PARKING SPACES.
2. PICNIC TABLES SHOWN ON ALL PLANS BUT WILL BE PROVIDED BY CONCESSIONAIRE.

150 0 150 300
SCALE OF FEET

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GOOSE BAY MARINA CONCESSION AREA MODERNIZATION
CANYON FERRY FIELD OFFICE, MONTANA

60% DESIGN SUBMITTAL

SITE PLANS

DESIGNED	J.KEHM
DRAWN	J.KEHM
CHECKED	
TECH. APPR. ???	
APPROVED ??? ???	
BILLINGS, MONTANA	SEPTEMBER 2013

OVERALL SITE DEVELOPMENT PLAN
C1.0

296–600–000

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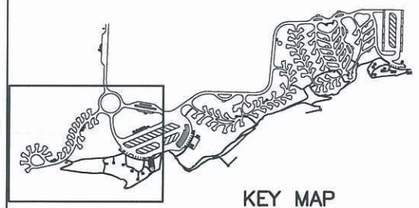

KEY MAP

GENERAL NOTES

1. FOR UTILITY SITE PLANS SEE SHEETS U1.0 TO U2.3.
2. PLANTED TREES ARE A MIX OF CONIFER AND DECIDUOUS.
3. PICNIC TABLES ARE SHOWN ON ALL PLANS BUT PROVIDED BY CONCESSIONAIRE.

PRIVATE PROPERTY

2'–4' BARRIER ROCKS, TYP.

PLANTED TREE, TYP.

DISPERSED CAMPING AREA

2007 SURVEY

A CX.X ACCESSIBLE 20' WIDE BACK–IN SPUR

A CX.X 20' WIDE BACK–IN SPUR, TYP.

TWO WAY ROAD

ONE WAY ROAD

TWO WAY ROAD

W1 W2 W3 W4 W5 W6 W7 W8 W9 W10 W11 W12 W13 W14 W15 W16 W17 W18 W19 W20

DOUBLE VAULT TOILET, TYP.

AGGREGATE USE PAD WITH PICNIC TABLE AND FIRE RING, TYP.

A CX.X TIMBER EDGED 18'x26' COMPACTED CRUSHER FINES PICNIC USE PAD WITH SHELTER, TYP.

AGGREGATE ROAD, TYP.

ONE WAY LOOP

A CX.X COVERED GROUP CAMPSITE PAVILION WITH PEDESTAL GRILLS, UTILITY TABLE, AND PICNIC TABLES

A CX.X DUMPSTER AREA WITH 8'x8' PAD, TYP.

ACCESSIBLE 20' WIDE BACK–IN SPUR

TIMBER EDGED COMPACTED CRUSHER FINES SHORELINE TRAIL, TYP.

DAY USE AREA
SEE SHEET C1.2

EXISTING TREES, TYP.

A CX.X TIMBER EDGED 15'x18' COMPACTED CRUSHER FINES PICNIC USE PAD, TYP.

WEST CAMPGROUND
NO SERVICES [20 SITES]

A CX.X SITE ENTRANCE SIGN

BEGIN ROAD CONSTRUCTION, WIDEN TO 24'

PRIVATE PROPERTY

AGGREGATE ROAD, TYP.

ROAD WIDENING FOR FUTURE BOAT INSPECTION AREA

TWO WAY ROAD

ENTRANCE PULLOFF
FUTURE BOAT INSPECTION

50 0 50 100
SCALE OF FEET

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CANYON FERRY FIELD OFFICE, MONTANA

60% DESIGN SUBMITTAL

SITE PLANS

DESIGNED	J.KEHM, A.BUENO
DRAWN	J.KEHM
CHECKED	
TECH. APPR.	???
APPROVED	??? ???
BILLINGS, MONTANA	SEPTEMBER 2013

WEST CAMPGROUND AND ENTRANCE SITE PLAN
C1.1

296–600–000

SHEET X OF XX

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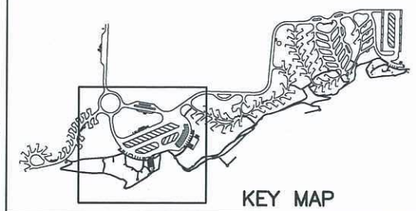

KEY MAP

PLANTED TREE, TYP.

2-LANE RV DUMP STATION AND WATER FILL

A CX.X

6" CONCRETE CURB ISLAND, TYP.

TO CAMPGROUNDS

TWO WAY ROAD

ONE WAY ROAD

CENTRAL CAMPGROUND
SEE SHEET C1.3

CONCRETE WALK

FUTURE FISH CLEANING STATION

DUMPSTER AREA

PARKING AREA WITH WHEELSTOPS, 5 SPACES

DOUBLE VAULT TOILET, TYP.

POLE LIGHT, TYP. SEE ELECTRICAL SHEETS

AGGREGATE ROAD, TYP.

A CX.X 6" HIGH CONCRETE CURB ISLAND, TYP.

BOAT PARKING AREA

A CX.X 6" CONCRETE CURB WITH CUT-OUTS AND DEPRESSED PLANTING AREA

DAY USE PARKING, 15 SPACES

5' WIDE CONCRETE PATH, TYP.

A CX.X 15'x18' TIMBER EDGE COMPACTED CRUSHER FINES PICNIC PAD WITH SHELTER, TYP.

CENTRAL HUB AREA
SEE SHEET C1.5

CONCRETE WALK AND CONCRETE CURB

DAYUSE AREA
PICNIC PADS AND SHELTERS

TIMBER EDGED COMPACTED CRUSHER FINE PATH, TYP.

A CX.X CONCRETE ACCESSIBLE PARKING STALLS, TYP.

EXISTING BOAT RAMP WITH CONCESSIONAIRE PROVIDED LOADING DOCK

LARGE GROUP PAVILION WITH 30'x64' SHELTER [OPTION #2] A CX.X

WOOD BENCH, TYP. A CX.X

TIMBER EDGE COMPACTED CRUSHER FINES SHORELINE TRAIL

GOOSE BAY

50 0 50 100
SCALE OF FEET

GENERAL NOTES

1. FOR UTILITY SITE PLANS SEE SHEETS U1.0 TO U2.3.
2. PLANTED TREES ARE A MIX OF CONIFER AND DECIDUOUS.
3. PICNIC TABLES SHOWN ON ALL PLANS, BUT PROVIDED BY CONCESSIONAIRE.
4. NO ACTUAL STRIPING IN ALL PARKING CONFIGURATIONS, JUST SHOWN TO INDICATE SPACES AND PARKING ANGLES

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60% DESIGN SUBMITTAL

SITE PLANS

DESIGNED	J.KEHM, A.BUENO
DRAWN	J.KEHM
CHECKED	
TECH. APPR. ???	
APPROVED ??? ???	
BILLINGS, MONTANA	SEPTEMBER 2013

DAY USE AREA
SITE PLAN
C1.2

296-600-000

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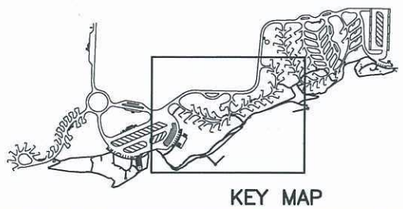

KEY MAP

PRIVATE PROPERTY

EAST CAMPGROUND
SEE SHEET C1.4

PLANTED TREE, TYP.

A CX.X 20' ACCESSIBLE CONCRETE CAMPSITE

20' ACCESSIBLE CONCRETE CAMPSITE

A CX.X 20' WIDE PULL-THRU CAMPSITE

SHARED BUDDY SITE WITH (2) PICNIC TABLES A CX.X

DOUBLE VAULT TOILET, TYP.

AGGREGATE ROAD, TYP.

TWO WAY ROAD

CENTRAL CAMPGROUND
ELECTRICAL ONLY SERVICES [30 SITES]

UTILITY STRIP WITH ELECTRIC PEDESTAL AND BOLLARD, TYP.

GROUP CAMPSITE PAVILION

A CX.X

ONE WAY ROAD

ONE WAY ROAD

AGGREGATE USE PAD WITH PICNIC TABLE AND FIRE RING, TYP.

ACCESSIBLE 18'x26' CONCRETE PICNIC PAD WITH SHELTER, TYP. A CX.X

20' WIDE BACK-IN SPUR, TYP.

DUMPSTER AREA WITH 8'x8' CONCRETE PAD, TYP.

EXISTING TREES, TYP.

RESIDENCE/HOST SITE WITH FULL HOOKUPS

5' WIDE CRUSHER FINES PATH, TYP.

ACCESSIBLE CONCRETE SHORELINE TRAIL ABOVE HIGH WATER ELEVATION

20' ACCESSIBLE CONCRETE CAMPSITE

GROUP PAVILION WITH 48" FIRERING AND 30'x34' SHELTER [OPTION #1] A CX.X

CENTRAL HUB AREA
SEE SHEET C1.5

15'x18' TIMBER EDGED PICNIC PAD WITH COMPACTED CRUSHER FINES, TYP.

GENERAL NOTES

1. FOR UTILITY SITE PLANS SEE SHEETS U1.0 TO U2.3.
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4. NO ACTUAL STRIPING IN ALL PARKING CONFIGURATIONS, JUST SHOWN TO INDICATE SPACES AND PARKING ANGLES

50 0 50 100
SCALE OF FEET

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SITE PLANS

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DRAWN	J.KEHM
CHECKED	
TECH. APPR.	???
APPROVED	??? ???
BILLINGS, MONTANA	SEPTEMBER 2013

CENTRAL CAMPGROUND
SITE PLAN
C1.3

296-600-000

SHEET X OF XX

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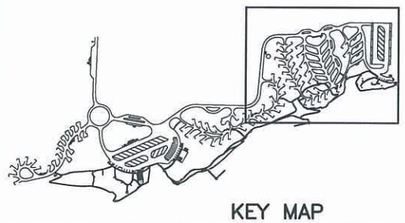

KEY MAP

A CX.X 20' WIDE PULL-THRU CAMPSITE, TYP.

A CX.X DUMPSTER AREA, TYP.

24' WIDE AGGREGATE ROAD, TYP.

UTILITY STRIP WITH SEWER CONNECTION, ELECTRIC PEDESTAL, AND WATER HYDRANT, TYP.

PLANTED TREE, TYP.

TWO WAY ROAD

DOUBLE VAULT TOILET, TYP.

20' ACCESSIBLE CONCRETE CAMPSITE

A CX.X

GROUP CAMPSITE PAVILION

ONE WAY TYP.

PRIVATE PROPERTY

5' WIDE COMPACTED CRUSHER FINES PATH, TYP.

EAST CAMPGROUND
FULL SERVICES [45 SITES]

ONE WAY ROAD

SHORT TERM STORAGE
SEE SHEET C1.6

20' WIDE BACK-IN SPUR, TYP.

EXISTING TREES, TYP.

20' WIDE PULL-THRU CAMPSITE, TYP.

WALK-IN TENT CAMPSITES
SEE SHEET C1.6

20' ACCESSIBLE CONCRETE CAMPSITE

EAST DOCK MAINTENANCE ACCESS ROAD WITH 24' GATE

18'x26' ACCESSIBLE CONCRETE PICNIC SITE WITH SHELTER, TYP.

A CX.X

AGGREGATE USE PAD WITH PICNIC TABLE AND FIRE RING, TYP.

A CX.X

CENTRAL CAMPGROUND
SEE SHEET C1.3

ACCESSIBLE CONCRETE PARKING STALLS WITH WHEEL STOPS

SATELLITE HOST SITE WITH ADDITIONAL PARKING AREA

5' WIDE ACCESSIBLE CONCRETE SHORELINE TRAIL

GENERAL NOTES

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SCALE OF FEET

DATE AND TIME PLOTTED
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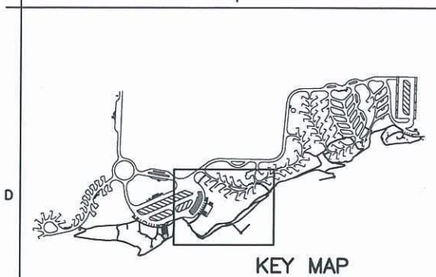
CANYON FERRY FIELD OFFICE, MONTANA
60% DESIGN SUBMITTAL
SITE PLANS

DESIGNED	J.KEHM, A.BUENO
DRAWN	J.KEHM
CHECKED	
TECH. APPR.	???
APPROVED	??? ???
BILLINGS, MONTANA	SEPTEMBER 2013

EAST CAMPGROUND
SITE PLAN
C1.4

296-600-000

SHEET X OF XX



KEY MAP

PLANTED VEGETATION, TYP.

FUTURE FUEL STATION

A CX.X 6" HIGH CONCRETE CURB WITH CUT-OUTS, TYP.

CAMPGROUND CHECK-IN PARKING ONLY SIGN, TYP. [2 TOTAL]

CHECK-IN RV PARKING LANE

POLE LIGHT, TYP SEE ELECTRICAL SHEETS

PARKING WITH WHEEL STOPS [15 SPACES]

CONCRETE WALK

ACCESSIBLE PARKING SIGN [2 TOTAL]

FLAGPOLE

STORE

FEE TUBE AND SINGLE PANEL BULLETIN BOARD

A CX.X

CONCRETE PLAZA

FLUSH TOILET AND FEE BASED SHOWER

CENTRAL CAMPGROUND
SEE SHEET C1.3

5' WIDE COMPACTED CRUSHER FINES TRAIL, TYP.

EXISTING TREES, TYP.

DAYUSE PAVILION ON CONCRETE PAD WITH 30'x34' SHELTER AND GROUP FIRERING [OPTION #1] A CX.X

15'x18' TIMBER EDGED PICNIC PAD WITH COMPACTED CRUSHER FINES, TYP. A CX.X

CENTRAL HUB
- STORE
- FLUSH TOILETS
- FEE-BASED SHOWERS
- SELF-SERVICE FEE STATION
- FUTURE FUEL STATION

A CX.X 8' WOOD BENCH, TYP.

A CX.X 15'x18 TIMBER EDGED COMPACTED CRUSHER FINES PICNIC PAD WITH SHELTER, TYP.

STAIRS AND GANGWAY TO CONCESSIONAIRE PROVIDED DOCKS, SEE STRUCTURE SHEETS

EXISTING BOAT RAMP WITH CONCESSIONAIRE PROVIDED LOADING DOCK

5' WIDE ACCESSIBLE CONCRETE SHORELINE TRAIL

GENERAL NOTES

1. FOR UTILITY SITE PLANS SEE SHEETS U1.0 TO U2.3.
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30 0 30 60
SCALE OF FEET

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60% DESIGN SUBMITTAL
SITE PLANS

DESIGNED	J.KEHM, A.BUENO
DRAWN	J.KEHM
CHECKED	
TECH. APPR.	???
APPROVED	??? ???
	BILLINGS, MONTANA SEPTEMBER 2013

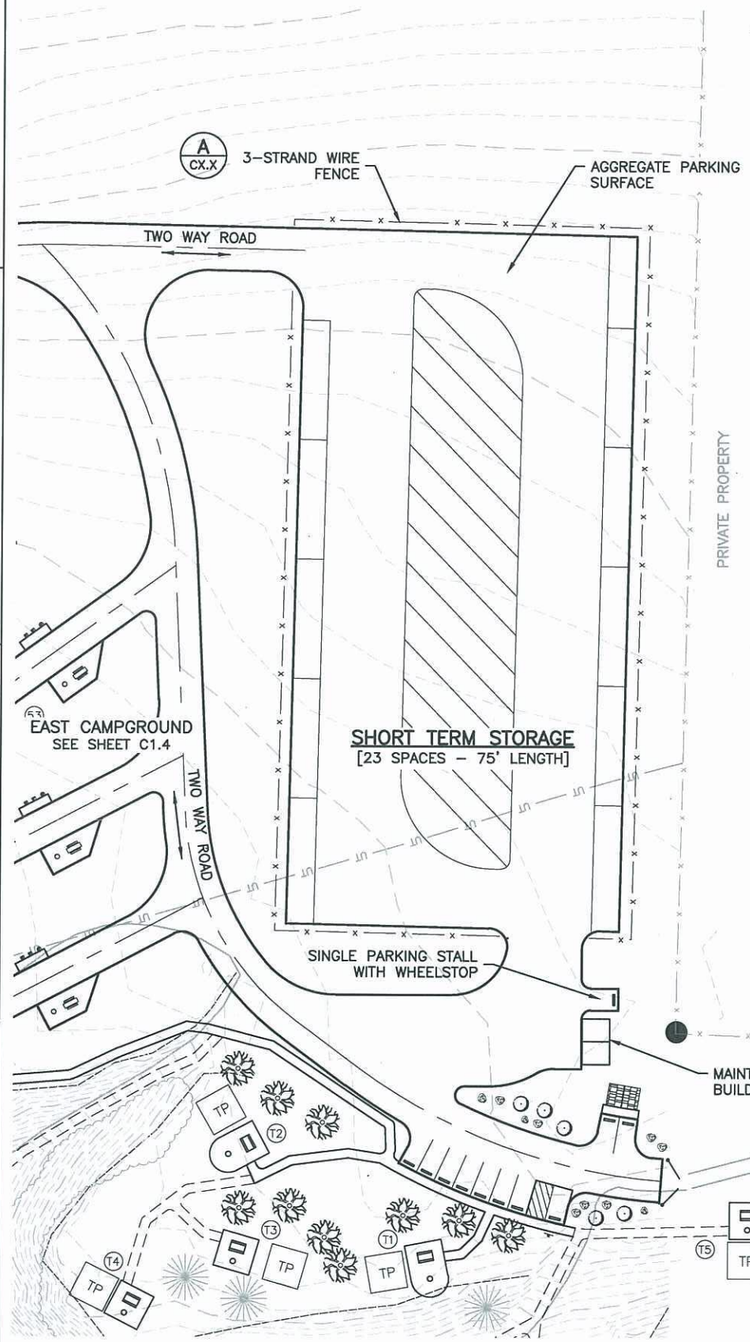
CENTRAL HUB SERVICES
SITE PLAN
C1.5

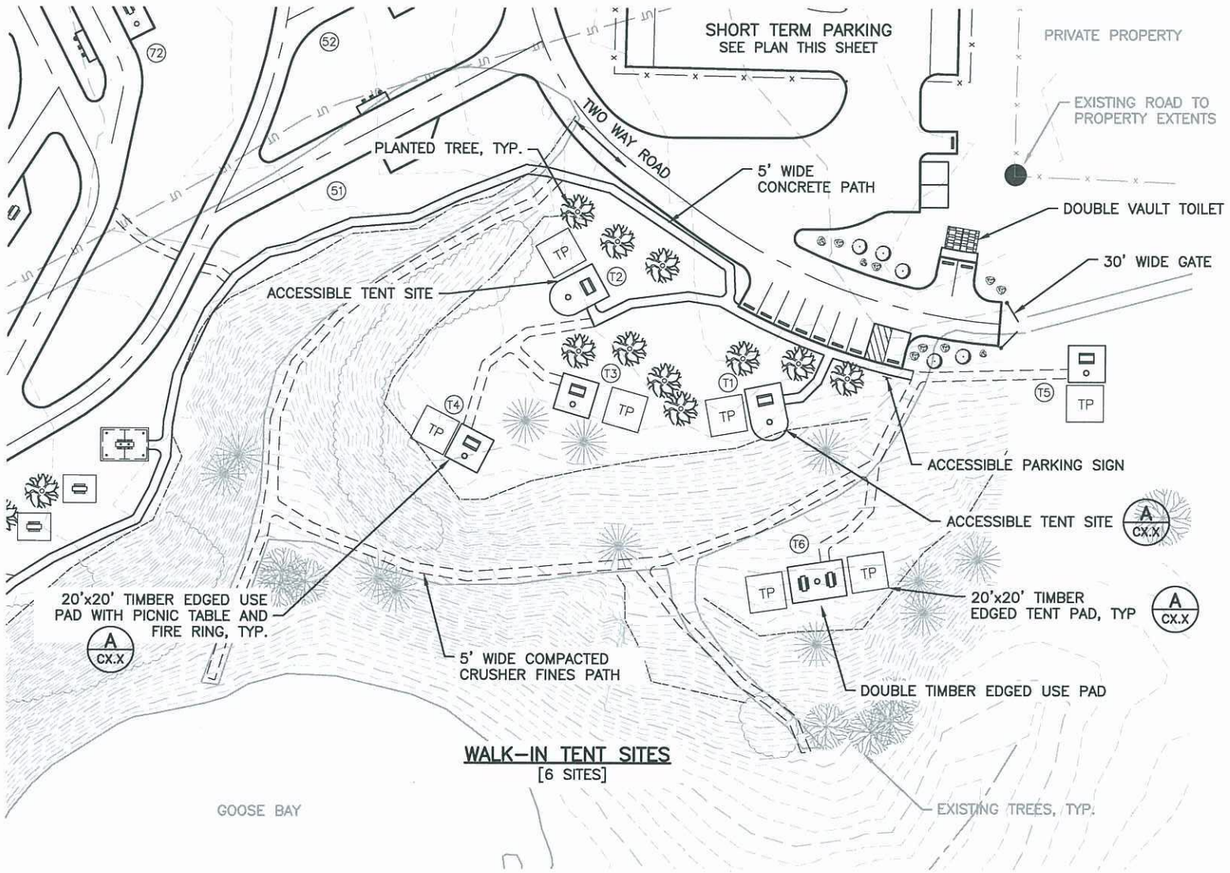
296-600-000

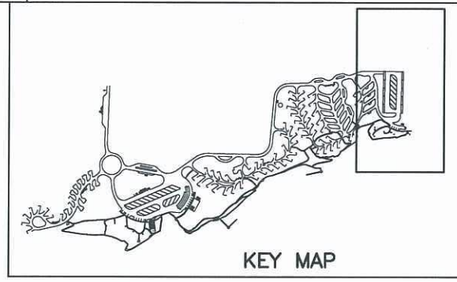
SHEET X OF XX

DATE AND TIME PLOTTED
Mar 28, 2014
PLOTTED BY
Not Plotted

CAD SYSTEM
AUTOCAD
CAD FILENAME
UNKNOWN







GENERAL NOTES

1. FOR UTILITY PLANS SEE SHEETS U1.0 TO U2.3.
2. NO ACTUAL STRIPING IN ALL PARKING CONFIGURATIONS, JUST SHOWN TO INDICATE SPACES AND PARKING ANGLES.
3. PLANTED TREES ARE A MIX OF CONIFERS AND DECIDUOUS.
4. PICNIC TABLE SHOWN ON ALL PLANS, BUT PROVIDED BY CONCESSIONAIRE.

40 0 40 80
SCALE OF FEET

RECLAMATION
Managing Water in the West

ALWAYS THINK SAFETY

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION

GOOSE BAY MARINA CONCESSION AREA MODERNIZATION
CANYON FERRY FIELD OFFICE, MONTANA
60% DESIGN SUBMITTAL
SITE PLANS

DESIGNED	J.KEHM, A.BUENO
DRAWN	J.KEHM
CHECKED	
TECH. APPR.	???
APPROVED	??? ???
BILLINGS, MONTANA	SEPTEMBER 2013

BOAT STORAGE AREA & WALK-IN TENT SITES PLAN
C1.6

296-600-000

SHEET X OF XX

DATE AND TIME PLOTTED: Not Plotted
PLOTTED BY: Not Plotted
CAD SYSTEM: AUTOCAD
CAD FILENAME: UNKNOWN