Appendix A1: Site Inventories

The following table provides an inventory of the facilities and opportunities available at public recreation sites in the Missouri-Madison Corridor. Items in **bold text** represent sites where recreation projects were proposed or completed during the first five years of the license (2000-2005) as detailed in Appendix A2.

	Heb	gen-	Madi	ison]	Regi	on															
Recreation Site	Motor Boat Launch	ıch	Boat Dock(s)	Platform		Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Bakers Hole Campground				X	, ,	X				72		X	X		X	X	X	X	_		
Bear Trap Canyon Road and Trailhead								X							X		X	X			
Beaver Creek Campground						X				63		X			X	X	X	X			
Beaver Creek Wildlife Viewing Area																X					
Blackbird FAS																		X			ID signs
Black's Ford FAS	X					X									X	X	X	X			Wind/ privacy screens
Burnt Tree Hole FAS	X					X									X			X			ID signs
Cabin Creek Campground and Trailhead						X		X		15		X			X	X	X	X			

	Heb	gen-	Madi	son]	Regi	on (co	ontir	nued)												
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Cabin Creek Interpretive Site						X		X								X					
California Corner		X																X			
Canaday Boat Launch		X				X									X	X	X	X			
Cherry Creek Campground						X			7						X		X				
Clute's Landing	X								2						X	X	X	X			
Cobblestone FAS						X		X							X		X	X			Bridge over slough
County Road Dispersed Use									8						X	X					
Damselfy FAS	X					X									X		X	X			
Eagle's Nest Day Use Area						X									X		X	X			
Earthquake Lake Boat Launch Earthquake Lake Interpretive Site - Quake Lake	X															X		X			
Earthquake Lake Visitor Center						X		X				X		X	X	X	X	X	X		

	Heb	gen-	-Mad	lison	Reg	ion (conti	nued	l)												
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Eight Mile Ford FAS	X					X									X	X		X			
Ennis FAS	X					X		X		18					X	X	X	X			Camping fee station
Fall Creek Access Site (Interpretive Area)						X									X	X	X	X			
Fisherman's Point				X		X		X							X		X	X			
Ghost Village Area						X		X							X	X		X			
Grey Cliff FAS	X					X				12					X		X	X			Fee station
Headwaters Trail System						X	X	X							X	X	X			X	Benches, ADA parking.
Hebgen Dam Day Use Area				X		X									X	X	X				Parking area
Horse Butte Lookout Picnic Site						X									X						
Kirby Day Use Site						X									X		X				
Kirkwood Picnic Site						X												X			
Kirkwood Trailhead								X									X				
Kobayashi Beach	X		X			X									X		X	X		X	
Lonesomehurst Boat Launch and Campground	X		X			X				26		X	X		X		X	X			

	Hel	bgen	-Ma	diso	n Re	gion	ı (coı	ntinu	ıed)												
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Lyon's Bridge FAS	X														X	X	X	X			
Madison River Campground						X				10		X			X	X	X				
Madison River Picnic Site						X												X			
Madison Slide Interpretive Site						X		X							X	X	X	X			
McAtee Bridge FAS	X					X									X			X			ID signs
Meadow Lake FAS						X				10					X		X	X			ID signs, (1) ADA-compliant camp pad
Milwaukee FAS	X							X							X		X	X			
Missouri Headwaters State Park	X					X		X		17		X		X	X	X	X	X	X		
Palisades Campground						X		X		10		X			X		X	X			
Palisades Day Use & Boat Launch	X					X						X			X			X			
Rainbow Point Boat Launch and Campground	X		X			X				85		X	X		X		X	X			
Raynold's Pass FAS	X					X			6						X	X	X	X			
Raynold's Rest Area						X	X					X			X		X				
Red Mountain Campground						X				19		X			X		X	X			

	Heb	ogen.	-Mad	ison	Reg	ion (c	conti	nued	l)												
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Refuge Point Interpretive Site								X								X					
Riverview Campground						X				22		X			X	X	X	X			
Ruby Creek Campground & Boat Launch	X					X				22		X			X		X	X			
Rumbaugh Ridge									5												
Spring Creek Campground						X			10						X		X	X			
Storey Ditch Boat Launch	X					X									X			X			
The Lake That Tilted								X								X		X			
Three Dollar Bridge FAS																					
Trapper Springs Campground and Day Use Area						X		X		15		X			X		X	X			
Upper Bear Trap Canyon				X		X		X							X			X			
Valley Garden FAS	X					X		X		8					X	X	X	X			Camping fee station
Varney Bridge FAS	X					X			6						X		X	X			Camping fee station
Warm Springs Creek Access	X	X													X		X	X			
West Fork Campground						X				7		X			X		X	X			

	Hel	ogen-	-Mad	lison	Regi	ion (e	conti	nued)													
Recreation Site	Motor Boat Launch		Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs		Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas	
Wilderness Boat Launch		X													X		X					
Windy Point Boat Launch	X					X									X			X				
Yellowstone Holiday Picnic Site						X												X				

	Hai	user-	Holt	er Ro	egion																
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Beartooth Landing Campground			X					X		8					X	X					Courtesy dock no tables
Beaver Creek Access Site								X							X	X	X				,
Black Sandy State Park	X		X			X		X	5	29		X	X	X	X	X	X	X		X	
Causeway Fishing Pier		X		X		X									X		X	X			
Clark's Bay Day Use Area	X					X	X	X				X			X	X	X	X		X	Volleyball, asphalt road & parking
Coulter Campground			X			X		X		5		X			X	X	X	X			
Departure Point Recreation Area						X	X	X		4		X			X		X	X		X	Paved roads & parking
Devil's Elbow Campground	X		X	X	X	X	X	X		48		X			X	X	X	X		X	Public tel., admin house & garage, off-site RV dump.
Fairweather FAS	X					X			4						X		X	X			
French Bar																					no facilities; walk/boat in access only
Hauser Dam Access Site		X													X	X	X	X			

	Hau	ıser-l	Holte	r Re	gion	(cont	inueo	d)													
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Holter Dam Campground and					[92		#		J									_	7
Portage Holter Lake Campground	X		X	X	X	X	X	X		18 52		X			X X	X	X	X		X	Public phone
Lake Helena FAS	X														X		X	X			
Lake Helena Wildlife Management Area		X															X	X			
Log Gulch Campground	X		X	X	X	X	X	X		75		X			X	X	X	X		X	
Meriwether Picnic Area			X			X	X	X							X	X		X			Due to fire in 2007, there is no longer a swimming area
Riverside Campground	X		X	X		X	X			35		X			X		X	X			
Spokane Bay			X			X		X	6						X		X	X			
Two Camps Vista							X	X												X	Asphalt parking area, concrete sidewalks through display area.
Ward Ranch Trailhead								X									X	X			there are not any designated camping units
White Sandy Beach	X				X	X	X	X		34		X			X	X	X	X		X	
York Bridge FAS	X		X			X									X	X	X	X			

	Gre	eat F	alls F	Regio	n																
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Big Bend FAS	X														X			X			
Black Eagle Memorial Island		X				X	X	X							X	X	X	X			
Black Eagle Overlook																					
Bull Pasture FAS															X			X			
Broadwater Bay, Oddfellows Park, and Portage Service Signage	X	X	X			X	X					X		X		X	X				Play equipment, basketball court
Carter Ferry FAS	X					X									X			X			
Cottonwood Grove FAS		X													X			X			
Craig FAS	X					X				11					X		X	X			
Dearborn Boat Launch	X																				
Dearborn FAS		X				X				1					X	X	X	X			
Devil's Kitchen FAS	X																				
Dunes FAS		X													X		X	X			

	Gre	at F	alls R	Regio	n (co	ntin	ued)														
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Fort Benton Motorboat Launch	X		X	X					4							X		X			
Fort Benton Canoe Launch and Campground	Λ	X	Λ	Λ		X			20	9	X	X	X	X	X	Λ		X			
Giant Springs State Park				X		X	X	X				X		X	X	X	X	X			
Hardy Bridge FAS						X											X	X			
Historic Train Exhibit						X		X							X	X	X		X		Deck
Lewis & Clark Heritage Greenway Cons. Ease.								X									X	X			
Lewis & Clark Interpretive Center								X				X		X		X		X	X		
Little Muddy FAS															X			X			
Lone Tree FAS								X							X			X			
Lower Smith River FAS																					
Mid-Canon FAS	X					X				7					X			X			
Morony Dam Public Access		X				X									X			X			
Mountain Palace FAS	X					X				3					X			X			
North Park Access Site	X					X		X							X	X	X	X			

	Gre	eat F	alls R	Regio	n (co	ontin	ued)														
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Old Fort Park						X	X				X	X		X		X				X	Pool, tennis courts, horseshoes, volleyball, playground, fort restoration, gazebo
Pelican Point FAS	X					X				2					X			X			
Prewett Creek FAS	X					X				7					X	X		X			
Rainbow Reservoir Boat Launch	X					X									X	X	X	X			
Rainbow Trailhead						X		X							X	X	X	X			
River's Edge Trail						X	X	X				X			X	X	X	X	X		Telescope
Ryan Island Day Use Area						X	X	X							X	X		X	X		Event facility.
Ryan Trailhead								X							X		X	X			
Rainbow and Lewis & Clark Overlooks						X	X	X							X	X	X	X	X		
Spite Hill FAS	X					X				1					X	X	X	X			
Stickney Creek FAS	X					X				5					X		X	X			

	Gre	eat F	alls R	Regio	n (co	ntin	ued)														
Recreation Site	Motor Boat Launch	Carry-In Boat Launch	Boat Dock(s)	Fishing Pier/Platform	Fish Cleaning Station	Picnic Tables/grills	Shelters	Recreation Trails	# Dispersed-Campsites	# Developed-Campsites	Showers	Drinking Water	RV Hookups	Flush-Toilet	Vault-Toilet	Interpretive Signs	Bulletin Board/Kiosk	Regulatory Signs	Overlook	Designated Swim Area	Active Recreation Areas
Sulfur Spring Trailhead	I						<u> </u>	X	7	75-	J				X	X	X	X			
Ulm Bridge FAS	X														X			X			
West Bank Park		X				X	X	X							X	X					Handicap Canoe Launch
White Bear Island FAS															X			X			
Widow Coulee FAS	X														X			X			
Wing Dam FAS																					
Wolf Creek Bridge FAS	X					X				5					X	X	X	X			Bench

Appendix A2: Project 2188 License Recreation Improvements

The following is a description of Project 2188 License recreation improvements with photo inventory and site map atlas. It contains information on recreation projects that have been completed or are planned as part of the Comprehensive Recreation Plan, Under Article 426, as approved by FERC on June 11, 2002 ("Approved CRP" or "1996 Plan" in other areas of the updated Plan). Some recreation projects were completed prior to issuance of the 2188 License in September 2000 based on agreement between the Licensee and agencies. Other projects were initiated following issuance of the License. The recreation projects are part of a consensus plan for development of recreation resources in the 2188 Project area.

Site names and descriptions throughout this inventory may vary somewhat from those shown in the Approved CRP, though project locations and completed improvements have not changed from those proposed, except as otherwise noted. Current site names are used.

Site maps included for each site identify both Project and Non-Project Recreation Amenities. Project Recreation Amenities refer to those improvements provided for in the Approved CRP. Non-Project Recreation Amenities are additional site amenities.

Information and Education Plan

Some components of the recreation plan are system wide. These include periodic visitor studies, surveys of recreation site managers, and the Information and Education (I&E) Plan. The I&E Plan was cooperatively designed and implemented as the recreation sites were completed. Through December 2016, all except two projects identified in the Approved CRP have been completed.

Calculation of Project Costs

All recreation project costs associated with design, construction or operation and maintenance of projects listed in Volume 6 of the Approved CRP were established in November 1992 dollars. The Licensee, NorthWestern Energy, calculates funding amounts for construction projects and ongoing operation and maintenance funds in subsequent years by annually adjusting the 1992 amounts by the Consumer Price Index for All Urban Consumers (CPI-U). All relevant Licensee/Agency cooperative management agreements also refer to the November 1992 base dollar amounts adjusted annually by the CPI-U to calculate current and on-going contributions by the Licensee to ensure adequate funding for the recreation projects for the term of the license. The 2016 O&M funding amounts are provided throughout the appendix. These amounts have been adjusted by the CPI-U from the November 1992 base.

Inventory of Project 2188 License Recreation Improvements

<u>Hebgen Development</u>	
Fisherman's Point	
Lonesomehurst Boat Ramp and Dock	
Rainbow Point Boat Ramp and Dock	
Hebgen RV Dump Station	
Hebgen Dam Day Use Area	
Lyon's Bridge Fishing Access Site	14
Madison Development	
Clute's Landing	19
Meadow Lake Fishing Access Site	
Kobayashi Beach Day Use Site	
Upper Bear Trap Canyon	
Fall Creek Access Site (Interpretive Area)	
Warm Springs Creek Access Site	
Warm Springs Creek Access Site	
Hauser Development	
Devil's Elbow Campground	32
Clark's Bay Day Use Area	34
Hauser Area RV Dump Station	36
Causeway Fishing Pier	38
White Sandy Beach	40
Hauser Dam Access Site	42
Holton Davidonment	
Holter Development Coulter Campground	16
Meriwether Picnic Area	
Beartooth Landing Campground	
Departure Point Recreation Area	
Log Gulch Campground	
Holter Lake Campground	
Holter Dam Campground, Portage, and RV Dump Station	
Hotter Dam Campground, Fortage, and Ky Dump Station	
Great Falls Area Development	
Canoe Portage Signage at Oddfellows Park	62
Black Eagle Memorial Island	64
Rainbow Reservoir Boat Launch	
River's Edge Trail	
Lewis and Clark National Historic Trail Interpretive Center	
Rainbow and Lewis & Clark Overlooks	72
Crooked Falls Overlook	
North Shore Conservation Easement	
Rainbow Morony Pedestrian/Bicycle Trail and North Shore	
Cochrane Dam Crossing	80
Sulfur Spring Trailhead	82
Ryan Island Day Use Area	8 4
Carter Ferry Access Site	86
River Access Sites	
North Park Access Site	QQ
Cottonwood Grove Fishing Access Site	
Widow Coulee Fishing Access Site	
Fort Benton Motorboat Launch	
Fort Benton Canoe Launch and Campground	
	/ U

Hebgen Development

Fisherman's Point

Lonesomehurst Boat Ramp and Dock

Rainbow Point Boat Ramp and Dock

Hebgen RV Dump Station

Hebgen Dam Day Use Area

Lyon's Bridge Fishing Access Site

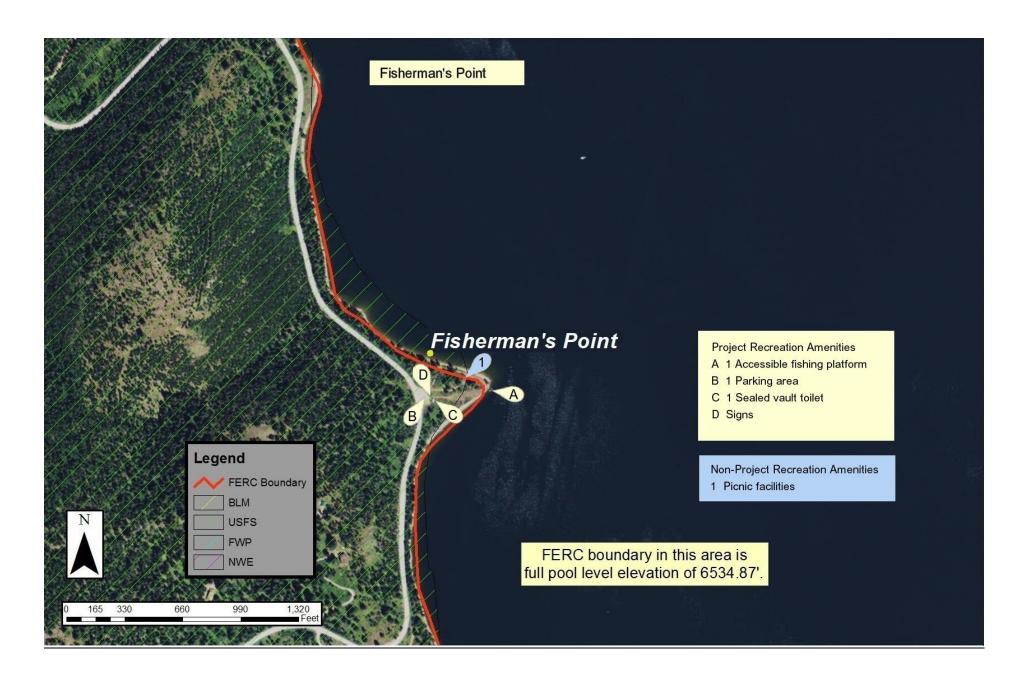
NorthWestern Energy recognizes the cooperation and assistance of the USFS, BLM, Montana FWP, River's Edge Trail Foundation and other partners in providing these pictures.

Fisherman's Point

The Licensee cooperated with the USFS to develop this day use site on Forest Service property along the shore of Hebgen Reservoir into an ADA-accessible site for individuals of all mobility levels. In keeping with the Approved CRP, facilities include a parking area, handicap-accessible fishing platform, sealed vault toilet, and signs, shown as "Project Recreation Amenities" on the map. Picnic facilities were also added and are shown as "Non-Project Recreation Amenities" on the map. The USFS is responsible for operating and maintaining the site, and NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$5,845 in 2016).





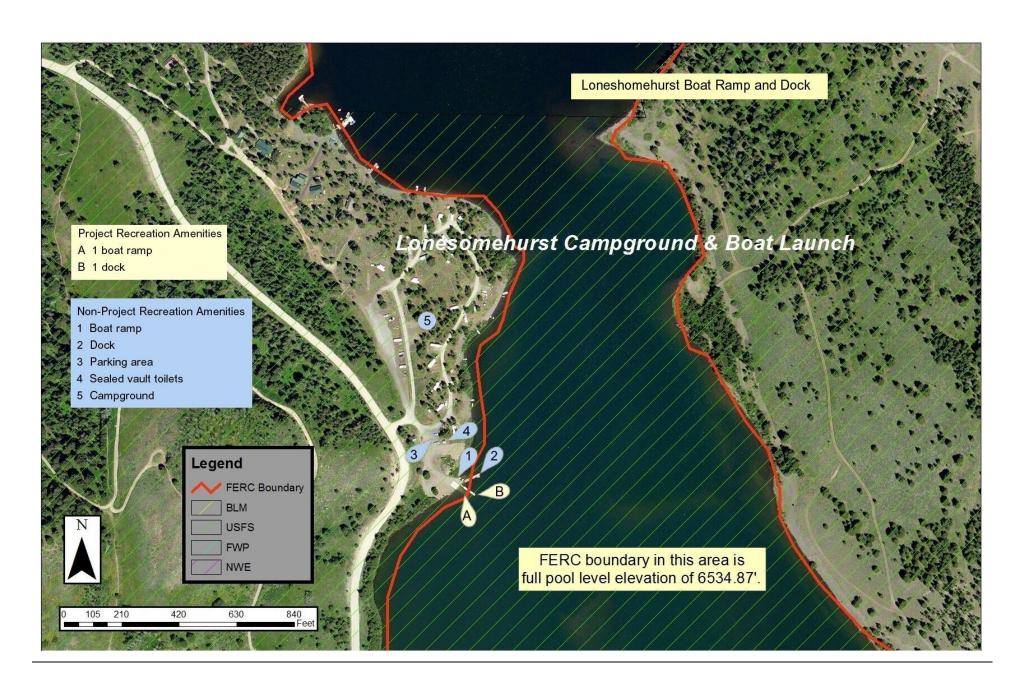


Lonesomehurst Boat Ramp and Dock

In keeping with the Approved CRP, the Licensee contributed funds for improvements to the boat ramp and dock at Lonesomehurst Campground on Forest Service property at Hebgen Reservoir, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include a second boat ramp and dock, parking area, sealed vault toilets and a campground. Funds originally allocated for the Highway Destruction Site, which the USFS determined would not be constructed due to concerns for nesting eagles, were reallocated to the boat ramp and dock improvements at two sites (also see Rainbow Point Boat Ramp and Dock). The USFS is responsible for operating and maintaining the improved facilities at the site.



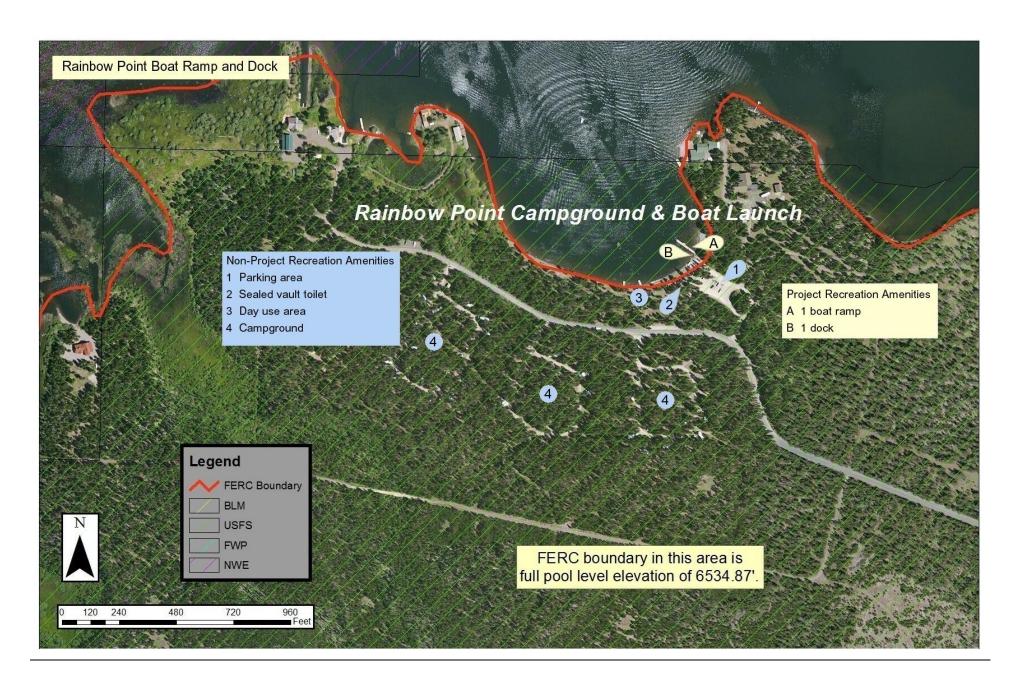




Rainbow Point Boat Ramp and Dock

In keeping with the Approved CRP, the Licensee contributed funds for improvements to the boat ramp and dock at Rainbow Point on Forest Service property at Hebgen Reservoir, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include a parking area, sealed vault toilet, day use area, and campground. Funds originally allocated for the Highway Destruction Site, which the USFS determined would not be constructed due to concerns for nesting eagles, were reallocated to boat ramp and dock improvements at two sites (also see Lonesomehurst Boat Ramp and Dock). The USFS is responsible for operating and maintaining the improved facilities at the site.

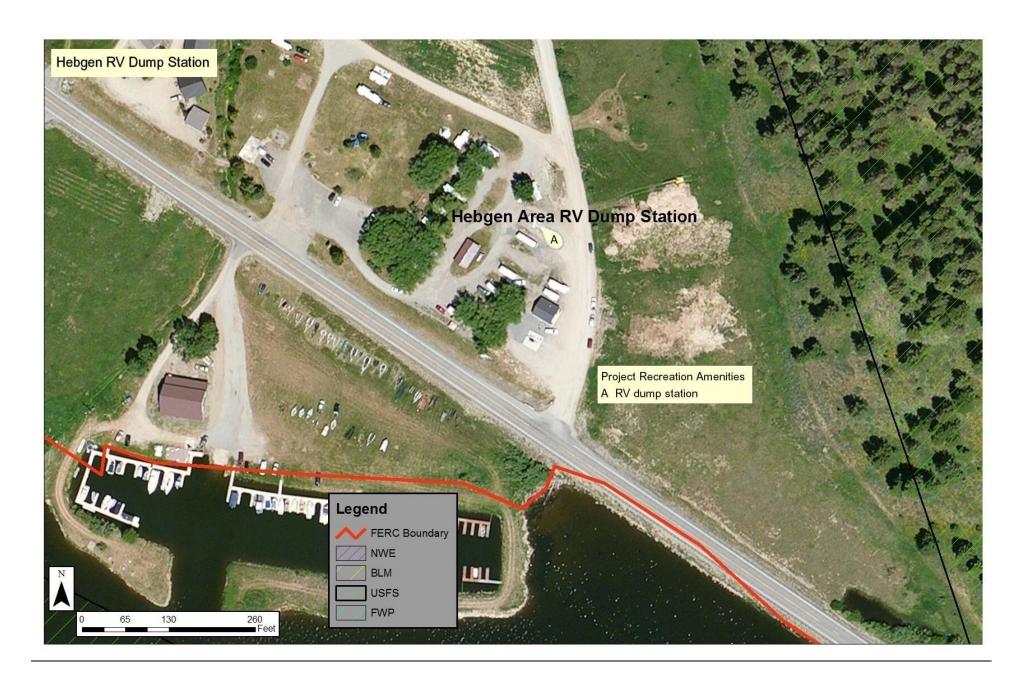




Hebgen RV Dump Station

The Licensee cooperated with an existing commercial operator and contributed funds to develop a publicly-available recreational vehicle (RV) dump station at the Kirkwood Resort and Marina on the north shore of Hebgen Reservoir. The private resort is responsible for operating and maintaining the RV dump station through a contract with the Licensee. NorthWestern Energy contributes funds for operation and maintenance as needed, up to \$8,350 (2016 \$).





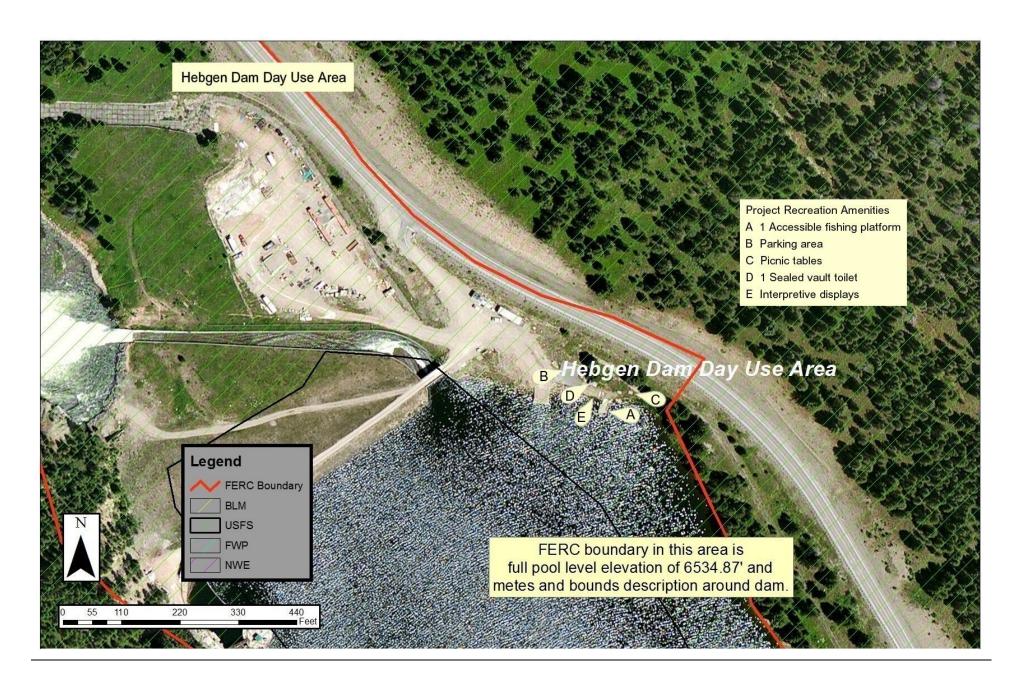
Hebgen Dam Day Use Area

The Licensee cooperated with the USFS in the design and development of this site on Forest Service property adjacent to Hebgen Dam. In keeping with the Approved CRP the facilities include a parking area, a handicap-accessible fishing platform on the reservoir, a sealed vault toilet, picnic tables, interpretive facilities that depict Hebgen Dam's role in the Licensee's hydroelectric operations since 1915 and informational signs about the area's recreational opportunities. The USFS is responsible for operating and maintaining this site. NorthWestern Energy contributes annually for operation and maintenance of the site (\$8,141¹ in 2016).



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¹ The 2016 contribution is 75% of the full \$10,855 contribution for 2016 as specified by the License. The site was closed to public use in 2014 to facilitate FERC required intake, spillway and pipeline repair work at Hebgen Dam,, which is immediately adjacent to this recreation site. Due to USFS approved site closure, user displacement to nearby recreation sites has likely occurred. The reduced contribution amount was agreed upon between NorthWestern Energy and the USFS for the duration of the site closure to help off-set added costs to the USFS due to user demands at other recreation sites in the area resulting from user displacement from Hebgen Dam Day Use Area.



Lyon's Bridge Fishing Access Site

The Licensee cooperated with the USFS and FWP to construct the Lyon's Bridge Fishing Access Site on the Madison River downstream from Hebgen Dam. In keeping with the Approved CRP facilities include a boat ramp, parking facilities, sealed vault toilet and signs. A second boat ramp, shown as a "Non-Project Recreation Amenity" on the map, also exists at the site. The USFS and the FWP cooperatively operate and maintain the access site.







Madison Development

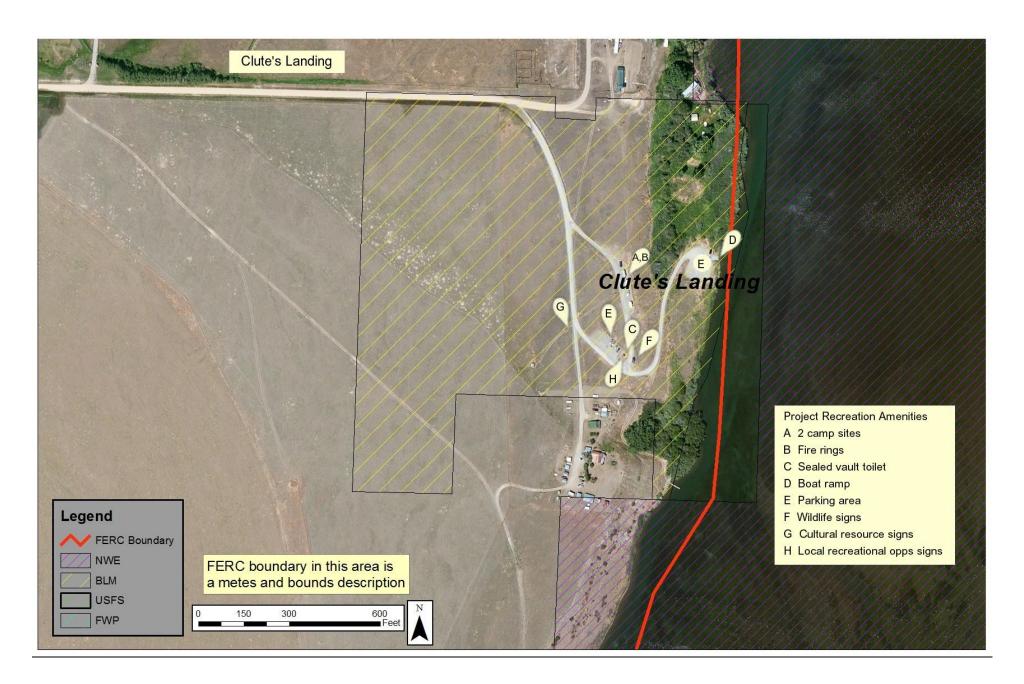
Clute's Landing
Meadow Lake Fishing Access Site
Kobayashi Beach Day Use Site
Upper Bear Trap Canyon
Fall Creek Access Site (Interpretive Area)
Warm Springs Creek Access Site

NorthWestern Energy recognizes the cooperation and assistance of the USFS, BLM, Montana FWP, River's Edge Trail Foundation and other partners in providing these pictures.

Clute's Landing

The Licensee cooperated with and provided funding to help the BLM to develop this site on BLM property. In keeping with the Approved CRP, facilities include two designated campsites, fire rings, a sealed vault toilet, boat ramp, parking area, and interpretive/informational signs about the area's wildlife, cultural resources and local recreational opportunities. The BLM is responsible for operating and maintaining the recreation site through a cooperative management agreement. NorthWestern Energy contributes funds annually for operation and maintenance of all BLM-managed sites associated with the Madison development (\$45,925 for all sites in 2016).





Meadow Lake Fishing Access Site

The Licensee cooperated with and provided funding to help FWP develop this overnight camping area on the west shore of Ennis Lake. In keeping with the Approved CRP facilities include designated campsites, fire rings, a sealed vault toilet, and interpretive and informational signs about the area's local recreational opportunities. The site is situated on property owned by FWP above the FERC boundary, and on NorthWestern Energy land within the FERC boundary. FWP is responsible for operating and maintaining the recreation area through a cooperative management agreement. NorthWestern Energy contributes funds annually for operation and maintenance of Meadow Lake FAS and other FWP sites associated with the Madison development (\$12,525 in 2016).





Missouri-Madison Comprehensive Recreation Plan - 2016

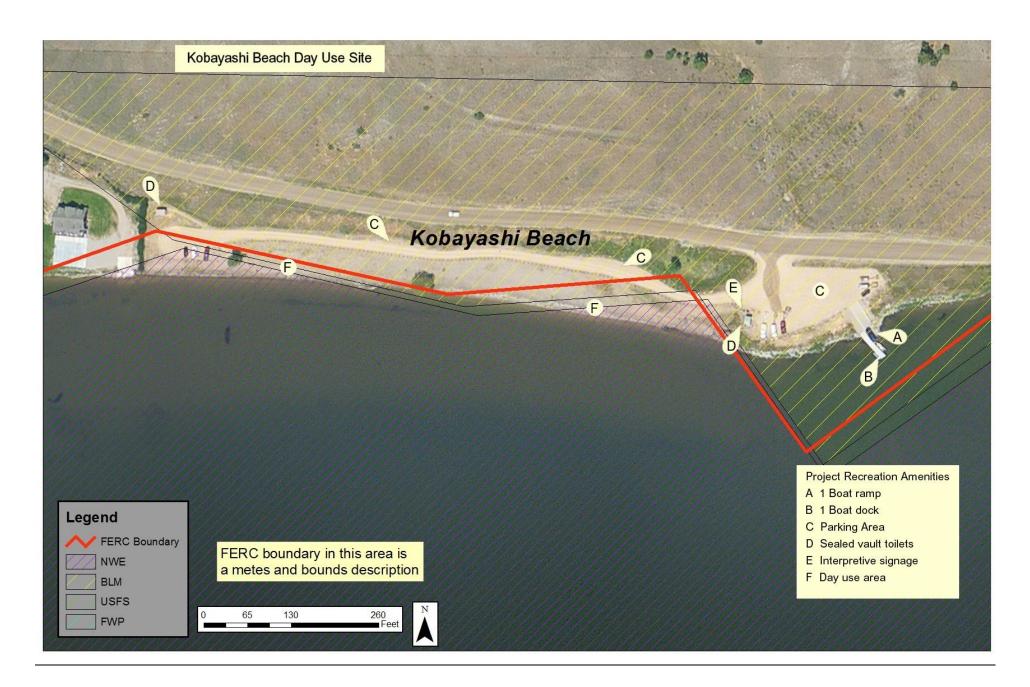


Kobayashi Beach Day Use Site

The Licensee contributed funds and cooperated with the development of this site on the north shore of Ennis Lake as a public day use area. In keeping with the Approved CRP facilities include a boat ramp, boat dock, parking, sealed vault toilets, interpretive facilities that depict the development's role in the Licensee's hydroelectric operations since 1908, and informational signs about the area's recreational opportunities. The site is situated on property owned by BLM above the FERC boundary, and on NorthWestern Energy land within the FERC boundary. The BLM is responsible for operating and maintaining the day use area through a cooperative management agreement. NorthWestern Energy contributes funds annually for operation and maintenance of all BLM-managed sites associated with the Madison development (\$45,925 for all sites in 2016).





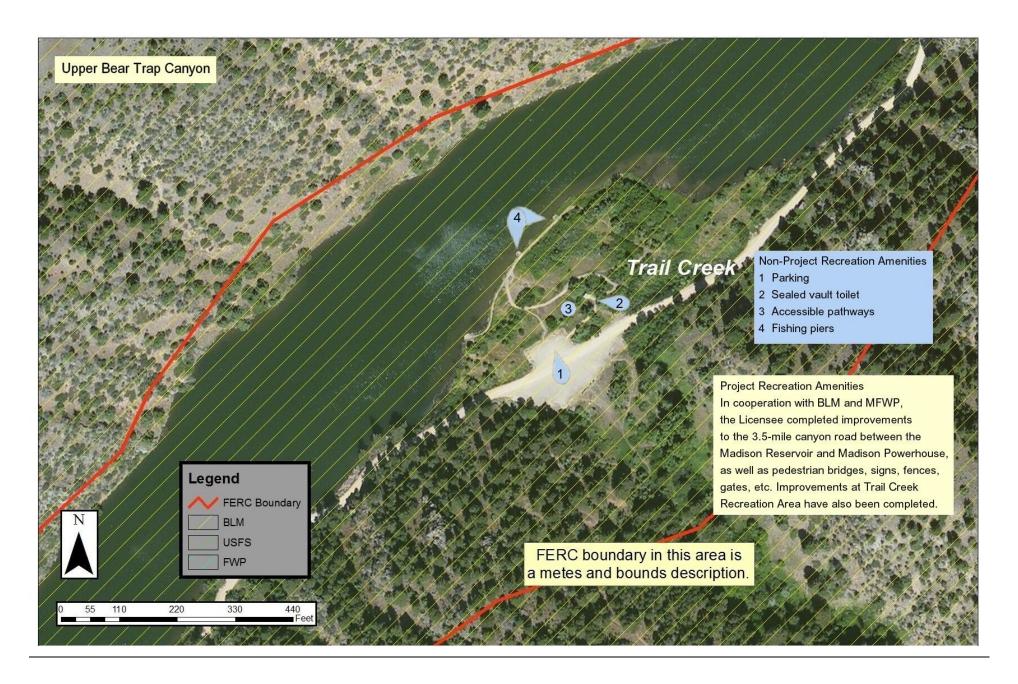


Upper Bear Trap Canyon

The Licensee contributed towards recreational improvements at this site which resides on BLM property. In keeping with the Approved CRP, improvements were made to the BLM's Trail Creek Recreation Area, the canyon road, pedestrian bridges, signs, fences and gates along the canyon road between Ennis Reservoir and Madison Dam, and described as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include parking areas, a sealed vault toilet, pathways, and fishing piers. The BLM is responsible for operating and maintaining the canyon's recreation related facilities through a cooperative management agreement. NorthWestern Energy contributes funds annually for operation and maintenance of all BLM-managed sites associated with the Madison development (\$45,925 for all sites in 2016).





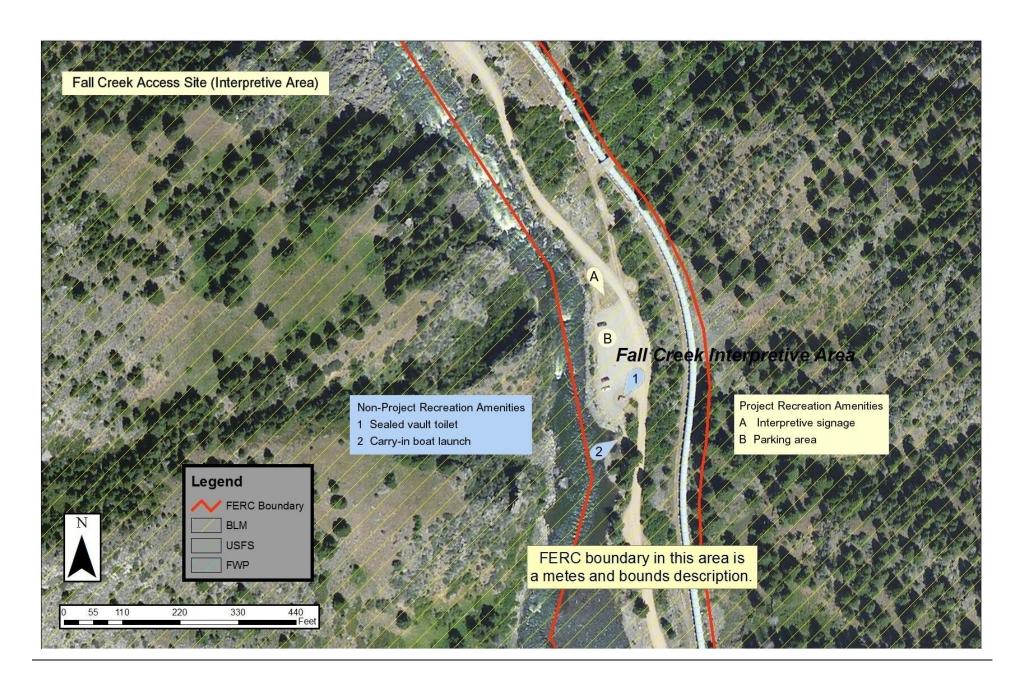


Fall Creek Access Site

The Licensee cooperated with and contributed funds to the BLM to complete site improvements on BLM property at the Fall Creek Access Site. In keeping with the Approved CRP, facilities include interpretive facilities (signs about the wood flow line and power generations facilities), and grading and surfacing a parking area, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include a sealed vault toilet and a primitive carry-in boat launch. The BLM is responsible for operating and maintaining the area through a cooperative management agreement. NorthWestern Energy contributes funds annually for operation and maintenance of all BLM-managed sites associated with the Madison development (\$45,925 for all sites in 2016).







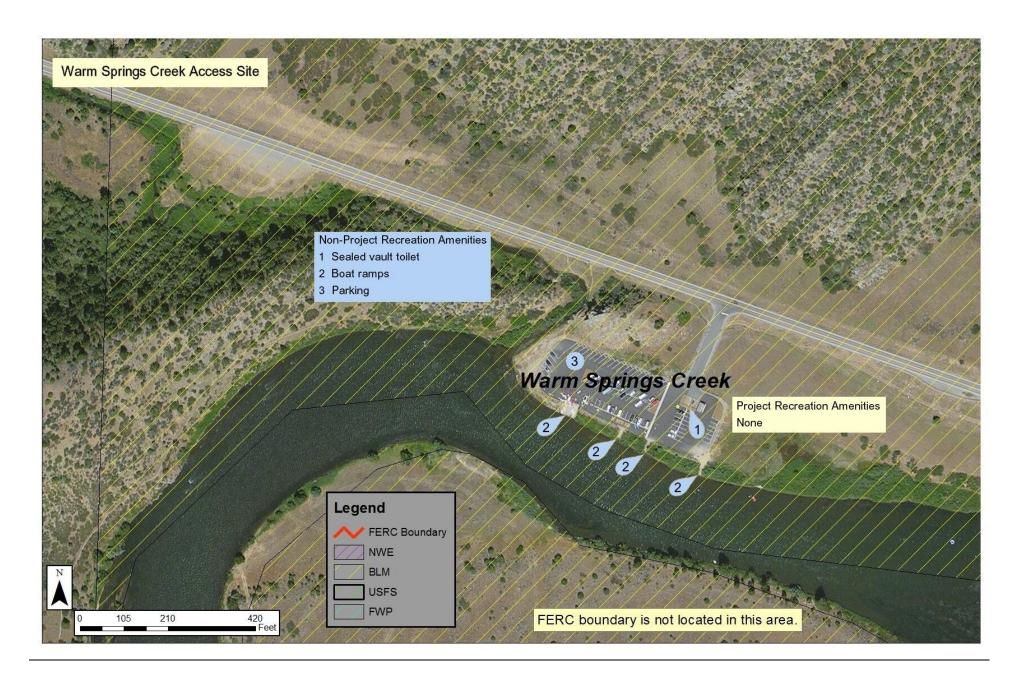
Warm Springs Creek Access Site

The Licensee acquired the Warm Springs Creek Access Site tract of land and transferred ownership of the parcel to the BLM for use as an access site and wilderness trailhead on the Madison River at the downstream end of the Bear Trap Canyon. The BLM developed the site with parking, sealed vault toilets and boat ramp facilities, shown as "Non-Project Recreation Amenities" on the map. The BLM operates and maintains the day use area.









Hauser Development

Devil's Elbow Campground
Clark's Bay Day Use Area
Hauser Area RV Dump Station
Causeway Fishing Pier
White Sandy Beach
Hauser Dam Access Site

NorthWestern Energy recognizes the cooperation and assistance of the USFS, BLM, Montana FWP, River's Edge Trail Foundation and other partners in providing these pictures.

Devil's Elbow Campground

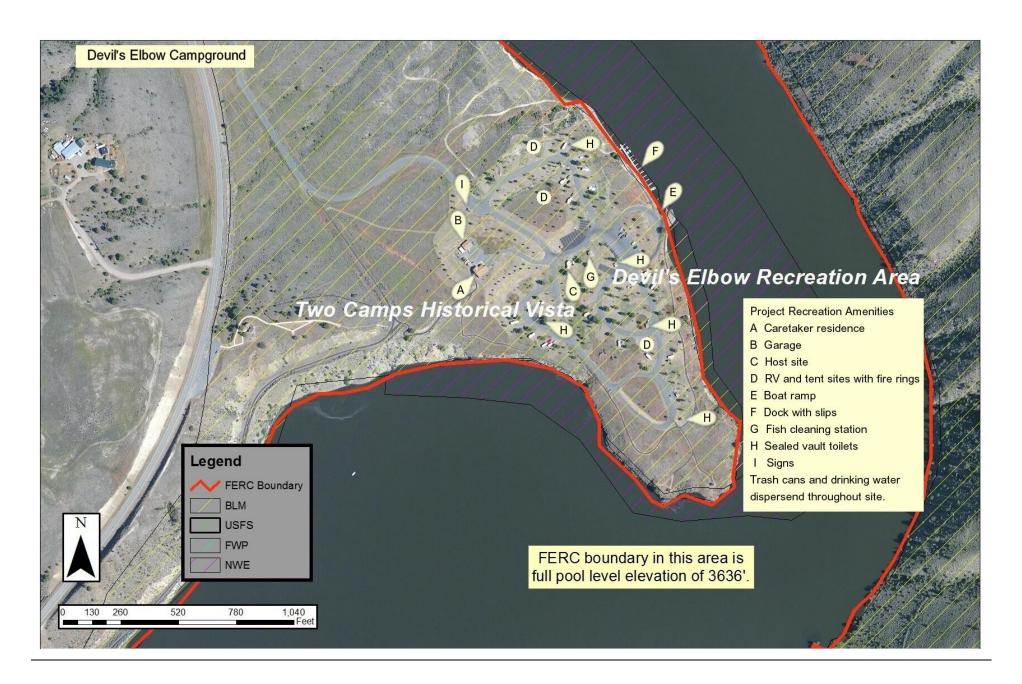
The Licensee cooperated with and provided funds to the BLM to develop Devil's Elbow Campground, situated at the upper end of Hauser Reservoir primarily on BLM property with a small portion residing on NorthWestern Energy land within the FERC Boundary. In keeping with the Approved CRP, the campground facilities include a caretaker residence, garage, campground host site, designated RV and tent campsites, boat ramp with a dock and multiple slips, fish cleaning station, sealed vault toilets, drinking water, fire rings, informational and interpretive signs, and trash cans. The campground was designed to accommodate individuals with disabilities and is connected to neighboring Clark's Bay Day Use Site by trails. The BLM operates and maintains the campground through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all BLM-managed sites associated with the Hauser and Holter developments (\$66,800 in 2016 for all sites on Hauser and Holter Reservoirs managed by BLM, in addition to funds contributed specifically for White Sandy Beach).











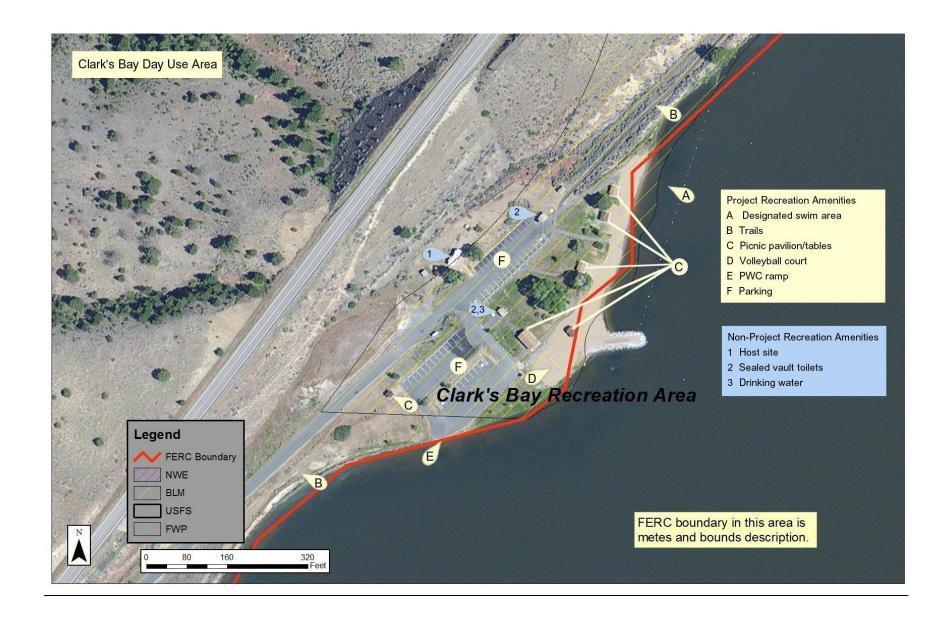
Clark's Bay Day Use Area

The site is situated at the upper end of Hauser Reservoir and primarily on BLM property, with a small portion residing on NorthWestern Energy land within the FERC Boundary. The site is connected to neighboring Devil's Elbow Campground by trails. In keeping with the Approved CRP, the day use facilities at Clark's Bay include a designated swimming area, trails, picnic facilities, volleyball court, personal watercraft ramp, and parking areas, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include a host site, sealed vault toilets, and drinking water. The day use area was designed to accommodate individuals with disabilities. The BLM operates and maintains the day use area through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all BLM-managed sites associated with the Hauser and Holter developments (\$66,800 in 2016 for all sites on Hauser and Holter Reservoirs managed by BLM, in addition to funds contributed specifically for White Sandy Beach).









Hauser Area RV Dump Station

In keeping with the Approved CRP, the Licensee cooperated with the BLM and contributed funds to construct a publicly-available RV dump station. The RV dump station was constructed in the vicinity of the Devil's Elbow Campground and Clark's Bay Day Use Area at the privately-owned Lakeside General Store. The commercial operator is responsible for operating and maintaining the RV dump station through a contract with the Licensee.





Causeway Fishing Pier

In keeping with the Approved CRP the Licensee cooperated with FWP to construct a fishing pier at a popular fishing area near Causeway FAS between the Lake Helena arm and the lower end of Hauser Reservoir. The pier was designed to accommodate individuals with disabilities, and was constructed on NorthWestern Energy property within the FERC boundary. FWP is responsible for the operation and maintenance at the Causeway fishing pier through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$41,750 to the Region 4 Fisheries division of FWP for Cottonwood Grove and Widow Coulee Fishing Access Sites and the Causeway Fishing Pier).







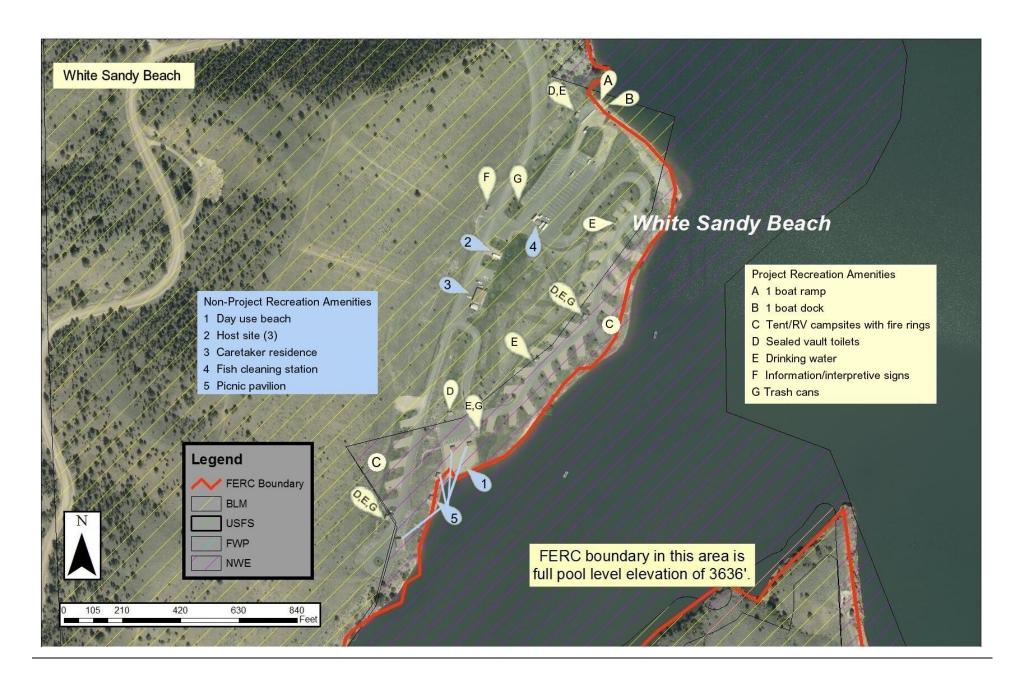


White Sandy Beach

The Licensee cooperated with the BLM to develop this day use and camping area at the lower end of Hauser Reservoir. In keeping with the Approved CRP, the facilities include a boat ramp and dock, designated RV and tent campsites, sealed vault toilets, drinking water, fire rings, informational and interpretive signs, and trash cans, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include a day use beach, three host sites, a caretaker residence, fish cleaning station, and picnic pavilions. The site was designed to accommodate individuals with disabilities. The site is positioned on BLM and NorthWestern property. The BLM is responsible for operation and maintenance of the site. NorthWestern Energy contributes funds annually for operation and maintenance funding for the site (\$58,450 in 2016).

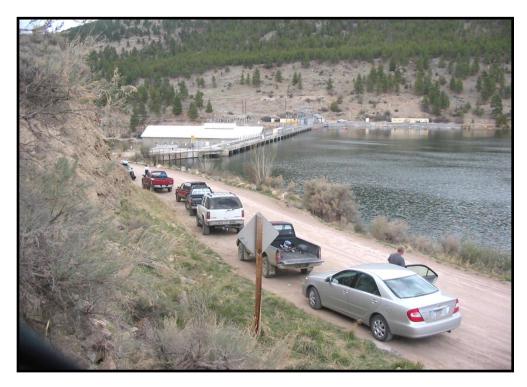






Hauser Dam Access Site

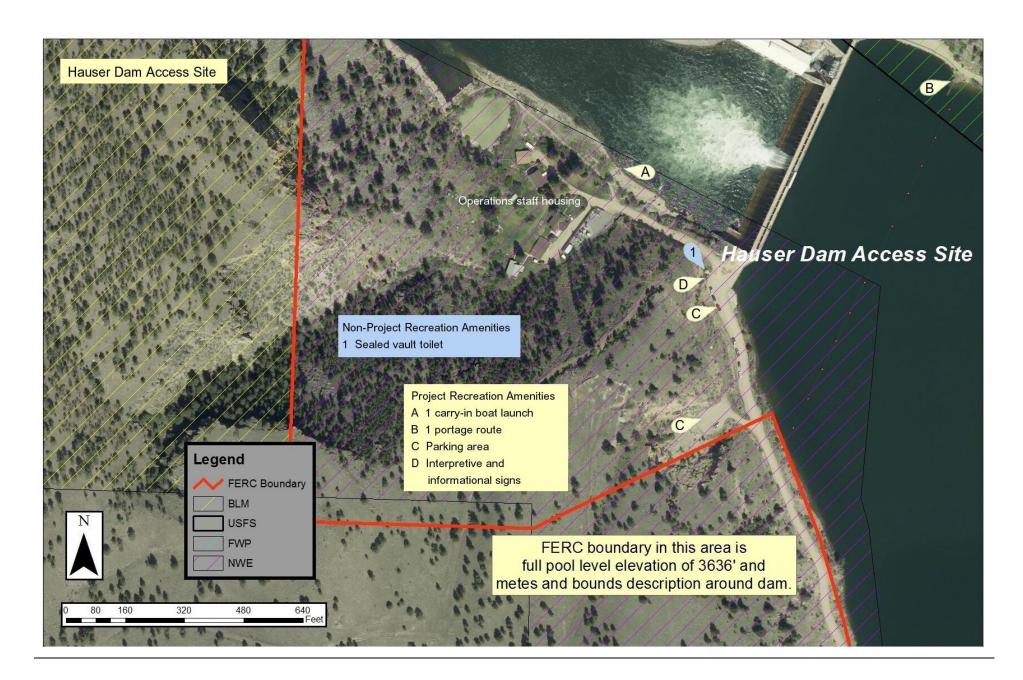
The Licensee improved and expanded the Hauser Dam public access site on NorthWestern Energy property adjacent to Hauser Dam. In keeping with the Approved CRP, facilities include a larger parking area, portage route, carry-in boat ramp below the dam, interpretive facilities that depict the development's role in the Licensee's hydroelectric operations since 1914, and informational signs about the area's fishing and hiking opportunities, shown as "Project Recreation Amenities" on the map. A vault toilet was also installed at the site, shown as a "Non-Project Recreation Amenity" on the map. FWP and the BLM share responsibility for operating and maintaining the access site through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$16,700 in 2016).





Missouri River below Hauser Dam

Hauser Dam Portage



Holter Development

Coulter Campground

Meriwether Picnic Area

Beartooth Landing Campground

Departure Point Day Use Area

Log Gulch Campground

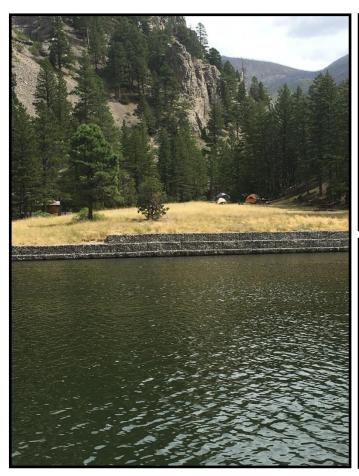
Holter Lake Campground

Holter Dam Campground, Portage, and RV Dump Station

NorthWestern Energy recognizes the cooperation and assistance of the USFS, BLM, Montana FWP, River's Edge Trail Foundation and other partners in providing these pictures.

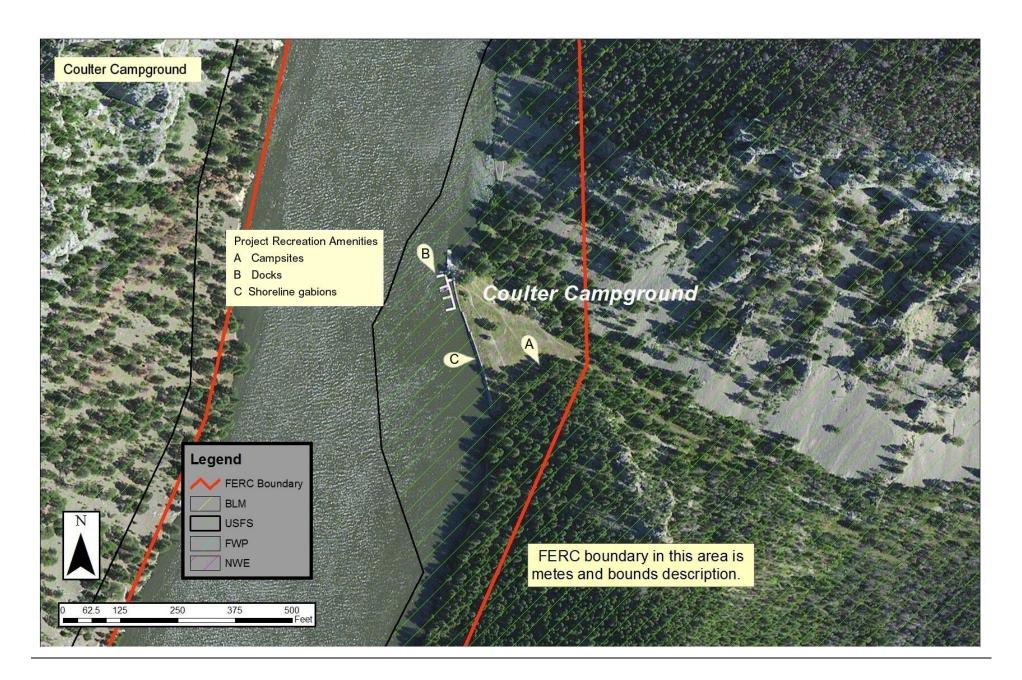
Coulter Campground

The Coulter Campground is located on Forest Service property in the Gates of the Mountains corridor of Holter Reservoir. In keeping with the Approved CRP, facilities include campsites and boat docks. In addition, shoreline stabilization was improved through the addition of rock-filled gabion baskets. The USFS operates and maintains the campground; NorthWestern Energy contributes funds annually for operation and maintenance at the site (\$27,555 combined for Coulter Campground and Meriwether Picnic Area in 2016).









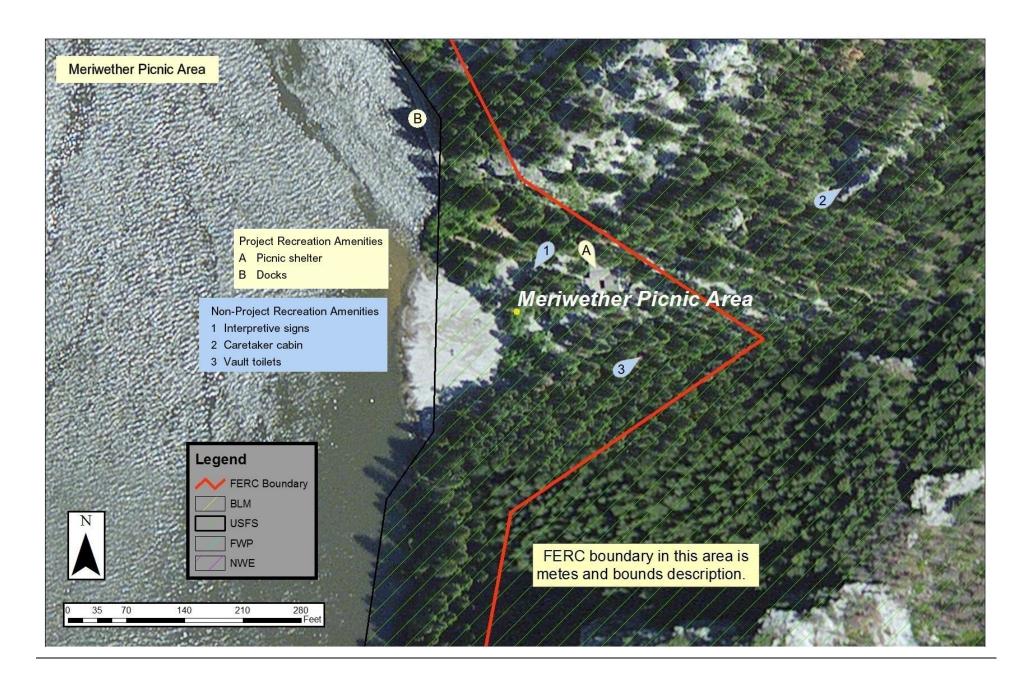
Meriwether Picnic Area

The Meriwether Picnic Area is located on Forest Service property in the Gates of the Mountains corridor of Holter Reservoir. In keeping with the Approved CRP, facilities include a picnic shelter and boat docks, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include interpretive displays, vault toilets, and a caretaker cabin. The USFS operates and maintains the picnic area; NorthWestern Energy contributes funds annually for operation and maintenance at the site (\$27,555 combined for Meriwether Picnic Area and Coulter Campground in 2016).





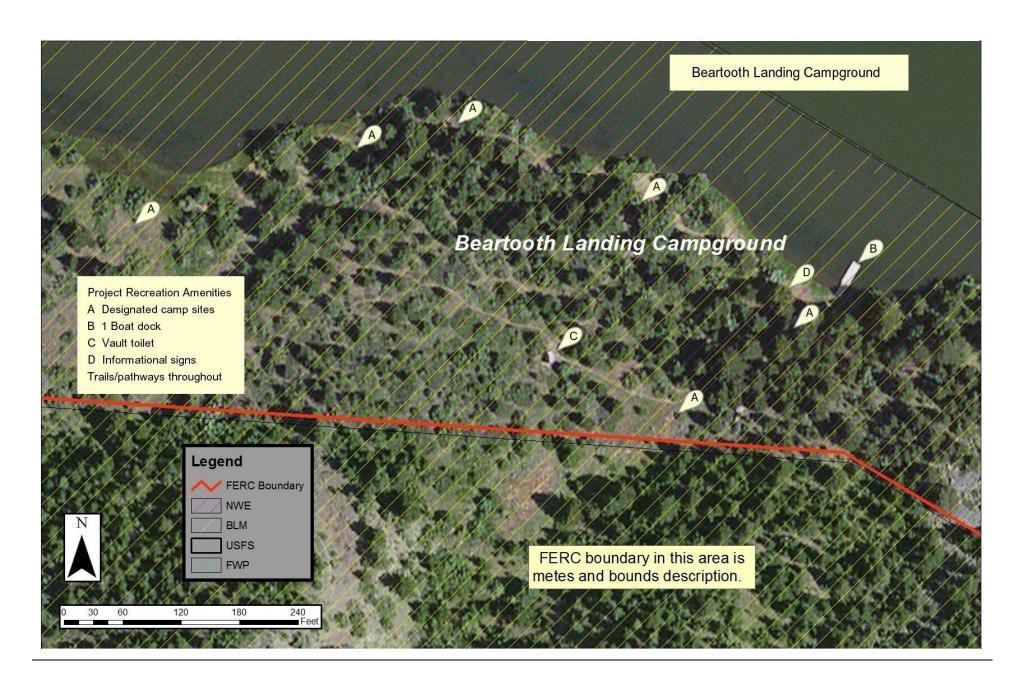




Beartooth Landing Campground

This primitive campground is located south of BLM's Sleeping Giant Wilderness Study Area and just downstream of the Gates of the Mountains corridor on Holter Reservoir. Beartooth Landing Campground is only accessible by boat. In keeping with the Approved CRP, facilities include designated campsites, a vault toilet, a boat dock, informational signs, and trails. The site was constructed on BLM property above the FERC Project boundary and on NorthWestern Energy property within the FERC boundary. The BLM operates and maintains the campground. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$66,800 in 2016 for all sites on Hauser and Holter Reservoirs managed by BLM, in addition to funds contributed specifically for White Sandy Beach).



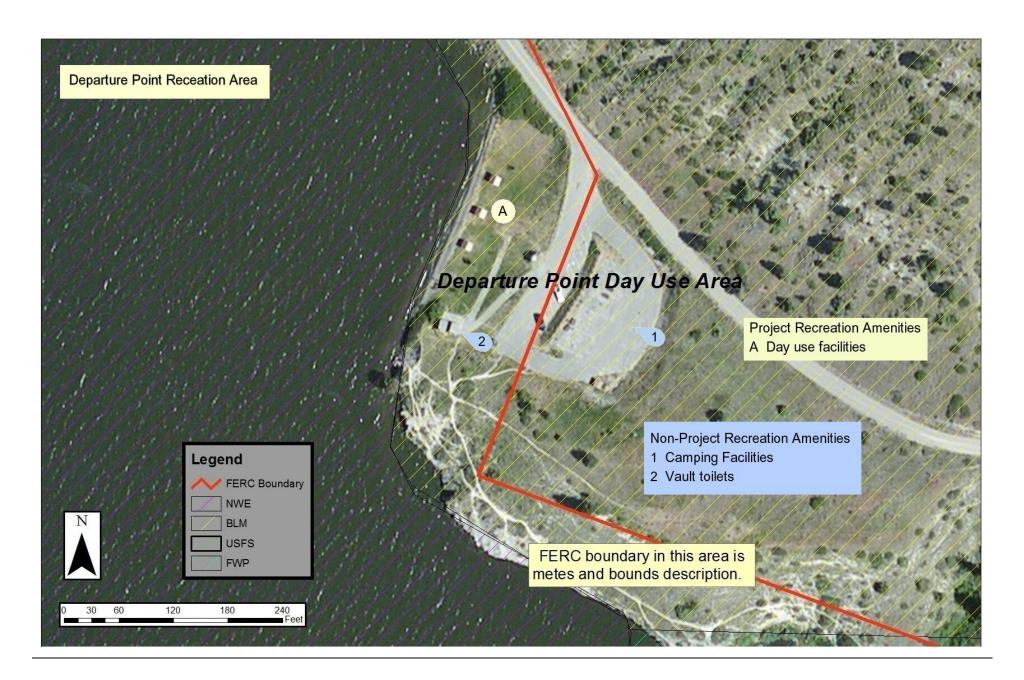


Departure Point Recreation Area

In keeping with the Approved CRP, the Licensee contributed funds to improve the existing day use facilities, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include camping facilities and vault toilets. The site is constructed on BLM property in the upper region of Lower Holter Reservoir, and the BLM operates and maintains the site. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$66,800 in 2016 for all sites on Hauser and Holter Reservoir managed by BLM, in addition to funds contributed specifically for White Sandy Beach).







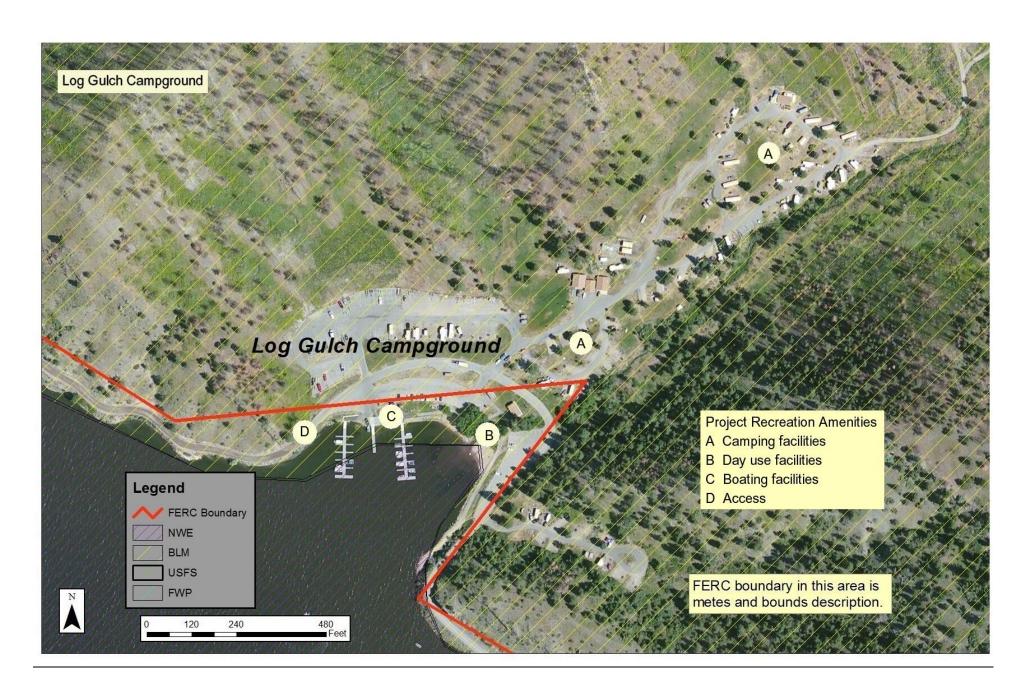
Log Gulch Campground

In keeping with the Approved CRP, the Licensee contributed funds to improve the existing camping, day use, boating facilities, and access to accommodate the high level of use that the site receives. The site is constructed on BLM property in the upper region of Lower Holter Reservoir, and the BLM operates and maintains the site. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$66,800 in 2016 for all sites on Hauser and Holter Reservoir managed by BLM, in addition to funds contributed specifically for White Sandy Beach).





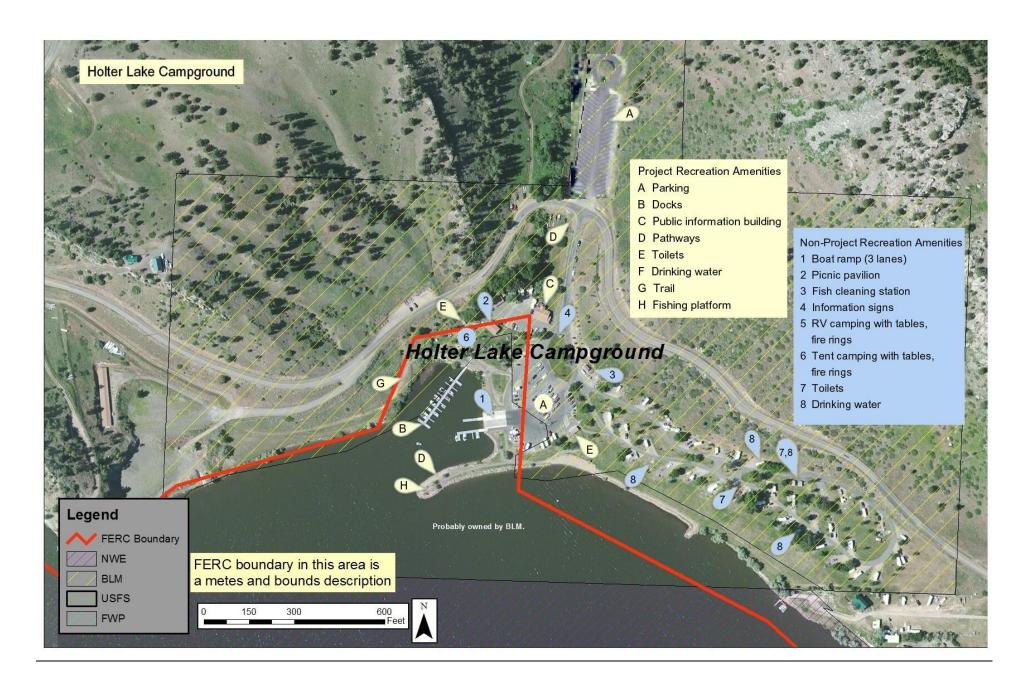




Holter Lake Campground

In keeping with the Approved CRP, site improvements at Holter Lake Campground included developing access facilities for individuals with disabilities. In particular a parking area, docks, a public information building, pathways, toilets, drinking water, a trail and a fishing platform are accessible for individuals with disabilities and are shown as "Project Recreation Amenities" on the map. Additional site amenities, most of which are also accessible for individuals with disabilities and shown as "Non-Project Recreation Amenities" on the map, include a boat ramp, picnic pavilion, fish cleaning station, informational signs, RV and tent camping sites with tables and fire rings, toilets, and drinking water. Following the Approved CRP, the Licensee and BLM coordinated the purchase, transfer to the BLM and development of an overflow parking area. The BLM operates and maintains the campground and overflow parking area, which are located on BLM property on Holter Reservoir, just upstream of Holter Dam. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$66,800 in 2016 for all sites on Hauser and Holter Reservoirs managed by BLM, in addition to funds contributed specifically for White Sandy Beach).





Holter Dam Campground

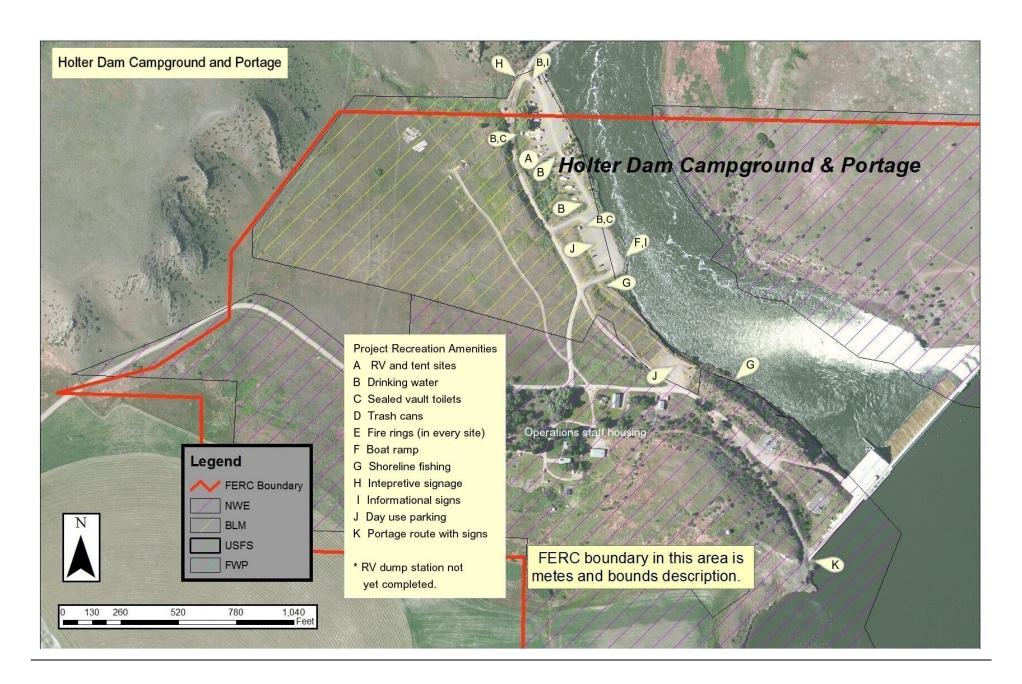
The Licensee cooperated with the BLM and helped fund the reconstruction of this existing campground situated on BLM property just below Holter Dam to better accommodate both overnight campers and day users. In keeping with the Approved CRP, facilities include designated RV and tent campsites, drinking water, sealed vault toilets, trash cans, fire rings, a boat ramp, shoreline fishing improvements, interpretive facilities, informational signs about the area's recreational opportunities, and a designated parking area for day users. An RV dump station will be constructed in the Holter Lake area when a suitable site and willing operator can be found.

Holter Dam Portage Route

In addition, the Licensee constructed and marked with signage a portage route on NorthWestern Energy property around the left side of Holter Dam.

The BLM operates and maintains the campground, day use areas, and the portage route. NorthWestern Energy contributes funds annually for operation and maintenance of the sites (\$66,800 in 2016 for all sites on Hauser and Holter Reservoirs managed by BLM, in addition to funds contributed specifically for White Sandy Beach).





Great Falls Area Development

Canoe Portage Signage at Oddfellows Park

Black Eagle Memorial Island

Rainbow Reservoir Boat Launch

River's Edge Trail

Lewis and Clark National Historic Trail Interpretive Center

Rainbow and Lewis & Clark Overlooks

Crooked Falls Overlook

North Shore Conservation Easement

Rainbow-Morony Pedestrian/Bicycle Trail

Cochrane Dam Crossing

Sulfur Spring Trailhead

Ryan Island Day Use Area

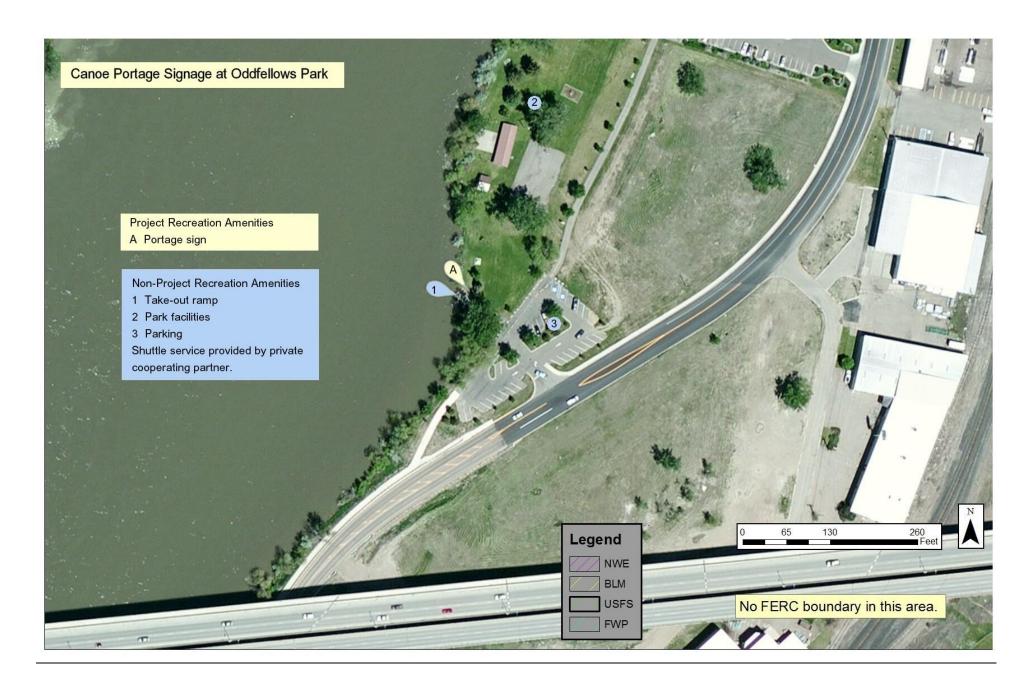
Carter Ferry Access Site

NorthWestern Energy recognizes the cooperation and assistance of the USFS, BLM, Montana FWP, River's Edge Trail Foundation and other partners in providing these pictures.

Canoe Portage Signage at Oddfellows Park

In keeping with the Approved CRP, the Licensee maintains a portage information sign at the take-out ramp at Oddfellows Park located upstream of Black Eagle Reservoir, which provides contact information for a local company which provides shuttle services around the five Great Falls area dams and is shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map include the park, parking area, and take-out ramp, which are maintained by the City of Great Falls.



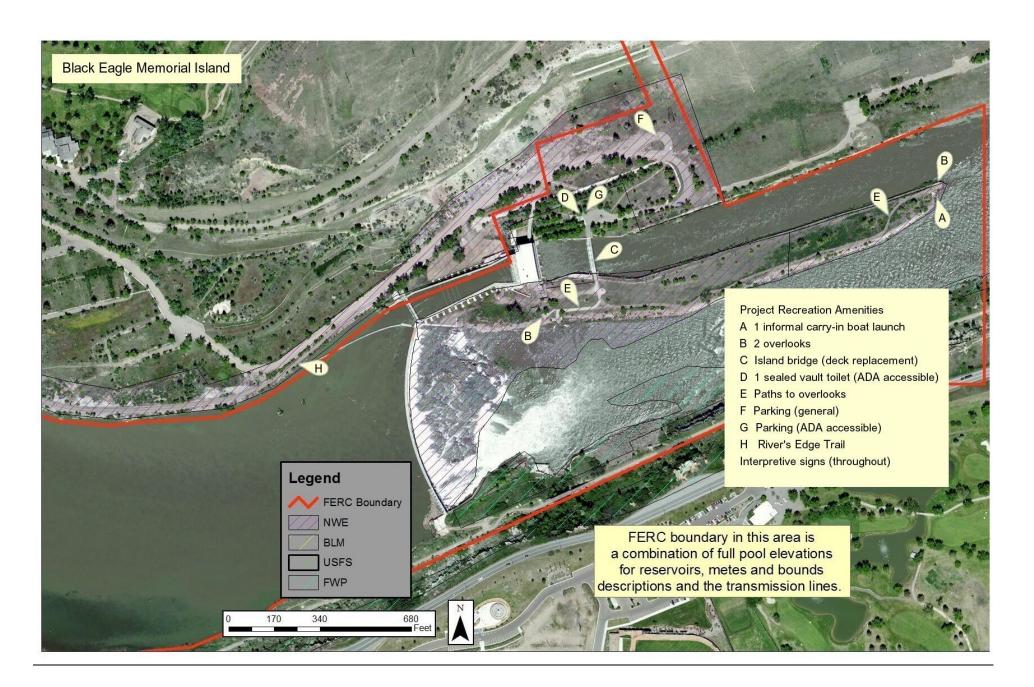


Black Eagle Memorial Island

The Licensee worked with numerous partners to reclaim and develop NorthWestern Energy's Black Eagle Memorial Island property just below Black Eagle Dam for open space and public access. The island is available for day use. In keeping with the Approved CRP, improvements include island bridge deck (replacement), two overlooks, interpretive signs, a sealed vault toilet (accessible), paths to overlooks, parking (including two accessible spaces) and River's Edge Trail segment. Additionally an informal carry-in launch for small watercraft at the downstream (east) end of the island has been established.

FWP operates and maintains Black Eagle Memorial Island through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350).





Rainbow Reservoir Boat Launch

The Rainbow Reservoir Boat Launch and parking area are located on NorthWestern Energy property on Rainbow Reservoir across from FWP's Giant Springs State Park. In keeping with the Approved CRP, facilities include a concrete boat ramp, and parking area, shown as "Project Recreation Amenities" on the map. An information kiosk, shown as "Non-Project Recreation Amenities" on the map, is also included at the site.

FWP operates and maintains the Rainbow Reservoir Boat Launch through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funding annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350).







River's Edge Trail

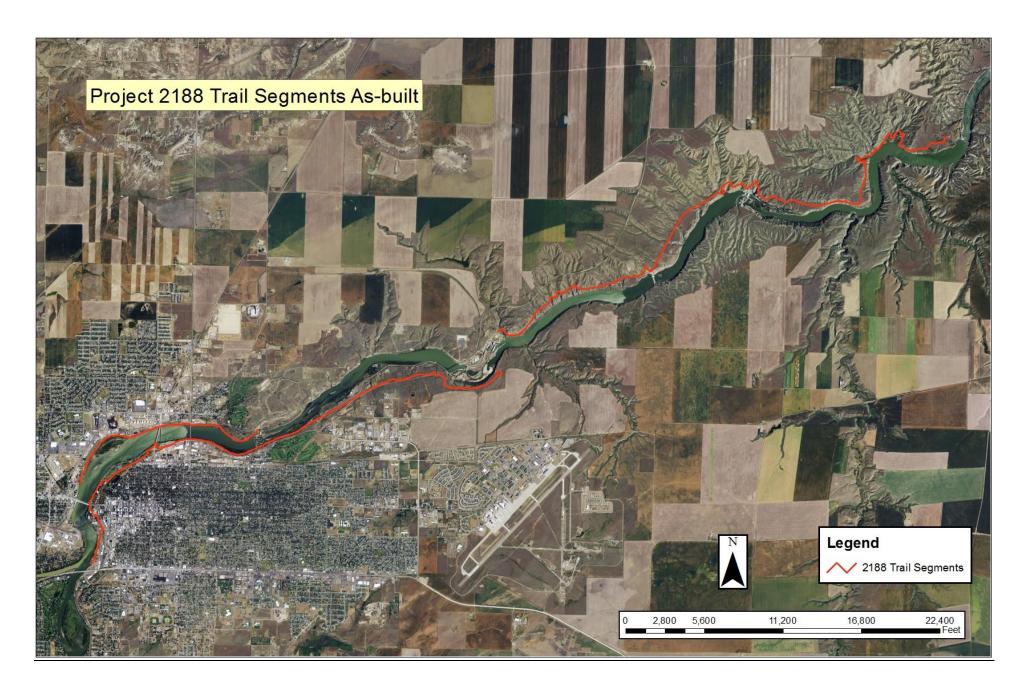
The Licensee cooperated with the City of Great Falls, Cascade County, FWP, Montana Department of Transportation, and the River's Edge Trail Foundation to develop the River's Edge Trail. Initial alignments were constructed on properties owned by various entities along the north shoreline from West Bank Park to Black Eagle Memorial Island, and along the south shoreline from Oddfellows Park to the Lewis & Clark Overlook. Continued expansions have resulted in trails spanning more than 50 miles (including the Rainbow-Morony Trail; see page A2-78).

FWP, the City of Great Falls and River's Edge Trail Foundation operate and maintain the River's Edge Trail along the south shore through a three-party memorandum of understanding. The City of Great Falls and River's Edge Trail Foundation maintain the River's Edge Trail along the north shore to Black Eagle Memorial Island. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350).



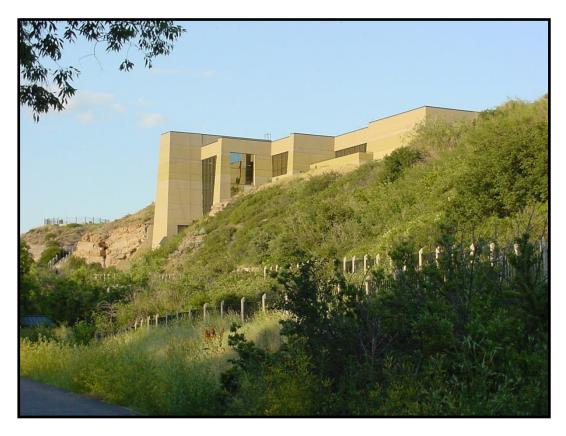






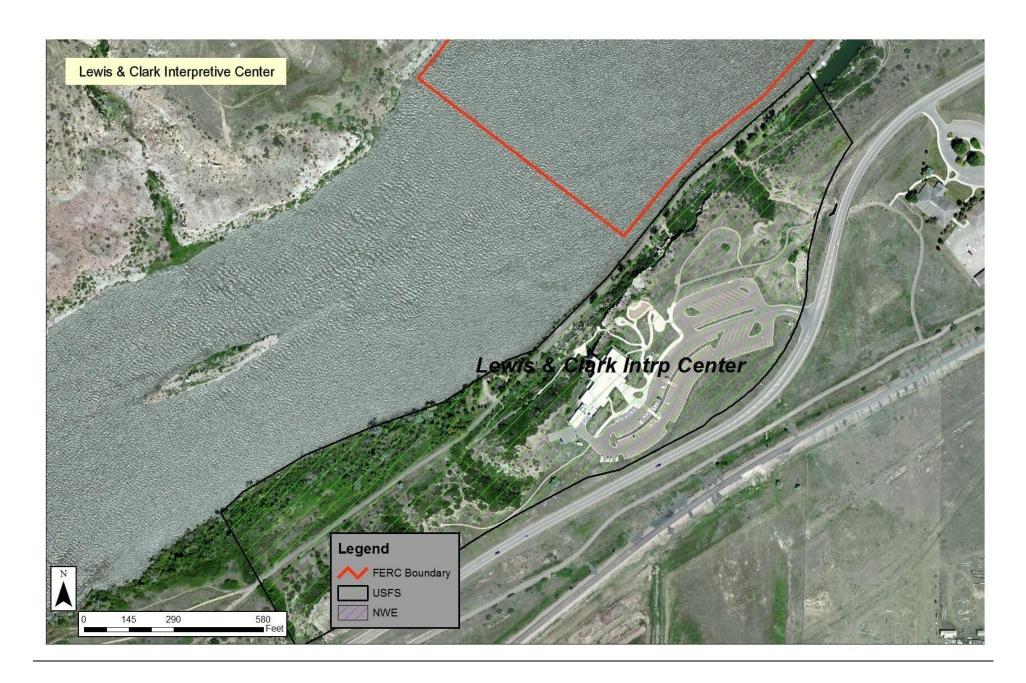
Lewis and Clark National Historic Trail Interpretive Center

The Licensee contributed to the construction of the Lewis and Clark National Historic Trail Interpretive Center located on Forest Service property along the south shore of Rainbow Reservoir in 1997. The Center provides unique opportunities that enhance the recreation resource in the Great Falls area. It serves as a core facility connecting other recreation sites and developments along the Missouri River between Fort Benton and Holter Reservoir. The Center promotes the public's knowledge, understanding and appreciation of the historic and cultural significance of the Lewis and Clark Expedition and the native people they encountered on their journey through Montana. The USFS operates and maintains the facility.









Rainbow and Lewis & Clark Overlooks

In keeping with the Approved CRP, the Licensee cooperated with FWP and River's Edge Trail Foundation to complete the Rainbow and Lewis & Clark Overlooks on NorthWestern Energy property near Rainbow Dam on the south shore, and cooperated in the construction of the trail segment that connects the overlooks to the overall River's Edge Trail system, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities" on the map, include parking and a sealed vault toilet.

FWP operates and maintains the overlooks and associated south shore property through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350). FWP, the City of Great Falls and River's Edge Trail Foundation maintain the River's Edge Trail segments through a three-party memorandum of understanding.





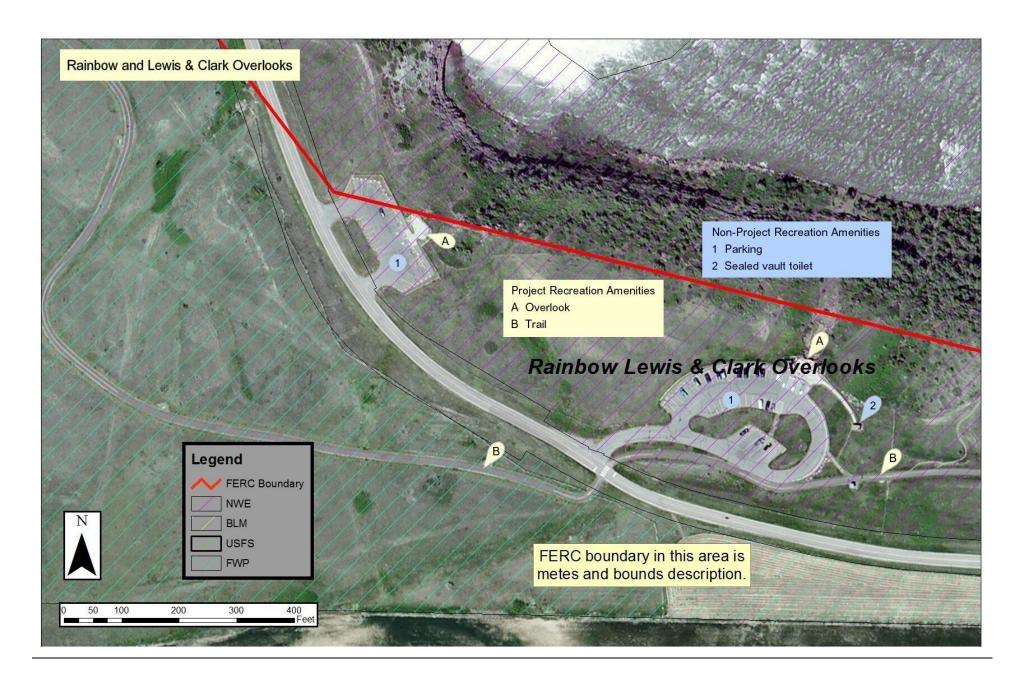


Top right: Rainbow Overlook

Right: River's Edge Trail segment near

Lewis & Clark Overlook



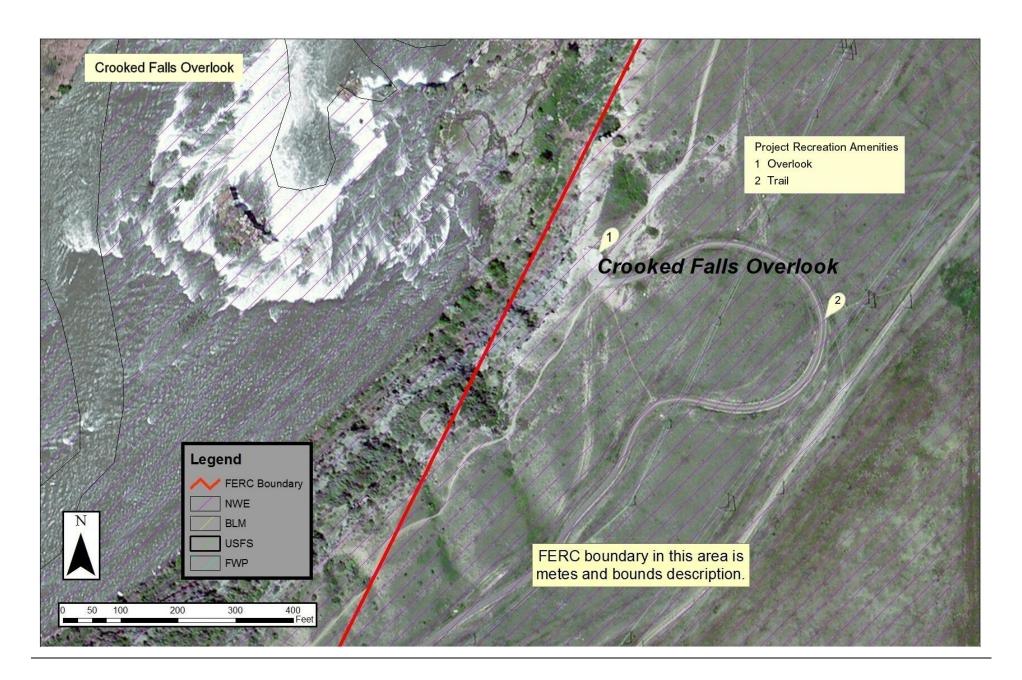


Crooked Falls Overlook

In keeping with the Approved CRP, the Licensee cooperated with FWP and River's Edge Trail Foundation to complete the Crooked Falls Overlook on NorthWestern Energy property near Rainbow Dam on the south shore. The Licensee also cooperated in the construction of the trail segment that connects the overlook to the overall River's Edge Trail system.

FWP operates and maintains the overlook and associated south shore property through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350). FWP, the City of Great Falls and River's Edge Trail Foundation maintain the River's Edge Trail segment through a three-party memorandum of understanding.



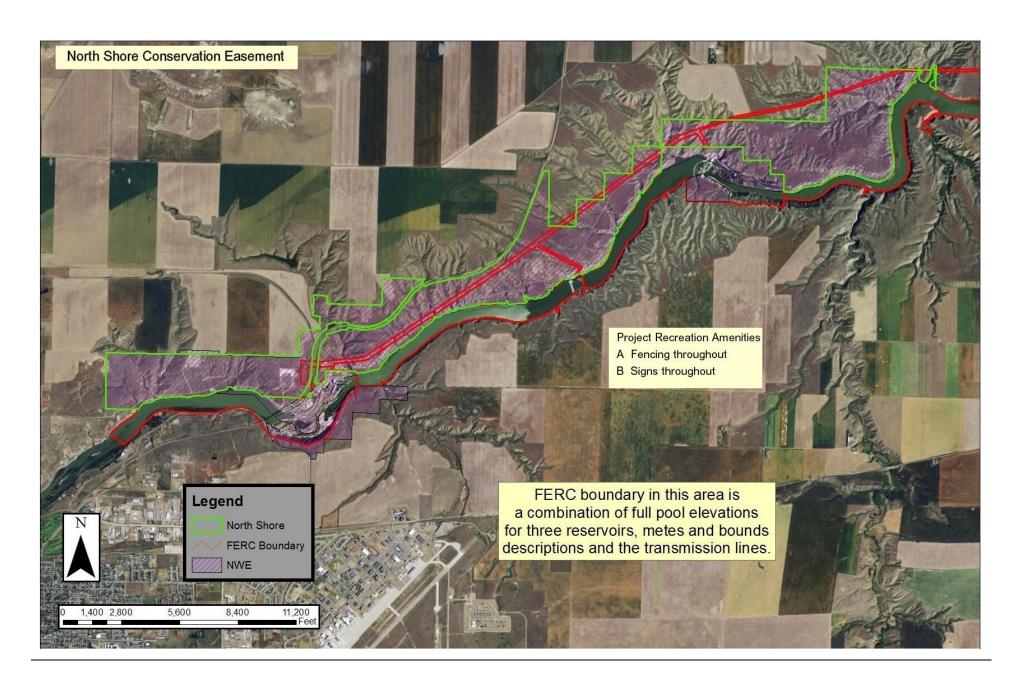


North Shore Conservation Easement

The Licensee established the 2,415-acre Lewis and Clark Heritage Greenway conservation easement for open space primarily on NorthWestern Energy property on the north shoreline of the Missouri River adjacent to the Rainbow, Cochrane, Ryan, and Morony Reservoirs. FWP owns the easement and approximately 435 acres in fee along the north shore. The Licensee's remaining land on the north shore is managed for open space, except where needed for project operations. In keeping with the Approved CRP, perimeter fencing was constructed and informational signs were placed throughout the Greenway. FWP maintains the lands covered by the easement through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350).



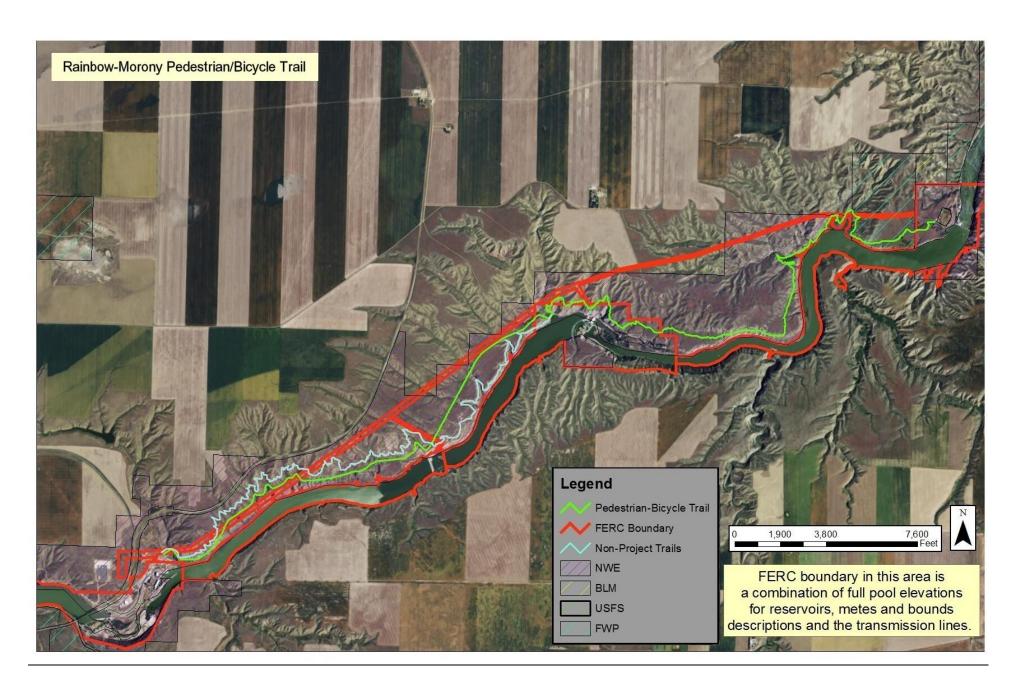




Rainbow-Morony Pedestrian/Bicycle Trail

The Licensee cooperated with FWP and River's Edge Trail Foundation to develop a pedestrian and bicycle trail on FWP lands and NorthWestern Energy lands within the Greenway conservation easement from Rainbow Dam to the Sulfur Spring Trailhead adjacent to the Morony Development. The trail uses the existing road from the Rainbow Development to the Ryan Development (linking the Ryan Island Day Use Area), and continues downstream to the Morony Development. Trailheads near the Rainbow, Ryan, and Morony Developments provide public access. FWP holds a trail easement and operates and maintains the trail through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350).

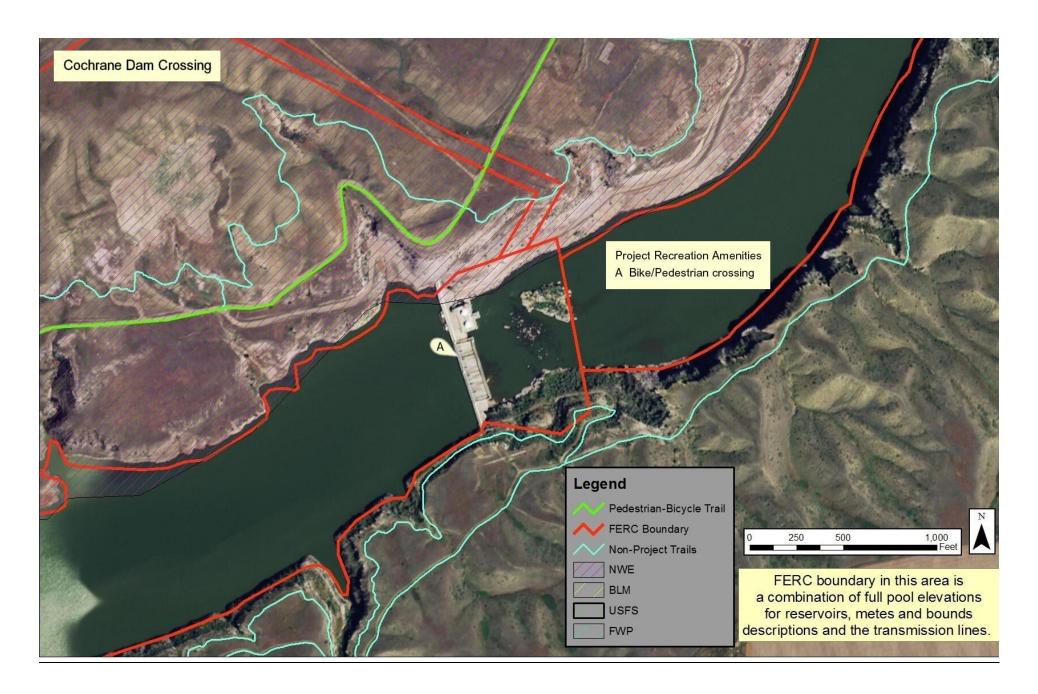




Cochrane Dam Crossing

In keeping with the Approved CRP, the Licensee worked with the River's Edge Trail Foundation to modify Cochrane Dam for periodic pedestrian access. When open, the crossing links the south shore pedestrian/bicycle trail to the north shore pedestrian/bicycle trail. The Licensee cooperates with the River's Edge Trail Foundation to open the crossing for public bicycle and pedestrian access upon request and with appropriate supervision. The Licensee operates and maintains the crossing.



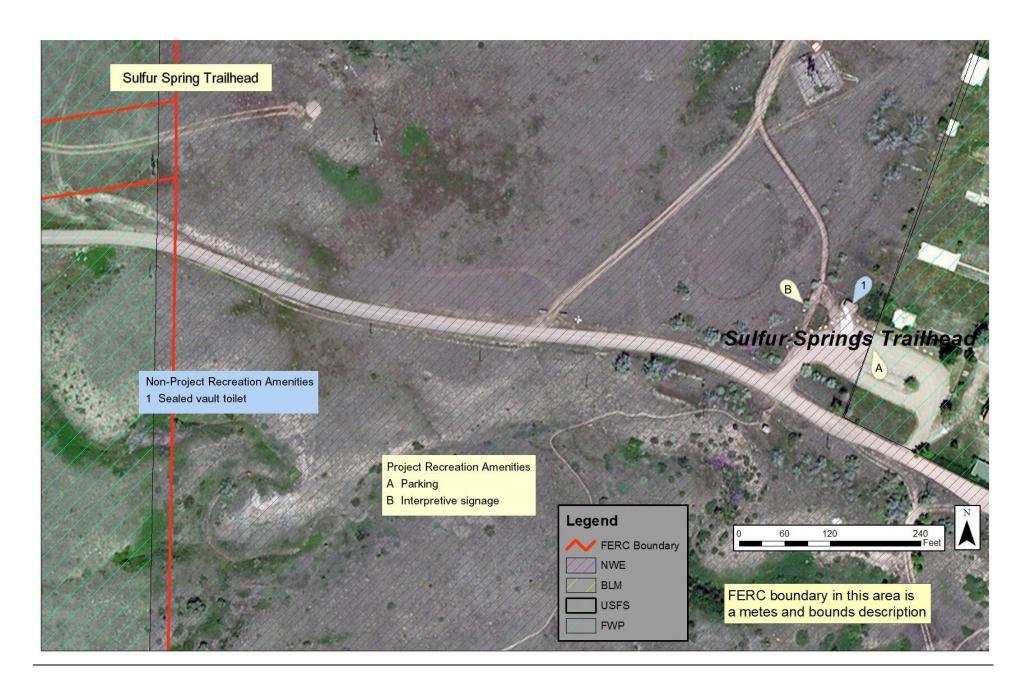


Sulfur Spring Trailhead

The Licensee cooperated with and provided funding to FWP for the development of the Sulfur Spring Trailhead located on FWP and NorthWestern Energy property near Morony Dam. In keeping with the Approved CRP, facilities include parking and interpretive signage, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as Non-Project Recreation Amenities" on the map, include a sealed vault toilet. FWP operates and maintains the trailhead through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of all sites managed by the Region 4 Parks division of FWP associated with the Great Falls developments (\$75,150 in 2016 plus a voluntary supplement of \$19,350).



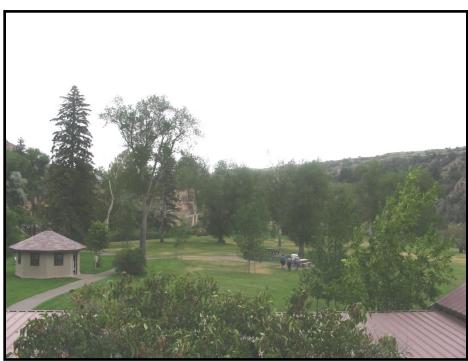


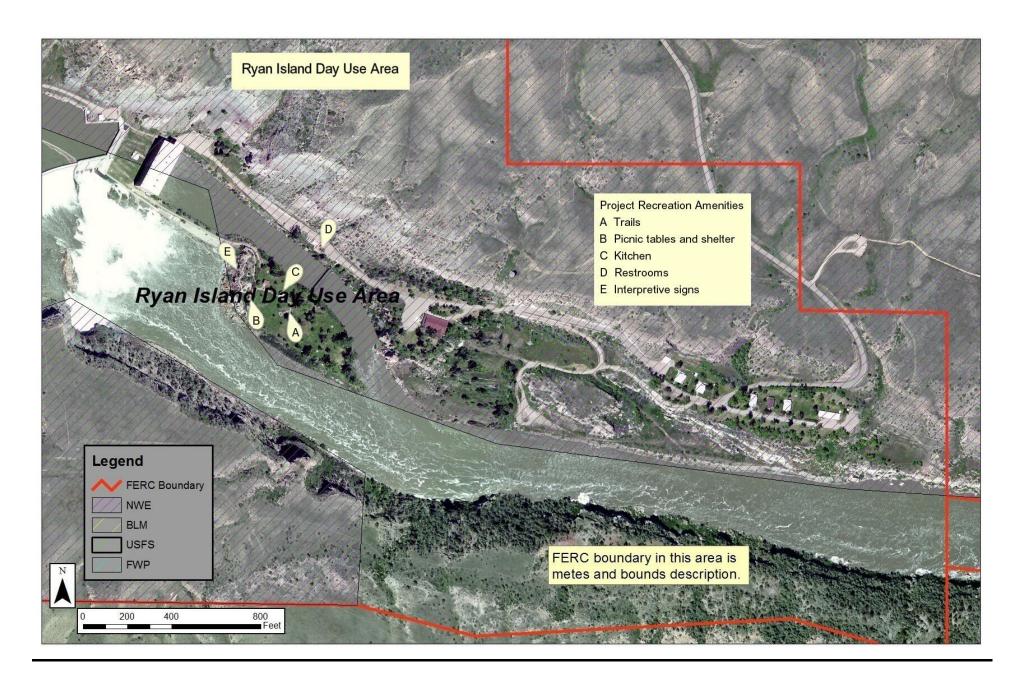


Ryan Island Day Use Area

The Ryan Island Day Use Area is located immediately downstream of Ryan Dam on NorthWestern's property. In keeping with the Approved CRP, facilities include trails, picnic tables and a shelter, interpretive signs, a kitchen, and sealed vault toilets. The site is open to the public from Mother's Day through Labor Day each year. The Licensee operates and maintains this site.







Carter Ferry Access Site

The Licensee, at the time, deposited \$61,443.42 (the original commitment of \$50,000 adjusted for CPI-U) into the long term trust for the development of this site. NorthWestern Energy will continue to work with the FWP to acquire and reconstruct a fishing access site in the vicinity of Carter's Ferry with a parking area, a boat ramp, restrooms, and signs.



River Access Sites

North Park Access Site
Cottonwood Grove Fishing Access Site
Widow Coulee Fishing Access Site
Fort Benton Motorboat Launch
Fort Benton Canoe Launch and Campground

The Licensee worked with the FWP Commission to obtain closure of Cochrane, Ryan and Morony Reservoirs for the water-based uses of boating, floating, swimming and sailing due to fluctuations in water levels resulting from hydroelectric operations that can threaten public safety. To offset lost recreational opportunities related to these closures, the Licensee cooperated with the City of Fort Benton, the Town of Cascade, Chouteau and Cascade counties, FWP, BLM, Montana State Historic Preservation Office, and Montana Department of Natural Resources and Conservation in acquiring, developing, and/or improving public access sites to the Missouri River. The facilities at these sites generally include boat ramps, parking, and sealed vault toilets. As these sites were acquired and developed, the Licensee entered into cooperative management agreements with local governmental entities, or state or federal agencies to manage each site.

NorthWestern Energy recognizes the cooperation and assistance of the USFS, BLM, Montana FWP, River's Edge Trail Foundation and other partners in providing these pictures.

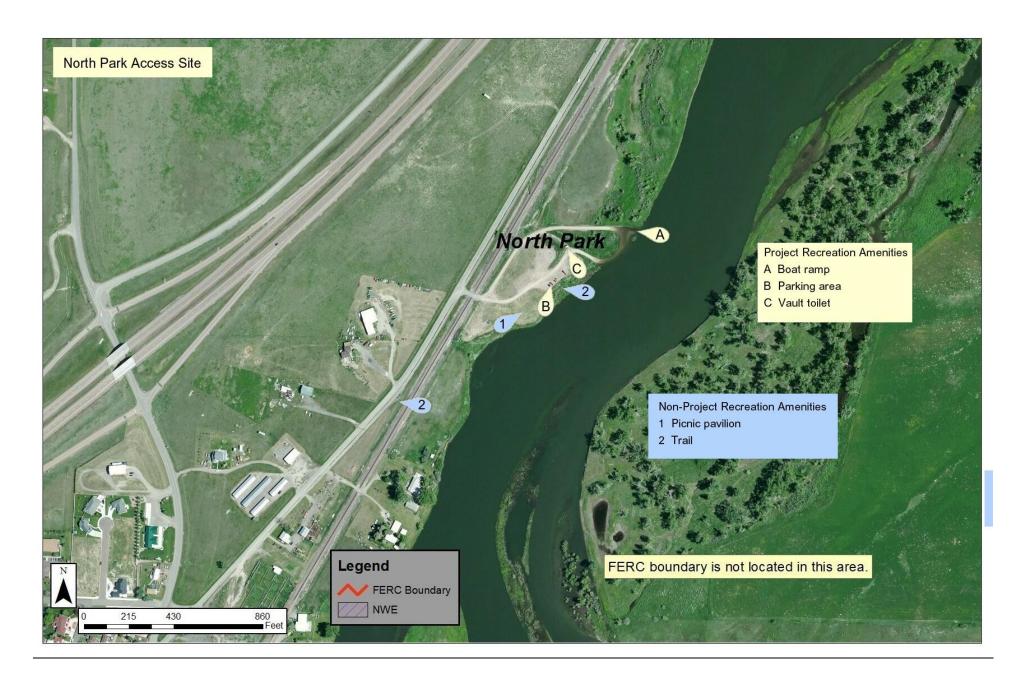
North Park Access Site

The Licensee cooperated with the Town of Cascade, among others, to fund and develop an access site on city-owned property along the Missouri River north of Cascade. In keeping with the Approved CRP, facilities include a parking area, a boat ramp, and vault toilet, shown as "Project Recreation Amenities" on the map. Additional site amenities, shown as "Non-Project Recreation Amenities", include a pedestrian trail and picnic pavilion. The Town of Cascade is responsible for operating and maintaining the site through a cooperative management agreement with the Licensee. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$16,700 in 2016).









Cottonwood Grove Fishing Access Site

The Licensee acquired a site on the Missouri River upstream of Great Falls, transferred the parcel to FWP, and cooperated with FWP to develop a day use site for non-motorized boating access. In keeping with the Approved CRP, facilities include a vault toilet, parking area, and a carry-in ramp for launching of non-motorized watercraft. FWP is responsible for operating and maintaining the site. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$41,750 to the Region 4 Fisheries division of FWP for Cottonwood Grove and Widow Coulee Fishing Access Sites and the Causeway Fishing Pier).





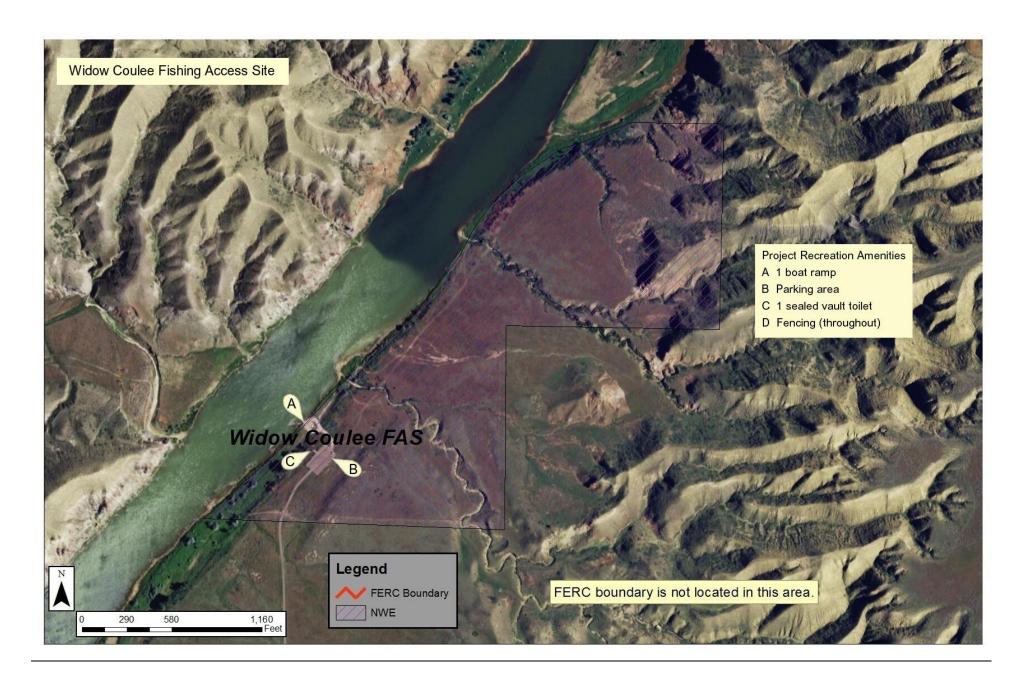


Widow Coulee Fishing Access Site

The Licensee cooperated with Chouteau County, the BLM, FWP, the Montana Department of Natural Resources and Conservation, and three adjacent landowners to construct this access site a few miles downstream of Morony Dam. The county constructed approximately three miles of new road and the Licensee constructed one mile of new road. In keeping with the Approved CRP, the facilities developed include a parking area, fencing, vault toilet, and boat ramp. FWP is responsible for operating and maintaining the site. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$41,750 to the Region 4 Fisheries division of FWP for Cottonwood Grove and Widow Coulee Fishing Access Sites and the Causeway Fishing Pier).







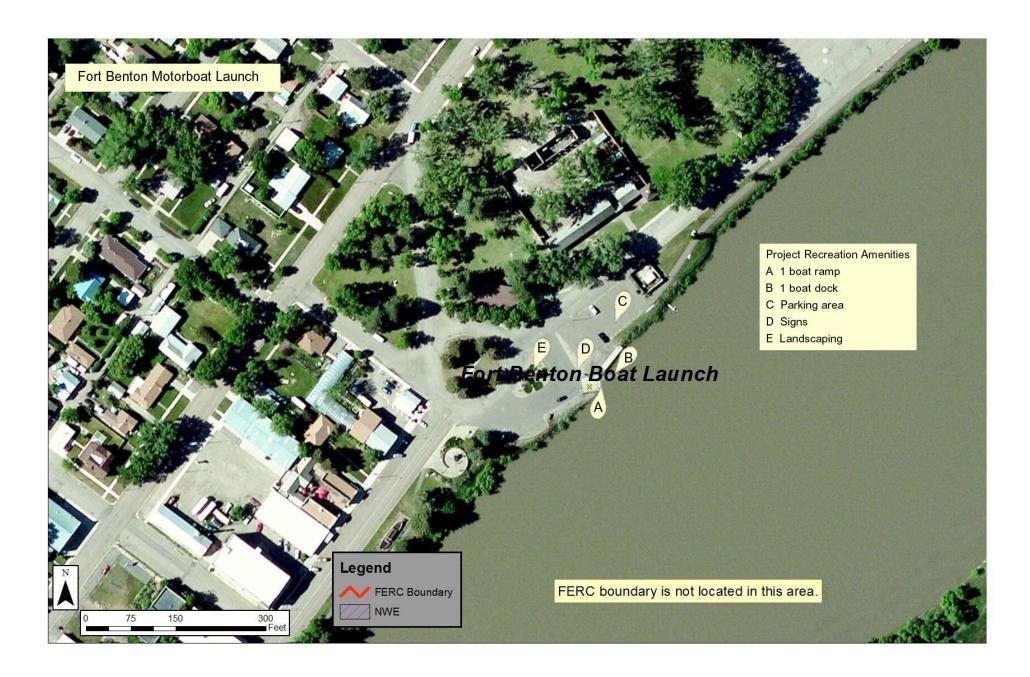
Fort Benton Motorboat Launch

The Licensee cooperated with FWP and the City of Fort Benton to reconstruct and improve the existing motorboat launch located on city property near the Old Fort Park in Fort Benton. In keeping with the Approved CRP, the facilities include a new boat ramp, dock, parking area, signs and landscaping.

The City of Fort Benton is responsible for operating and maintaining the motorboat launch. NorthWestern Energy contributes funds annually for operation and maintenance of the site (\$8,350 in 2016).







Fort Benton Canoe Launch and Campground

The Licensee cooperated with Chouteau County and the BLM to construct a non-motorized boat launch and campground on county property at the Chouteau County Fairgrounds. In keeping with the Approved CRP, facilities include a carry-in-boat launch, dispersed tent and seven designated RV campsites, a sealed vault toilet, drinking water, fire rings, picnic tables, fences, signs, landscaping, a long-term parking area, showers and flush toilets.

Chouteau County is responsible for operating and maintaining the canoe launch and campground. NorthWestern Energy contributes funds annually for operation and maintenance of the sites (\$8,350 in 2016).

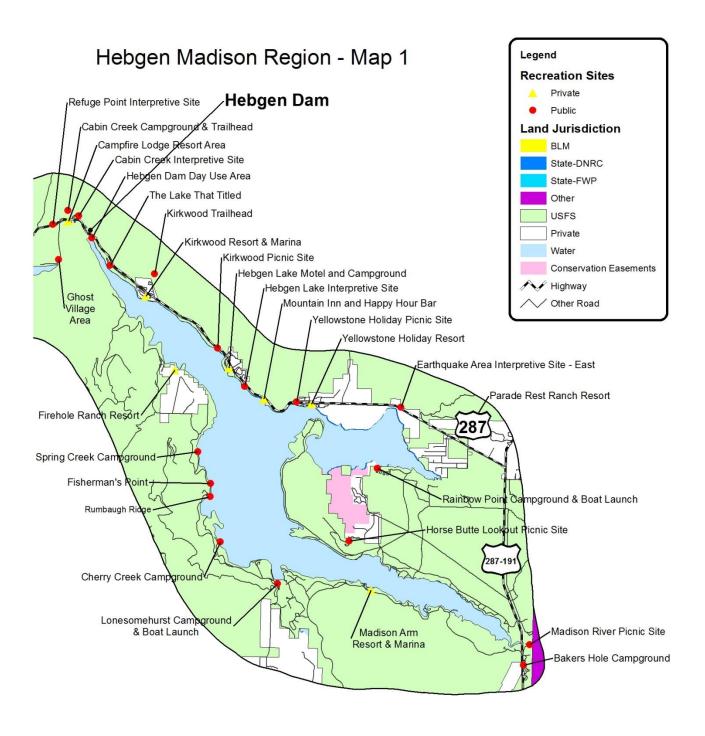


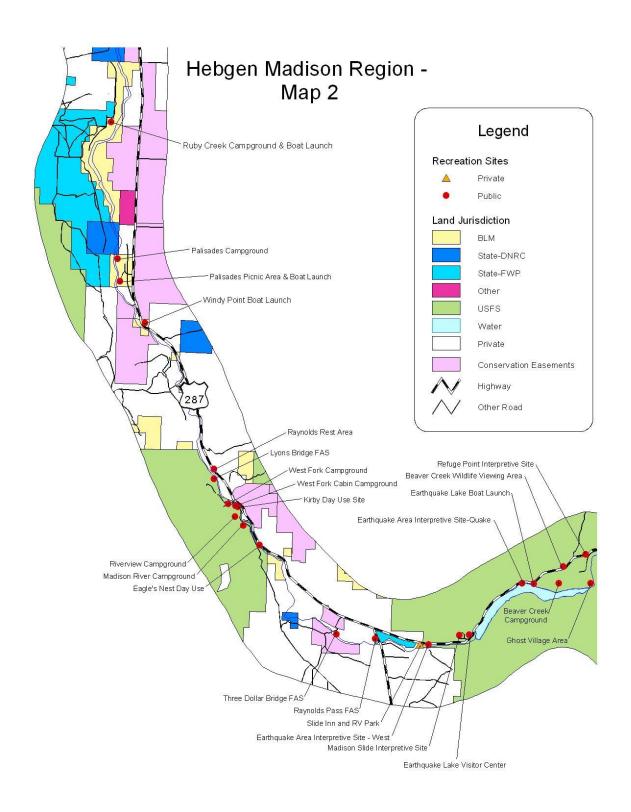


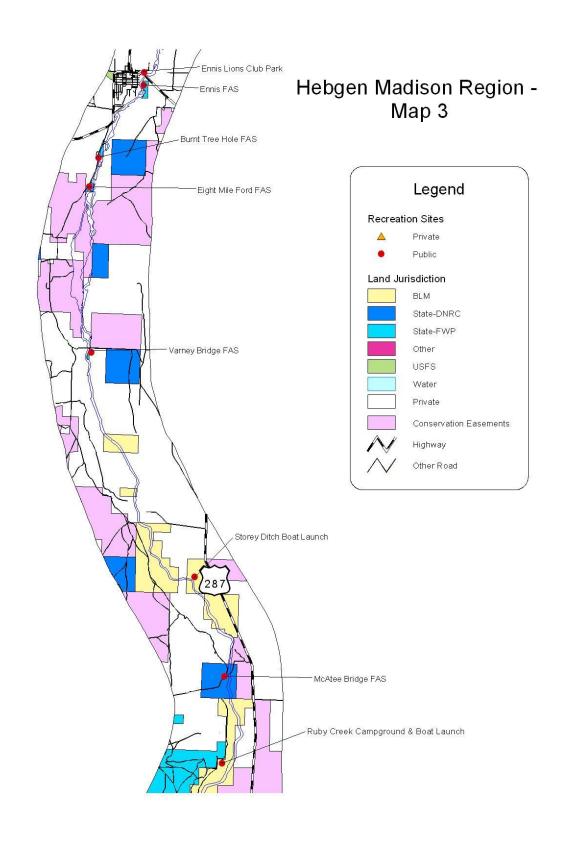


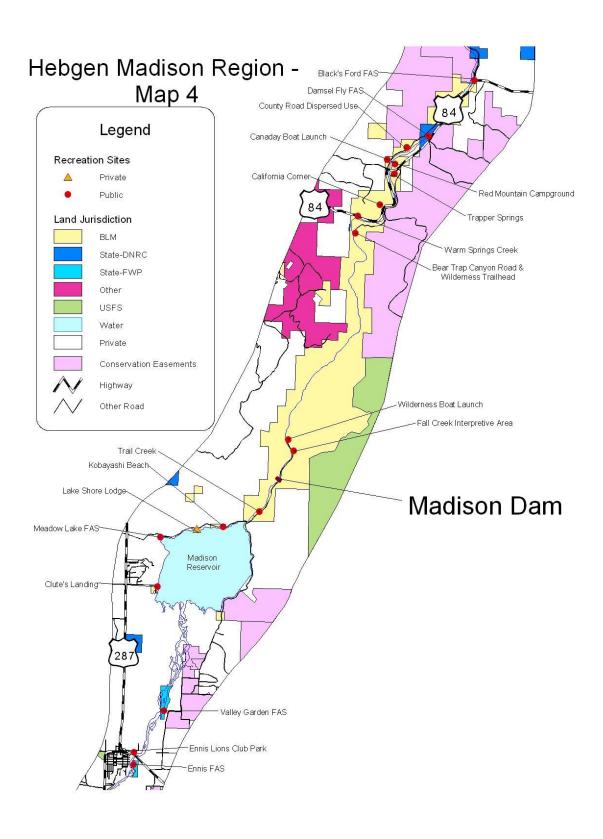
Appendix A3: Recreation Site Location Maps

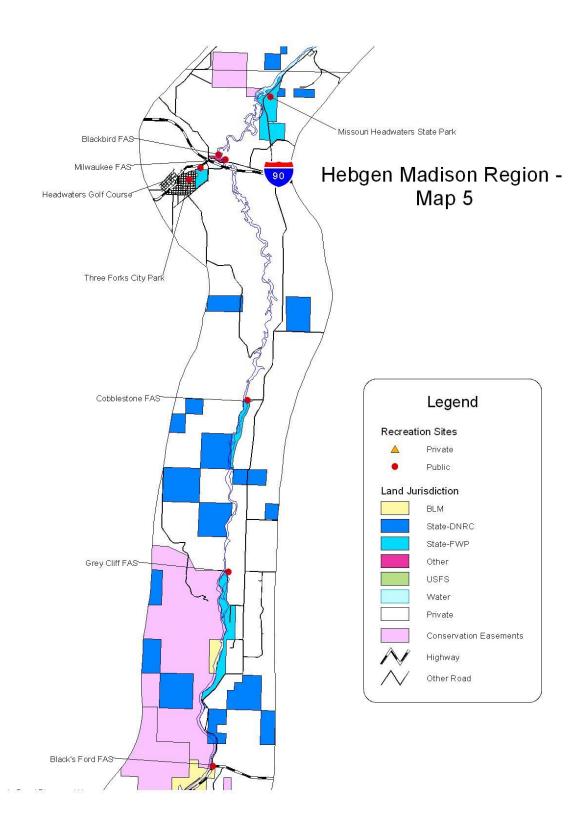
The following 12 maps show the location of public recreation sites in the Corridor.

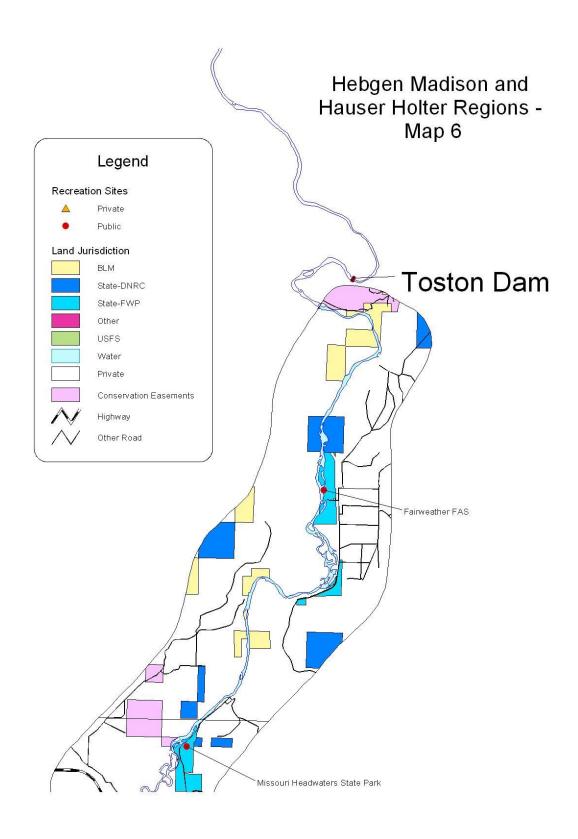


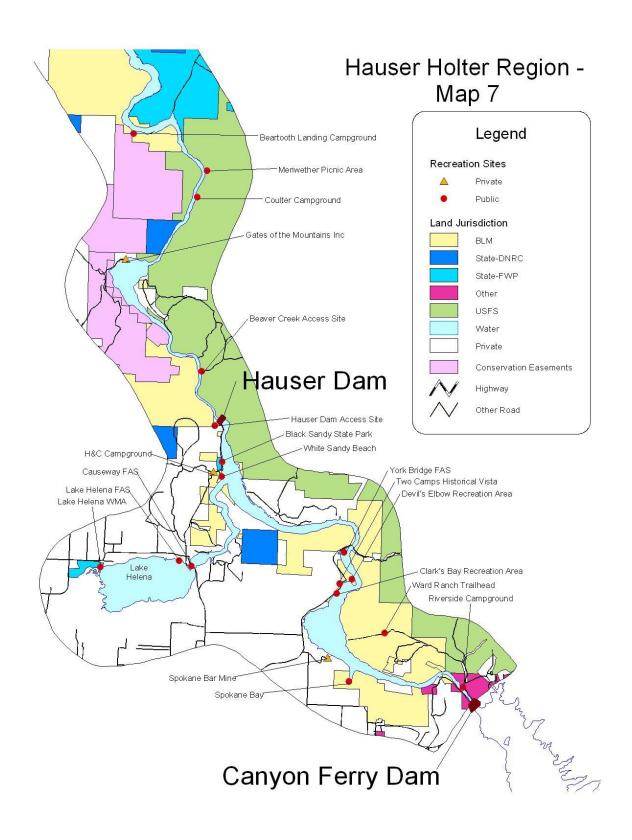


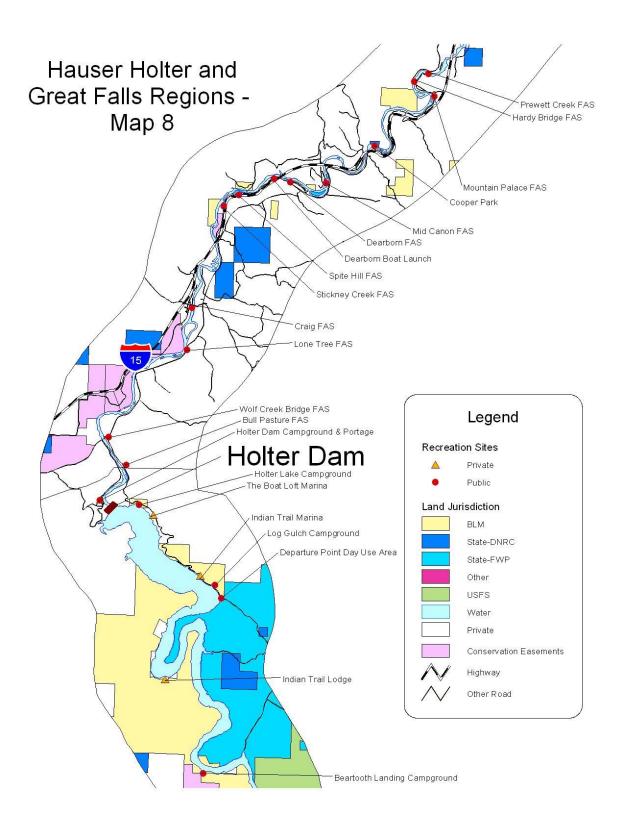




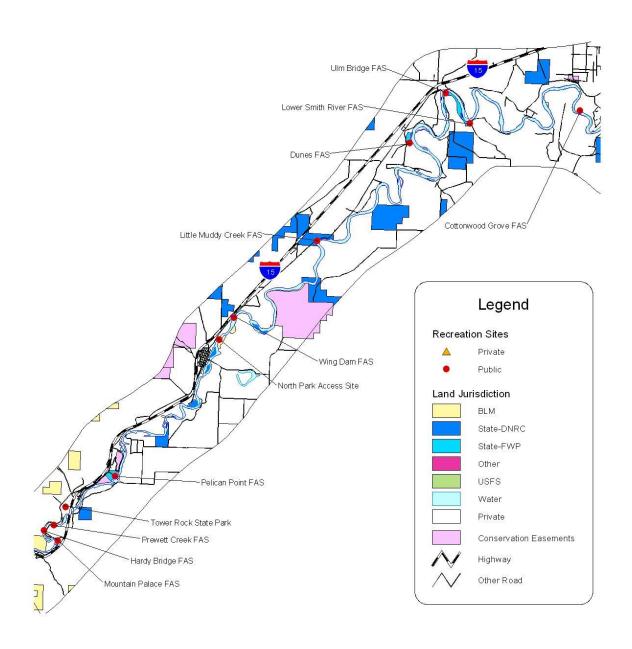


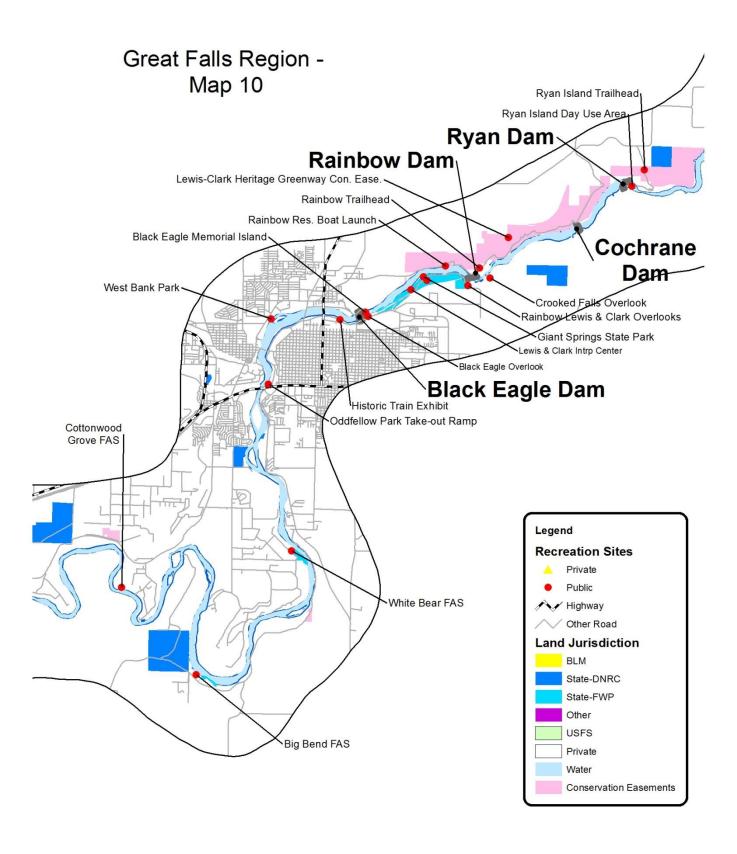


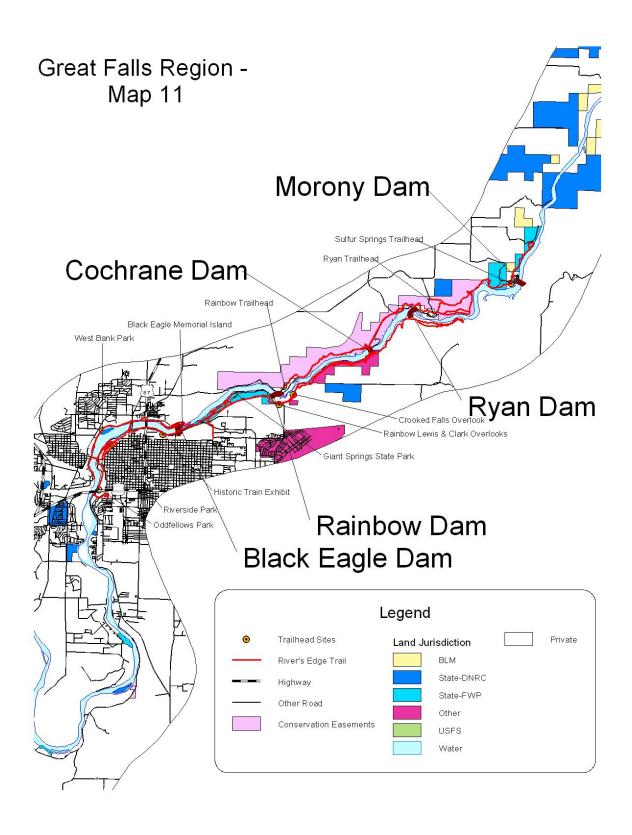




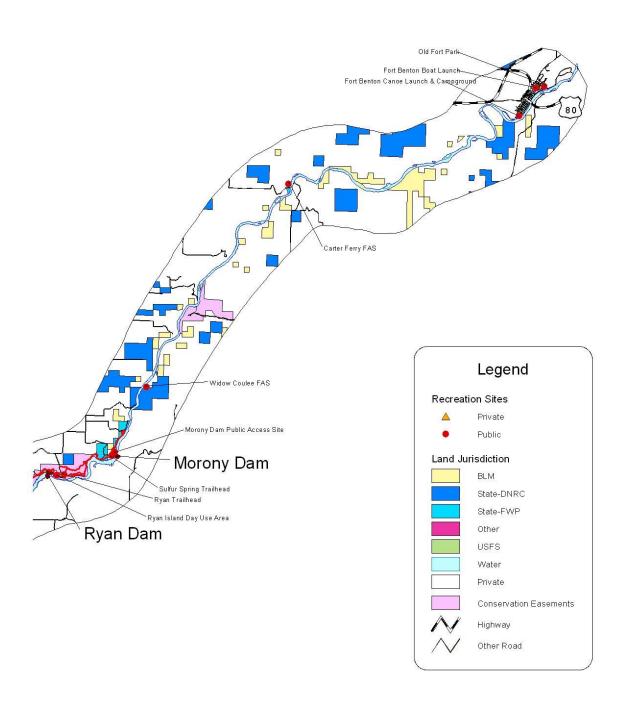
Great Falls Region - Map 9







Great Falls Region -Map 12



Appendix A4: Regional Private Property Maps

The following maps show location of private properties and structures in 2015 for each region of the Corridor.

It is important to note that these maps cannot be directly compared with those shown in previous versions of the Plan. For a variety of reasons (e.g. completeness of the raw data) a direct comparison with earlier data would exaggerate the conversion of larger parcels to smaller parcels.

Figure A4-1: Private Properties by Size, Hebgen-Madison Region

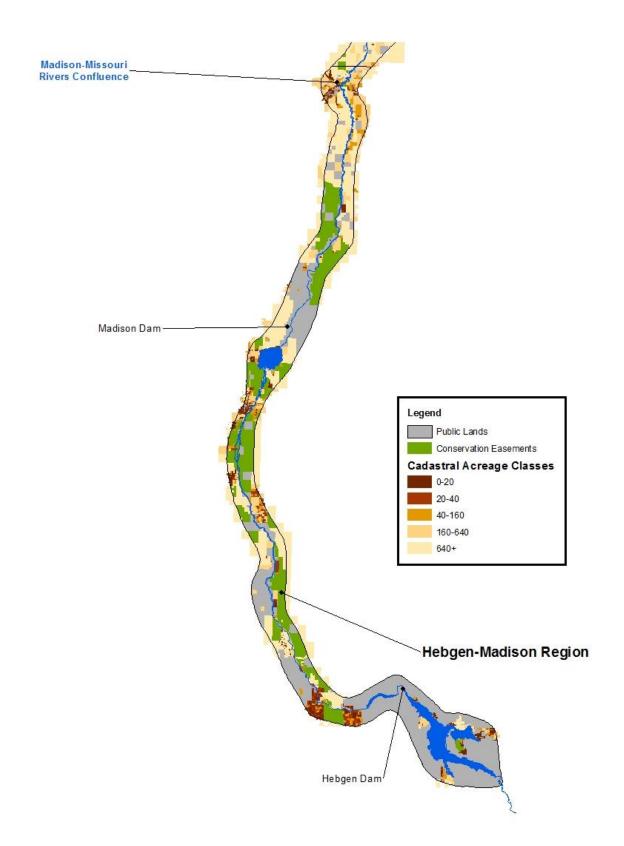
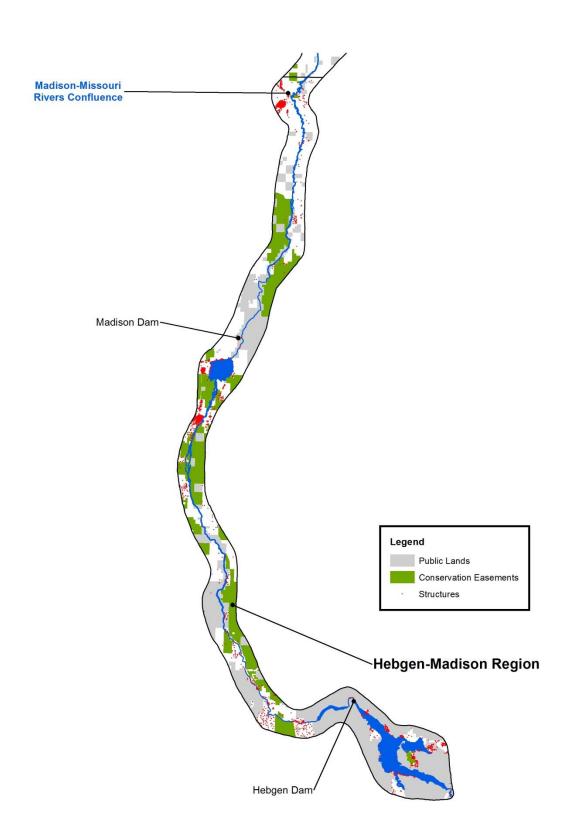


Figure A4-2: Structure Locations, Hebgen-Madison Region



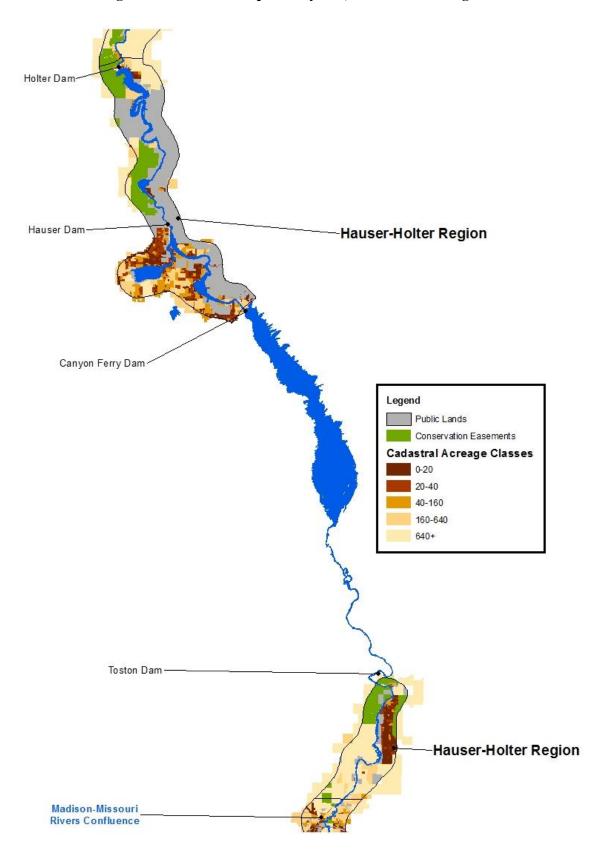


Figure A4-3: Private Properties by Size, Hauser-Holter Region

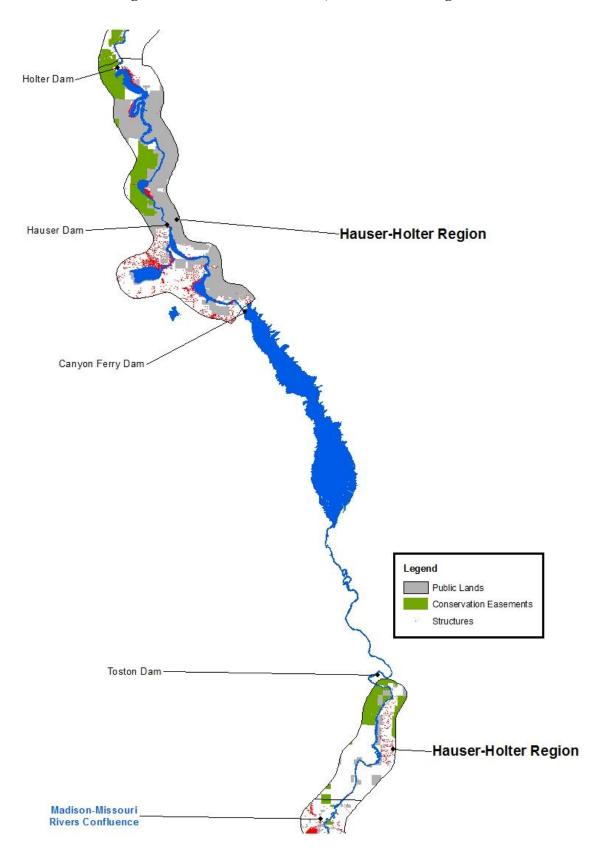


Figure A4-4: Structure Locations, Hauser-Holter Region

Figure A4-5: Private Properties by Size, Great Falls Region

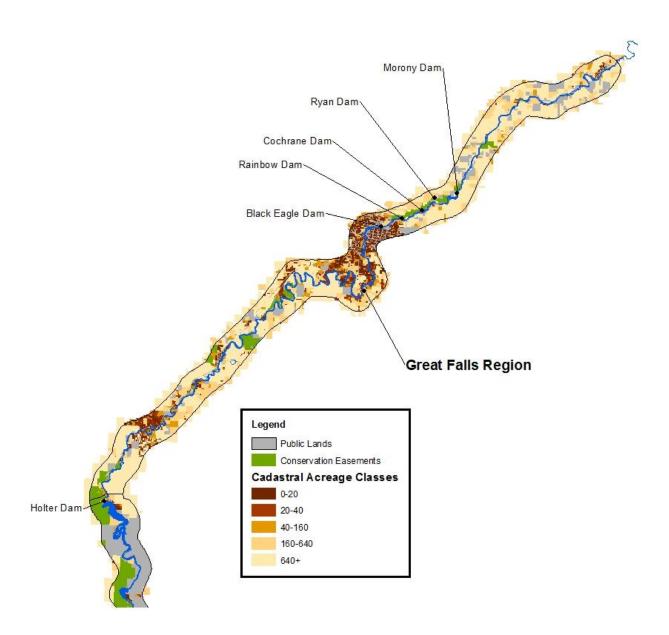
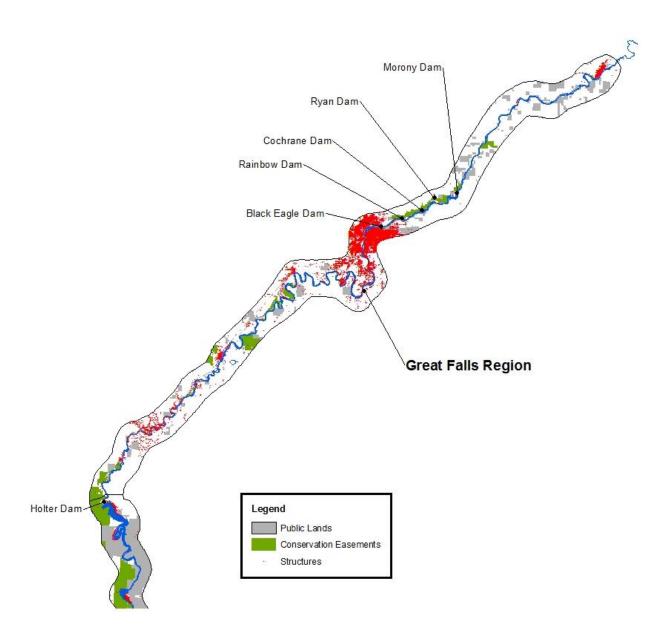


Figure A4-6: Structure Locations, Great Falls Region



Appendix B: Visitor Survey Results

The Missouri-Madison Recreation Visitor Study has been conducted five times over the past 20 years. The initial, year-long study was conducted during 1994-95 to establish benchmark data for visitor use, satisfaction, and perceptions related to public recreation in the Corridor. The four subsequent studies, conducted during the summer recreation season of 1999, 2003, 2008, and 2014, sought to update 1994-95 data for recreation visitors in the Corridor and establish trend information.

The study provides NorthWestern Energy, agencies, and partners with information about recreational use of sites associated with NorthWestern Energy's Missouri-Madison Hydroelectric Project. The study is required as a condition of NorthWestern Energy's license from the Federal Energy Regulatory Commission (FERC) for the Project.

Summary results from the 2014 visitor study for the Missouri-Madison Corridor are provided below. Complete results including methods, study objectives, and regional results, are available online at www.missourimadison.com.

Summary

- A recreation visitor survey was conducted in 2014 during the 17-week peak recreation use season (May 18 to September 13) at NorthWestern Energy's Missouri-Madison Hydroelectric Project.
- Fifty-seven recreation sites and two trail systems associated with the Project were included in the study. Survey technicians sampled each site about 18 times at various times of day and days of the week.
- Surveys from 3614 recreation visitors were collected. Visitor response to the study was excellent, with 85% of personally-contacted visitors participating in the survey (92% of sample came from personally-contacted visitors; remainder from survey cards left on unattended vehicles).
- Results indicate that visitors perceive the recreation sites to be in good condition and developed in a manner that meets their needs.
- o Sightseeing, photography, and camping were popular activities, though 30% of visitors indicated fishing—either from shore, by wading, or from a boat—as their primary activity.
- o Good fishing and scenic beauty were the most common reasons visitors chose a site.
- O Satisfaction with various site attributes was good and overall site satisfaction was relatively high (7.8 on a 9-point scale).
- O Visitors were generally satisfied with recreational development and management, with about three-quarters (72%) preferring to leave things as is.
- Those visitors desiring changes most-often named accommodations for disabled visitors, showers, bathrooms, RV hookups or waste dumps.
- o Only 4% of visitors reported experiencing resource degradation or vandalism at the site.
- o Fifty-eight percent of visitors were male and 42% were female.
- o The median age of visitors (aged 16 or older) was 47 years.
- Most (61%) visitors were from Montana, with more than one third from other US states.
- One-third (34%) of visitors were using the recreation site for the first time, while two-thirds (66%) were repeat visitors. Visitors with previous experience had generally visited more than 10 times.
- o The median group size at recreation sites was three people.
- Typical site visits lasted 3-6 hours for day users, while overnight visitors generally stayed three nights.

- Visitors to sites in the Hebgen Region tended to:
 - o Be from out-of-state.
 - o Be first-time visitors.
 - o Stay overnight.
 - Visit for camping opportunities.
- O Visitors to sites in the Ennis Region tended to:
 - o Be day users.
 - Visit for fishing and non-motorized boating opportunities.
 - Choose the site because of good fishing.
 - o Use more licensed guides or outfitters.
- O Visitors to sites in the Helena Region tended to:
 - Be mostly from Montana.
 - Visit for powerboating opportunities.
 - O Choose the site because it's easy to get to.
 - o Have more groups with disabled members.
- Visitors to sites and trails in the Great Falls Region tended to:
 - o Be day users.
 - Visit for walking/hiking, cycling and sightseeing opportunities.
 - o Choose the site because of scenic beauty.
 - o Feel the least crowded.
- o Results are generally similar to four previous studies conducted in 2008, 2003, 1999, and 1995.

Study Overview

The study area included the major recreation sites associated with the nine hydroelectric developments that comprise the Project. The hydro developments and their respective recreation sites begin on the Madison River near West Yellowstone and continue downriver past Great Falls on the Missouri River.

Fifty-seven recreation sites and two trail systems near Great Falls were included within the study. They range from informal, dispersed-use sites to highly-developed facilities. The study excluded recreation sites along river reaches that are not within or close to NorthWestern Energy's hydro development boundaries or that were not included in the FERC Project License.

For discussion purposes, the term "Corridor" refers to the all of the recreation sites that were included in the study. These sites are grouped within four geographic regions (Regions) along the Madison and Missouri Rivers:

- o Hebgen Region (Hebgen Lake Area)
- Ennis Region (Ennis Lake and Warm Springs Areas)
- o Helena Region (Hauser and Holter Lake Areas)
- o Great Falls Region (Great Falls, Cascade and Fort Benton Areas)

In the results, the Ennis and Helena Regions were divided into smaller areas to provide more geographic-specific information, because the division was useful and sample sizes were reasonably adequate. Similarly, within the Great Falls Region, results for the Great Falls trails are reported separately from other recreation sites in that region.

Response Rates and Sample Sizes

Response to the recreation site visitor survey was excellent. In total, 3614 surveys were completed, with the vast majority (93%) conducted using the hardcopy questionnaire.

Of the 3933 visitors personally contacted onsite and asked to participate, 3091 completed the hardcopy questionnaire at the site, 247 returned it by mail, and 80 opted to complete the online version of the survey. In total, the survey response rate for visitors who were personally contacted onsite was 85%.

As expected, response to invitations to participate in the Internet survey that were left on unattended vehicles was considerably less. The 1735 survey invitation cards placed on unattended vehicles yielded 228 online surveys, resulting in a 13% response rate. This low rate likely resulted from the lack of personal contact with a survey technician, the difficulty in communicating an effective appeal for survey participation on a card, and general disregard to materials left on vehicles. Nonetheless, the online survey facilitated survey participation of recreationists that would otherwise not have been included in the study, particularly at sites where visitors were often unavailable for personal contact. However, potential non-response bias is a significant issue in the online survey because of the low response. Due to the follow-through required by respondents to participate in the online survey, it can be assumed that to some degree, many visitors in the Internet-based sample had opinions or experiences that they were particularly eager to share. Because these online surveys represented only a small proportion of the completed questionnaires, they were pooled with the on-site interviews and all questionnaires were analyzed together.

¹ Because survey questionnaires for the River's Edge Trail and North Shore Natural Trail were different than the questionnaire used for the recreation sites, trail results are not included in "Corridor" results.

The sample sizes for the Corridor and each of the four Regions was sufficient to provide excellent statistical confidence in aggregate results.² Because each recreation site was sampled at about the same intensity (i.e., the time spent sampling at each site was about the same) and response rates at each site were about equal, combined site results provide a reasonable measure of Corridor- and Region-wide recreation.³

Notes on Interpreting Results

Although efforts were made to sample each recreation site an equal number of times, some sites were sampled at a higher or lower intensity due to travel times, scheduling, site closures for construction activity, and other logistical factors. To some extent therefore, results from these sites are over- or underrepresented when results from several sites are combined in Corridor or Regional summaries.

At some sites, not all recreation uses were captured in accurate proportions. For example, people participating in boat- or trail-related activities usually were not present at boat launches and trailheads very long before they departed for their activity, while visitors using these sites for picnicking or bank angling were often present at the site and available for sampling. As previously noted, efforts to solicit participation of trail or boat users in the Internet survey via survey invitation cards left on unattended vehicles resulted in a significantly lower response rate than on-site interviews.

Repeat site use by visitors was not recorded because visitors were sampled only once at each site over the course of the study period.⁴ As such, to some degree, results under-report site use associated with frequent site visitors, such as area residents or others that visit the same site many times over the season.

 $^{^2}$ For binomial random variables (e.g., the proportion of visitors that participate in an activity or were first-time visitors), at the worst case where p=0.5, we are 95% confident that the true proportion is: +/- 1.6% for Corridor results, +/- 3.8% for Hebgen Region results, +/- 3.7% for Ennis Region results, +/- 2.9% for Helena Region results, and +/- 3.0% for Great Falls Region results.

³ Weighting of site-specific results was not necessary.

⁴ Sampling visitors only once at each site ensures that a repeat visitor is not unduly disturbed or burdened by a repeat request for survey participation. Visitors could, however, be sampled again at a different site.

Group Characteristics of Missouri-Madison Visitors

Type			Disabil	ities			
n=3199	Alone	11%	n=3207	Groups with Disabled	11%		
	Family	52%	n=224	Common Types:			
	Friends	19%		Mobility impairment			
	Family and Friends	17%		Back injury			
	Business Associates	1%		Multiple sclerosis Mental disability or cond Hearing or vision			
	Used a Licensed Guide or Outfitter	4%					
Size			Compo	sition			
n=3121	Mean	4.5	n=3121	Adult Males	40%		
	Median	3.0		Adult Females	34%		
				Children under 18	26%		

Respondent Characteristics of Missouri-Madison Visitors

Age			Highes	t Education Completed	
n=3180	Mean	47	n=3154	Elementary (1-8 years)	<1%
	Median	47		High School (9-12 years)	25%
				College (13-16 years)	49%
Gender				Post Graduate (17+ years)	26%
n=3189	Male	58%			
	Female	42%			
Origin			Housel	hold Income	
n=3033	Montana	61%	n=2743	Less than \$20,000	9%
	California	4%		\$20,000 to \$39,999	17%
	Idaho	3%		\$40,000 to \$59,999	19%
	Washington	3%		\$60,000 to \$79,999	17%
	Utah	3%		\$80,000 to \$99,999	12%
	Other US	23%		\$100,000 to \$119,999	9%
	Canada	2%		\$120,000 to \$139,999	6%
	Other country	1%		\$140,00 or more	11%
	Most Common N	/lontana Citi	es/Towns:		
	Great Falls	17%	Missoula	2%	
	Helena	14%	Butte	2%	
	Bozeman	9%	Belgrade	2%	
	Billings	2%	Ennis	2%	

Trip Characteristics of Missouri-Madison Visitors

Previous Site Experience

n=3226 First Visit to Site 34% Repeat Visitor 66%

Previous 36% Years 24% 1 to 5 2 or less Visits Visiting 6 to 10 16% 3 to 10 36% n=2149 n=2140More than 10 48% More than 10 40%

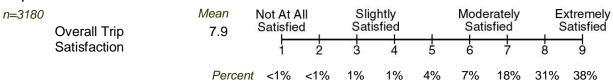
Length of Stay

n=3191	Day Use 5	56%		Overnight Use	44%	
	Hours	Less than 1	17%	Nights	Mean	3.9
	n=1407	1 or 2	30%	n=1373	Median	3.0
		3 to 6	44%			
		More than 6	8%			

Activity Participation

n=3333	P	articipated in Activity	Primary Activity		Participated in Activity	Primary Activity
	Bank Angling	23%	11%	Auto / RV Camping	31%	13%
	Wade Angling	11%	5%	Tent Camping	15%	5%
	Boat Angling	22%	14%	Picnicking	27%	4%
	Powerboating	16%	4%	Walking / Hiking /	27%	3%
F	Personal Watercraft	3%	1%	Running	21%	3%
	Swimming	26%	5%	Biking	7%	1%
	Waterskiing / Tubing	/ 9%	3%	Horseback Riding	1%	<1%
	Wakeboarding	970	370	ATV / Motorcycling	3%	<1%
	Non-Motorized Boatin	0		Sightseeing	49%	12%
	(canoe, kayak, raft, fletube, drift boat, sailboard)	17%	7%	Photography	32%	1%
		out,		Visiting Historic Site	s 15%	3%
				Nature Study / Viewing Wildlife	26%	2%
				Other Activity	9%	5%

Trip Satisfaction



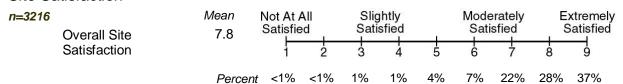
Opinions of Missouri-Madison Visitors about Site

Reaso	ns Site was Chose	en		Additional Facility Needs	
n=3333		One of the Reasons	Primary Reason	<i>n</i> =3212 Yes, site needs facilities 2	28%
	Easy to get to	58%	16%	Accommodation for disabled	6%
	Group facilities	9%	2%	Showers	5%
	Heard about it	18%	5%	More bathrooms	3%
	Good facilities	33%	8%	More campsites	3%
	Good fishing	39%	21%	RV dump capabilities	2%
	Scenic beauty	58%	19%	RV hookups	2%
	Been here before	49%	6%	More picnic tables	2%
	Try a new area	14%	4%		
	Historical significand	e 11%	4%		
	Other sites crowded	4%	2%		
	Other reason	19%	13%		

Satisfaction with Facility Condition

n=3157	Very Dissatisfied - 2 -	Neutral No Opinion	+1	Very Satisfied + 2	Mean	Noted as an Important Condition
	Campsite / picnic	area conditions			1.2	33%
	Boat dock / boat	launch conditions			0.9	18%
	Quality of interpre	etive / educational in	formation		0.7	4%
	Amount or appro	priateness of develo	pment		1.0	7%
	Maintenance of f	acilities			1.3	22%
	Cleanliness of ar	ea			1.5	34%
	Condition or degr	ee of naturalness			1.3	17%
	Behavior of other	people			1.1	20%
	Number of other	recreationists within	sight or so	und	0.8	13%
	Rules and restric	tions			0.9	6%
	Number of fish ca	aught			0.5	16%
	Opportunity to vie	ew wildlife			1.0	10%
	Amount of dust of	n roads within the si	te		0.7	3%
	Condition of road	s within the site			1.0	9%
	Sanitation and to	ilet facilities			1.1	32%

Site Satisfaction



Perceptions of Resource Degradation or Vandalism

*n***=3236** 4% of respondents saw resource degradation or vandalism at the site.

Common types: Trash or litter, graffiti, dog excrement

Opinions about Reservation System

*n***=2409** 38% of respondents at sites allowing camping said they would prefer to have some of the camping spots available through an online reservation system.

For respondents that would like to see a reservation system:

Not willing to pay a fee 36%
Willing to pay less than \$5 27%
Willing to pay \$5-\$10 25%
Willing to pay \$11-\$15 6%
Willing to pay more than \$15

Encounters and Crowding of Missouri-Madison Visitors

Number of Encounters

n=2437	0	1-5	6-10	11-20	21-30	31+
Non-motorized boats	42%	36%	13%	5%	2%	2%
Powerboats	42%	27%	16%	9%	4%	3%
Personal Watercraft	62%	26%	9%	2%	1%	<1%
Waterskiers, wakeboarders, tubers	66%	21%	8%	3%	1%	1%
Bank Anglers	39%	42%	13%	5%	1%	1%
Wade Anglers	69%	22%	6%	2%	1%	<1%
Boat Anglers	47%	26%	15%	9%	3%	1%
Livestock	87%	7%	2%	1%	1%	2%
Shoreline Development	68%	23%	5%	2%	1%	1%

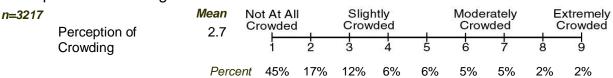
Expected Number of Encounters

n=1511		More	Less	Don't Know
	Non-motorized boats	11%	42%	47%
	Powerboats	15%	40%	45%
	Personal Watercraft	10%	42%	48%
	Waterskiers, wakeboarders, tubers	10%	42%	48%
	Bank Anglers	11%	48%	40%
	Wade Anglers	10%	45%	46%
	Boat Anglers	9%	44%	46%
	Livestock	9%	25%	66%
	Shoreline Development	15%	25%	61%

Reaction to Number of Encounters

n=1750		Enjoyed	Didn't Mind	Disliked	N/A
	Non-motorized boats	26%	47%	1%	25%
	Powerboats	19%	51%	6%	24%
	Personal Watercraft	17%	40%	8%	35%
	Waterskiers, wakeboarders, tubers	16%	41%	4%	39%
	Bank Anglers	26%	50%	2%	22%
	Wade Anglers	19%	39%	1%	41%
	Boat Anglers	22%	47%	1%	29%
	Livestock	15%	27%	3%	56%
	Shoreline Development	19%	33%	4%	45%

Perception of Crowding



Appendix C: Visitor Use Counts Study Results

The Missouri-Madison Recreation Visitor Use Counts Study was initiated by NorthWestern Energy in 2005 to gain a better understanding of the volume and distribution of use at public recreation sites in the Missouri-Madison Corridor, and to help recreation managers better understand use patterns in each region and the Corridor overall.

The primary objectives of the study are (1) to gain an understanding of <u>total visitation</u> to public recreation sites within the Missouri-Madison Corridor and (2) to understand <u>use relationships</u> between these public recreation sites in order to estimate use for the entire system. These objectives work to meet the goals of assisting NorthWestern Energy in reporting recreation visitation trends for sites associated with the nine Project 2188 hydroelectric developments to the Federal Energy Regulatory Commission (FERC), as required by the FERC license. In addition, the information provided by the study may be used to support applications for projects considered for funding by the River Fund.

Managers must have a clear understanding of visitation (or visitor volume) to public recreation sites in addition to perceptions of visitor satisfaction, opinions, and use characteristics, in order to effectively manage recreation sites. Developing use relationships between sites allows annual estimating of use at sites that aren't actually counted in a year, since some sites are monitored each year and others are monitored on a rotational basis. Examining use relationships among different sites will lead to more quantifiable descriptions of use.

Vehicle and trail counts have been developed for public recreation sites in the Missouri-Madison Corridor. In 2014, pertinent visitor information was obtained from the Missouri-Madison Visitor Study which allowed for refinement of the use data gathered by this effort. In particular, this allowed for a better understanding of use of the River's Edge Trail system in Great Falls and more accurate estimates for the trail, which had been difficult in prior years past due to multiple access points to the trail system.

Since 2008, visitation estimates are provided for nearly all reservoir sites included in this study. In addition to helping managers understand site-specific use, this information will allow a better understanding of how sites relate to one another to provide a diverse system of opportunities to the recreating public. Similarly, estimates have also been developed for many of the access sites associated with river reaches in the Corridor. Results from the 2014 Missouri-Madison Recreation Visitor Use Counts Study for the entire corridor are available in this chapter. Additional information for specific regions, waterbodies, and recreation sites is available online at www.missourimadison.com.

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¹ To provide an estimate of site use in any given year requires that the site had previously been monitored with an automatic counter so that relationships of use with another site(s) was established, and that the site is open to the public with the same relative capacity as when automatic counts were collected.

Summary of 2014 Findings

- Recreation groups visited Inventoried Sites more than 708,450 times from May 23 September 4, 2014.
- Peak use occurred on July 4, 2014.
- Recorded use was distributed regionally as:

Hebgen-Madison Region 45% Hauser-Holter Region 16% Great Falls Region 39%

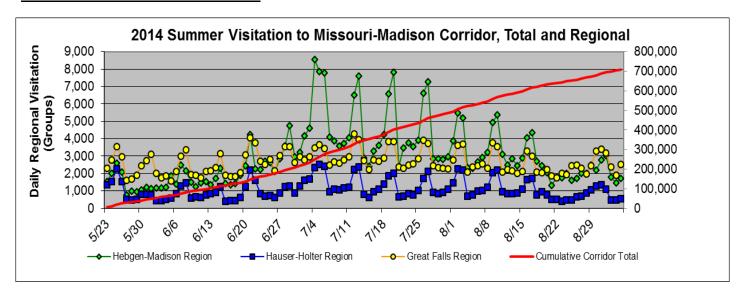
- Of total Corridor visitation to Inventoried Sites, 61 percent occurred on river reaches while 39 percent occurred on reservoirs. The Upper Missouri River accounted for the highest portion of total visitation (25%) followed by the Upper Madison River (18%) and Lower Madison River (17%).
- Total estimated group visits to Inventoried Sites by water body were:

Hebgen Lake = 36,776 Upper Madison River = 126,864 Ennis Lake = 30,855 Lower Madison River = 121,687 Hauser Lake = 74,511 Holter Lake = 41,819

Upper Missouri River = 178,294 Great Falls Reservoirs = 93,370 Lower Missouri River = 6,021

Based on Indicator sites, visitation in the Missouri-Madison Corridor decreased 3 percent in 2014 compared to 2013.

Missouri-Madison Corridor Overview

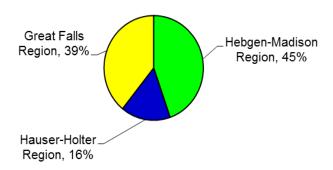


Inventoried Sites in the Missouri-Madison Corridor supported more than 708,000 recreation group visits in 2014. This visitation was spread among 95 percent of public recreation sites in the Corridor that are included in this study (90 of 95 sites), or 58 percent of all public recreation sites in the Corridor (90 of 155 sites).

The Hebgen-Madison Region hosted the largest portion of all Corridor use (45%), while visitation to the Great Falls Region accounted for more than one-third (39%) of Corridor use and the Hauser-Holter Region accounted for 16 percent of total use.

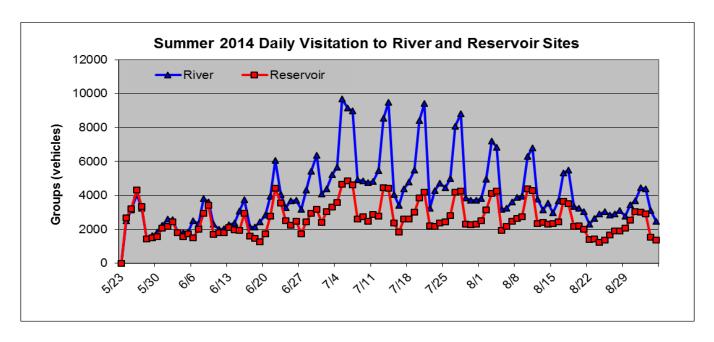
Proportionally, visitation appears to be quite stable throughout the Corridor, regardless of various influential factors. Since 2009, the Hebgen-Madison Region has accounted for slightly more than 40 percent of total Corridor visitation each year, while the Great Falls Region has accounted for slightly less than 40 percent and the Hauser-Holter Region has accounted for about 20 percent of visitation each year.

Percent of Summer 2014 Visitation to Corridor, by Region



River vs. Reservoir Sites

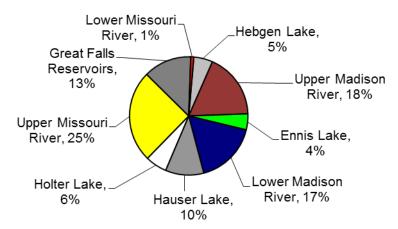
Sixty one percent of the estimated visitation for Inventoried Sites in the Corridor in 2014 was associated with recreation sites along river reaches and 39 percent was associated with sites on Project reservoirs. Peak use of recreation sites on rivers and reservoirs alike occurred on the July 4 holiday weekend, when 9675 group visits were recorded at river sites and 4629 group visits were recorded at reservoir sites over the three-day period.



Percent of Summer 2014 Visitation to Corridor, River vs. Reservoir

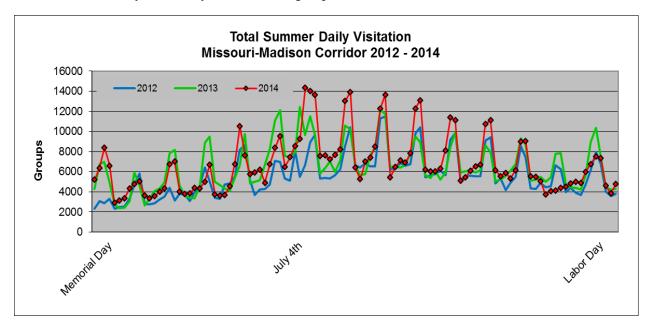


Percent of Summer 2014 Visitation to Corridor, by River/Reservoir Segment

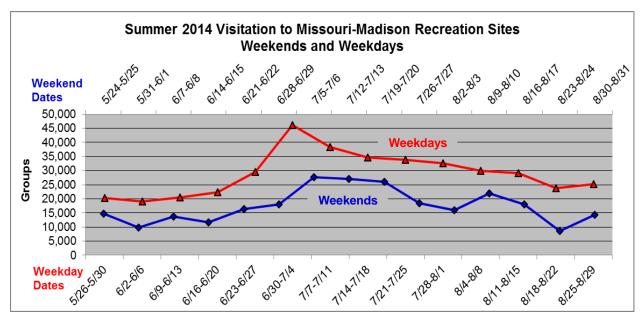


Corridor Visitation

A total of 708,453 group visits were recorded in the Corridor during the 2014 peak recreation season. Of this total, 39 percent (276,861 group visits) occurred through July 6, and 61 percent (431,592 group visits) occurred between July 7 and September 4. Compared to 2013, this represents no shift in visitation for the period preceding the July 4th holiday and the period following it. Peak use of Inventoried Sites occurred on the July 4th holiday, when 14,350 group visits were recorded in the Corridor.



Weekend use throughout the use season ranged from a two-day low of 8,571 group visits on August 23-24, to a high of 27,689 group visits on July 5-6. Weekday use throughout the use season ranged from a five-day low of 18,961 group visits on June 2-6 to a high of 46,118 group visits on June 30 – July 4. On average, recreation sites in the Corridor hosted a total of 8,933 group visits per day on weekend days and 5,574 group visits per day on weekdays.



Appendix D: Recreation Opportunity Spectrum and Limits of Acceptable Change

The Limits of Acceptable Change (LAC) process is the foundation for long-term management of the Project Area's primary recreation values. The premise of LAC is that change will occur to the natural and social conditions of an area as a result of natural and human factors. Corridor land use has and will continue to change over time. The most dramatic change is occurring on private land in the form of residential development. Change happens more slowly to public lands and those private lands that are subject to conservation easements. By defining desirable resource conditions or standards for various indicators, undesirable change can be identified and addressed. The LAC framework has been designed to be flexible to allow for unique setting-specific situations (e.g., unique recreation opportunities within the Project Area), provide ample opportunity for public recreation managers to administer lands in their jurisdiction according to land-use conditions, and be cost effective.

The LAC system of thresholds and indicators allows recreation managers to monitor trends in the Project Area, and alerts them to potentially unacceptable change before it is too late to make course corrections. If conditions exceed established thresholds, corrective management actions are triggered. Once management actions or controls are identified, funding and implementation mechanisms can be applied to maintain or restore desired conditions. The flow chart below (Figure D-1) illustrates the resource monitoring and evaluation steps and Table D-1 provides step-by-step examples of this monitoring. LAC indicators and thresholds adopted for this Plan are provided in Table D-2.

Recognizing that "acceptable" resource conditions are setting specific, and that the Project Area contains a diversity of recreation settings managed by both state and federal agencies, federal land management agencies have used the ROS framework to classify lands they manage based on their distinguishing recreation and resource conditions and opportunities. The ROS system uses seven ROS classes, ranging from urban to primitive, based on physical, social and managerial characteristics as described in Table D-3. Based on these characteristics, federal agencies prescribe ROS designations for lands they manage when agency resource management plans are updated. Generally, designation boundaries follow major landscape elements such as valley ridgelines, terrain characteristics, river directional changes, and vegetation, as well as available recreation opportunities.

For the 1996 Plan, ROS classes were identified and mapped for all public and private lands in the Corridor using a combination of physical, biological, social, and managerial conditions that give value to a place. At that time, ROS classes were shown for all lands, including public lands that were not designated under an ROS framework by the managing entity as well as private lands, in order to provide a planning context for recreation projects on public lands in the Corridor. ROS classifications have changed on some of the public lands since that time, and others have no formal designation. Additionally, private land subdivision and residential development have changed land use patterns to varying degrees. Accordingly, a more accurate representation of the land use within the Corridor has been prepared by presenting privately-owned lands by parcel boundaries with concentrations of smaller parcels indicating more intensively used area. Private lands subject to conservation easements have also been mapped and indicate more stable land use trends. Federally managed lands are mapped with formal ROS designations where adopted by managing agencies. State land management agencies, such as FWP and DNRC, do not classify lands under their jurisdictions based on the ROS framework or any similar type of classification system, and ROS classifications for these lands are not presented (see Figures D-2, D-3, D-4, and D-5).

In combination, the LAC and ROS frameworks on federally managed lands help maintain the desired mix of recreation opportunities for those areas by articulating, in measurable terms, desired setting-specific conditions and systematic monitoring of these requirements for unacceptable change. A current report of site conditions related to LAC indicators and thresholds is available online at www.missourimadison.com.

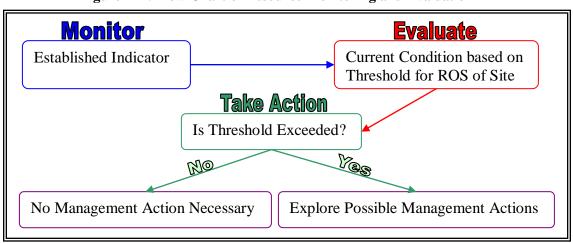


Figure D-1: Flow Chart of Resource Monitoring and Evaluation

	Table D-1: Step-by-Step Examples of Resource Monitoring and Evaluation							
Site	ROS*	Indicator	Acceptable Condition	Current Condition	Possible Management Actions			
A	RN	1) Condition of Boat Docks	1) Fair, Good, or Very Good	1) Poor	Upgrade boat dock for user convenience and safety			
		2) Shoreline erosion rating	2) Low	2) Low	2) None required			
		3) Visitor crowding rating	3) 6 or less	3) 2.8	3) None required			
В	Urban	1) Condition of Boat Docks	1) Fair, Good, or Very Good	1) Poor	Upgrade boat dock to safely accommodate high amount of use.			
		2) Shoreline erosion rating	2) Low	2) High	 Initiate no-wake zones if wave action or power-loading are sources, or stabilize shoreline if other sources are at fault. 			
		3) Visitor crowding rating	3) 6	3) 6.2	3) Camping reservation system, enforcement of capacity at parking areas, limit number of people per unit, fees, additional site development or acquisition.			
С	SPNM	1) Condition of Boat Docks	1) Fair, Good, or Very Good	1) Very Poor	Upgrade boat dock to provide shoreline protection.			
		2) Shoreline erosion rating	2) Low	2) Moderate	2) Public education, rotate area out of use.			
		3) Visitor crowding rating	3) 3	3) 1.2	3) None required			

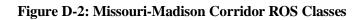
^{*} RN = Roaded Natural, SPNM = Semi-Primitive Non-Motorized.

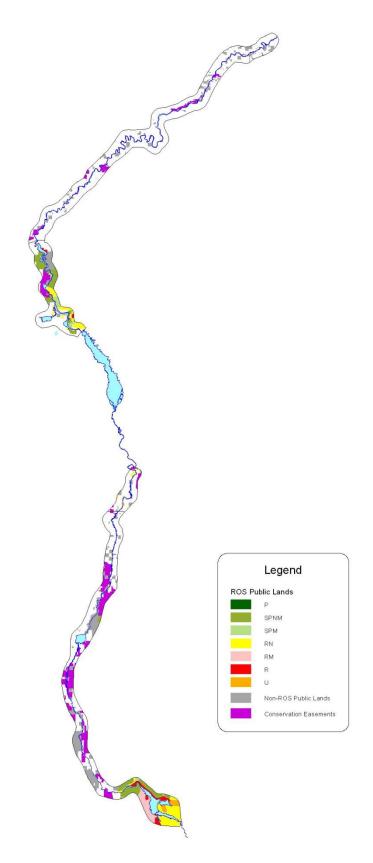
	Table D-2: Limits of Acceptable Change Indicators and Thresholds Possible						
Indicator	Unit of Measure	Data Source	Threshold	Acceptable Condition	Management Options		
Noise	Satisfaction with number of other recreationists within sight or sound.	Visitors' Survey	0 (Neutral/No Opinion)	Positive rating on -2 to +2 scale.	Initiate quiet hours, better enforcement of existing quiet hours, prohibit animals at the site, or limit number of people allowed per camping unit.		
Vegetative Damage	Monitor degree of vegetative damage	Managers' Survey	Moderate for undeveloped ROS only	Low for undeveloped ROS only	Public education, rotate areas out of use on a regular basis.		
Shoreline Erosion	Monitor degree of human-caused soil erosion on shoreline	Managers' Survey	Moderate	Low degree	Erosion protection, public education, and rotate areas out of use on a regular basis.		
Soil Compaction	Monitor soil compaction or disturbance in camping or use areas	Managers' Survey	High	Low or moderate degree for undeveloped ROS only	Public education, rotate areas out of use on a regular basis.		
Litter	Satisfaction with cleanliness of area	Visitors' Survey	0 (Neutral/No opinion)	Positive rating on -2 to +2 scale.	More intensive litter pickup or garbage collection, additional receptacles, and visitor education.		
Facility Repair	Monitor condition of site facility elements	Managers' Survey	2 (Poor)	3 (Fair), 4 (Good) or 5 (Very Good)	More enforcement to minimize vandalism, replacement or repair, removal/closure of structures if there are public safety concerns.		
User Conflicts	"Satisfied" response to "Behavior of other people"	Visitors' Survey	0 (Neutral/No opinion)	Positive rating on -2 to +2 scale.	Work with recreating public and managers to resolve conflicts between different types of uses.		
Road Conditions	Satisfaction with condition of road within the site	Visitors' Survey	0 (Neutral/No opinion)	Positive rating on -2 to +2 scale.	Coordinate efforts to improve road conditions within and adjacent to recreation site.		

7	Table D-2 (continued): Limits of Acceptable Change Indicators and Thresholds							
Indicator	Unit of Measure	Data Source	Threshold	Acceptable Condition	Possible Management Options			
Use and Crowding	Perception of crowding	Visitors' Survey	6 (Moderately Crowded) for developed ROS, 3 (Slightly Crowded) for undeveloped ROS	Less than 6 for developed ROS. Less than 3 for undeveloped ROS on scale of 1 (Not at all crowded) to 9 (Extremely crowded).	Establishment of a camping reservation system, enforcement of capacity at parking areas through ticketing and/or "Site Full" signage, limits on number of people per camping site/unit,			
	Satisfaction with number of other recreationists within sight or sound	Visitors' Survey	0 (Neutral/No opinion)	Positive rating on -2 to +2 scale.	raising or instituting fees and/or different fees for different times and uses, and additional site development or acquisition of new sites.			

Table D-2 (continued): Limits of Acceptable Change Indicators and Thresholds				
Informational Element*	Process of Evaluation			
Facilities Needed	Monitor on Visitors' Survey whether visitors think additional facilities are needed at sites.			
Air Quality	Monitor satisfaction with the amount of dust on roads within recreation sites on the Visitors' Survey.			
Sanitation	Report on Managers' Survey the degree (low, moderate, or high) to which sanitation is a problem at the site for undeveloped ROS only. Monitor satisfaction with sanitation and toilet facilities at this site on the Visitors' Survey.			
Use and Crowding	Monitor why visitors felt crowded on the Visitors' Survey. Collect capacity use information on non-holiday summer weekends and weekdays for campground, day use areas, and boat launch parking areas on the Managers' Survey.			
Road Conditions	Monitor condition of roads <u>leading to</u> and <u>within</u> site on the Managers' Survey categorized by surface type (asphalt, gravel, native surface). Monitor condition of parking lots <u>within</u> site on the Managers' Survey categorized by surface type (asphalt, gravel, native surface).			

^{*}Informational Elements are characteristics that will be monitored and reported regularly, as are the LAC indicators, but have no established thresholds tied to them; their purpose is strictly informational.





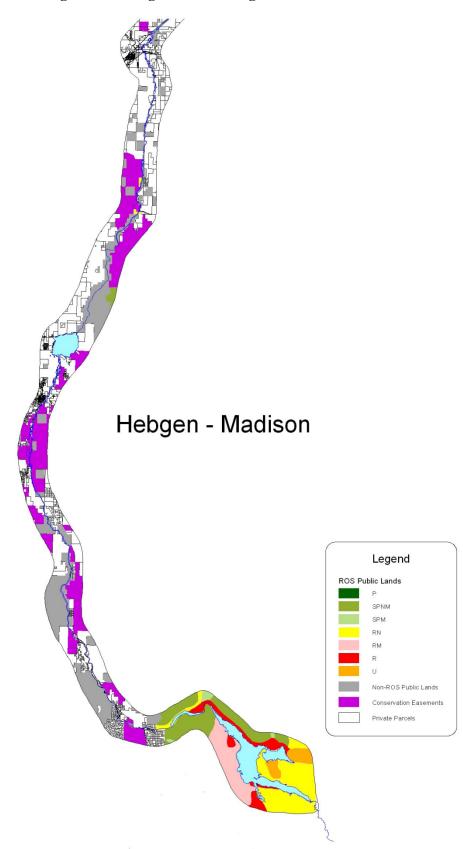
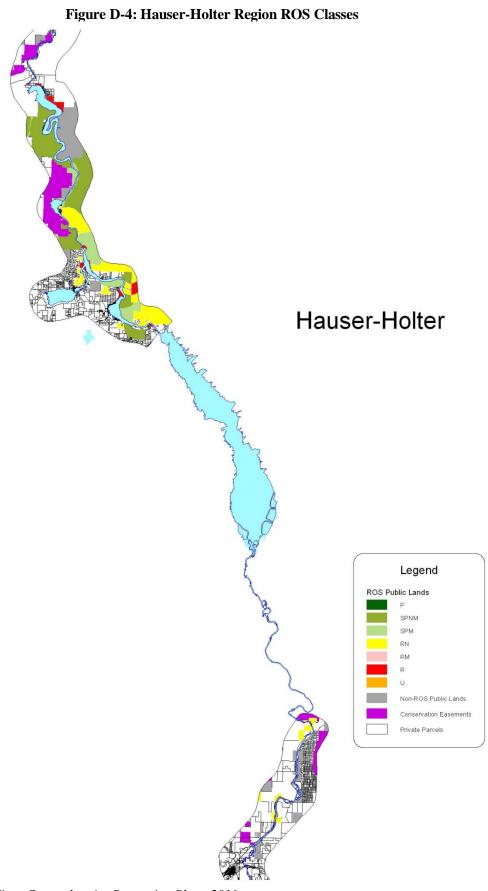
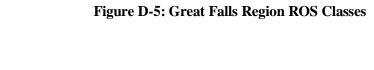


Figure D-3: Hebgen-Madison Region ROS Classes





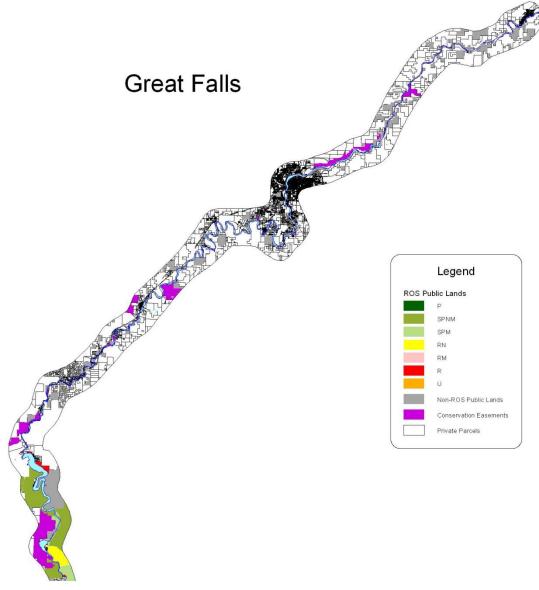


Table D-3: Recreation Opportunity Spectrum Class Ratings "Undeveloped" ROS Classes						
	Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized			
Opportunities	Very high probability of experiencing solitude, freedom, closeness to nature, tranquility, self reliance, challenge, and risk.	High probability of experiencing solitude, closeness to nature, tranquility, self-reliance, challenge, and risk.	Moderate probability of experiencing solitude, closeness to nature, and tranquility. High degree of self-reliance, challenge, and risk in using motorized equipment.			
Environment	Unmodified natural or natural appearing environment.	Natural appearing environment.	Predominantly natural appearing environment.			
Expected Interaction	Very low interaction between users.	Low interaction between users.	Low interaction between users.			
Evidence of Use	Minimal evidence of other users.	Some evidence of other users.	Low concentration of users but often evidence of others on trails.			
Restrictions/ Controls	Restrictions and controls not evident after entry	Minimum of subtle on-site controls.	Minimum on-site controls and restrictions present but subtle.			
Road Access	Access and travel is non-motorized on trails or cross country	Access and travel is non-motorized on trails; some primitive roads or cross country.				
Vegetation Condition	No vegetation alterations	Vegetative alterations: sanitation salvage to very small units in size and number, widely dispersed and not evident.	Vegetative alterations very small in size and number, widely dispersed and visually subordinate.			
ADA Access	Access for people with disabilities can be most difficult and very challenging. See design guide.	Access for people with disabilities is difficult and challenging.	Access for people with disabilities is difficult and challenging.			
Site Modifications/ Facilities	No site modifications for facilities. Rustic and rudimentary ones for site protection only. Use undimensioned native materials.	Rustic and rudimentary facilities primarily for site protection. No evidence of synthetic materials. Use undimensioned native materials.	Rustic and rudimentary facilities primarily for site protection. No evidence of synthetic materials. Use undimensioned native materials.			
Interpretive Opportunities	Interpretation through self-discovery. No on-site interpretation facilities.	Interpretation through self-discovery. Some use of maps, brochures, and guidebooks. No on-site interpretation facilities.	Interpretation through very limited onsite facilities. Use of maps, brochures and guidebooks.			
Summarized Synopsis	Very high probability of experiencing solitude, freedom, closeness to nature, tranquility, self-reliance, challenge, and risk. Generally designated and managed wilderness or wilderness study areas.	High probability of experiencing solitude, closeness to nature, tranquility, self-reliance, challenge, and risk.	Moderate probability of experiencing solitude, closeness to nature, tranquility. High degree of self-reliance, challenge and risk in using motorized equipment.			

	Table D-3 (continued): Recreation Opportunity Spectrum Class Ratings "Developed" ROS Class						
	Roaded Natural	Roaded Modified	Rural	Urban			
Opportunities	Opportunity to affiliate with other users in developed sites but with some chance for privacy. Self-reliance on outdoor skills of only moderate importance. Little challenge and risk.	Opportunity to get away from others but with easy access. Some self-reliance in building own camp site and use of motorized equipment. Feeling of independence and freedom; little challenge and risk.	Opportunity to observe and affiliate with other users is important as is convenience of facilities. Self-reliance on outdoor skills of little importance. Little challenge and risk except for activities such as downhill skiing.	Opportunity to observe and affiliate with other users is very important as is convenience of facilities and recreation opportunities. Outdoor skills, risk, and challenge are unimportant except for competitive sports.			
Environment Mostly natural appearing environment as viewed from sensitive roads and trails.		Substantially modified environment except for camp site. Roads, landings, slash, and debris may be strongly dominant from within, yet remain subordinate from distant sensitive roads and highways.	Natural environment is culturally modified yet attractive (i.e., pastoral farmlands). Backdrop may range from alterations not obvious to dominant.	Urbanized environment with dominant structures, traffic lights, and paved streets. May have natural appearing backdrop. Recreation places may be city parks and large resorts.			
Expected Interaction	Interaction between users at camp sites is of moderate importance.	Moderate evidence of other users on roads. Little evidence of others or interaction at camp sites.	Interactions between users may be high.	Interaction between large numbers of users is high.			
Evidence of Use	Moderate evidence of use at camp sites.	Moderate evidence of other users on roads.	High evidence of other users.	High evidence of other use.			
Restrictions/ Controls	Some obvious on-site controls of users.	Little on-site controls of users except for grated roads.	Obvious and prevalent on-site controls.	Intensive on-site controls are numerous.			
Road Access	Access and travel is "conventional motorized" including sedan, trailers, RVs, and some motor homes.	Conventional motorized access including sedan, trailers, RVs, ORVs, and motor bikes.	Access and travel facilities are for individual, intensified motorized use.	Access and travel facilities are highly intense, motorized, and often with mass transit supplements.			
Vegetation Condition	Vegetative alterations done to maintain desired visual and recreational characteristics.	Shape and blend vegetative alterations. Maintain camp sites and immediate foreground in natural appearing state.					
ADA Access	Access for people with disabilities is of only moderate challenge.	Access for people with disabilities is difficult and challenging.	Access for people with disabilities is easy and meets ADAAG standards.	Access for people with disabilities is easy and meets ADAAG standards.			
Site Modifications/ Facilities	Rustic facilities providing some comfort for the user as well as site protection. Use native materials but with more refinement in design. Synthetic materials should not be evident. Moderate site modification for facilities.	No on-site facilities except signing at major road junctions. Occasional sanitary facilities for user health protection. Site modification by users only.	Some facilities designed primarily for user comfort and convenience. Some synthetic but harmonious materials may be incorporated. Design may be more complex and refined. Moderate to heavy site modification.	Facilities mostly designed for user comfort and convenience. Synthetic materials are commonly used. Facility design may be highly complex and refined but in harmony or complimentary to the site. Heavy site modifications for facilities.			
Interpretive Opportunities	Interpretation through simple wayside exhibits. Use native-like materials with some refinement in design. Some casual interpretation by forest staff.	Interpretation by simple wayside signs made of native-like rustic materials.	Interpretation through more complex wayside exhibits including small, lighted structures. Interpretive facilities such as kiosks and portals may be staffed part time.	Interpretation through very sophisticated exhibits in staffed visitor centers, wayside exhibits, etc.			
Summarized Synopsis Opportunity to affiliate with other users in developed sites but with some chance for privacy. Self-reliance on outdoor skill of only moderate importance. Little challenge and risk.		Opportunity to get away from others, but with easy access. Some self-reliance in building own camp site and use of motorized equipment. Feeling of independence and freedom. Little challenge and risk.	Opportunity to observe and affiliate with other users is important as is convenience of facilities. Self-reliance on outdoor skills of little importance. Little challenge and risk except for activities such as downhill skiing.	Opportunity to observe and affiliate with other users is very important as is convenience of facilities and recreation opportunities. Outdoor skills, risk and challenge are unimportant except for competitive sports.			

Appendix E: Missouri-Madison Comprehensive Recreation Plan Memorandum of Understanding (MOU)

This appendix contains the Missouri-Madison Memorandum of Understanding (MOU) which was formally assigned (by mutual consent of all parties to the MOU) to NorthWestern Energy in their acquisition of the Project 2188 License and nine associated hydropower developments in November 2014. The MOU is approved by the licensee (now NorthWestern Energy) and other signatory agencies and counties, including the US Forest Service, US Bureau of Land Management, Montana Fish, Wildlife & Parks, Madison County, Gallatin County, Broadwater County, Lewis and Clark County, Cascade County, Chouteau County, and Bureau of Reclamation.

MISSOURI-MADISON COMPREHENSIVE RECREATION MANAGEMENT PLAN

AMENDED AND RESTATED

MEMORANDUM OF UNDERSTANDING

MONTANA POWER COMPANY

MISSOURI-MADISON

REVOLVING TRUST FUND

AMENDED AND RESTATED MEMORANDUM OF UNDERSTANDING

This AMENDED AND RESTATED Memorandum of Understanding (MOU) is made and entered into by and between The Montana Power Company ("MPC"), the United States Forest Service, the United States Bureau of Land Management, the United States Bureau of Reclamation, the State of Montana Department of Fish, Wildlife and Parks ("Agencies"), Madison, Gallatin, Broadwater, Chouteau, Lewis and Clark and Cascade counties ("Counties"), collectively referred to herein as the "Parties".

WITNESSETH

WHEREAS, MPC has prepared an application for the Federal Energy Regulatory Commission ("FERC") to relicense MPC's nine Missouri-Madison hydroelectric facilities ("Project 2188") for a term of 50 years.

WHEREAS, the Project 2188 application identified proposed recreation resources to be developed within five years of the Project License; and

WHEREAS, MPC has proposed to develop a Comprehensive Recreation Management Plan ("Plan") for the 2188 Project developments and the river reaches between them which will outline the planning process for identification of recreation resources to be developed during the term of the License beginning five years after FERC issues the Project License; and

WHEREAS, MPC desires to endow a Montana Power Company Missouri-Madison Revolving Fund ("Fund") to finance the acquisition, development, and annual operation and maintenance of recreation resources identified through the planning process created by the Plan; and

WHEREAS, the Agencies and Counties desire to participate in the development and implementation of the Plan and to participate in deciding allocation of monies from the Fund;

WHEREAS, MPC intends to provide recreation and real estate staff support to facilitate implementation of the Plan; and

WHEREAS, the Parties desire to amend and restate this MOU to reflect changes that have occurred as the Plan has been developed and implemented and to reflect the desire of the Parties to administer the Plan and the Fund through a not-for-profit organization.

NOW, THEREFORE, the Parties agree as follows:

I. Purpose

- A. The purpose of this MOU is to establish terms and conditions which shall govern the Fund, and the parties' participation therein. The Parties understand and agree that this MOU is conditioned upon FERC approval of the Project 2188 Application for a New License and issuance of the New License for Project 2188. If FERC does not approve that Application or does not issue a New License, then the parties agree that this MOU shall be null and void.
- B. The 2188 Project area includes MPC's nine Missouri-Madison dams and reservoirs, the river reaches between these dams and reservoirs, and the river reach below Morony Dam to Fort Benton. However, the parties recognize that the 2188 Project area does not include the United States Bureau of Reclamation's Canyon Ferry project or the State of Montana's Toston project or the Missouri River between the two projects. Exhibit A attached hereto identifies the Toston to Canyon Ferry Exclusion Area. However, the BOR's Canyon Ferry project is included as a study area for purposes of this MOU and the Plan.
- C. The parties recognize that should FERC issue the New License at a date later than the Parties anticipate, all dates identified herein may be subject to change.

II. Definitions

- A. The Missouri-Madison River Fund (River Fund) A nonprofit corporation formed under the Montana Nonprofit Corporation Act, which is tax exempt as a "supporting organization" under Sections 501(c)(3) and 509(a)(3) of the Internal Revenue Code of 1986, as amended, and which will manage the acquisition, development, and annual operation and maintenance of recreation resources associated with the Project 2188 area for the benefit of the Agencies and the Counties.
- B. The Montana Power Company Missouri-Madison Revolving Fund (Fund) The endowment MPC proposes to donate to the River Fund in accordance with this MOU to finance the acquisition, development, and annual operation and maintenance of recreation resources associated with the Project 2188 area.
- B. The Comprehensive Recreation Management Plan (Plan) The planning process which will be developed to determine recreation needs, establish goals and objectives, and identify and prioritize land acquisition, facility development, and annual operation and maintenance requirements for the Project 2188 area.
- D. Board of Directors (Board) The governing body of the River Fund which will oversee and direct the Plan on an ongoing basis and which shall decide allocations of monies from the Fund.

- E. Regional Working Groups (Groups) Groups formed to make prioritized recommendations concerning the recreation resource to the Board for specific geographic areas covered by the Plan.
- F. Recreation Advisory Groups Groups established by MPC during the early stage of the 2188 Project relicensing process to provide input about the recreation resource that could not be gained by public uses surveys. Members of the recreation advisory groups include representatives from the USFS, BLM, DFWP, local governments, businesses, organizations and individuals.
- G. Acquisition dollars Dollars spent in accordance with this MOU to purchase recreational lands or interests therein as identified in the Project 2188 Application for a New License or as approved by the Board.
- H. Development dollars Dollars spent in accordance with this MOU for all design and construction costs related to the development of recreation resources as identified in the Project 2188 Application for a New License or as approved by the Board.
- I. Operation and Maintenance dollars Dollars spent in accordance with this MOU for annual operation and maintenance of recreation sites as identified in the Project 2188 Application for a New License or as approved by the Board.

III. Authority

A. <u>Authority to Enter into MOU</u>

- 1. The Montana Department of Fish, Wildlife and Parks is authorized to enter into this MOU under Mont. Code Ann. §§ 23-1-102, 23-1-107, and 87-1-201.
- The United States Bureau of Land Management is authorized to enter into this MOU by the Federal Land Policy and Management Act (FLPMA), 42 U.S.C. § 1701 et. seq.; the Intergovernmental Cooperation Act of 1968, 42 U.S.C. § 4201; The Economy Act of 1932, 32 U.S.C. § 1535; and the Land and Water Conservation Fund Act of 1965, 16 U.S.C,. § 4601-4.
- The Counties are authorized to enter into this MOU by Mont. Code Ann. §
 7-11-101 et. seq.

B. Funding, Authority, and Operating Limitations

It is understood that operating plans and procedures and subsequent agreements may be developed, as needed, by the participants to implement this MOU or the objectives of the MOU. Nothing in this MOU or subsequent plans, procedures, or agreements

will be construed as affecting the authorities of the participants or as binding beyond their respective authorities and prerogatives for decision making, or to require any of the participants to obligate or expend funds in excess of appropriated funds. Participation in individual transactions or projects is voluntary. Parties may decide not to participate if a transaction or project is determined to be inconsistent with individual participant plans, mission statements, or other applicable criteria.

Nothing herein shall be considered as obligating the Forest Service or the Bureau of Land Management to expend or as involving the United States in any contract or other obligations for the future payment of money in excess of appropriations authorized by law and administratively allocated for any work under this MOU.

IV. Comprehensive Recreation Management Plan

- A. MPC will develop and administer a Comprehensive Recreation Management Plan ("Plan") for the Missouri-Madison Project's developments, the river reaches between and for the river reach below Morony Dam to Fort Benton. MPC will develop the Plan by the later of 1996 or three years after FERC issues the Project License. The Plan will provide a decision-making process for determining needs, establishing goals and objectives, and identifying and prioritizing land acquisition, facility development, and annual operation and maintenance requirements associated with the recreational resource. Exhibit B and C, attached hereto, illustrate this planning process. Initially, the Plan will be developed and administered utilizing concepts from the Recreation Opportunity Spectrum (Clark and Stankey, 1979) and the Limits of Acceptable Change (Stankey et al 1985) management frameworks. Exhibit D and E, attached hereto provide a summary of the two management frameworks. Other methodologies may be incorporated into the planning process as necessary to maintain the quality and integrity of the Plan. Recreation advisory groups, agency resource management plans, recreation studies, and facility inventories will supplement the Plan on an ongoing basis.
- B. MPC shall develop and implement the Plan cooperatively with the MDFWP, BLM, USFS, BOR, local governments, with input from private landowners, and special interest groups.
- C. A Board of Directors will be established according to Section VI. Below to oversee and direct the Plan on an ongoing basis, and will reevaluate the Plan on an eight-year cycle beginning in 1998. The first update will be completed in the year 2006.
- D. Beginning in 1994 and every four years thereafter, MPC will conduct visitor surveys on its reservoirs and will coordinate those surveys with surveys conducted by the Agencies. The 1994 surveys will be designed to provide baseline data about the recreation

visitors and the resource. The survey conducted in 1998 and every four years thereafter will be used to supplement the original data and to provide guidance for management and development recommendations and Plan maintenance or updates. The survey method to determine data about recreation visitors and the recreation resource shall be described in the Plan.

E. The public and special interest groups will provide input to Regional Working Groups that will be established in accordance with Section V. below for the Hebgen/Madison, Hauser/Holter and Great Falls areas.

V. Regional Working Groups

- A. Regional Working Groups ("Groups") shall be established for the Hebgen/Madison, Hauser/Holter and Great Falls areas.
 - The Hebgen/Madison Group shall cover the geographic area from Hebgen Reservoir down to the Headwaters State Park on the Madison River.
 - 2. The Hauser/Holter Group shall cover the Missouri River from Headwaters State Park to Holter Dam including Hauser and Holter Reservoirs but excluding the Toston and Canyon Ferry Projects pursuant to Section I.B. above; provided, however, that the Canyon Ferry Project shall be included for the purpose of coordination of planning efforts between the Missouri-Madison Project and the Canyon Ferry Project.
 - 3. The Great Falls Group shall be responsible for the area immediately below Holter Dam down to Fort Benton on the Missouri River.

In addition to representatives from the Parties to this MOU, the Groups shall include representation from local governmental entities, and from the recreating public.

- B. The Groups shall meet as necessary, but at least semi-annually, once in the spring and once in the fall. After the fall meeting, each Group shall forward its recommendation to the Board within such time as the Board determines necessary.
- C. The Groups shall make prioritized recommendations concerning the recreation resource to the Board. Each Group's recommendation shall be based on input from recreation advisory groups, the general public, visitor surveys, recreation management plans, and the planning processes established in the Plan and other management frameworks as deemed necessary.
- D. Each Group shall appoint a chairperson and shall adopt working rules as necessary to accomplish its objectives.

E. MPC for the River Fund will provide each Group member with at least 30 days written notice prior to all meetings, unless such notice is waived in writing by all Group members.

VI. Board of Directors

- A. A Board of Directors ("Board") shall be established to supervise and control the affairs of the River Fund, to oversee the development and implementation of the Plan and to decide allocation of monies from the Fund.
 - B, The Board shall be composed of the following members:
 - MPC (General Office), FWP (Parks Division Office), USFS (Region One Office), BLM (Montana State Office), and the Bureau of Reclamation (Montana Area Office).
 - 2. The Counties shall each appoint one member who shall serve a two-year term.
 - 3. One member who will represent the Public. This member will be selected by the Board from candidates nominated by the Regional Working Groups. The public representative cannot be an employee of any party to this Agreement and shall serve a two-year term.
- C. Each Board member shall have one vote, except the BOR whose representative shall be a non-voting member.
- D. The Board membership may be expanded by mutual agreement of all Board members.
- E. The Board shall meet, review, and make decisions on the Regional Working Groups' recommendations, as necessary, except in the case of the Forest Service a recommendation will be made to the appropriate official. However, the Board shall meet at least annually during the first week in November.
- F. The Board shall seek appropriate information and advice from recreation research institutes or similar entities.
- G. The Board shall appoint a chairperson and shall adopt working rules as necessary to accomplish the Board's objectives.
- H. MPC for River Fund will provide each Board member with at least 30 days written notice prior to all meetings, unless such notice is waived in writing by all Board members.
- I. Board decisions shall be made by a consensus of those present. However, if the Board cannot reach a consensus, then except as provided in VI.D. above, decisions will be made by a two-thirds majority vote of the Board members.

VII. Recreation Revolving Fund

A. Fund Initiation

On or before the date FERC issues a New License for Project 2188, MPC shall establish a Fund to finance the acquisition, development, and annual operation and maintenance of recreation resources that are identified by the Plan. MPC shall make deposits for the Fund to the River Fund, releasing all ownership and control over the funds deposited. Except as provided in Section VII.B.4.a. and for acquisition in accordance with Section VII.B.4.b., the Fund will only be accessible after the year 2000, or five years after issuance of a new license whichever is later, for recreation resources identified and recommended by the Board.

2. Supporting Organization

River Fund shall manage the Fund in accordance with Treasury Regulation Section 1.509(a)-4 as a "supporting organization" for the benefit of the Agencies and the Counties, and shall be bound by all statutory and fiduciary duties and responsibilities that apply to supporting organizations.

3. <u>Initial Deposit and MPC Matching Proposal</u>

For the first five years after the Project license is issued, MPC will deposit into the Fund (which shall be part of the assets of the River Fund, as described above) an amount equal to the original recreation site acquisition, development, and operation and maintenance dollars established in the Project 2188 Application for a New License. MPC will deposit these monies, lump sum, into the Fund at the beginning of the calendar year for which the projects are scheduled according to Exhibit F, attached hereto. These funds will be available for matching expenditures by the Agencies or their designees. Exhibit F provides a description of the projects proposed for development prior to the year 2000 or five years after issuance of the license, whichever is later. As an example, the Agencies may request funds on the basis of a selected percentage match to be made by MPC so that the total will equal the full amount needed. If

the Agency funding request is successful, MPC agrees to provide its portion of the funds needed for the project, and also agrees to permanently commit to the Fund an amount equal to that matched by agencies or their designees.

B. <u>Implementation</u>

1. Fund Administration

- a. The Fund will be administered by the River Fund. River Fund may hire a professional fund manager ("Fund Manager"). The Fund shall be administered consistent with Treasury Regulations Section 1.509(a)-4 and solely for the benefit of public recreation-related use within the 2188 Project area as identified in the Plan and as determined by the Board.
- The Fund Manager shall account for revenues and expenditures from the Fund using generally accepting accounting procedures.
 The Fund Manager shall prepare and submit to the Board a Fund Annual Financial Report.
- c. Reasonable administrative costs of the River Fund, including but not limited to the costs of a Fund Manager and audit costs, may be paid from Fund income with the approval of the Board.

2. Fund Income

The Fund Manager, under direction and supervision of the Board, shall have full and independent authority to withdraw, invest, and reinvest the amounts contained in the Fund. The Fund monies shall be invested according to prudent investment practices appropriate to such Funds. Principal, interest, and other earnings of the Fund shall be deposited in the Fund and become available for disbursement in accordance with this MOU.

3. Transaction Costs

Transaction costs associated with land acquisitions may be funded by either MPC or an Agency, in their discretion, or may be funded by Fund income upon approval by the Board.

4. Fund Expenditures

a. General

Beginning in the year 2000 or five years after FERC issues the Project License, Fund expenditures for acquisition, development and operations and maintenance of recreation sites shall be limited to the use of interest income only, except that up to \$1,000,000 or 20 percent of the Fund principal, whichever is less, may be used on a revolving basis for the acquisition of land or interest therein in accordance with Section VII.D.4.b until the Fund principal reaches \$5,000,000.00 at which time only the 20% ceiling will remain in effect. Further, Fund income may be used for land acquisitions after the year 2000 without an Agency commitment for matching.

b. Expenditure of Fund Principal

Acquisition dollars that MPC deposits into the Fund principal shall be used to acquire recreational lands or interests therein that are recommended by the Board in accordance with the Plan. Such acquisitions shall be held initially in River Fund's name or other appropriate receiver as determined by the Board. Except as expressly provided otherwise, expenditures from the Fund for land acquisitions or interests therein shall be made only if a public agency or nonprofit partner has made a commitment and agency or partner funds are available to acquire such land or interest therein within a reasonable time to be determined by the Board. The Parties understand and agree that agencies are required to acquire land on the basis of fair market value as officially approved by the Agency. When the public agency or nonprofit partner acquires land or interest therein, then the proceeds shall be deposited back into the Fund principal

If the public agency or nonprofit partner cannot fulfill its commitment to acquire, then the Board shall use its best efforts to find another public agency or nonprofit partner to acquire the land or interest therein. If such a purchaser cannot be found and if the Board so determines, River Fund may sell the land or interest

therein to a private party. River Fund shall deposit the sale proceeds into the Fund principal.

Alternatively, if a public agency or nonprofit partner cannot be found, the Board may decide to retain the property for the benefit of the public and repay the principal account with Fund income until reimbursement to principal is compete. At that time, the Board shall determine who should be the appropriate receiver of the land or interest therein, or it may be retained in River Fund's ownership. The Board shall use its best efforts to find an appropriate receiver other than River Fund for the land or interest therein.

c. Expenditure of Fund Income

Beginning in the year 2000 or five years after FERC issues the 2188 Project License, Fund income may be used for acquisition, development and operation and maintenance of recreation projects identified by the Plan and as approved by the Board without reimbursement by the Parties hereto. Fund income may also be used to reimburse Fund principal in accordance with Section VII.B.4.b above.

5. <u>Future Matching Contribution by MPC</u>

In recognition of its obligation throughout the term of the Project License, beginning in the year 2000 or five years after issuance of the license, which is later, MPC agrees to match Agency contributions to the River Fund on a two year cycle; provided that MPC's matching contribution shall be limited to the total interest earned by the Fund during the year the Agencies contributed matching dollars.

MPC will match 100% of Agency expenditures on future recreation projects identified by the Plan and approved by the Board located on MPC's reservoirs, and located on the river reaches between ULM and Rainbow Dam and below Morony Dam to Carter Ferry. MPC will also match 25% of Agency expenditures for recreation resources located on the remaining river reaches between the reservoirs and below Carter Ferry to Fort Benton. MPC's matching contribution shall be deposited into

the Fund held by the River Fund for use in acquisition, development and operation and maintenance activities.

For example, if in the year 2000, Agencies contribute \$100,000 in the 100% matching area and \$100,000 in the 25% matching area, then MPC will contribute \$125,000 to the Fund in the year 2002 provided that the Fund earned at least \$125,000 in interest in the year 2000. However, if in the year 2000 the Fund earned only \$100,000 in interest, MPC's matching contribution in the year 2002 would be only \$100,000.

6. Access and Use

Access and use of the Fund will be determined solely by the Board. Upon direction from the Board, the Fund Manager shall make disbursements from the Fund.

VIII General Provisions

A. Separate Agreements

For each recreation project developed pursuant to this MOU, the Parties understand and agree that separate agreements between the participating agency or nonprofit partner and River Fund shall be executed as necessary to complete that project.

B. Term

Duration

This MOU shall be effective upon execution by all Parties and shall remain in effect until the earlier of:

- a. The expiration of the New License issued by FERC for the Project
 2188 Application, or
- b. Project 2188 termination by either MPC or FERC; provided that Section VI.B.1 shall remain in effect until termination of the Fund. The term of this MOU may be modified by mutual written agreement of the Parties.
- c. This MOU will be reviewed every four years and updated if necessary. Every other review will be in conjunction with the surveys to be conducted every eight years as referred to in Section IV.D. above.

C. Effect of Termination of the MOU Upon the Fund

 This MOU may be terminated at any time by mutual written agreement of the Parties. 2. Any party hereto, except MPC, may terminate its participation in this MOU at any time by giving 30 days written notice by registered mail, or personal delivery of notice, to all the other Parties.

D. <u>Termination of the Fund</u>

- 1. If this MOU terminates pursuant to Section VIII.B. above, its restrictions upon the use of the Fund shall also be terminated.
- The Parties intend that the monies contained in the Fund shall be used for the benefit of the Agencies and Counties and for the recreation purposes described in this MOU. Therefore, should the Fund be terminated, the Fund assets shall continue to be held by the River Fund and managed as directed by the Board in accordance with the purposes of the Fund. In such circumstances River Fund and/or MPC shall make any required FERC notification.

E. Termination of the River Fund

- Upon the dissolution or other termination of River Fund, the assets remaining after all creditors have been paid shall be distributed as provided by the River Fund's Articles of Incorporation, provided, however, that such distribution shall be consistent with the relevant provisions of the Internal Revenue Code and the Montana Nonprofit Corporation Act which then are in effect.
- 2. To the extent reasonably possible, such distribution shall be made to the Agencies and Counties which are a party to this MOU, or their successors, in a manner to be determined by the Board, so long as such distribution is consistent with Section VIII.E.1.

F. Choice of Law

The provisions of this MOU relating to the administration and operation of the Fund shall be interpreted under the laws of the State of Montana.

G. FERC Notice

MPC for River Fund shall notify FERC's Regional Office of all official meetings of the Board and shall also file a copy of the Fund Annual Report with that office.

H. Binding Effect

This MOU shall inure to the benefit of, and shall be binding upon the respective successors and assigns of the Parties hereto.

I. Assignment

The Parties hereto may not assign this MOU without the consent of all other Parties; provided that such consent will not be unreasonably withheld.

J. <u>Modification</u>

This MOU may be modified only in writing by mutual agreement of the Parties.

K. Execution in Counterparts

This MOU may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Amended and Restated MOU on the dates indicated below.

THE MONTANA POWER COMPANY

By: St. Comer
Title: Guntere Vice Princent
Date: 2/19/99

MADISON COUNTY

Commissioner

UNITED STATES FOREST SERVICE

3v: 🔪

Solot Suparus ux Harva No.

Date: Ichnay 17, 1999

Вι	JRE	ΑU	OF	LAND	MANA	GEMENT
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lts:

State Director

February 22, 1999 Date:

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

By: tatival Valian

Its: Divedor

Date: 2/20/99

CASCADE COUNTY

GALLATIN COUNTY

BROADWATER COUNTY

BOCC Vies Chamma

Date: 2/16/99

LEWIS AND CLARK COUNTY Ву: MICHAEL J.

Its: CHAIRMAN

Date: FEBRUARY 16, 1999

CHOUTEAU COUNTY

By: Kenneth & Engellant

Its: <u>Chairman</u>

Date: Febr. 16,1999

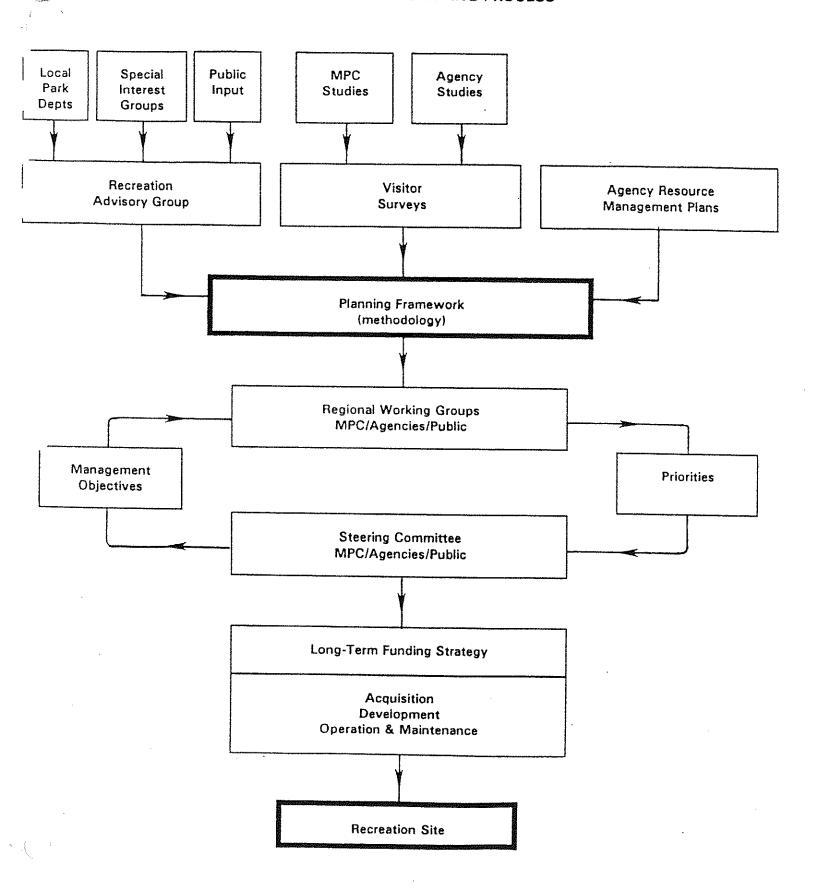
UNITED STATES BUREAU OF RECLAMATION

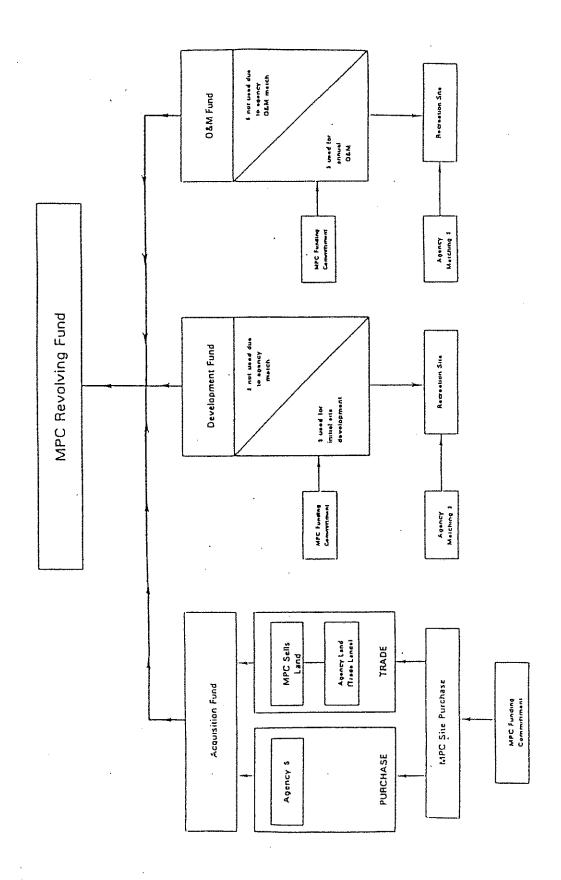
By: Swar Kelly

Its: Montana Area Manager

Date: 2/17/99

MISSOURI-MADISON COMPREHENSIVE RECREATION MANAGEMENT PLAN FRAMEWORK AND PLANNING PROCESS



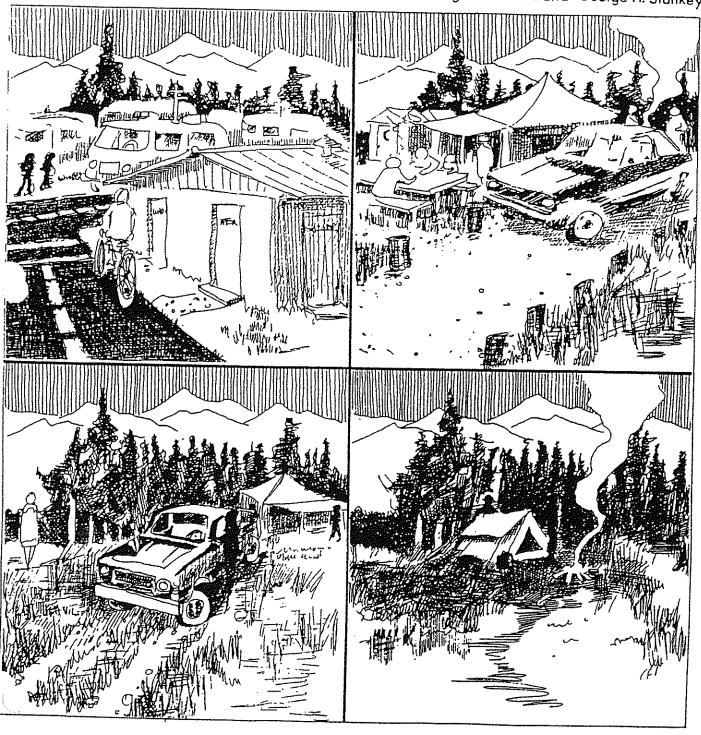


'S. Department of Agriculture Forest Service

> Pacific Northwest Forest ange Experiment Station

General Technical Report PNW-98 December 1979 The Recreation Opportunity
Spectrum: A Framework for
Planning, Management, and
Research

Roger N. Clark and George H. Stankey



INTRODUCTION

foday, many agencies at federal, State, and local levels are responding to the burgeoning demand for outdoor recreation. In addition, many private firms offer facilities and services for recreation, such as campgrounds. computerized reservation systems, and equipment rentals. With this expansion in the demand for recreational services has come a number of complex policy issues. What range and mix of opportunities should be provided and what are the roles of the various suppliers? Who can most effectively and efficiently serve public needs at national, regional, and local levels?

In this paper we describe a framework for outdoor recreation managers and policymakers who must answer questions concerning both the allocation and management of opportunities for recreation. This framework mests on the concept of the Recreation Jopportunity Spectrum (ROS). It is distinguished by varying conditions, ranging from modern and developed to primitive and undeveloped, or as Nash (1973) succinctly phrased it, "from the paved to the primeval." We will review the background of the opportunity spectrum concept and how it has been used in the past; describe six manageable factors or setting attributes that influence the opportunities for recreation; and describe uses of the spectrum concept for identifying and measuring the consequences of alternative allocations of and management actions on opportunities for outdoor recreation.

Figure 1.--A recreation opportunity setting includes features provided by nature or management and associated with recreational use.

THE RECREATION OPPORTUNITY SPECTRUM

In this paper we focus on the setting in which recreation occurs. When considering opportunities for outdoor recreation, people must make choices about activities in which to engage, settings in which to recreate, and kinds of recreation experiences to seek. We believe that, by describing the factors that influence or define the range of possible settings and by communicating this information to recreationists, they will be able to choose the experiences they desire.

We define a recreation opportunity setting as the combination of physical, biological, social, and managerial conditions that give value to a place. Thus, an opportunity includes qualities provided by nature (vegetation, landscape, topography, scenery), qualities associated with recreational use (levels and types of use), and conditions provided by management (developments, roads, regulations). By combining variations of these qualities and conditions, management can provide a variety of opportunities for recreationists (fig. 1).



Recreation opportunity settings imply a choice for recreationists; people must be aware of the opportunities, and the opportunities must be comprised of conditions desired by recreationists. Thus, opportunities are a function of user preference and a product of management actions designed to provide desired settings and to make people aware of their existence.

We recognize that the recreational value of an opportunity is a function of the perceived ability of that opportunity to provide certain activities and experiences. Our definition focuses on the social, physical, and managerial attributes of settings, not on the psychological values that may be derived. The link between the setting and experiences or "psychological outcomes" (Driver and Brown 1978) is an issue to which we will turn shortly.

The basic concept underlying ROS is not new. Many authors have remarked that a range or continuum of opportunities is needed to efficiently serve diverse public tastes for recreation. Wagar (1966) called for campgrounds ranging from highly developed sites suitable for modern self-contained campers to remote locations accessible only to backpackers. Similar continua have been suggested for hunting (Potter et al. 1973), wildland areas (Marshall 1933, Lloyd and Fischer 1972, Helburn 1977, Driver and Brown 1978), and parks (Field 1976, McCool and Elmer 1975). All these continua are characterized by a range of conditions from modern to primitive.

The spectrum concept is also reflected in a variety of land management descriptions. A basic recommendation of the Outdoor Recreation Resources Review Commission (1962) was for classification of recreational resources along "a spectrum from areas suitable for high-density use to sparsely used extensive primitive areas."

To implement terms of the National Forest Management Act (NIMA) (U.S. Laws, Statutes, etc. 1976a), the USDA Forest Service published draft regulations that note, "a broad spectrum of dispersed and developed recreation opportunities... will be provided." Through provision of this spectrum, land management planners will best be able to offer the diversity deemed so important by NFMA. To develop operational guidelines for the implementation of the ROS, the USDA Forest Service has established a task force of managers and researchers.1/ This group will be responsible for development of procedures to apply the opportunity spectrum concept on the ground. The Bureau of Land Management, U.S. Department of the Interior, is similarly involved in developing such guidelines.

 $[\]frac{1}{2}$ Members of the task force include Thomas Hoots (Task Force Leader, Washington Office), John Asterford (San Bernadino National Forest), Wendell Beardsley (Northern Region, USDA Forest Service), Perry Brown (Colorado State University), Leon Buist (University of Nevada), Roger Clark (Pacific Northwest Forest and Range Experiment Station, USDA Forest Service), Charles McConnell (Rocky Mountain Region, USDA Forest Service), Gary Morrison (Mount Baker-Snoqualmie National Forest), George Olson (North Carolina National Forest), Doug Smith (Southwestern Region, USDA Forest Service), George Stankey (Intermountain Forest and Range Experiment Station, USDA Forest Service), Lance Tyler (Arapaho-Roosevelt National Forest), Donald Warman (Pacific Northwest Region, USDA Forest Service), Bev Driver (Rocky Mountain Forest and Range Experiment Station, USDA Forest Service).

United States Department of Agriculture

Forest Service

Intermountain Forest and Range Experiment Station Ogden, UT 84401

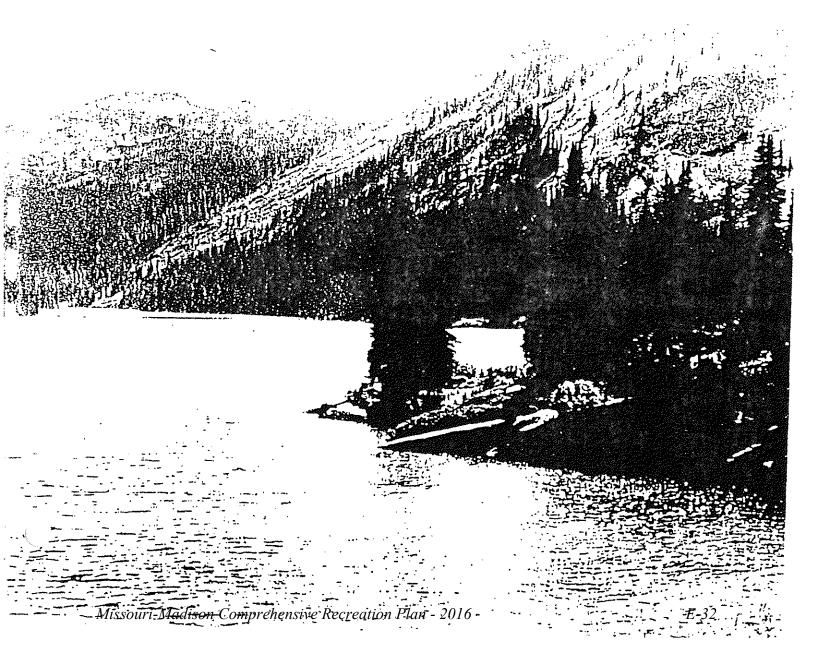
General Technical Report IMI-176

January 1985



The Limits of Acceptable Change (LAC) System for Wilderness Planning

George H. Stankey David N. Cole Robert C. Lucas Margaret E. Petersen Sidney S. Frissell



SUMMARY

This paper describes the Limits of Acceptable Change (LAC) system, a framework for establishing acceptable and appropriate resource and social conditions in recreation settings. The LAC has been developed in response to the need of managers for a means of coping with increasing demands on recreational areas in a visible, logical fashion. The LAC also represents a reformulation of the recreational carrying capacity concept, with the primary emphasis now on the conditions desired in the area rather than on how much use an area can tolerate.

The LAC is not a new idea. It is, however, the latest step in a continuing effort to improve wildtand recreation management through definition of more explicit, measurable objectives. Nine steps are involved in the overall process.

Step 1 involves identification of area concerns and issues. In addition to legal guidelines and organizational policy, management of an area needs to reflect area-specific features and values in order that the role of the area at both regional and national levels can be assessed.

In step 2, opportunity classes are defined and described. Opportunity classes represent subunits of the area where different conditions are provided, thereby increasing the diversity of the area. These differences are measured through indicators, identified in step 3, representing resource and social conditions for which management is striving. Indicators should be capable of quantitative measurement.

In step 4, the existing condition of the resource and social conditions is inventoried. These data are recorded and mapped, and serve as the basis for the definition, in step 5, of standards for each indicator in each opportunity class. Basing the standard on inventory data helps ensure realism and also clarifies the nature and extent of management activity that will be required to achieve standards.

Step 6 involves identification of alternative allocations of the area among the various opportunity classes. Because different allocations will require different types of management, step 7 requires an analysis of the various costs and benefits of each alternative, in terms of environmental impacts and impacts on visitors as well as administrative costs.

In step 8, the costs and benefits of each alternative are evaluated and a final alternative is selected. This final selection will reflect the responsiveness of the alternative to the issues and concerns identified in step 1 and the management requirements identified in step 7.

Step 9 involves implementation of the selected alternative and establishment of a monitoring program. Monitoring is particularly important as it provides feedback on the effectiveness of the management actions employed, alerting managers to the need to consider more rigorous application or the use of other measures.

To demonstrate how these nine steps can lead to an effective management program, a hypothetical case example is described.

PROPOSED

MISSOURI-MADISON

RECREATION PROTECTION, MITIGATION

AND ENHANCEMENT SCHEDULE

AND COST ESTIMATES

IN

1992 DOLLARS

AMENDED OCTOBER, 1998

HEBGEN

Day use area at the dam, includes an RV dump station along Hebgen's north shore (\$8,000)	
- 4 years of the license	\$ 400,000
Handicapped access improvements at USFS sites (\$7,000)	
- Highway Destruction Site (1 year of the license)	\$ 50,000
- Fishermen's Access Point (2 years of the license)	\$ 50,000
Lyon's Bridge Site reconstruction	
- Completed	\$ 100,000
ESTIMATED COSTS	\$ 600,000
ESTIMATED ANNUAL O&M COSTS (\$15,000)	

MADISON

Kobayashi Beach (\$10,000) - Completed - \$130,000 for acquisition and \$10,000 for development 1 year of the license	140,000 260,000 400,000
Campground on reservoir, BLM's west shore property (\$25,000) - 2 years of the license	\$ 500,000
Warm Springs Creek - Completed - \$100,000 for acquisition	\$ 100,000
Interpretive facilities at Fall Creek - 3 years of the powerhouse rehabilitation	\$ 30,000
Grey Cliff reconstruction * - 2 years of the license	\$ 50,000
BLM's Madison River property near Black's Ford * - 4 years of the license	\$ 50,000

⁽⁾ Operation and Maintenance Costs

Construction Schedule

^{*} FERC did not recommend this site be included in the license requirements in its September, 1997 Draft Environmental Impact Statement

⁺ Operation and Maintenance may be paid out of a \$40,000 pooled amount to the BLM for all of its Hauser and Holter recreation sites.

ESTIMATED ANNUAL O&M COSTS

(\$35,000)

^() Operation and Maintenance Costs
- Construction Schedule

^{*} FERC did not recommend this site be included in the license requirements in its September, 1997 Draft Environmental Impact Statement

⁺ Operation and Maintenance may be paid out of a \$40,000 pooled amount to the BLM for all of its Hauser and Holter recreation sites.

HAUSER

Hauser Dam Public Access Site, includes a portage route and carry-in-boat launch area below dam (\$10,000)		
- 5 years of the license	\$	300,000
White Sandy Beach, includes handicapped access at the Causeway (\$40,000 for White Sandy only)		
- Completed - \$325,000 for acquisition	\$	325,000
- 3 years of the license		1,175,000
	\$	1,500,000
Devil's Elbow Campground +		
- Once BLM acquires the property	\$	1,000,000
FOTMANTED COORD		
ESTIMATED COSTS	\$	2,800,000
ESTIMATED ANNUAL O&M COSTS (Does not include O&M costs for		
Devil's Elbow Campground, see footnote ⁺)		(\$50,000)
HOLTER		
Holter Dam Campground +		
- 3-5 years of the license	\$	1,000,000
		, ,
East side day use and boat launch area +		
- 5 years of the license	\$	300,000
Log Gulch and Departure Point +		
- 2 years of the license	\$	600,000
Destant Barrie		
Portage Route	•	£ 000
- 2 years of the license	\$	5,000
Upper Holter Lake Public Access Site *		
- 2 years of the license	\$	100,000
2 years of the needse-	φ	100,000
Wolf Creek Bridge Access Site reconstruction (\$10,000) *		
- 4 years of the license	\$	200,000
•	*	

⁽⁾ Operation and Maintenance Costs

Construction Schedule

^{*} FERC did not recommend this site be included in the license requirements in its September, 1997 Draft Environmental Impact Statement

⁺ Operation and Maintenance may be paid out of a \$40,000 pooled amount to the BLM for all of its Hauser and Holter recreation sites.

⁽⁾ Operation and Maintenance Costs

⁻ Construction Schedule

^{*} FERC did not recommend this site be included in the license requirements in its September, 1997 Draft Environmental Impact Statement

⁺ Operation and Maintenance may be paid out of a \$40,000 pooled amount to the BLM for all of its Hauser and Holter recreation sites.

GREAT FALLS DEVELOPMENTS

Lewis and Clark Interpretive Center - Completed	\$	1,100,000
Black Eagle Recreation Area, includes a park and 3 associated boat launches (\$15,000)	•	5 00 000
- 1 year of the license	\$	500,000
Shuttle service around the dams Completed	\$	1,000
Vision 2000 Rails to Trails Project Completed	\$	60,000
Pedestrian/bicycle trail and Green way from Rainbow to Morony (\$5,000) - 3 years of the license	\$	150,000
North Shore Natural Area (\$5,000) - Upon establishment of the conservation easement	\$	20,000
Cochrane, Ryan and Morony Reservoir Closures (\$5,000) - 1 year of the conservation easement	\$	35,000
Sulfur Springs Trailhead (\$10,000) - 5 years of the license	\$	100,000
Lewis and Clark, Crooked Falls and Rainbow Overlooks (\$10,000) Completed	\$	100,000
Pedestrian and bicycle access across Cochrane Dam (\$2,000) Once south shore right-of-way is acquired	\$	30,000
Carter Ferry Access Site - 3 years of the license	\$	50,000
Cascade to Dunes River Access Site (\$10,000) - 3 years of the license	\$	200,000
Ulm Bridge to Big Bend River Access Site (\$10,000) 4 years of the license	\$	200,000

⁽⁾ Operation and Maintenance Costs

⁻ Construction Schedule

^{*} FERC did not recommend this site be included in the license requirements in its September, 1997 Draft Environmental Impact Statement

⁺ Operation and Maintenance may be paid out of a \$40,000 pooled amount to the BLM for all of its Hauser and Holter recreation sites.

Morony to Carter River Access Site (\$10,000) - Completed – access easement	•
- 2 years of the license	\$ 200,000
Carter to Fort Benton River Access Site (\$10,000) 5 years of the license	\$ 200,000
ESTIMATED COSTS	\$ 2,946,000
ESTIMATED ANNUAL O&M COSTS	(\$92,000)

The combined cost estimates for the proposed Missouri-Madison Recreation Protection, Mitigation and Enhancement Package are:

- 1. \$9,881,000 for acquisitions and developments
- 2. \$242,000 for annual operation and maintenance
- 3. \$500,000 for developing the Comprehensive Recreation Management Plan completed;
- 4. \$125,000 for the Information and Education Plan; and
- 5. \$150,000 for recreation studies conducted on the Applicant's reservoirs in 1994 completed and \$110,000 every four years thereafter, beginning in 1999.

⁽⁾ Operation and Maintenance Costs

Construction Schedule

^{*} FERC did not recommend this site be included in the license requirements in its September, 1997 Draft Environmental Impact Statement

⁺ Operation and Maintenance may be paid out of a \$40,000 pooled amount to the BLM for all of its Hauser and Holter recreation sites.

Appendix F: Hebgen Shoreline Plan

The Hebgen Shoreline Plan is a source of information for owners of docks and other shoreline facilities that provides design, construction and management recommendations for shoreline facilities to maximize usage during the summer months and minimize reservoir-related impacts during the winter months.

The Plan provides information on:

- Hebgen Reservoir operations under Articles 403, 413 and 419 of the FERC Project No. 2188 license;
- Design and construction guidelines for docks and other shoreline facilities that are less susceptible to ice damage; have a longer season of use during periods of lower water levels, and/or protect and enhance the recreation, natural and aesthetic resources of Hebgen Reservoir;
- Local, state, and federal permit requirements for the construction of shoreline facilities or other activities that affect the shoreline and lakebed such as dredging or filling; and
- Additional information sources for understanding current operation of Hebgen Reservoir and parameters that affect reservoir access and use.

The Hebgen Shoreline Plan was prepared in cooperation with the U.S. Forest Service. The Forest Service manages most of the Hebgen Reservoir shoreline as part of the Gallatin National Forest. Remaining shoreline lands are in private ownership.

The Hebgen Shoreline Plan is available online at www.missourimadison.com.

Missouri-Madison Comprehensive Recreation Management Plan

Shoreline Management Planning





Shoreline Management Planning

Shoreline Plan

for

Hebgen Reservoir

Prepared by NorthWestern Energy

With assistance from American Lands

Updated July 2015

Shoreline Plan

for

Hebgen Reservoir

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Shoreline Plan for

Hebgen Reservoir

I. Introduction

This Shoreline Plan for Hebgen Reservoir (Plan) has been prepared by NorthWestern Energy (NorthWestern). NorthWestern owns and operates the Hebgen Development, as part of Project 2188 License Missouri-Madison Hydroelectric Project [Federal Energy Regulatory Commission (FERC)]. The Project 2188 FERC license was issued on September 27, 2000.

This Shoreline Plan was developed to meet requirements of Article 426 of the FERC Project No. 2188 License. Article 426 of the license requires that NorthWestern develop a plan for managing recreation resources at the Missouri-Madison Hydroelectric Project, and that, for Hebgen Reservoir, NorthWestern monitor, and within the operating parameters set forth in Article 403 of the license, minimize adverse impacts to boat ramps and docks located on Hebgen Reservoir that might be caused by changes in management of reservoir water levels. As part of this Plan, NorthWestern has identified information and strategies for owners of docks and shoreline facilities on Hebgen Reservoir to help them access and use reservoir waters in a safe and effective manner.

This Plan was prepared in cooperation with the U.S. Forest Service. The Forest Service manages most of the Hebgen Reservoir shoreline as part of the Gallatin National Forest. Remaining shoreline lands are in private ownership.

II. Purpose of the Plan

The primary purpose of this Plan is to provide information to owners of docks and other shoreline facilities to help them design, construct and manage those facilities for maximum usage during the summer with no reservoir-related impacts occurring during the winter. In the following sections of this Plan, information is provided on:

- Hebgen Reservoir operations under Articles 403, 413 and 419 of the FERC Project No. 2188 license;
- Design and construction guidelines for docks and other shoreline facilities that are: less susceptible to ice damage; that have a longer season of use during periods of lower water levels; and/or, that protect and enhance the recreation, natural and aesthetic resources of Hebgen Reservoir;

- Local, state, and federal permit requirements for the construction of shoreline facilities or other activities that affect the shoreline and lakebed such as dredging or filling; and
- Additional information sources for understanding current operation of Hebgen Reservoir and parameters that affect reservoir access and use.

III. Hebgen Reservoir Operations under License Articles 403, 413 and 419

Hebgen Reservoir operations are implemented as a requirement of Article 403 of the FERC license. Hebgen operations were approved by FERC following consultation and consensus by NorthWestern, the Montana Department of Fish, Wildlife and Parks, the US Fish and Wildlife Service, the US Bureau of Land Management, and the Forest Service. Articles 413 and 419 provide additional detail on required operations of the license.

Article 403. Hebgen Development

- (1) maintain a continuous minimum flow of 150 cfs in the Madison River as measured just downstream from Hebgen Dam at USGS Gauge No. 6-385, and a continuous minimum flow of 600 cfs at USGS Gauge No. 6-388 near the Kirby Ranch;
- (2) limit flows at USGS Gauge No. 6-388 near Kirby Ranch to no more than 3,500 cfs to minimize erosion of the Quake Lake outlet;
- (3) limit changes in outflow from Hebgen Dam to no more than 10 percent per day for the entire year;
- (4) maintain the elevation of Hebgen Reservoir between 6,530.26 and 6,534.87 feet (normal full pool elevation) from June 20 through October 1. In a typical year, the Licensee shall operate the Hebgen Development so that Hebgen Reservoir would refill to approximately its full pool elevation of 6,534.87 feet in late June or early July. The Licensee shall then maintain Hebgen Reservoir near its full pool elevation until September 1. Between September 1 and March 31 of a typical year, the Licensee shall draft Hebgen Reservoir to approximately an elevation of 6,524 feet. During this period, as Hebgen Reservoir is being drafted, the Licensee shall, to the extent practical given the variability of inflows to Hebgen Reservoir, maintain a reasonably uniform discharge from the Hebgen Development. After April 1 of a typical year, the Licensee shall operate the Hebgen Development to refill Hebgen Reservoir to at least elevation 6,530.26 feet by June 20.

This Article's flows and water surface elevation requirements may be temporarily modified, if required by operating emergencies or flow conditions beyond the control of the licensee, approved maintenance activities, or for short periods upon mutual agreement among the Licensee, the Forest Service as appropriate, the BLM, FWS, Montana DFWP, and Montana DEQ to: (1) accommodate special maintenance or construction requirements; (2) allow for archaeological studies; (3) implement the temperature enhancing pulsed flow protocol at the Madison development, required in Article 413; (4) satisfy power production purposes during an extended period of

extreme drought; and (5) implement the Missouri River Coordination Agreement with BOR, which requires that water stored in the reservoirs at the nine project developments be used to enhance downstream power production if extreme drought conditions persist for an extended period. If the flows or water surface elevations are so modified, the Licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 413. To monitor and mitigate potential thermal effects in the lower Madison River, the Licensee shall: (1) continue to collect water temperature data at several sites in the lower Madison River; (2) continue development of the Madison Thermal Model (either the existing statistical model or a more mechanistic dynamic model) and update calibration with recent temperature data; (3) use model output to develop and test a pulsed flow protocol (magnitude, duration, and timing) to achieve desired temperature reduction in the lower Madison River at critical times; (4) develop a protocol for implementing pulsed flows based on real time temperature data and model output -- temperature trigger points should include measures such as daily mean, daily maximum, daily range, weekly range, and sudden increases (either daily or weekly); (5) install and maintain remote (real time) water temperature and meteorology sensing equipment in the lower Madison River (in the Greycliff-to-Black's Ford reach) to trigger pulsed releases; and (6) monitor the effectiveness of pulsed flows to achieve desired temperature reduction in lower Madison River. If pulsed flows do not achieve the desired objectives, other means should be evaluated in consultation with the FWS. Montana DFWP, and Montana DEQ.

Article 419. Within one year after the date of issuance of the license, the Licensee shall file for Commission approval, and upon approval, implement the approved plan to coordinate and monitor flushing flows in the upper Madison River downstream of Hebgen Dam. The plan shall include, but not be limited to a, provision for monitoring flushing flow needs in the upper Madison River near Kirby Ranch in 2002 and every five years thereafter for the term of the license, and a provision to coordinate flushing flows in the lower Madison River below Madison Dam with flushing flow requirements in the upper Madison River below Hebgen Dam.

The Licensee shall prepare the plan in consultation with the Forest Service, FWS, Montana DFWP, Montana DEQ and other interested entities. The plan shall include a schedule for implementation of the program, for reporting and consultation with the agencies concerning the annual results of the program, and for filing the results, agency comments, and the Licensee's response to agency comments with the Commission. The Licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The Licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the Licensee does not adopt a recommendation, the filing shall include the Licensee's reasons, based on project-specific information.

Hebgen Reservoir operations under Article 403 were phased in during the winter of 1997-1998 with full implementation during the winter of 1998-1999. The primary

purpose of the Article 403 Hebgen operations is to balance reservoir recreation and biological resource needs with Article 403 Madison operations for downstream Madison River minimum and pulse flow requirements for fisheries and aquatic habitat, wildlife and recreation resource requirements.

Lower Madison River pulse flow operation required by Article 413 began in 1994. NorthWestern's updated (ten year) Madison River pulse flow protocol was approved by resources agencies and the FERC on June 4, 2015. Pulse flows (using water stored in Hebgen Reservoir) are periodically required to protect Lower Madison River fisheries from elevated water temperature during periods of extreme hot, dry summer conditions.

Madison River flushing flows required by Article 419 may occur on an annual basis pending evaluation of the amount of spring runoff available. NorthWestern has resource agency and FERC approvals to implement an updated five year Flushing Flow Plan, which was granted to the prior licensee (PPL Montana) on June 3, 2013. Flushing flows are implemented in the spring (typically May) of high-flow years as Hebgen Reservoir fills to help move or 'flush' accumulations of fine sediments from the river bottom and maintain river channel integrity in the upper and lower Madison River. Per the communications protocol specified in the Flushing Flow Plan, NorthWestern would operate Hebgen Dam to provide a spring flushing flow following consultation with state and federal agencies during those years when snow depths and predicted inflows to Hebgen Reservoir indicate sufficient volume is present to meet all operations requirements, including filling of Hebgen Reservoir.

Some owners of docks and other shoreline facilities have reported that their facilities have been damaged because of Article 403 operational changes. They have stated that, depending on reservoir water levels, docks and other shoreline facilities become encased in ice as the reservoir freezes. Then, during the sustained winter drawdown, this ice moves and shifts, causing damage to these structures. Some owners also indicate releasing water from Hebgen Reservoir in the summer (because of the Article 403 minimum flow and Article 413 pulse flow requirements), especially during drought years, leads to reduced water levels that makes make full use of their shoreline facilities difficult.

IV. Design and Construction Guidelines for Shoreline Facilities

The long-term goal of the Plan is to have all docks and other shoreline facilities designed and constructed in a manner that is less susceptible to ice damage during winter drawdown under Article 403, that allows the owners maximum usage during fluctuating water levels under Article 413, and that protects and/or enhances the recreation, natural and aesthetic resources of Hebgen Reservoir. Monitoring completed to date has shown that floating and removable docks are the best design to accomplish this goal. Docks that can be removed before freeze up minimize ice damage during winter drawdowns. Floating docks can rise and fall with reservoir water levels, increasing their usability when summer water levels drop.

Owners of docks and other shoreline facilities are encouraged to design and construct their docks and other shoreline facilities using the following voluntary guidelines. Owners of shoreline facilities or other improvements that occupy National Forest System lands are required to secure authorization from the Forest Service prior to new installations or alterations of existing facilities.

Boat Dock Guidelines

1. Number

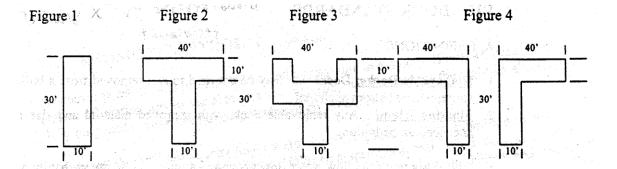
- a. Noncommercial situations maximum of one dock for each
 - i. House or cabin on land adjoining the reservoir
 - ii. Private landowner who owns land adjoining the reservoir but does not have a house/cabin on their land.
- b. Community docks, a single dock having one or more slips that serve several houses or cabin owners, are recommended for multi-family type dwellings.
- c. Commercial operations may need many docks for their business. Commercial operations should consult with NorthWestern on issues such as congestion and impacts to the natural shoreline when reviewing any plans for expansion of their operations.

2. Design

- a. All new docks and replacement docks should be removable.
- b. Docks should be designed to allow water to flow under and around them. Solid docks that do not allow water to flow under or around them should not be used.

3. Size

- a. To minimize visual impacts and other impacts to other shoreline uses, docks should be held to minimum functional dimensions. Community docks may require larger dimensions.
- b. Non-community docks should not exceed 30 feet in total length if there is 10 feet of water depth at the end farthest from shore when Hebgen Reservoir is at its full pool level. When the depth is less than 10 feet at that point, additional dock length should only be used to the point of reaching the 10-foot depth level at full pool. Dock length should be measured from the shoreline at the full pool level to the furthermost extension of the dock into Hebgen Reservoir.
- c. Maximum width of a dock should be 10 feet. See figures 1-4.
- d. On a T or C shaped dock the maximum width across the head of the T or C should not exceed 40 feet. See figures 2 and 3.
- e. On an L shaped dock, the maximum length of the wing section should not exceed 30 feet. This creates a maximum of 40 feet across the head of the L. See figure 4.



4. Materials

- a. Docks should be constructed of wood, metal, plastic, fiberglass or other material standard to the industry.
- b. Factory pressure treated (non-toxic marine grade) wood, untreated wood or plywood are suitable material.
- c. All field applied preservatives, wood treatment, carpet, glue, paint, varnish and other such materials must meet state and federal standards for marine applications.
- d. When applying an approved preservative, brush, spray, dip or soak in such a manner that the preservative is not allowed to drip, spill or otherwise enter the water.
- e. When molded foam or other floating material is used it should be enclosed or sealed to avoid breakup and/or scattering of loose material. If this occurs, the source should be repaired immediately and the loose material must be removed from the reservoir.
- f. Wood, metal, metal pipe, axles and wheels or other durable material should be used for skids on docks to prevent shoreline damage and dock damage when removing and installing docks unless the dock is lifted in and out of the water.
- g. Natural, non-contrasting exterior finishes or colors such as natural wood, earth tones, or other colors found in the area should be used for all visible surfaces.
- Anchor materials should be of pre-formed concrete, rocks, steel blocks, or driven pipe with adequate nylon or polypropylene rope, or non-corrosive metal cable.

5. Dock Removal and Installation

- a. Removable docks should be removed by October 31 or before ice-up, whichever occurs first, in order to prevent ice damage. The dock does not necessarily have to be removed from the lake. A dock would also be considered removed if it is disconnected from its anchor and tied off to the shoreline.
- b. Removable docks may be installed anytime the owner wishes to install them after ice-melt.

- 6. Timeframes for Implementation of Dock Guidelines
 - a. Some existing docks do not meet the above guidelines. Dock owners should consider taking steps to meet these guidelines when docks are replaced or with dock maintenance or upgrade involving more than 20% in-place/in-kind reconstruction.

Boat Buoy Guidelines

1. Number

- A maximum of two mooring buoys are recommended for the following noncommercial situations:
 - i. a non-community dock permitted for a lot on NFS lands adjacent to Hebgen Reservoir;
 - ii. a cabin/home served by a community dock; and
 - iii. a private landowner who adjoins Hebgen Reservoir.
- b. A maximum of one additional buoy is recommended for a Forest Service lot having one or more guest cabins.
- c. Additional buoys should not be installed for off-reservoir cabins or users.
- d. Commercial operations may need many buoys for their business. Commercial operators should consult with NorthWestern regarding installation of buoys.

2. Location

- a. Buoys should be located as close to docks as practical and in front of an owner's cabin/home or dock.
- b. In general, all mooring buoys should be located within 200 feet of the high water mark (FERC Project Boundary). The maximum distance buoys should be located from the high water mark is the distance needed to safely float the boat.

3. Other installations

- a. The boat buoys on a water-ski slalom should be greater than 200 feet from the high water mark (FERC Project Boundary) to minimize erosion due to the wake. Courses should not be installed in areas that would result in conflicts with other recreation uses or create unsafe conditions. In addition, the Montana Department of Fish, Wildlife and Parks has established no-wake zones on certain portions of Hebgen Reservoir, and any installation and use of a slalom course would need to comply with the no-wake zones.
- b. Buoys installed for slalom courses are to be removed from the reservoir when the installer is done using the course.
- c. Safety and information buoys such as no wake and swimming area buoys should be in numbers and locations in accordance with industry standards.

4. Design

a. Highly visible buoys are best (e.g. white). To minimize visual impacts and other impacts to other shoreline uses, buoys should be held to minimum functional dimensions not to exceed three feet in any one dimension. However, safety and information buoys should be in sizes in accordance with industry standards.

5. Materials

- a. Buoys should be made of plastic, molded foam, or fiberglass.
- b. When molded foam or other floating material is used it should be enclosed or sealed to avoid breakup and/or scattering of loose material. It this occurs, the source should be repaired immediately and the loose material must be removed from the reservoir.
- c. Anchor materials should be of pre-formed concrete, rocks or steel blocks and nylon or polypropylene rope, or non-corrosive metal cable or chain (e.g. galvanized or stainless).
- 6. Timeframes for Implementation of Buoy Guidelines
 - a. Buoy owners should meet these guidelines when installation occurs.

Shoreline Erosion Control Guidelines

Because the causes of erosion are variable and site specific it is difficult to develop specific guidelines as to the location, length, design and materials that should be used. Specific features of a proposed shoreline erosion control measure would be worked out during the local, state and/or federal permit application and review process.

Fence Guidelines

- 1. All fences should have the end points identified with buoys that meet the buoy guidelines established above.
- 2. All fences that are abandoned or are no longer needed should be removed.

V. Local, State and Federal Permit Requirements

An individual planning to construct a dock or other shoreline facility is responsible for obtaining all applicable local, state and federal permits before beginning construction. Following is a list of local, state and federal permits that may be required. Contact information for each permitting agency is provided.

Occupancy and Use of National Forest System (NFS) lands

Authorization is required for any occupancy and use of NFS lands or for any change or modification to existing facilities on NFS lands.

District Ranger Hebgen Lake Ranger District P.O. Box 520 / 332 Gallatin Road West Yellowstone, MT 59758

Phone: 406-823-6961

Zoning Regulations and Floodplain Permit

Zoning regulations and/or a floodplain permit may be applicable.

Gallatin County Planning Office 311 W. Main, Room 108 Bozeman MT 59715 Phone: 406-582-3130 www.gallatin.mt.gov

310 Permit

Montana's Natural Streambed and Land Preservation Act, also known as the 310 Law, is a state law that requires any person planning to work in or near a year-round (perennial) stream or river on private or public land to first obtain a 310 Permit from the local conservation district.

Gallatin County Conservation District PO Box 569 Manhattan MT 59741 Phone: 406-282-4350 www.gallatincd.org

404 Permit

This permit is needed for any activity that will result in dredging and/or the discharge or placement of dredged or fill material into waters of the United States. Waters of the U.S. include lakes, rivers, streams, wetlands and other aquatic sites including Hebgen Reservoir.

Army Corps of Engineers 10 West 15th Street Suite 2200 Helena MT 59626 Phone: 406-441-1375

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

VI. Monitoring of Boat Docks and Shoreline Facilities

NorthWestern will conduct periodic monitoring to identify those dock and facility designs that meet goals for maximizing use during the summer with no reservoir-related impacts during the winter. The need for monitoring of docks and shoreline structures will be determined in cooperation with the Forest Service, and will be conducted in those years following ice-up at reservoir elevations likely to result in damage to shoreline structures. A representative set of docks and structures will be monitored. Following monitoring, information provided to dock owners on design and construction of docks will be updated as determined appropriate.

NorthWestern will consider possible adjustments to the precise rate and timing of winter drawdowns to help minimize or eliminate damage to shoreline facilities. Such adjustments must comply with the operating requirements of the License.

NorthWestern will provide periodic information to dock and shoreline owners on the design and construction of docks. NorthWestern will also periodically solicit feedback from owners of docks on the usability of their docks under current reservoir operation.

VII. Additional Information

NorthWestern will continue to provide information on changes in reservoir operations to cabin and dock owners and other interested parties on Hebgen Reservoir. NorthWestern will cooperate with the FS in updating design and construction guidelines for dock and shoreline structures, if needed, and will provide this information to cabin and dock owners on Hebgen Reservoir. NorthWestern will also provide periodic updates on individuals and businesses that design, construct and/or sell floating and/or removable docks, and updates to permitting requirements for local, state, and federal agencies as needed. This information will be provided at meetings of the Hebgen-Madison Recreation Advisory Group that are held in West Yellowstone during the summer.

NorthWestern will conduct periodic workshops as appropriate on the design and construction of floating, removable docks. NorthWestern will also maintain a mailing list of landowners and cabin and dock owners on Hebgen Reservoir. Individuals on this list will receive notification of any workshops conducted at West Yellowstone on dock design, and meetings of the Hebgen-Madison Recreation Advisory Group.

The following information sources are provided to help cabin and dock owners and recreationists better understand current operation of Hebgen Reservoir and parameters that affect reservoir access and use.

Real-Time Information on Reservoir Elevation

To obtain information on Hebgen Reservoir elevation, the US Geological Survey maintains a website where you can find current monitoring data for Hebgen Reservoir. The website address is http://waterdata.usgs.gov/mt/nwis. Click on the 'current conditions' box. Click on a box saying 'Statewide Streamflow Current Conditions Table.' Scroll down the list of gauging stations to the number 06038500 for the Madison River below Hebgen Lake and click on that number. When information for this gauging station appears on the screen, check off elevation for Hebgen Lake under available parameters, and 'Go'. Current reservoir elevation (as available) for the previous seven days will be displayed on a graph.

Current Reservoir Operation

Information on current operation of Hebgen Reservoir is available from NorthWestern in Butte. As described in Section III, Hebgen Reservoir is operated to balance reservoir recreation and biological resource needs with lower Madison River fisheries, wildlife and recreation resource requirements. Under normal operating conditions, reservoir elevation will fluctuate up to 4.5 feet from June 20 through October 1 (between the

normal full pool elevation of 6,534.87 feet and 6,530.26 feet). When drought conditions and low stream flows occur, reservoir elevations may fluctuate more than 4.5 feet.

Winter drawdown of Hebgen Reservoir will typically begin in October and continue through March. In a normal year, reservoir elevation will drop at an average rate of one foot per month during this time period. Drawdown rates will vary from year to year depending on end-of-summer elevations and winter conditions. For information on current operation of Hebgen Dam, contact:

Deb Mullowney
Asset Optimization Coordinator
NorthWestern Energy
40 East Broadway
Butte, MT 59701
PH: 406-497-3509

Deb.Mullowney@northwestern.com

Drought Monitoring

Persistent drought and hot summer weather can combine to lower reservoir levels and stream flows throughout Montana. NorthWestern recognizes the potential disruption to normal activities and shared impact that these conditions may cause. Information on current drought conditions in Montana, and programs on drought preparedness can be found at the Montana State Library website:

http://mslapps.mt.gov/Geographic_Information/Maps/drought/

Lower Madison River Thermal Pulse Flows

Information on the implementation of pulsed flows in the lower Madison River can be found on the Madison Thermal website at www.madisondss.com/madison.php

For more information, contact:
Jon Jourdonnais
Leader, Hydropower License Compliance
NorthWestern Energy
1801 South Russell Street
Missoula, MT 59806
PH: 406-490-1802
jon.jourdonnais@northwestern.com

Plan Revision

NorthWestern may update and revise this Plan in cooperation with the Forest Service, and will allow for a public comment process and appropriate notification. If you have questions about the Plan or additional requests for information, contact:

Kim Bergstrom
Pinnacle Research (for American Lands)
PO Box 1690
Plains, MT 59859
PH: 406-826-2374
pinnacle@blackfoot.net

Appendix G: Plan Update Progress Summary

This appendix provides a summary of meetings and feedback received related to the update of this Plan for 2016. Summaries of meetings for the 2005 and 2010 updates of the Plan are archived and available by request.

As a primary guidance document for recreation management in the Missouri-Madison Corridor, the Plan does not establish policies, but rather augments and supports planning documents established and adopted by the cooperating land management agencies. Therefore, much of the basis for the supporting framework of the Plan is either relatively unchanged from the previous update in 2010, or information simply required to update to current conditions.

The 2016 update of the Plan was conducted with a logical approach, utilizing manager input:

- Chapter 1 remains largely the same, since the purpose and need for the Plan, background of the Plan, and process for Plan updates remains current and appropriate.
- Various aspects of Chapter 2 were updated as follows:
 - o The Issues, Vision, and Goals were reviewed by managers and members of the Regional Working Groups. Comments were collected (see below) and incorporated as appropriate.
 - The process for project evaluation was largely unchanged, as was the criteria for project selection related to the River Fund grant program.
 - The River Fund grant project application materials were updated to reflect a new scoring criterion related to design options at the request of the River Fund Board, and the project application itself was reformatted to simplify the flow of the document and better integrate minor adjustments that had been incorporated over recent years.
 - o Minor updates were made to the monitoring, evaluation, and adaptive management section of the Plan to reflect current information and timelines.
 - The River Fund grant section was updated to reflect activity under the program since the last Plan update in 2010.
- Except for the Corridor definition and physical setting descriptions, which have not changed in recent years, information in Chapter 3 was largely updated to reflect current land use, recreation management, population and development information, as well as recreation amenities currently available in the Corridor and recreational use trends.
- Information in the Corridor Resources Supplement appendix in the 2010 Plan was incorporated into Chapter 3-2, so this appendix was removed in the 2016 update.
- Recreation site inventory information was updated for 2016.
- Minor edits were made to the summary of recreation projects planned for 2000-2005 to reflect two recently-completed projects.
- Recreation site location maps and regional private property maps were updated to reflect the current situation in 2015.
- Results of the visitor survey and visitor use counts study were updated with 2014 information, and references were added to access additional data, study details, and survey instruments online.
- Minor updates were made to the Recreation Opportunity Spectrum and Limits of Acceptable Change information.
- The Missouri-Madison MOU, Hebgen Shoreline Plan, and update process summary were included as additional appendices, in keeping with previous versions of the Plan.

Specific feedback pertaining to the Issues, Vision, and Goals was received from recreation managers during spring 2015 Regional Working Group meetings, as described below.

Regarding current condition statement: "Increased recreational use of the Project Area has the potential to change the quality of visitor experiences, decrease land managers' ability to maintain the condition of developed and dispersed recreation sites, and to lead to conflicts among different types of users and between users and private landowners."

<u>Comment summary:</u> Manager is not sure this is happening, because conflicts that seem apparent really might just be part of the experience. They may not necessarily have a negative impact on user experiences, though there still is potential for displacement of user groups.

<u>Outcome</u>: This was a comment for discussion with no specific request to add or change the issue or goal statements. The phrase "and to lead to conflicts" was edited to "and may lead to" conflicts.

<u>Regarding current condition statement</u>: "Changes to natural_resource conditions within the Project Area (wildfires, floods, insect infestations, invasive species, etc.) have the potential to alter recreation use patterns and management of developed recreation sites.

<u>Comment summary</u>: Manager feels shoreline stability should be added to this current condition statement.

<u>Response</u>: The concept is captured in the condition statement, but stability of riparian and shoreline vegetation was added to the "Inter-relationship Between Recreation Uses and Other Resources" issue.

<u>Issue</u>: Fee discrepancies between sites and user groups create management issues without support to accommodate the increased use.

Comment summary: Discrepancies in fee structures of neighboring sites — especially those in close proximity to each other but managed by different agencies — produces undesirable displacement from the higher-cost site to the lower-cost site, placing additional pressure on resources that are already heavily used. In addition, impacts to recreation resources associated with permitted outfitters utilizing sites that do not benefit from the outfitter and guide permit system and fees requires additional agency funding for upkeep due to increased use. And lastly, cabin owners on Holter Lake — whom can only access their property by boat — utilize launch sites, parking areas, and trash services at public recreation areas.

<u>Response:</u> New item added to the list of current conditions encouraging collaborative solutions among agencies. While the Plan has no legal authority to regulate fees, it lends support by encouraging collaboration between agencies to find creative solutions to policies that adversely impact management of sites.

"Exploring collaborative solutions to recreation management issues within the Corridor will help ensure quality recreation opportunities and amenities. Issues are rarely agency-specific, though internal policies may dictate various approaches for resolving those issues by different agencies. Resolving issues collaboratively and efficiently ensures long-term success for providing quality recreation opportunities and amenities."

In addition, supporting statements related to the issue of conflicts among recreation uses were edited to specifically identify fee discrepancies between agencies.

Issue: Land use changes.

<u>Comment summary</u>: Cattle are not natural and shouldn't be referred to as such in the description of land use changes.

<u>Response</u>: Edited language under "Changes in Land Use" issue to reflect open space instead of natural-appearing settings (which include cattle).

Issue: Waste water disposal.

<u>Comment summary</u>: The Plan needs to identify the need for RV dump stations and responsible disposal of RV waste water.

<u>Response:</u> Human waste and wastewater are addressed in a broad context in the intro paragraph and specifically in the underlying bullets of the "Responsible Outdoor Recreation" section.

The above edits were reviewed and discussed with managers and no additional comments or suggestions were submitted.

In addition to the Issues, Vision, and Goals for the Plan, managers also reviewed and updated summaries of agency plans adopted in the Corridor and included in chapter 3-3 (Land Use and Recreation Management). This information is vital to understanding the context and parameters of the environment and conditions that managers operate under.

Manager review and approval of the update is the final step in the Plan update process.