

Flathead Wild and Scenic River

Proposed Action for the Comprehensive River Management Plan



Flathead National Forest



Glacier National Park

July 2019

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INTRODUCTION

In 1968, Congress passed the Wild and Scenic Rivers Act (P.L. 90-542) and established a nationwide system of outstanding free-flowing rivers. For a river segment to be considered eligible for Wild and Scenic River status it must be “free-flowing” and possess “outstandingly remarkable values” within its immediate environment. These rivers are protected for the benefit and enjoyment of present and future generations. In 1968, Congress identified 27 rivers for study with the enabling legislation. To date, 226 rivers in 40 states and the Commonwealth of Puerto Rico have been added to the National Wild and Scenic Rivers System (Interagency Coordinating Council, 2019).

The Flathead River was one of the 27 rivers designated for study under section 5(a) of the Wild and Scenic Rivers Act (WSRA) of 1968 for inclusion in the National Wild and Scenic River (WSR) System. The designating legislation passed in 1976, assigned the USDA Forest Service (Forest Service) as having primary administrative responsibility for the Flathead Wild and Scenic River. However, Glacier National Park and the State of Montana retain lands and or management responsibility for lands under their administration.

Purpose of this Document

The Flathead National Forest (the Forest) and Glacier National Park currently manage the 219 miles of the three forks of the Flathead River under the Flathead Wild and Scenic River Management Plan, the Flathead River Recreation Management Direction, and the current editions of the Glacier National Park General Management Plan and the Flathead National Forest Forest Plan (U.S. Forest Service 1980, U.S. Forest Service 1986, Glacier National Park 1999, US Forest Service 2018). Section 3(d) (2) of the Wild and Scenic Rivers Act requires that river management plans for WSRs designated prior to 1986 be reviewed for conformity with the Act.

This document will identify the current management plan components that will be carried forward from previous plans and will identify those components that will need to be added or updated for the Flathead Comprehensive River Management Plan (CRMP). These actions will fulfill the requirements of Section 3(d)(1) of the Wild and Scenic Rivers Act that states that “the Federal agencies charged with the administration of each component of the National Wild and Scenic Rivers System shall prepare a comprehensive management plan...to provide for the protection of river values. The plan shall address resource protection, development of lands and facilities, user capacities, and other management practices necessary or desirable to achieve the purposes of this Act. The plan shall be prepared, after consultation with State and local governments and the interested public.” This Proposed Action document describes components of the CRMP that the Forest and Glacier National Park will implement to manage the WSR for the next 10 years or more. More detail on the specific components of the CRMP and their status is provided in the Framework Section of this document.

Background

The Wild and Scenic Rivers System has three river classifications: wild, scenic, and recreational. A single river or river segment may be divided into different classifications, depending on the

type and intensity of the development and access present along the river at the time of designation (WSRA Section 2 (b)):

- **Wild:** Rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
- **Scenic:** Rivers or sections that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
- **Recreational:** Those rivers or sections that are readily accessible by road or railroad, may have some development along their shorelines, and may have undergone some impoundment or diversion in the past.

All three levels of classification are present within the Flathead WSR. In general, access to the river reaches is more limited toward the headwaters, and public use increases as you proceed downstream as the rivers approach roaded areas where access is easier. Each of the three forks includes a segment classified as Recreational located in the lower reaches (Figure 1).

Scoping

The CRMP will be developed in compliance with the National Environmental Policy Act (NEPA), including public involvement. As part of the NEPA process, an Environmental Assessment (EA) will be completed to provide a basis for comparing alternatives within the CRMP framework and selecting a management plan that protects the resource values of the three forks of the Flathead River.

At this time, the agencies are conducting scoping and requesting public input on the proposed action including issues and desired river conditions, thresholds, indicators and management actions being considered for the management of the three forks of the Flathead River and the WSR corridor. Under NEPA, scoping seeks to determine the breadth of issues to be addressed in the EA of the CRMP and identify the issues that may need to be addressed when considering or developing an alternative to the proposed action. By collaborating with the public and other agencies at this point, the Forest and the Park Service can help ensure that the analysis adequately addresses those issues of importance to affected stakeholders and interested parties. Information on the project and outreach efforts can be found on the website established for the CRMP: <https://www.fs.usda.gov/detailfull/flathead/home/?cid=fseprd573051&width=full>

Recreational Opportunity Spectrum

In addition to the classification system used in the Wild and Scenic Rivers Act, the Forest Service applies a Recreation Opportunity Spectrum (ROS) that describes the types of experiences, activities, facilities, degree of remoteness, visitor management, social encounters, and level of naturalness that visitors can expect in an area. Establishing a variety of ROS settings enables land managers to plan for a variety of settings in which the public can recreate, each with their own characteristics and opportunities. The Forest Plan established ROS settings and associated plan components for every acre on Flathead National Forest. These settings range from primitive settings within Great Bear Wilderness to a rural setting in and around Whitefish Mountain Resort.

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More information on ROS and the range of settings on the Forest can be found in the FEIS volume 2 (pp. 316-338) and forest plan (pp. 55-58). The ROS can be applied to the Wild and Scenic Rivers Act classifications.



Figure 1: The Flathead Wild and Scenic River System

The Three Forks of the Flathead River includes ROS levels of Primitive; Semi-Primitive, Non-Motorized; Semi-Primitive, Motorized; and Roaded, Natural reaches (Table 1) (US Forest Service 2018). The ROS provides guidelines for evaluating management and project actions. However, as illustrated in Figure 2, the ROS classes are not discrete in that an area can be managed across a range within an ROS class, or if an area has a unique feature that requires a “subclass” of ROS for appropriate management, the system is flexible enough to accommodate that.

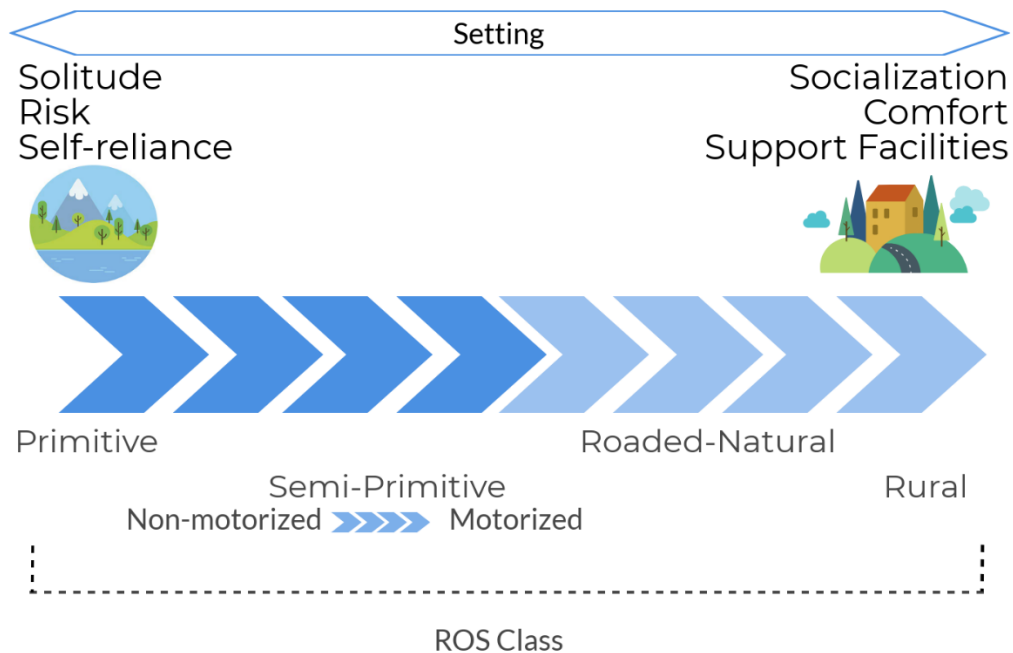


Figure 2. Representation of the Recreational Opportunity Spectrum (ROS) classes identified along reaches of the Flathead Wild and Scenic River.

As an example of ROS flexibility, a unique feature on the Middle Fork Flathead River called the goat lick is located in a segment with an ROS of Semi-Primitive, Non-Motorized, but managers may restrict activities near the goat lick more stringently than along the rest of the segment in order to protect the unique value of the goat lick feature to wildlife. The Forest referenced the ROS guide in developing the Desired River Conditions and identification of activities that are consistent and those that are inconsistent with each WSR segments classification.

Mileage and upper and lower bounds, and WSR classification for each of the Flathead WSR segments are summarized in Table 1 and displayed in Figure 1.

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Table 1. Segment classification, Recreation Opportunity Spectrum (ROS) class in the forest plan, and segment upper and lower bounds for the Flathead River Wild and Scenic River.

River Segment/ Classification	ROS Class	Upstream Bound	Downstream Bound	Miles
North Fork- Scenic	Roaded Natural	Canadian Border	Camas Bridge	40.7
North Fork- Recreational	Roaded Natural	Camas Bridge	Middle Fork Confluence	17.6
Middle Fork- Wild	Primitive	Headwaters	Bear Creek	46.6
Middle Fork- Recreational	Semi-Primitive Non- Motorized/ Roaded Natural	Bear Creek	South Fork Confluence	54.0
South Fork -Wild (wilderness)	Primitive	Youngs Creek	Cedar Flats	40.6
South Fork -Wild (non-wilderness)	Semi-Primitive Non- Motorized	Cedar Flats	Spotted Bear	10.7
South Fork- Recreational	Roaded Natural	Spotted Bear	Log Landing	8.8
Total Miles:				219

The Wild and Scenic Rivers Act requires the administering agency to protect and enhance the river's free-flowing condition, water quality and its outstandingly remarkable values. Protecting these values becomes the basis for managing the wild and scenic river corridor.

FRAMEWORK OF A CRMP

An interagency interpretation of the Wild and Scenic Rivers Act was completed in 1982 and includes guidelines for eligibility, classification, and management of river areas. Since issuance of these guidelines, several sections of the Act have been amended to clarify intent, most notably the requirement for the development of a comprehensive river management plan (CRMP). In addition, the courts have provided interpretation of various provisions of the Act as a result of litigation. In 2002, the Interagency Wild and Scenic Rivers Coordinating Council developed the following recommended contents and key elements of a CRMP:

1. Describe the outstandingly remarkable river values (ORVs);
2. Define the Goals and Desired Conditions for protecting the river values;
3. Include a monitoring program to assess enhancement or maintenance of Desired Conditions;
4. Address and identify user capacities;
5. Reflect a collaborative approach with stakeholders;
6. Address water quality and instream flow requirements;
7. Address development of lands and facilities; and
8. Describe and identify regulatory authorities (local, state, federal, tribal, partners) that assist in protecting river values.

The 1980 Flathead River Management Plan and the 1986 Flathead River Recreation Management Direction addressed the river plan requirements in force at the time of designation. In 1986 the Wild and Scenic Rivers Act was amended and added requirements for addressing user capacities and reflecting a collaborative approach to the list of CRMP contents. These additions reflect changes in the studies of recreation management and collaboration in decision-making. The 1986 amendment also required plans developed prior to 1986 be reviewed, amended, and updated to address these requirements.

The following table summarizes the status of each CRMP requirement for the Flathead WSR system (Table 2).

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Table 2. Current requirements for a Comprehensive River Management Plan under the Wild and Scenic Rivers Act and the status for each component for the three forks of the Flathead River. Bold type indicates items that are the focus of this action. All items will be included in the CRMP.

CRMP Requirement	Details and References for the Three Forks of the Flathead River	Status¹
<i>Describe the outstandingly remarkable river values (ORVs);</i>	<i>An Interagency ORV Assessment was completed in 2013 (Forest Service and Glacier National Park, 2013), as well as a detailed Ethnographic resources review and assessment in 2015 (Flathead Headwaters Ethnographic Resources Review and Assessment).</i>	C
Define the Goals and Desired Conditions for protecting the river values;	The original Desired Conditions from the 1980 and 1986 management documents have been reviewed, and much of this direction will be retained. A series of public meetings were held in 2018 to share current information on resource conditions in the WSR corridor and collect public input.	PA/EA
Include a monitoring program to assess enhancement or maintenance of Desired Conditions	Existing and proposed monitoring indicators are described in this document and public input on indicators and monitoring needs will continue to be a focus of the EA and CRMP.	PA/EA
Address and identify user capacities;	The University of Montana collected recreational user data at multiple sites on each of the three forks in 2017 and 2018. A third data season is underway for 2019. These data as well as past river monitoring data will be analyzed in the EA to assess the current levels and patterns of use and to develop user capacities for inclusion in the CRMP.	EA
Reflect a collaborative approach with stakeholders	The public meetings in 2018 gathered input from community residents near the Flathead River and a web portal was developed to facilitate wider participation and dissemination of the materials presented at each meeting. Consultation with Tribes, state and federal agencies, and community groups was also conducted in 2018 and will continue throughout the EA and CRMP development.	Ongoing
Address water quality and instream flow requirements;	The CRMP will evaluate current water budgets on the rivers, derive a minimal instream flow that will support the ORVs, and assess management needs. The water quality information will be updated as will the water quality regulatory information.	EA
Address development of lands and facilities;	The CRMP will update the status of easements, developments in and near the WSR corridor, and identify priorities for continued easement acquisition. The CRMP will also evaluate the condition and use of facilities and determine if any changes should be made to accommodate changes in use patterns or resource conditions.	EA

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CRMP Requirement	Details and References for the Three Forks of the Flathead River	Status¹
Describe and identify regulatory authorities (local, state, federal, tribal, partners) that assist in protecting river values	A review of current regulatory responsibilities will be included in the CRMP with particular emphasis on changes in regulations since the time of designation in 1976. The review will focus on regulations that affect ORV resources, lands management, and other aspects of access and use of the river corridor.	EA

¹Notes:

C	Complete	PA	Described in this document as part of the Proposed Action
EA	Item will be analyzed in the EA	Ongoing	Will be addressed in Proposed Action, the EA, and the CRMP

Existing Guidance

Planning for the river system began prior to designation with the Flathead River Study (1970), which documented the rivers existing “outstanding qualities” and free-flowing conditions. Shortly after the river’s designation in 1976, a River Management Plan was published (1980) and later supplemented with a Recreation Management Direction (1986). The management direction for managing the WSR segments was incorporated into the 1986 Forest Plans for Flathead National Forests which was revised in 2018. Glacier National Park recognizes the significance of the Flathead WSR and discussed the management of the WSR segments in its General Management Plan, where they acknowledge that the Forest Service is the lead agency for the Flathead River WSR management (Glacier National Park, 1999). It was also noted in the North Fork Management Plan where the designation was described and how it is jointly managed (Glacier National Park, 1992). In 2016 the park completed its Foundation Plan which highlighted the Flathead WSR under Park Purpose and Significance and listed it as one of the Park’s fundamental resources and values (Glacier National Park, 2016). All of these plans together have been in practice in lieu of a CRMP for the Three Forks of the Flathead Wild and Scenic River. More detail on each of these guidance documents and other relevant management direction is provided below.

The Wild and Scenic Rivers Act states that to be included in the system, a river must “possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values.” The Interagency Wild and Scenic Rivers Coordinating Council provided guidance for determining a river’s outstandingly remarkable values (ORVs) (www.rivers.gov). The criteria for an ORV are:

- **An ORV must be river related or dependent.** This means that a value must be located in the river or on its immediate shorelands (generally within ¼ mile on either side of the river, also referred to as the river corridor); contribute substantially to the functioning of the river ecosystem; and/or owe its location or existence to the presence of the river.
- **An ORV must be rare, unique, or exemplary at a comparative regional or national scale.** Such a value would be one that stands out from among a number of similar values on other rivers that are themselves uncommon or extraordinary.

Determining ORVs is a matter of informed professional judgment. To make these determinations, comparative regions are delineated for each resource value to allow the meaningful comparison against similar rivers. Resources are comparatively evaluated using defined criteria or standards.

Aspects of the Wild and Scenic Designation Codified by Law

Although the current river management plan for the Flathead River must be updated, there are features of the 1976 WSR designation that will remain unchanged. Some aspects of a WSR designation are codified in law and any alterations require an Act of Congress. These aspects include the boundary delineation and the segment classifications including their upstream and downstream bounds (Figure 1 and Table 1). Therefore, the CRMP will not propose changes to these.

Boundary of the WSR Corridor

The corridor width can include up to 320 acres per mile, which works out to an average of ¼ mile from the banks on both sides of the river. However, boundaries can be wider or narrower than the ¼ mile average in places, as long as the 320 acres per mile limit is not exceeded over the entire length of the segment. Boundaries are measured from the ordinary high-water mark.

The official boundary description of the Middle Fork of the Flathead River, The North Fork of the Flathead River and the South Fork of the Flathead River are each shown on map sets titled “Boundary Map” and on aerial photography dated June 30, 1977. The official boundary was released and described in the Federal Register, volume 43, Number 117 on June 16, 1978.

2013 Outstandingly Remarkable Values Assessment

In 2013 the Forest and Glacier National Park reviewed the ORVs in detail and described their status and relevant region of comparison for each category in the “Outstandingly Remarkable Values Assessment of the Flathead River System”(ORV Assessment) (Forest Service and Glacier National Park 2013). In 2015, the Forest conducted a detailed Ethnographic resource review and assessment which included the WSR segments (Flathead Headwaters Ethnographic Resources Review and Assessment). As a result, ethnography was added as an ORV to both WSR segments of the Middle Fork Flathead River. In general, the regions of comparison for the Three Forks of the Flathead were focused in northwestern Montana but were extended to northern Idaho and northeastern Washington for evaluation of recreation, wildlife, and botanical resources. Prior to the data review, evaluation criteria were defined for each category of ORV (Table 3).

Table 3. Outstandingly Remarkable Values (ORV) evaluation criteria for the Flathead River Wild and Scenic River.

Category	Evaluation Criteria
Recreation	The variety of challenge, level, and access to recreational opportunities including fishing, boating, swimming, walking, hunting, camping, backpacking.
Scenery	The scenic value of the landscape, the lack of development in the river corridor, the lack of human presence, in the dramatic landscape of the river corridors.
Wildlife	The complexity and completeness of habitat along with the density, uniqueness, and presence of rare or recently delisted species.
Botany	Having a diversity of species, numbers of plant communities, and cultural importance of native plants as well populations of rare plant species such as those that are regionally listed as sensitive or rare.
Geology	Features undergoing dynamic development within a short timeframe geologically, outstanding hydrologic or geologic features, and the range or uniqueness of a special or unusual geologic feature as compared with the region.
Fisheries	Overall value of life history type, habitat quality, abundance, lack of aquatic invasive species, angling opportunities, and the presence of native fish.
Water Quality	Exceptional water quality was evaluated in terms of the lack of turbidity, maintenance of historic temperature regimes, high levels of dissolved oxygen, and a lack of pollutants or pollution presence.

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Table 3. Outstandingly Remarkable Values (ORV) evaluation criteria for the Flathead River Wild and Scenic River.

Category	Evaluation Criteria
Ethnographic	The value of a site in terms of interpreting ethnography due to its rarity, unusual characteristics, or exceptional human interest value.
History	The river or area within the river corridor contains sites or features associated with a significant event, an important person, or cultural activity in the past that was rare, unusual or one-of-a-kind in the region.

Given the proximity to the international boundary, Canadian landscapes and resources undoubtedly contribute to the values found along the Flathead River in the United States. However, the Flathead River need only be outstanding in comparison with other similar American rivers. The ORV Assessment determined that each WSR segment included multiple ORVs. Table 4 summarizes these determinations by river segment.

Table 4. Flathead Wild and Scenic River segments and outstandingly remarkable value (ORV) determinations.

	North Fork	North Fork	Middle Fork	Middle Fork	South Fork-wilderness	South Fork-non-wilderness	South Fork
Segment Classification	Scenic	Recreational	Wild	Recreational	Wild	Wild	Recreational
ORV							
Recreation	X	X	X	X	X	X	X
Fisheries	X	X	X	X	X	X	X
Water quality	X	X	X	X	X	X	X
Wildlife	X	X	X	X	X	X	X
Botany	X		X		X		
Geology	X	X	X	X	X	X	X
Scenic	X	X	X	X	X	X	X
Historic	X	X	X	X	X	X	X
Ethnographic	X	X	X	X	X	X	X

Source: Forest Service and Glacier National Park 2013.

A river's ORVs are identified pre-designation through a study or during preparation of a CRMP. The 2013 ORV assessment confirmed the status of the river values identified at the time of designation.

Glacier National Park Plans

In 1999 Glacier National Park completed the General Management Plan which describes the Flathead WSR under Regional Cooperation. The plan states that the designation and management direction is consistent with Glacier National Park's planning efforts. Management of the North and Middle Fork helps to protect the natural, cultural, scenic and recreational values of the park. The 1992 North Fork Study Area Management Plan describes the portion of the WSR within Glacier National Park and speaks to the joint management of the river by the Forest and the Park (Glacier National Park, 1992). It also zoned the wild and scenic river and stated "The integrity of the natural ecosystem will be maintained and ecological conditions will be affected only minimally by visitor use and management practices. Management activities in the area, which will be conducted in cooperation with the Forest Service will be infrequent and relatively unobtrusive (patrols of access areas and the river). Except for the few developed sites and private landholdings next to the river, this zone will offer many opportunities for solitude. Visitors will have relatively infrequent contacts with park staff and one another. The degree of self-sufficiency and assumption of risk will be high. Appropriate activities will include boating, swimming, fishing, sightseeing and photography." (page 12). The 2016 Foundation Document prepared for Glacier National Park includes the Flathead WSR under *Purpose and Significance* of the Park and lists the river under *Fundamental Resources and Values* in regard to Clean Water (Glacier National Park, 2016).

2018 Flathead National Forest Plan

The 2018 Forest Plan includes management direction for Management Areas which addresses the currently congressionally designated WSR segments (pages 91-92 of the Forest Plan) (US Forest Service, 2018). The CRMP will be consistent with the 2018 Forest Plan, and if changes are needed to the forest plan direction, then the decision for the CRMP will disclose what direction will be amended to the forest plan. It should be noted that the following excerpts apply the concept of Desired Conditions as,

a description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, towards which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress towards their achievement to be determined but must not include completion dates (36 CFR § 219.7(e)(1)(i)).

Desired conditions are not commitments or final decisions approving projects and activities. The desired condition for some resources may currently exist, but for other resources they may only be achievable over a long time period (See page 5 of 2018 Forest Plan).

The following are the management direction statements for existing WSR segments.

Desired conditions (MA2-DC)

01 The free-flowing conditions and water quality of designated wild and scenic rivers are protected and enhanced.

02 The outstandingly remarkable values of designated wild and scenic rivers are protected and enhanced.

03 Designated or eligible wild rivers are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted.

04 Designated or eligible scenic rivers are free of impoundments, with shorelines or watersheds still largely primitive and undeveloped but accessible in places by roads.

05 Federal lands within the wild and scenic river corridor are retained in public ownership.

06 Administrative facilities on designated wild and scenic rivers are screened or designed to blend into the natural river environment and development is consistent with the river's classification.

07 Commercial outfitted river use is a key element in providing guided fishing and rafting experiences on the Flathead Wild and Scenic River.

Standards (MA2-STD)

A standard is a mandatory constraint on project and activity decisionmaking that is established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR § 219.7(e)(1)(iii)). Standards can be developed for forestwide application or be specific to a management area or geographic area.

01 Wilderness management direction must be followed where segments of the Flathead Wild and Scenic River (portions of the South and Middle Forks of the Flathead) are located in the wilderness.

02 Designated rivers must be managed to protect the free-flowing character, water quality, and outstandingly remarkable values for which they were designated.

Guideline (MA2-GDL)

Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR § 219.7(e)(1)(iv)). A guideline can be forestwide or specific to a management area or geographic area.

01 To protect the outstandingly remarkable values, impacts from recreational use should be in the acceptable range per the direction in the Flathead Wild and Scenic River Recreation Management Direction.

Figure 3 displays the document names, year of publication, and a brief summary of the core contents of the plans that have contributed to management of the Flathead River since its designation under the Wild and Scenic Rivers Act.

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Figure 3: Flathead River Comprehensive River Management Plan Documents

Visitor Use Regulations- Flathead WSR

Some aspects of visitor use are regulated across the Forest or across Glacier National Park. The following table summarizes some applicable “system-wide” regulations (Table 5). As noted previously, lands on the northern bank of the Middle Fork and the eastern bank of the North Fork fall inside Glacier National Park for portions of those rivers’ lengths. See Figure 1 for details.

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Table 5. Existing visitor use regulations on the Flathead National Forest and in Glacier National Park relevant to the Flathead Wild and Scenic River Comprehensive River Management Plan.

<i>Use Type</i>	<i>Forest Regulation</i>	<i>Park Regulation¹</i>
Human Waste Disposal	Self-contained/pack out on Forest for all users (except where public facilities are provided at river access sites)	Self-contained/pack out within Park for overnight users (except where public facilities are provided)
Overnight Stay Limits²	See notes below. General limit is 16 days.	By permit only for one night.
Engines such as Motorboats³	Prohibited except for Recreational classified segments where motors are allowed, but limited to 10 hp or less. Prohibited in Wilderness Areas.	NA
Food Storage	Food storage order	Food storage order
Dispersed or Backcountry Camping	Allowed on Forest, but permits are not required.	By permit only
X-C Motorized Travel	Limited on Forest but permitted for access to backcountry camping and or provide access to the river. Prohibited in Wilderness Areas.	Prohibited
Campfires	Not restricted on the Forest lands, but prohibited at parking areas and access points above the high water mark.	Fire pans required
Pets	Not restricted on the Forest.	Prohibited on shore within the river corridor
Drones	Recreational use allowed in the Forest outside of Wilderness Areas. Prohibited in Wilderness Areas.	Prohibited
Fishing; boat and shoreline	Managed, licenses required, and permitted by Montana FWP. AIS inspections required.	Park permits fishing without a license, but regulations are similar to MFWP. AIS inspections required.
Party Size	Limited to 15 people per group and 35 head of stock inside Wilderness Areas. Limited to 10 people per group on the South Fork Wild segment, outside Wilderness, from the Wilderness Boundary to Spotted Bear. Parties over 75 in other areas of the Forest require a Special Use Permit.	12 persons for overnight use, no limits for daytime use

1 Glacier National Park regulations apply on portions of the North and Middle Forks where shoreline areas fall inside the park boundary.

2 North Fork 3 days at Border and Polebridge River Access Sites. Day use only at Big Creek River Access, 3 days at Great Northern and Glacier Rim River Access Sites

Middle Fork Seasonal restriction at Castle River Site, 3 days at all other river access sites. No camping from Bear Creek to Essex on Forest side. Day use only at West Glacier River Access.

South Fork No special limit areas.

3 South Fork Recreational Boats with motors up to 10 hp are allowed on this segment from the Hungry Horse Reservoir inlet to Upper Twin Creek.

Visitor Use Management Framework and User Capacity

CRMPs are required to address user capacity, which includes the type and amount of recreation use a river area can sustain without adverse impacts on ORVs, water quality, and the free-flowing character of the river area; the quality of visitor experience; and public health and safety. The information in this Proposed Action sets the stage for analyzing and evaluating user capacity in the EA.

The Visitor Use Management (VUM) Framework prescribes four steps to developing a visitor use management plan. The steps and components of each step are summarized in Table 6 (IVUMC 2016). The public involvement and interagency work completed in 2018 largely addressed Step 1. This Proposed Action addresses Step 2 and provides preliminary management options for Step 3. After scoping is completed, the agencies will develop the components of Step 3, including the numerical user capacities for each segment, and will analyze each component in the EA for the CRMP. The management strategies developed in Step 3 would connect visitor use and the desired river conditions in each segment. Step 4 would begin after the CRMP is finalized and the management plan is implemented. This is an adaptive process, and the monitoring results during implementation will inform future management (Figure 3).

Table 6. Summary of the Visitor Use Management Framework steps and process.

1 Build the Foundation	2 Define Visitor Use Management Direction	3 Identify Management Strategies	4 Implement, Monitor, Evaluate, and Adjust
Clarify the purpose and need	Define Desired Conditions	Compare existing and Desired Conditions. Clarify links to visitor use.	
Review applicable laws, regulations, and management direction		Identify management strategies and actions to achieve desired conditions	Implement management actions
Assess existing information and current conditions	Define appropriate visitor activities, facilities, and services	identify visitor/user capacities and additional strategies to manage use levels within capacities.	Conduct and document ongoing monitoring, and evaluate the effectiveness of management actions in achieving desired conditions
	Select indicators and thresholds	Develop a monitoring strategy/plan	Adjust management actions if needed to achieve desired conditions, and document rationale.

In addition to the Wild and Scenic Rivers Act and the interagency guidelines pertaining to its implementation, recent court cases have found that CRMPs must discuss the maximum number (capacity)

of people that can be received into river corridors and describe an actual level of visitor use that will not adversely impact or degrade river values (IWSRCC 2002). Defining visitor capacity requires agencies to make an explicit tie between the kinds and amounts of visitor and other public use and the protection and enhancement of ORVs. To determine these capacities, resource specialists analyze ORVs and desired river conditions and identify corresponding indicators that help managers assess how use is affecting resources. Visitor capacity levels are not static. Periodic and ongoing monitoring to assess whether the quantity and mixture of use leads to adverse impacts on the resource values of the area will be incorporated into the monitoring plans.

The Wild and Scenic Rivers Act does not define “visitor capacity”. The concept of recreation visitor capacity has been explored and refined over several decades. While there are varying definitions of visitor capacity, all include the concepts that desired resource conditions and values must be protected, and the quantity or amount of use must be addressed. For the purpose of addressing “visitor capacity” within the CRMP, the 1982 interagency guidelines for WSR definition is used.

The quantity of recreation use which an area can sustain without adverse impact on the outstandingly remarkable values and free flowing character of the river area, the quality of recreation experience, and public health and safety.

An important attribute of visitor use management is applying the VUM framework proactively to determine which management actions are necessary to meet management objectives before unacceptable impacts occur (Figure 3). Identifying indicators and pairing these with a monitoring plan can help refine the understanding about which actions are necessary to maintain or achieve desired conditions and to set thresholds for management actions. The agencies have been conducting river monitoring using indicators identified in the 1980 and 1986 management plans. An updated monitoring plan will be included in the CRMP. The proposed indicators, thresholds, and possible management actions are described for each segment in the Proposed Action section of this document.

Indicators, Thresholds, and Triggers

Indicators are specific resource or experiential attributes that can be measured to track changes in desired conditions so that progress toward achieving and maintaining desired conditions can be assessed.

Thresholds are minimally acceptable conditions associated with each indicator.

A **trigger** is a condition of concern for an indicator that is enough to prompt a management response to ensure that desired conditions continue to be maintained before the threshold is crossed.

Typically, desired conditions and management objectives for the planning area are determined, then indicators are selected and thresholds are established. Once these steps are complete, the visitor capacity process can begin. (IVUMC, 2019)

Framework for Addressing Capacity

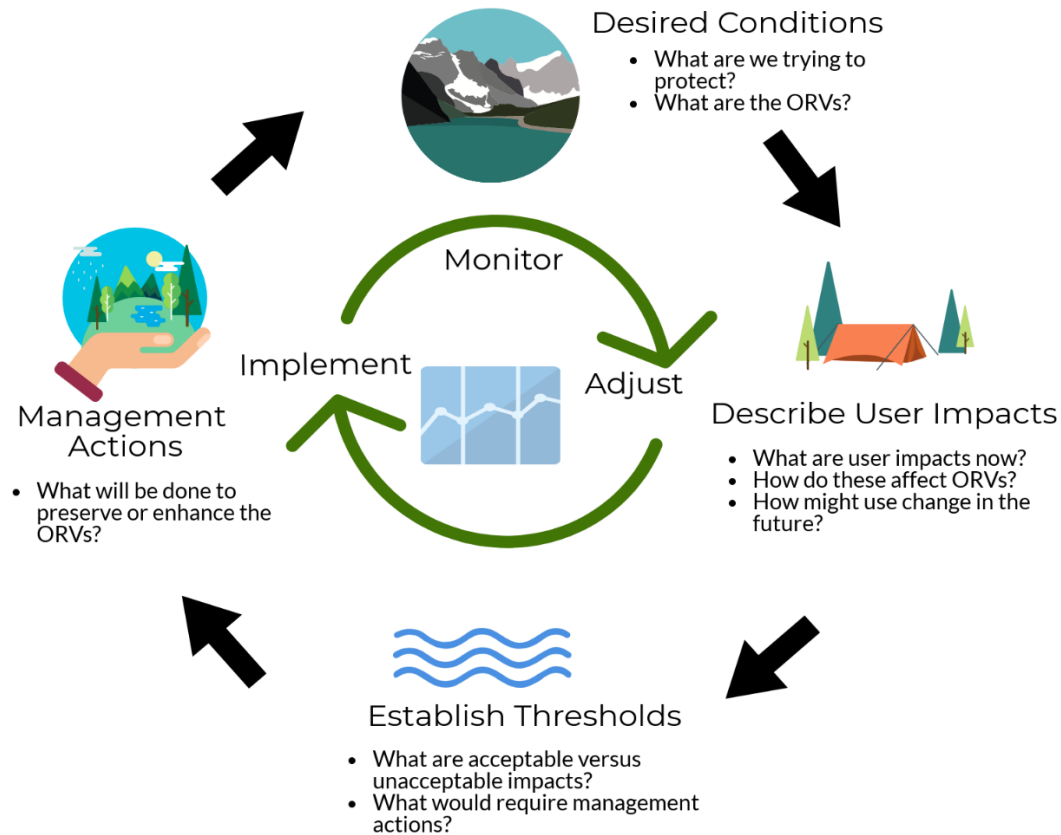


Figure 1: Conceptual diagram of the IVUMC Framework for addressing capacity

Triggers and thresholds are related, but separate values. Triggers are set at a level that is within the acceptable conditions for a resource, but that may be nearing a range of indicator values closer to unacceptable conditions. Triggers are linked to predetermined management actions to be implemented when the trigger value is being approached (Figure 4).

To monitor each river value, one or more indicators are selected that will allow managers to keep attuned to changes in the ecosystem or social setting. For each indicator, a threshold is set. This value determines the amount of change that will be accepted before river management objectives are no longer being met. In this manner, indicators and thresholds provide managers with information to determine if the resource values, and opportunities they are managing, are actually being provided. Managers use triggers and thresholds to help them set and evaluate levels of resource condition with a prescribed monitoring plan (IVUMC, 2019).

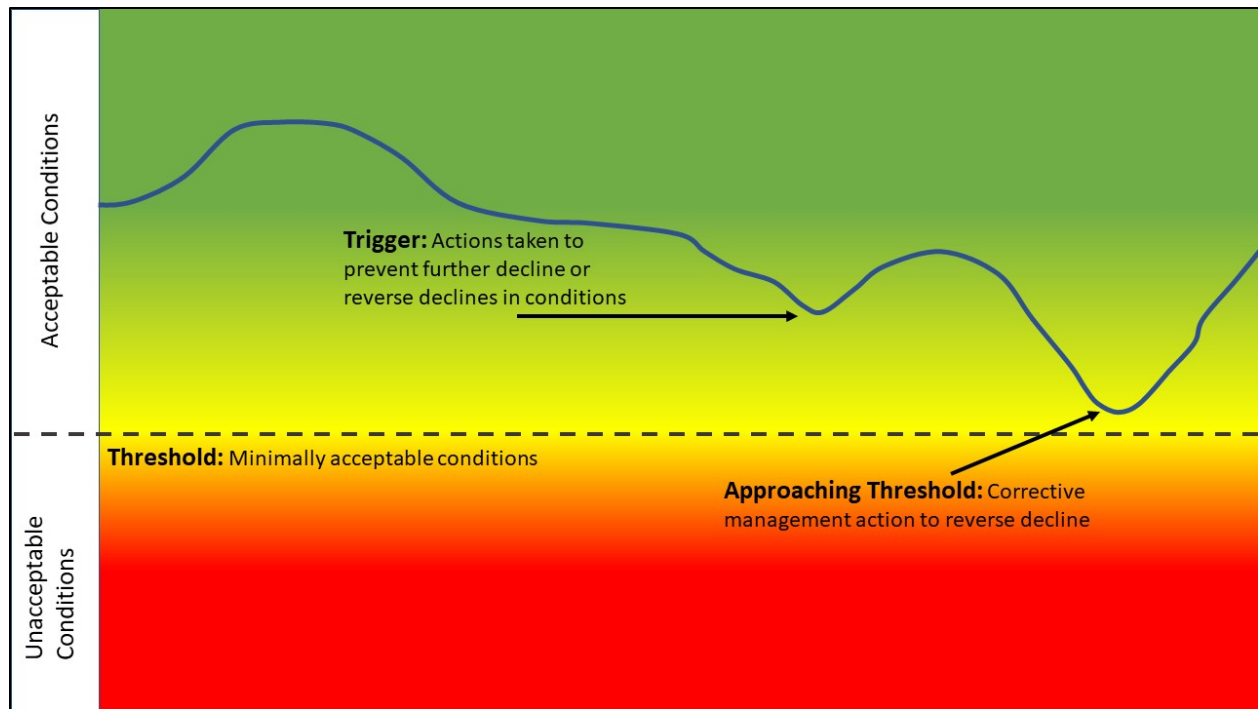


Figure 4. Relationship between triggers, thresholds, and resource conditions using the Visitor Use Management Framework (IVUMC, 2016).

User capacity is an estimate and not always a concrete number. This is particularly true in situations where the amount of use is low and does not threaten desired conditions or river values. In these situations, capacity estimates yield visitor use numbers that are far higher than current amounts of use, thus decisions about capacity do not result in near-term management actions to regulate use levels. For most river segments, user capacity numbers will not reflect current use; however, monitoring will still occur and more precise numbers will be developed if trends suggest river values could be threatened. For the recreational sections of rivers, which are co-located with major highways or improved forest roads, use levels have been reported at moderate levels and consequently the amount of analysis devoted to determining final user capacity on those rivers will be greater. However, capacity numbers identified for those segments may still be higher than the current use.

Monitoring and Research on Current Use on the Flathead River

The Forest and GNP have collected information on visitor use, expectations, and level of satisfaction using interviews, surveys, and count data. These data will allow us to summarize current types and levels of visitor use for each segment of the Flathead River in the EA. The more recent surveys and data collection efforts are described in Table 7.

*Flathead River Wild and Scenic River System
Proposed Action*

Table 7. Summary of studies on recreation user data collection on the Three Forks of the Flathead River completed since 1986.

Year	Data Type	Report Title: Description
1986-present	Annual monitoring	Annual monitoring data collected per the 1986 Recreation Management Direction. Includes on-river encounter counts, campsite condition ratings, shore party encounters, and other parameters.
Locations Monitored		North Fork (Scenic), North Fork (Recreational), Middle Fork (Wild), Middle Fork (Recreational, all management units), South Fork (Wild), South Fork (Recreational)
2012-2014	Survey/Interview	The Wild and Scenic River Visitor Survey 2012-2014¹: 329 surveys were obtained from Flathead River corridor users in all the WSR Segment Management Areas
Locations Monitored		North Fork (Scenic), North Fork (Recreational), Middle Fork (Wild), Middle Fork (Recreational, all management units), South Fork (Wild), South Fork (Recreational)
2017	Camera data	The Flathead Wild and Scenic River: 2017 River Use Report²: Monitored the number of watercraft on the North and Middle Forks of the Flathead River for 2017.
Locations Monitored		<u>North Fork:</u> Wurtz Airstrip, Ford Cabin, and Polebridge <u>Middle Fork:</u> Quarter Circle Bridge/ West Glacier, Moccasin Creek
2018	Camera data	The Flathead Wild and Scenic River: 2018 River Use Report³: Monitored the number of watercraft on the North, Middle, and South Forks of the Flathead
Locations Monitored		<u>North Fork:</u> Wurtz Airstrip, Ford cabin (below), Polebridge (above takeout), Great Northern Flats (below), Glacier Rim (below) and Blankenship. <u>Middle Fork:</u> Middle Fork were Bear Creek (below), Paola (below), Moccasin (below) and Quarter Circle Bridge/ West Glacier (below) <u>South Fork:</u> Mid Creek (below) Spotted Bear at swinging bridge (above).
2019	Camera data	Will monitor the number of watercraft on the North, Middle, and South Forks of the Flathead
Locations Monitored		Plan is to replicate sites from 2018

¹ (Dalenberg, Friedmund, Thomsen, & Wheeler, 2018)

² (Wheeler, et al. 2018)

³ (Mirza, et al. 2018)

The 1986 Recreation Management Direction (U.S. Forest Service 1986) established a monitoring plan based on indicators and standards for seven management units across the three forks of the Flathead River system. River rangers for the Forest Service and Glacier National Park have been collecting monitoring data from 1986 to the present. Data from past monitoring efforts will be used in the EA analysis to examine trends in use and help to set user capacities.

The University of Montana collected data for 2017 and 2018 and is collecting a third year of data in 2019. The 2017 season was the first time that researchers from the University of Montana collected information on river use patterns for designated segments of the Flathead River WSR. In 2017 and 2018, static cameras collected data during daylight hours at each location (Table 7) during the summer season from late May through September. The intent is for this project to continue for future years to allow researchers and agency recreation managers to compare data across years.

PROPOSED ACTION

The purpose and need for the Flathead River CRMP is:

- To protect and enhance the outstandingly remarkable values (ORVs) identified in the original designation.
- To update the existing river management plan as required to maintain compliance with the Wild and Scenic Rivers Act and to reflect changes that have occurred since designation (1976) in forest and park management, special status species, and other laws that affect resources within the WSR corridor.

This plan will be implemented through three primary mechanisms, including intergovernmental coordination, individual agency action, and partnerships with non-governmental organizations and the public. This plan provides management direction and information on the desired river conditions as well as monitoring indicators, triggers, and thresholds for the Flathead WSR into the future. Future projects and site-specific activities must be consistent with the regulatory guidance provided in the CRMP as well as the Flathead Forest Plan. For the Forest Service administered lands within the Flathead WSR corridor, the Forest Service may require amending the Flathead Forest Plan with some or all of the guidance that results from the CRMP. If an amendment is necessary, the substantive requirements from the 2012 planning rule that would be addressed and are directly related is § 36 CFR 219.10(b)(1)(v) (protection of designated wild and scenic rivers).

Proposed System-wide Desired Conditions, Indicators, and Thresholds

Because the Flathead Forest Plan and other management documents include monitoring plans and indicators that also assess the condition of the ORV resources covered in the CRMP, there are some resources where WSR-specific indicators and thresholds were determined unnecessary. The sections below describe the Desired River Conditions for each ORV across the Flathead WSR system. The following statements would supplement the Desired Conditions described in the Forest Plan, which apply across the entire Flathead National Forest, and are defined as,

descriptions of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, towards which management of the land and resources should be directed (Page 5 of Forest Plan).

The proposed Desired River Conditions for the WSR are statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that the Forest Service and National Park Service strive to achieve and maintain in the WSR corridor. The proposed Desired River Conditions relate to the ORVs identified for the Flathead WSR.

These sections also identify existing monitoring plan components in the Flathead Forest Plan, the Glacier National Park General Management Plan, or relevant monitoring regularly completed by another agency or program that can provide information on changes in resource conditions over time. This collaborative approach to monitoring and assessment limits redundancy in on-the-ground efforts and increases coordination among the groups tasked with resource management in the Flathead WSR system. System-wide Desired River Conditions were developed for scenery, wildlife, botany, geology, fisheries, ethnography, and history. Some segment-specific Desired River Conditions were also developed for certain ORVs. Those are discussed in the more detailed segment-specific discussions. Table 3 includes the

ORV evaluation criteria for each resource area. Table 4 displays the array of ORVs for each segment. Not all ORVs were designated on all segments in the Flathead WSR system.

Scenery

The proposed desired river conditions for scenic resources in the Flathead WSR system include:

- The Flathead River retains scenic integrity aligned with the values for which the WSR segments were designated: outstanding opportunities to view a diversity of landscapes from virtually untouched wilderness landscapes, to culturally rich landscapes connecting us to historic uses of the river and its banks.
- Consideration for scenery should be undertaken from the perspective of on the water as well as on the shore to reflect the complete scenic value of the landscape within the river corridors.
- The scenic integrity objectives, as mapped across the forest in the forest plan, for the Three Forks of the Flathead River will be met or exceeded.

Proposed Monitoring or Indicators

Monitoring of scenery would continue per the Monitoring Guide (US Forest Service 2018). An indicator would be any decline in the scenic integrity objective.

Wildlife

The proposed desired river conditions for wildlife resources in the Flathead WSR system include:

The Flathead River contains high quality habitat for wildlife species using riparian areas including species of conservation concern and species of interest for hunting, trapping, and viewing. Ecological conditions are maintained as close as possible to their natural state and to support native wildlife species. Habitat connectivity within or between watersheds is maintained and conditions supporting wildlife diversity are maintained. Human activities do not result in bald eagle nest abandonment. No detections of nesting mortalities or nest failures attributed to human influence occur.

Proposed Monitoring or Indicators

Monitoring of wildlife habitat conditions would continue per the Monitoring Guide (US Forest Service 2018), although locations within the WSR corridor are not specified. Wildlife population monitoring would continue to be coordinated by Montana Fish, Wildlife and Parks (MFWP) or Montana Natural Heritage Program (MNHP), and implemented by MFWP, MNHP, The Forest, and Glacier National Park. The monitoring interval and locations for assessment may need to be changed if results show conditions are not meeting desired conditions.

Botanical Resources

The forest-wide Desired Conditions in the 2018 Forest Plan for botanical resources would apply to the Flathead WSR system and include:

- ecological conditions that support self-sustaining populations of native riparian-associated plants and are free of persistent non-native species,
- non-forested areas in and around wetlands that are composed of plant communities that support and contribute to wetland ecological and habitat diversity,
- forest stands and landscapes have the necessary conditions to be resilient and resistant to non-native insects and diseases,

- habitat conditions within each vegetation type contribute to long term persistence and diversity of native plant species and plant species of conservation concern,
- natural ecological processes and disturbances (e.g., succession, wildfire, avalanches, insects, and disease) are the primary forces affecting the composition, structure, and pattern of vegetation,
- wilderness areas provide opportunities for visitors to experience natural ecological processes and disturbances with a limited amount of human influence,
- native plant species and plant communities dominate the landscape with invasive plant species at low abundance or non-existent,
- no new non-native invasive plant species become established, and
- invasive plant species are controlled with integrated pest management.

In addition, the following desired river conditions are proposed for botanical resources. The Flathead River WSR corridor contains high quality habitat for plant species including species of conservation concern. Ecological conditions are maintained as close as possible to their natural state and to support native plant species and species assemblages with invasive plant species at low abundance or non-existent. The upper segments of the WSR provide an opportunity for the public to experience the natural ecological state with limited human influence.

Proposed Monitoring or Indicators

Monitoring of botanical conditions would continue per the Monitoring Guide in the Forest Plan. The monitoring interval and locations for assessment may need to be changed if results show conditions are not meeting desired conditions. An indicator would be abundance and size of non-native plant populations specifically in the WSR corridor.

Geology

The proposed desired river conditions for geologic resources in the Flathead WSR system include:

- The river bottoms of the three forks of the Flathead River contain brightly colored pebbles, cobbles, and boulders. Locally sourced rock is used for all streamside projects to preserve the qualities of the river bottom substrate.
- Parasitic wasps and other fossils remain minimally disturbed and locations remain unpublished. Research permits are reviewed and granted for projects which would not comprise the fossils' ORV.

Proposed Monitoring or Indicators

Monitoring outside of current activities identified in the Forest Plan is not necessary. As part of the geologic resource, impacts to soils from road and development activities will be monitored. Collaboration between the Forest Service and the National Park Service will include monitoring the condition of the Goat Lick on the Middle Fork.

Fisheries

The proposed desired river conditions for fisheries resources in the Flathead WSR system include:

The Flathead River WSR system contains high quality habitat for self-sustaining populations of Westslope Cutthroat Trout, Bull Trout, and other native fish species. The migratory life-history of native fishes is maintained. The public is aware of the importance of native fish and efforts to ensure their

persistence. The public is aware of sport fishing resources and opportunities. Aquatic habitat is maintained in a condition with low substrate embeddedness, abundant cold water, native vegetation, and an abundant aquatic food supply. River channels are largely allowed to evolve within the natural range of geomorphic pattern and profile. Management through fishing regulations and visitor use levels combine to conserve existing fish populations. Population composition, distribution, and condition are evaluated regularly based on MFWP survey data. The Forest Service, National Park Service, and MFWP collaborate on fisheries management projects and actions within the WSR corridor.

Proposed Monitoring or Indicators

No monitoring outside of current activities in the Forest Plan or Glacier National Park Management Plan. As stated above, the agencies have an established collaboration on fisheries management in the Flathead WSR system and fish population composition, distribution, and condition are evaluated regularly based on MFWP survey data.

Water Quality and Quantity

The proposed desired river conditions for water resources in the Flathead WSR system include:

Water Quality: Water quality of the Flathead WSR system continues to meet or exceed Montana Department of Environmental Quality (DEQ) standards. Water quality in the mainstems and tributaries is maintained or enhanced to preserve the Use Class of each mainstem (A-1 for the North and Middle Forks and B-1 for the South Fork) and to protect and enhance their outstandingly remarkable values.

Water Quantity and Flow: The Flathead WSR exists in a free-flowing condition with a natural range of flows that provide optimum conditions for native fish and wildlife, river channel formation and maintenance, riparian vegetation recruitment and maintenance, and human enjoyment. Volumes or rates of recharge and/or discharge remain robust. Stream flows, including peak flows and flood events, occur within the range of natural variability and are minimally affected by human disturbances. Groundwater flow paths are within their natural range of variability and continue to contribute to base surface flows.

Proposed Monitoring or Indicators

See Table 8 below for the proposed monitoring plan and indicators related to water quality.

History and Ethnography

The proposed desired river conditions for historical and ethnographic resources in the Flathead WSR system include:

The Flathead River contains cultural resources with outstanding scientific, cultural, and social value. Protection and preservation of historical and ethnographic resources through compliance with NHPA and Section 106 requirements is maintained. Public appreciation of cultural resource values is enhanced by positive cultural resource-based education and interpretive programs, opportunities for volunteers to participate in cultural resource conservation efforts, and heritage-based recreational programs that promote appreciation and awareness of the importance of protecting and preserving heritage resources. Public involvement and interpretive information can promote a greater understanding of modern Tribes whose ancestors have interacted and interrelated with the Flathead WSR landscape for millennia.

Proposed Monitoring or Indicators

Heritage site inventory of the Flathead WSR corridor has been minimal, and completion of additional non-project related cultural resource surveys as well as preparation of historic overviews, thematic studies, and traditional cultural property investigations are encouraged to increase knowledge and appreciation for heritage resources and their inherent values. A process for identifying heritage sites that are susceptible to imminent risk should be implemented through inventory and monitoring efforts, and historic property management planning, to preserve site integrity and protect ethnographic and historic ORVs.

Proposed System-wide Indicators, Triggers, and Thresholds

The Wild and Scenic River Act requires the administering agency to prepare a CRMP “to provide for the protection of the river values” (Section 3(d)(1)). This includes resource protection related to the WSR’s free-flowing condition, water quality, and outstandingly remarkable values. The following water quality indicators, triggers and thresholds are being proposed for all Flathead WSR segments, as summarized in the Table 8.

Table 8: Indicators, Triggers, and Thresholds Common to All Flathead River Segments

River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Water Quality*, Fish, Botany	Sedimentation: Number of sites associated with trails, take-outs, boat ramps, parking lots, campgrounds, roads, etc. that show evidence of erosion and delivery to the river or a tributary to the river	Observation of rill erosion and gullies at recreation areas	0 Sites	Designate and direct visitors to sustainable facilities, routes, and river access points Close and rehabilitate unsustainable facilities, routes, and river access points Construct sustainable facilities, routes, and river access points if needed, and where appropriate	Soil compaction at facilities, routes, and river access points decreases water infiltration and increases runoff. Heavily used areas which typically lack ground-cover, are most susceptible to erosion; where they are near waterbodies, they may cause sedimentation. Sedimentation can adversely affect aquatic habitat and the recreation experience.
Water Quality*, Recreation	Fecal Bacteria (E. coli organisms) At all recreation sites: Number of human waste deposits (obvious shallow burial holes included) and/or direct conduits from fecal source to surface water body	Recent (within 1 year) evidence of dispersed camping or other concentrated recreation use, in areas without sanitary facilities	1 instance of unburied human waste observed (per site visit)	Management strategies include: More frequent monitoring; informational signage with education on “pack it out” and defecating away from surface water; “pack it out” requirements; fix the cause of contamination; and provide sanitary facilities where possible.	Fecal Coliform can adversely affect the recreation experience and human health.

Table 8: Indicators, Triggers, and Thresholds Common to All Flathead River Segments

River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Water Quality*, Recreation	Fecal Bacteria (E. coli organisms) At sites with sanitary facilities: Infrequent spot monitoring immediately upstream and downstream of the facility: Take 10 samples of 100 mL each Sample during the rising limb of a precipitation or snowmelt event.	Sanitary facilities with observed evidence of leakage, water table connection, overflow, or otherwise malfunction	Current MT Department of Environmental Quality Standards or- No single sample may exceed 406 E. coli organisms per 100 mL	Implement corrective actions (e.g., service latrine more frequently, fix the problem, re-site the facility, or decommission the facility), and/or implement water quality monitoring at the facility	Fecal Coliform can adversely affect the recreation experience and human health.

*The frequency of monitoring will increase with noticeable increase in recreation use. Wild segments on the Middle and South Forks (Management Unit 1) are located entirely within designated wilderness and currently sees relatively low recreation use. Water quality monitoring, therefore, will be commensurate with apparent recreational use; as use increases, monitoring frequency will also increase. There may not be an immediate need to track the water quality metrics listed in the table above.

Proposed Segment-Specific Desired Conditions, Indicators and Thresholds

In the following sections, indicators, triggers, and thresholds are described for each of the Flathead WSR segments and management units. For each indicator, a management action column lists possible actions that would be implemented if a particular trigger is reached. Because resource conditions, ORVs, and visitor expectations may differ among the WSR segments, the proposed indicators, triggers, and thresholds may differ as well. As an indicator approaches triggers, river managers would implement management appropriate to slow trends, reverse trends, or mitigate adverse effects of trends (See Figure 4). Potential management actions are proposed in each segment's trigger and threshold table in the sections below.

User levels can vary considerably from year to year and from season to season, and management actions are meant to prevent overall declines in resource conditions. If an indicator reaches or surpasses a trigger, river managers would evaluate whether trends indicate a sustained pattern that requires action. A single year beyond a trigger may be an outlier and may not necessitate management action. Generally, managers will look for indicator levels at or above triggers for two consecutive years or three years out of five before implementing management actions. To acknowledge the seasonal nature of use on the Flathead River, many of the triggers and threshold descriptions note that they would be monitored during the peak season. For the Flathead River, peak season would be defined as June through August.

North Fork Flathead River– Scenic Segment

This segment covers approximately 40 river miles (RM) from the Canadian Border to Camas Bridge. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the North Fork Flathead Scenic segment.

Outstandingly Remarkable Values¹

River classification, length, and outstandingly remarkable values are summarized in Table 9.

Table 9: North Fork Flathead River – Scenic Segment Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Scenic	40	No in Forest, but recommended Wilderness within GNP	Fisheries, geologic, water quality, wildlife, botanic, recreation, scenic, historic, ethnographic

Desired River Conditions

Recreation:

Visitor use on the Scenic segment of the North Fork is characterized by a remote, non-motorized on-river experience with world class views of the Livingston Range in Glacier National Park that is accessible in places by vehicles. Users find a fairly high degree of isolation, commitment, risk, and challenge while floating or fishing on the river with few encounters with the sights and sounds of humans. Encounters with motorized recreational vehicles such as motorboats or unmanned aerial vehicles are extremely rare and limited to administrative use promoting and protecting ORVs or emergencies. Outfitter-guide and livery/ shuttle services are consistent with the above described on-river experience and ensure access for a wide range of users on the river. However, private parties make up the majority of users. To this end, limitations on party size, number of craft, and number of parties may occur as use of the river and/or dispersed camping areas in the corridor increases.

Developed facilities are limited to four portal areas: (Border, Ford, Polebridge, and Coal Creek) and have a development scale consistent with the roaded natural ROS class. High use and congestion occur at access sites along the river. Portal areas (river access points) provide education and interpretation opportunities related to ORVs including nearby cultural and historical resources.

There is little evidence of human development outside of these portal areas. Dispersed camping areas and concentrated use areas (such as Wurtz, Coal Creek, and Sondreson Meadow) are kept at a low level of development. Impacts of dispersed recreation are minimized because sites are hardened to accommodate use levels, Leave No Trace camping techniques are promoted, and human waste disposal is required for overnight parties isolated from toilet facilities (See Table 5).

Wildlife:

The number of harlequin duck broods remain stable or increase.

¹More information on how the outstandingly remarkable values were evaluated for each river segment is available in the 2013 ORV Assessment (Forest Service and Glacier National Park, 2013).

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The opportunities for solitude for on-river users was identified as the most limiting attribute for the North Fork Scenic segment. A limiting attribute is defined as the attribute(s) that most constrains the analysis area's ability to accommodate visitor use. The limiting or constraining attribute(s) may vary across an analysis area.

The following indicators, triggers, thresholds, and management actions are being proposed for the North Fork Scenic segment (Table 10).

Table 10: North Fork Flathead River – Scenic Segment Proposed Indicators, Triggers, and Thresholds

<i>ORV/River Value</i>	<i>Indicator</i>	<i>Trigger</i>	<i>Threshold</i>	<i>Range of Management Actions</i>	<i>Rationale</i>
Recreation	Float encounters per day	Encounters with no more than 3 parties per day during 60% of the peak use season ¹ .	Encounters with no more than 3 parties per day during 80% of the peak use season.	Group size limits, permit system, outfitter restrictions, seasonal restrictions	The desired recreation experience for this management unit includes a degree of solitude, which is affected by float parties encountered and party size. <i>By managing floaters, shore party encounters with float parties will be addressed.</i>
Recreation	Availability of dispersed camping sites accessed by vehicles. ²	Exceeding occupancy no more than 50% of the time during peak season.	Exceeding occupancy no more than 80% of the time during peak season.	Designated campsites, group size limits per site, reservations, reducing stay limit, camping permits.	Having large groups at one time will change and or diminish the recreation experience and potentially exceed maximum capacity estimates. Increased use at dispersed sites could result in increased erosion and contaminates into the watershed.
Recreation	Float encounters with Shore Parties per day outside	Encounters with no more than 12 parties per day during 60% of the	Encounters with no more than 12 parties per day during 80% of the	Designated campsites, group size limits per site, reservations,	Encounters with too many shore parties will compromise the desired float experience.

Table 10: North Fork Flathead River – Scenic Segment Proposed Indicators, Triggers, and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Range of Management Actions	Rationale
	of portal areas. (shore parties exclude private lands and active driving).	peak use season.	peak use season.	reducing stay limit, camping permits.	
Recreation	Campsite Condition-Forest and park side excluding portal and concentrated use areas with direct road access.	Maximum number of sites at a particular impact rating per linear river mile is exceeded. 1 light 1 moderate 0 heavy or extreme	2 light 2 moderate 0 heavy or extreme	Designated campsites, reduce party size, permitted camping only, Harden dispersed sites. Consider firepan requirements.	Campsite impacts should remain light or moderate outside of portal and concentrated use areas.

¹ Peak recreational season is defined as June to August for the Flathead River system

² At each of the following areas: Sondreson Meadows, Wurtz, Polebridge river access site, Ford River Access site and Coal Creek

North Fork Flathead River– Recreational Segment

This segment covers approximately 19 river miles (RM) from Camas Bridge to the confluence with the Middle Fork of the Flathead River. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the North Fork Flathead Recreational segment.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in Table 11.

Table 11: North Fork Flathead River – Recreational Segment Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Recreational	19	No in Forest, recommended in the Park	Fisheries, geologic, water quality, wildlife, recreation, historic, ethnographic

Desired River Conditions

Recreation:

Visitor use on the Recreational segment of the North Fork is characterized by non-motorized day use floating and day use along the shorelines consistent with a roaded natural ROS framework. Day users on

the river and on shore can expect frequent encounters and interaction with other visitors. Shoreline use is wide ranging and regularly occurring. Leave No Trace principles are encouraged and enforced. Encounters with motorized recreational vehicles such as motorboats or unmanned aerial vehicles are extremely rare and limited to administrative use promoting and protecting ORVs or emergencies.

Developed facilities are consistent with a roaded natural ROS framework. High use and intermittent congestion occur at access sites. Where overnight use conflicts with the emphasis on providing access for day users, overnight use at sites accessible by roads on the Forest is prohibited during peak season. River based campsites other than at sites accessible by roads do not have high levels of impact on either the Forest or the Park.

This stretch of river is highly accessible to the general public. This reach is suitable for enhanced visitor services which provide connections to river safety and conservation education/interpretation, particularly those services that promote youth engagement.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The congestion at parking areas and the effect of congestion on visitor safety and security, as well as the amount of visitor services available were identified as the most limiting attributes for the North Fork Recreational segment. The 1986 Recreation Management Plan did not set bounds for on-river or on-shore encounters for the North Fork Recreational segment, nor did it impose party size limits. The CRMP must include triggers and thresholds that would protect or enhance the ORVs for each WSR segment. The river management team has developed triggers and thresholds for the North Fork Recreational segment similar to those on other segments to maintain consistency within the Flathead WSR system. The following indicators, triggers, thresholds, and management actions are being proposed for the North Fork Recreational segment (Table 12).

Table 12: North Fork Flathead River – Recreational Segment Proposed Indicators, Triggers and Thresholds

ORV	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Average number of watercraft passing by a selected location per day during the peak use season	40 watercraft/day	60 watercraft/day	Permit system. Stagger launches Group size limits Develop river access site at Camas Bridge.	Although the recreation experience that is managed for in this corridor is not one of solitude, long waits at put-ins, take-outs, and above rapids, could result in a diminished recreation experience as a result of over-crowding.
Recreation	Float encounters per day	Encounters with no more than 10 parties per day during 60 %of the peak use season ¹	Encounters with no more than 10 parties per day during 80%of the peak use season	Group size limits, permit system, outfitter restrictions, seasonal restrictions	Excessive encounters with other float parties will result in a diminished recreation experience.

Table 12: North Fork Flathead River – Recreational Segment Proposed Indicators, Triggers and Thresholds

ORV	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Campsite Condition-Forest and park side excluding portal and concentrated use areas with direct road access.	Maximum number of sites at a particular impact rating per linear river mile is exceeded. 1 light 1 moderate 0 heavy or extreme	2 light 2 moderate 0 heavy or extreme	Designated campsites, reduce party size, permitted camping only, Harden dispersed sites. Consider firepan requirements.	Campsite impacts should remain light or moderate outside of portal and concentrated use areas.
Recreation	Litter encountered	No more than one occurrence of litter visible from watercraft per 6 miles of river	No more than one occurrence of litter visible from watercraft per 3 miles of river	Increased education efforts, Group size restrictions	Where use levels are relatively unrestricted, increasing encounters with litter is an indicator of users' lack of Leave No Trace ethics.

¹ Peak recreational season is defined as June to August for the Flathead River system

Middle Fork Flathead River – Wild Segment

This segment covers approximately 27 river miles (RM) from Shafer Meadows to the confluence with Bear Creek. This segment is entirely within the Great Bear and Bob Marshall Wilderness Areas (Figure 1). The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the Middle Fork Flathead Wild segment.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in Table 13.

Table13: Middle Fork Flathead River – Wild Segment Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Wild	27	Yes	Fisheries, geologic, water quality, wildlife, botanic, recreation, scenic, historic

Desired River Conditions

Recreation:

Overall, this unit is managed for solitude and consistency with a primitive ROS, a Wild river classification, and all applicable wilderness management direction. Visitor use on the Wild segment of the Middle Fork is characterized by opportunities for expedition-length trips and floats with the highest degree of remoteness, commitment, risk, and challenge. Visitors can expect encounters with the sights and sounds of humans; however, the natural environment will generally appear to be affected primarily by the forces of nature. A set number of outfitter-guide and livery services, including air livery services to

Schafer Meadows Airstrip, ensure access for a wide range of users on the river, reflect an emphasis on multi-day trips, and support the above-described desired on-river experience.

Administrative facilities in the corridor are managed consistent with wilderness management direction for the area. Facilities development for user comfort or safety is not permitted. Signing is minimal to protect resource values and identify trails.

Consistent with a primitive ROS class and all applicable wilderness management direction, human impacts associated with camping are generally limited to well-dispersed campsites of small size. Leave No Trace principles are encouraged and enforced.

Wildlife:

The number of harlequin duck broods remain stable or increase.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The opportunity for solitude on-river was identified as the most limiting attribute for the Wild segment of the Middle Fork. The following indicators, triggers, thresholds, and management actions are being proposed for the Middle Fork Wild segment (Table 14).

Current management practices will continue, as defined by Forest Plan and wilderness plan direction, to manage visitor use. Wilderness character monitoring will continue, and visitor use and resource impacts will be monitored through this effort.

Table 14. Middle Fork Flathead River – Wild Segment Proposed Indicators, Triggers and Thresholds

<i>ORV/River Value</i>	<i>Indicator</i>	<i>Trigger</i>	<i>Threshold</i>	<i>Management Actions</i>	<i>Rationale</i>
Recreation	Float encounters with other float parties per day	Encounters with no more than 2 parties per day during 60% of the peak use season ¹	Encounters with no more than 2 parties per day during 80% of the peak use season	Group size limits, permit system, outfitter restrictions, seasonal restrictions restrict day float trips, Expand drop float services. Monitor other launch points.	The desired recreation experience for this management unit includes a degree of solitude, which is affected by large group sizes and the amount of float parties present. <i>By managing floaters, shore party encounters with float parties will be addressed.</i>
Recreation	Campsite Condition	Maximum number of sites at a particular impact rating per 640 acre area.	2 moderate 0 heavy or extreme	Designated campsites, reduce party size, permitted camping only. Closing	Campsite impacts should remain light or moderate

*Flathead River Wild and Scenic River System
Proposed Action*

Table 14. Middle Fork Flathead River – Wild Segment Proposed Indicators, Triggers and Thresholds

<i>ORV/River Value</i>	<i>Indicator</i>	<i>Trigger</i>	<i>Threshold</i>	<i>Management Actions</i>	<i>Rationale</i>
		1.5 moderate 0 heavy or extreme		undesirable campsites. Stay limits.	
Recreation	Launches per day at Schafer Meadows	No more than 2 launches per day during 60% of the peak recreational use season.	No more than 2 launches per day during 80% of the peak recreational use season.	Group size limits, permit system, outfitter restrictions, seasonal restrictions, restrict day float trips, expanding drop float services, monitoring other launch points.	This indicator provides an efficient way to measure volume of use further down the river.
Recreation	Float encounters with shore parties per day	Encounters with no more than 4 parties per day during 60% of the peak use season	Encounters with no more than 4 parties per day during 80% of the peak recreational use season.	Designated campsites, group size limits per site, reservations, reducing stay limit, camping permits	Encounters with too many shore parties will compromise the desired float experience
Recreation	Number of parties floating above Schafer Meadows	More than 12 parties floating above Schafer Meadows in one season	More than 12 parties floating above Schafer Meadows for 2 consecutive seasons or 3 out of 5 seasons	Group size limits, permit system, outfitter restrictions, seasonal restrictions	Floating use above Schafer Meadows is currently minimal. This indicator will help keep us ahead of changing use trends.
Recreation	Number of watercraft launched per day at Schafer Meadows	70% probability of having no more than 15 watercraft launched per day at Schafer Meadows	80% probability of having no more than 15 watercraft launched per day at Schafer Meadows	Group size limits, permit system, outfitter restrictions, seasonal restrictions	This indicator provides an efficient way to measure volume of use further down the river.

¹ Peak recreational season is defined as June to August for the Flathead River system

Middle Fork Flathead River – Recreational Segment: Management Unit 1

This segment covers approximately 23 river miles (RM) from the confluence with Bear Creek to Cascadilla. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the Middle Fork Flathead Recreational segment for Management Unit 1.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in Table 15.

Table 15: Middle Fork River – Recreational Segment (Management Unit 1) Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Recreational	23	No in the Forest and recommended in the Park	Fisheries, geologic, water quality, wildlife, recreation, scenic, historic

Desired River Conditions

Recreation:

Visitor use on this management unit of the Recreational segment of the Middle Fork is characterized by non-motorized day use floating and day use along the shorelines consistent with a semi-primitive ROS framework. This management unit serves as a transitional zone between primitive and roaded natural management units up and downstream, respectively. Day users on the river and on shore can expect few to moderate encounters and interaction with other visitors. High concentrations and/or large groups of users are inconsistent with desired river conditions for this management unit. Shoreline use is concentrated at the river access sites, though intermittent use between access points and via private property occurs on the National Forest side. Few encounters occur on the Glacier National Park side, mostly between floaters and fishermen due to the lack of vehicle and trail access to the Park side of the river. Encounters with motorized recreational vehicles such as motorboats or unmanned aerial vehicles are extremely rare and limited to administrative use promoting and protecting ORVs or emergencies.

Developed facilities are limited to four portal areas on the Forest side (Bear Creek, Essex, Paola, Cascadilla) and have a development scale consistent with the roaded natural ROS class. There are no developed facilities on the Park side. High use and congestion occur at access sites during the peak summer season. Though there is highway traffic passing along side and into the river access sites, facilities are provided to serve the river based recreational traffic. River access sites provide camping opportunities that do not interfere with river users putting in or taking off watercraft. Consistent with a semi-primitive ROS class, human impacts associated with river-based camping are limited to campsites of small to moderate size. Leave No Trace principles are encouraged and enforced.

The number of outfitter-guide and livery/ shuttle service permits ensures access within the river corridor to a wide range of users and provides educational opportunities related to river safety and conservation education without compromising desired levels of solitude for this unit. Interpretive/educational services oriented to highway-based tourism exist as an element of the Montana Scenic Loop.

Wildlife

The number of mountain goats at the mineral lick remain stable or increase and show no signs of disturbance from visitors.

Geology

The Forest Service and the National Park Service will collaborate on monitoring the Goat Lick. The public is aware of the importance of protecting the Goat Lick and are provided with observation directions and information on any floating restrictions.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The congestion at parking areas and the effect of congestion on visitor safety and security, as well as the amount of visitor services available were identified as the most limiting attributes. for Management Unit 1 of the Recreational segment of the Middle Fork. The following indicators, triggers, thresholds, and management actions are being proposed for the Management Unit 1 of the Middle Fork Recreational segment (Table 16).

Table 16: Middle Fork Flathead River – Recreational Segment: Management Unit 1 Proposed Indicators, Triggers and Thresholds.

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Float encounters per day	Encounters with no more than 5 parties per day during 60% of the peak use season ¹	Encounters with no more than 5 parties per day during 80% of the peak use season	Group size limits, permit system, outfitter restrictions, seasonal restrictions	The desired recreation experience for this management unit includes a degree of solitude, which is affected by large group sizes and the amount of float parties present. <i>By managing floaters, shore party encounters with float parties will be addressed.</i>
Recreation	Campsite Condition- Forest and park side excluding portal and concentrated use areas with direct road access.	Maximum number of sites at a particular impact rating per linear river mile is exceeded. 1 light 1 moderate 0 heavy or extreme	Total number of sites does not exceed 15% of current condition	Designated campsites, reduce party size, permitted camping only, Consider firepan requirements. Increased enforcement efforts. Prohibit camping to favor day use.	Campsite impacts should remain light or moderate outside of portal and concentrated use areas.

Table 16: Middle Fork Flathead River – Recreational Segment: Management Unit 1 Proposed Indicators, Triggers and Thresholds.

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Access Site Congestion	7-minute average wait time during peak use season	15-minute average wait time during peak use season	Expanding/improving river access sites to relieve congestion.	Congestion at access sites lowers the quality of the recreation experience. Parking capacity relates to the social experience and number of users on the river.
Recreation	Litter encountered	No more than one occurrence of litter visible from watercraft per 6 miles of river	No more than one occurrence of litter visible from watercraft per 3 miles of river	Increased education efforts, Group size restrictions	Where use levels are relatively unrestricted, increasing encounters with litter is an indicator of users' lack of Leave No Trace ethics.

¹ Peak recreational season is defined as June to August for the Flathead River system

Middle Fork Flathead River – Recreational Segment: Management Unit 2

This segment covers approximately 16 river miles (RM) from Cascadilla to West Glacier. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the Middle Fork Flathead Recreational segment for Management Unit 2.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in Table 17.

Table 17: Middle Fork River – Recreational Segment (Management Unit 2) Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Recreational	16	No on the Forest and recommended in the Park	Fisheries, geologic, water quality, wildlife, recreation, scenic, historic

Desired River Conditions

Recreation:

Visitor use on this management unit on the Recreational segment of the Middle Fork is characterized by non-motorized day and half-day whitewater rafting opportunities consistent with a roaded natural ROS

framework. Frequent encounters and interaction occur among visitors both on-shore and on-river. Shoreline use is concentrated at the developed river access sites, though intermittent use occurs between access points. Leave No Trace principles are encouraged and enforced. Encounters with motorized recreational vehicles such as motorboats or unmanned aerial vehicles are extremely rare and limited to administrative use promoting and protecting ORVs or emergencies.

Developed facilities are consistent with a roaded natural ROS framework and limited to existing sites. High use and intermittent congestion occur at access sites. Development at the West Glacier Access Site is sensitive to the neighboring residential community.

Outfitter-guide and livery/ shuttle services ensure access to the widest range of users on the river for full-day and half-day whitewater recreational opportunities along with river safety and conservation education. Numbers and types of outfitter and service permits are managed to maintain ORVs.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The congestion at the rapids for on-river users and at parking areas and the effect of congestion on visitor safety and security, as well as the amount of visitor services available were identified as the most limiting attributes for Management Unit 2 of the Recreational segment of the Middle Fork. The following indicators, triggers, thresholds, and management actions are being proposed for Management Unit 2 of the Middle Fork Recreational segment (Table 18).

Table 18: Middle Fork Flathead River-Recreational Segment: Management Unit 2 – Proposed Indicators, Triggers, and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Float encounters per day	Encounters with no more than 10 parties per day during 60% of the peak use season ¹	Encounters with no more than 10 parties per day during 80% of the peak use season.	Group size limits, permit system, outfitter restrictions, seasonal restrictions	The desired recreation experience for this management unit includes a degree of solitude, which is affected by large group sizes and the amount of float parties present. <i>By managing floaters, shore party encounters with float parties will be addressed.</i>
Recreation	Campsite Condition-Forest and park side excluding portal and concentrated use areas	Maximum number of sites at a particular impact rating per linear river mile is exceeded.	Maximum number of sites at a particular impact rating per linear river mile is exceeded.	Designated campsites, reduce party size, permitted camping only. Consider firepan requirements. Consider	Campsite impacts should remain light or moderate outside of portal and concentrated use areas

Table 18: Middle Fork Flathead River-Recreational Segment: Management Unit 2 – Proposed Indicators, Triggers, and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
	with direct road access.	1 light 1 moderate 0 heavy or extreme	2 light 2 moderate 0 heavy or extreme	prohibiting camping to favor day use.	
Recreation	Access Site Congestion (by river ranger)	15-minute average wait time during peak use season	25-minute average wait time during peak use season	Expand capacity of parking areas. Improve traffic flow. Off-site overflow parking areas with shuttle system. Stagger boat launches. Require launch permits	Congestion at access sites lowers the quality of the recreation experience. Parking capacity relates to the social experience and number of users on the river
Recreation	Litter encountered	No more than one occurrence of litter visible from watercraft per 6 miles of river	No more than one occurrence of litter visible from watercraft per 3 miles of river	Increased education efforts, Group size restrictions	Where use levels are relatively unrestricted, increasing encounters with litter is an indicator of users' lack of Leave No Trace ethics.

¹ Peak recreational season is defined as June to August for the Flathead River system

Middle Fork Flathead River- Recreational Segment: Management Unit 3

This segment covers approximately 15 river miles (RM) from West Glacier to the Confluence with the South Fork Flathead River. The Blankenship Access is managed as a day-use area by Flathead County on the northwestern side of the river. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the Middle Fork Flathead Recreational segment for Management Unit 3.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values is summarized in the below table.

Table 19: Middle Fork Flathead River – Recreational Segment (Management Unit 3) Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Recreational	15	No on the Forest and proposed in the Park	Fisheries, geologic, water quality, wildlife, recreation, scenic, historic

Desired River Conditions

Recreation:

Visitor use on this management unit on the Recreational segment of the Middle Fork is characterized by ease of access to the river and non-motorized full-day and half-day floating consistent with a roaded natural ROS framework transitioning to a rural ROS framework. High levels of encounters and interaction occur among visitors including on-shore and on-river. Shoreline use is concentrated at the river access sites, though intermittent high use between access points occurs. Leave No Trace principles are encouraged and enforced. Encounters with motorized recreational vehicles such as motorboats or unmanned aerial vehicles are extremely rare and limited to administrative use promoting and protecting ORVs or emergencies.

Developed facilities are consistent with a roaded natural ROS framework and limited to existing sites. High use and intermittent congestion occur at access sites, particularly during peak summer season. Developments at West Glacier and concentrated use areas near Blankenship Bridge are intended for day use and are sensitive to the neighboring residential communities.

This stretch of river is highly accessible to the general public.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The congestion at parking areas and the effect of congestion on visitor safety and security were identified as the most limiting attributes for Management Unit 3 of the Middle Fork Recreational segment. The following indicators, triggers, thresholds, and management actions are being proposed for the Management Unit 3 of the Middle Fork Recreational segment (Table 20).

Table 20: Middle Fork Flathead River- Recreational Segment- Management Unit 3 Proposed Indicators, Triggers and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Average number of watercraft passing by a selected location per day during the peak use season	150 boats/day	170 boats/day	Establish a limited number of permits per day. Stagger boat launches per hour. Expand river access sites.	Although the recreation experience that is managed for in this corridor is not one of solitude, long waits at put-ins, take-outs, and above rapids, could result in a diminished recreation experience as a result of over-crowding.

*Flathead River Wild and Scenic River System
Proposed Action*

Table 20: Middle Fork Flathead River- Recreational Segment- Management Unit 3 Proposed Indicators, Triggers and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Campsite Condition- Forest and park side excluding portal and concentrated use areas with direct road access.	Maximum number of sites at a particular impact rating per linear river mile is exceeded. 1 light 1 moderate 0 heavy or extreme	2 light 2 moderate 0 heavy or extreme	Designated campsites, reduce party size, permitted camping only. Institute firepan requirements. Prohibit camping to favor day use.	Campsite impacts should remain light or moderate outside of portal and concentrated use areas.
Recreation	Access Site Congestion (by river ranger)	5-minute average wait time during peak ¹ use season	7-minute average wait time during peak use season	Expand capacity at parking areas. Improve traffic flow. Off-site overflow parking areas with shuttle system. Stagger boat launches per hour. Issue launch permits	Congestion at access sites lowers the quality of the recreation experience. Parking capacity relates to the social experience and number of users on the river
Recreation	Litter encountered	No more than one occurrence of litter visible from watercraft per 6 miles of river	No more than one occurrence of litter visible from watercraft per 3 miles of river	Increased education efforts, Group size restrictions	Where use levels are relatively unrestricted, increasing encounters with litter is an indicator of users' lack of Leave No Trace ethics.
Recreation	Float encounters per day	Encounters with no more than 20 parties per day during 60% of the peak use season	80% chance of encountering 20 or less parties per day	Group size limits, permit system, outfitter restrictions, seasonal restrictions	Excessive encounters with other float parties will result in a diminished recreation experience.

¹ Peak recreational season is defined as June to August for the Flathead River system

South Fork Flathead River- Wild Segment: Management Unit 1

This segment covers approximately 38 river miles (RM) from confluence of Youngs and Danaher creeks to Mid Creek. This Management Unit is entirely within the Bob Marshall Wilderness Area (Figure 1). The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for Management Unit 1 of the South Fork Flathead Wild segment.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in the below table.

Table 21: South Fork Flathead River – Wild Segment (Management Unit 1) Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Wild	38	Yes	Fisheries, geologic, water quality, wildlife, botanic, recreation, scenic, historic

Desired River Conditions

Recreation:

Overall, this unit is managed for solitude and consistency with a primitive ROS, a Wild river classification, and all applicable wilderness management direction. Visitor use on this segment of the South Fork is characterized by opportunities for expedition-length trips and floats with a high degree of remoteness, commitment, risk, and challenge. Visitors can expect encounters with the sights and sounds of humans; however, the natural environment will generally appear to be affected primarily by the forces of nature. Outfitter-guide and livery services ensure access to a wide range of users on the river and reflect an emphasis on multi-day trips. Numbers and types of outfitter and service permits are managed to maintain ORVs.

Administrative facilities in the corridor are consistent with wilderness management direction for the area. Facilities are not developed for user comfort or safety. Signing is minimal to protect resource values and identify trails.

Consistent with a primitive ROS class and all applicable wilderness management direction, camping is limited to well-dispersed campsites of small size. Leave No Trace principles are encouraged and enforced.

Wildlife

The number of harlequin duck broods remain stable or increase.

Geology

The FW-DC-CAVES clearly states the desired conditions for caves and karst features. However, the Meadow Creek Gorge is not specifically identified in the Forest Plan, but views of the gorge will remain protected.

Fisheries

Bull Trout populations are sustained at a level that can accommodate catch-and-release fishing per the current MFWP fishing regulations. The public is aware of the requirements and opportunities for Bull Trout fishing in the South Fork Flathead River. Data from MFWP Bull Trout Catch Cards are used to inform management of user levels.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The opportunity for solitude for on-river users was identified as the most limiting attribute for Management Unit 1 of the South Fork Wild segment. The following indicators, triggers, thresholds, and management actions are being proposed for the North Fork Recreational segment (Table 22).

Current management practices will continue, as defined by Forest Plan and wilderness plan direction, to manage visitor use. Wilderness character monitoring will continue, and visitor use and resource impacts will be monitored through this effort.

Table 22: South Fork Flathead River- Wild Segment- Management Unit 1 Proposed Indicators, Triggers and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Number of Float parties encountered per day	Encounters with no more than 3 parties per day during 60% of the peak use season ¹	Encounters with no more than 3 parties per day during 80% of the peak use season.	Group size limits, permit system, outfitter restrictions, seasonal restrictions	The desired recreation experience for this management unit is a Wilderness experience which is affected by large group sizes and the amount of float parties present. <i>By managing floaters, we hope to maintain a Wilderness experience for float parties and shore parties.</i>
Recreation	Total number of watercraft encountered per day	Encounters with no more than 15 watercraft per day during 70% of the peak use season	Encounters with no more than 15 watercraft per day during 80% of the peak use season	Group size limits, permit system, outfitter restrictions, seasonal restrictions	<i>By managing the number of watercraft, we hope to maintain a Wilderness experience for float parties and shore parties</i>
Recreation	Campsite condition	Maximum number of sites at a particular impact rating per 640-acre area. 1.5 moderate	3 moderate and 1 heavy or extreme site within 640-acre area	Designated campsites, reduce party size, permitted camping only. Closing	The topography of the South Fork River valley above meadow creek gorge has more available areas for dispersed camping

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
		0 heavy or extreme		undesirable campsites. Stay limits.	that can be accessed by trail or river users.

¹ Peak recreational season is defined as June to August for the Flathead River system.

South Fork Flathead River- Wild Segment: Management Unit 2

This segment covers approximately 13 river miles (RM) from the Bob Marshall Wilderness Area boundary to Swinging Bridge. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for Management Unit 2 of the South Fork Flathead Wild segment.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in the below table.

Table 23: South Fork Flathead River – Wild Segment (Management Unit 2) Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Wild	13	No	Fisheries, geologic, water quality, wildlife, botanic, recreation, scenic, historic

Desired River Conditions

Recreation:

Overall, this unit is managed for solitude and consistency with a primitive ROS, a Wild river classification, and all applicable wilderness management direction. Visitor use on management unit 2 of the Wild segment of the South Fork is characterized by a primitive and wild, non-motorized on-river experience outside of designated wilderness. Full day and half day trips are the primary use, with few overnight trips by the public. Users find a fairly high degree of isolation, commitment, risk, and challenge while floating or fishing on the river. Visitors can expect encounters with the sights and sounds of humans; however, the natural environment will generally appear to be affected primarily by the forces of nature. Encounters with motorized recreational vehicles such as motorboats or unmanned aerial vehicles are extremely rare and limited to administrative use promoting and protecting ORVs or emergencies. Outfitter-guide and livery/ shuttle services ensure access for a wide range of users on the river; however, private parties make up the majority of users. To this end, limitations on number of craft and number of parties may occur as use of the river and/or dispersed camping areas in the corridor increases. Numbers and types of outfitter and service permits are managed to maintain ORVs.

Administrative facilities in the corridor are consistent with wilderness management direction for the area. Facilities are not developed for user comfort or safety. Signing is minimal to protect resource values and identify trails.

Consistent with a semi-primitive, non-motorized ROS class, camping is limited to few, well-dispersed campsites of small size. Leave No Trace principles are encouraged and enforced.

Wildlife

The number of harlequin duck broods remain stable or increase.

Geology

The FW-DC-CAVES clearly states the desired conditions for caves and karst features. Although the Meadow Creek Gorge is not specifically identified in the Forest Plan, views of the gorge remain protected.

Fisheries

Bull Trout populations are sustained at a level that can accommodate catch-and-release fishing per the current MFWP fishing regulations. The public is aware of the requirements and opportunities for Bull Trout fishing in the South Fork Flathead River. Data from MFWP Bull Trout Catch Cards are used to inform management of user levels.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The opportunity for solitude for on-river users was identified as the most limiting attribute for Management Unit 2 of the South Fork Wild segment. The following indicators, triggers, thresholds, and management actions are being proposed for the Management Unit 2 of the South Fork Wild segment (Table 24).

Table 24: South Fork Flathead River- Wild Segment- Management Unit 2 Proposed Indicators, Triggers and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Float encounters with other float parties per day	Encounters with no more than 3 parties per day during 70% of the peak use season ¹	Encounters with no more than 3 parties per day during 80% of the peak use season	Group size limits, permit system, outfitter restrictions, seasonal restrictions	The desired recreation experience for this management unit is an -experience consistent with the Wild classification which is affected by large group sizes and the amount of float parties present. <i>By managing floaters, we hope to maintain an experience consistent with a Wild river for float parties and shore parties</i>

Table 24: South Fork Flathead River- Wild Segment- Management Unit 2 Proposed Indicators, Triggers and Thresholds

ORV/River Value	Indicator	Trigger	Threshold	Management Actions	Rationale
Recreation	Campsite Condition	Maximum number of sites at a particular impact rating per 640-acre area. 1.5 moderate 0 heavy or extreme	2 moderate 0 heavy or extreme impact rating per 640-acre area.	Designated campsites, reduce party size, permitted camping only. Closing undesirable campsites. Stay limits.	Group size limits, permit system, outfitter restrictions, seasonal restrictions
Recreation	Number of watercraft encountered per day	Encounters with no more than 15 watercraft per day during 70% the peak use season.	Encounters with no more than 15 watercraft per day during 80% the peak use season.	Group size limits, permit system, outfitter restrictions, seasonal restrictions	<i>By managing the number of watercraft, we hope to maintain an experience consistent with a Wild river for float parties and shore parties</i>

¹ Peak recreational season is defined as June to August for the Flathead River system.

South Fork Flathead River- Recreational Segment

This segment covers approximately 9 river miles (RM) from the Swinging Bridge to Hungry Horse Reservoir. The following desired river conditions, indicators, triggers, thresholds, and possible management actions are being proposed for the South Fork Flathead Recreational segment.

Outstandingly Remarkable Values

River classification, length, wilderness classification, and outstandingly remarkable values are summarized in the below table.

Table 25: South Fork Flathead River – Recreational Segment Designation Summary

Classification	Miles	Wilderness	Outstandingly Remarkable Values
Recreational	9	No	Fisheries, geologic, water quality, wildlife, botanic, recreation, scenic, historic, ethnographic

Desired River Conditions

Recreation:

Visitor use on the Recreational segment of the South Fork emphasizes non-motorized day use floating and day use along the shoreline, including some motorized boat use in the section between Hungry Horse Reservoir and Upper Twin Creek consistent with the roaded natural ROS framework. Moderate to high amounts of encounters and interaction occur among visitors on the river and on shore, with some chance

for isolation. Shoreline use is concentrated at the river access sites and near dispersed camping sites adjacent to the river.

Developed facilities are limited to river access sites and have a development scale consistent with the roaded natural ROS class. High use and congestion occurs at access sites, particularly during peak summer season. Though there is traffic passing along side and into the river access sites, facilities serve the river based recreational traffic. River access sites provide camping opportunities that do not interfere with rivers users putting in or taking off watercraft. Leave No Trace principles are encouraged and enforced.

Outfitter-guide services ensure access within the river corridor to a wide range of users and provide educational opportunities related to river safety and conservation education without compromising desired levels of solitude for this unit.

Fisheries

Bull Trout populations are sustained at a level that can accommodate catch-and-release fishing per the current MFWP fishing regulations. The public is aware of the requirements and opportunities for Bull Trout fishing in the South Fork Flathead River. Data from MFWP Bull Trout Catch Cards are used to inform management of user levels.

Indicators, Triggers and Thresholds

During the pre-scoping meetings and internal agency workshops, when analyzing visitor impacts to ORVs for this river segment, it was determined that visitor use could potentially impact recreation ORVs. The accessibility of this river segment was identified as the most limiting attribute for the Recreational segment of the South Fork. The following indicators, triggers, thresholds, and management actions are being proposed for the South Fork Recreational segment (Table 26).

Table 26: South Fork Flathead River- Recreational Segment- Proposed Indicators, Triggers and Thresholds

<i>ORV/River Value</i>	<i>Indicator</i>	<i>Trigger</i>	<i>Threshold</i>	<i>Management Actions</i>	<i>Rationale</i>
Recreation	Watercraft per day	60% chance of no more than 20 watercraft passing a certain point per day	80% chance of no more than 20 watercraft passing a certain point per day	Party size limits Permit system	<i>By managing the number of watercraft, we hope to maintain an experience consistent with a Wild river for float parties and shore parties</i>
Recreation	Parking Congestion	60% chance of parking area being full at launch points and take outs	80% chance of parking area being full at launch points and take outs.	Expand capacity at parking areas. Improve traffic flow. Off-site overflow parking areas with shuttle system. Stagger boat launches per	Congestion at access sites lowers the quality of the recreation experience. Parking capacity relates to the social experience and number of users on the river

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				hour. Issue launch permits	

Next Steps

The material in this Proposed Action will be the subject of scoping for the CRMP. The Flathead National Forest and Glacier National Park will host public meetings to gather input and suggestions on the proposed desired river conditions, indicators, triggers, thresholds, and potential management actions described for each WSR segment. Information on meeting dates, locations and methods to submit comments are provided on the Flathead WSR webpage

<https://www.fs.usda.gov/detailfull/flathead/home/?cid=fseprd573051&width=full> along with documents, past meeting summaries, and other background information. At the conclusion of scoping, the comments will be reviewed, and the agencies will use this input to develop alternatives to the Proposed Action. The alternatives will be analyzed in an Environmental Assessment (EA) of the CRMP. Similar to the Forest Planning process, the agencies will issue the Draft CRMP and the EA for public review. At that time, public meetings will be held to gather comments and input on the Draft CRMP and EA.

If you would like to receive emails and information on the Flathead WSR CRMP, you can submit your email address at the bottom of the webpage referenced above.

Glossary¹

Characteristics of visitor use include the amount, type, timing, and distribution of visitor activities and behaviors.

Desired conditions are statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services that an agency strives to achieve and maintain in a particular area.

Indicators are specific resource or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed.

Limiting Attributes are the attribute(s) that most constrains the analysis area's ability to accommodate visitor use. The limiting or constraining attribute(s) may vary across the analysis area.

Peak Season for the Flathead River: River planners acknowledge the seasonal nature of use on the Flathead River. To reflect this, many of the triggers and thresholds note that they would be monitored during the peak season. For the Flathead River, peak season would be defined as June through August.

Thresholds are minimally acceptable conditions associated with each indicator.

Triggers reflect conditions of concern for an indicator that are enough to prompt a management response to ensure that desired conditions continue to be maintained before the threshold is crossed.

Visitor capacity is a component of visitor use management and is the maximum amounts and types of visitor use that an area can accommodate while achieving and maintaining the desired resource conditions and visitor experiences that are consistent with the purposes for which the area was established.

Visitor experience is the perceptions, feelings, and reactions that a visitor has before, during, and after a visit to an area.

Visitor use refers to human presence in an area for recreational purposes, including education, interpretation, inspiration, and physical and mental health.

Visitor use management is the proactive and adaptive process for managing characteristics of visitor use and the natural and managerial setting using a variety of strategies and tools to achieve and maintain desired resource conditions and visitor experiences.

The **Visitor Use Management Framework** provides the analytical elements necessary to address visitor use management opportunities and issues, consistent with applicable law, within existing agency management processes.

¹ Excerpted from the VUM Framework (IVUMC, 2016)

Works Cited

- Dalenberg, D., Friedmund, W., Thomsen, J., & Wheeler, I. (2018). *Draft Flathead Wild and Scenic River Visitor Survey 2012-2014*. Missoula: University of Montana.
- Forest Service and Glacier National Park. (2013). *Outstandingly Remarkable Values Assessment of the Flathead River System. Flathead National Forest, Glacier National Park*. Kalispell, MT: Flathead National Forest and Glacier National Park.
- Glacier National Park. (1992). *North Fork study area management plan*. Washington, D.C.: National Park Service.
- Glacier National Park. (1999). *Final General Management Plan and Environmental Impact Statement, Record of Decision, and Summary, Glacier National Park, 1999*. Retrieved June 5, 2019, from National Park Service: Planning, Environment & Publoc Comment: <https://parkplanning.nps.gov/document.cfm?parkID=61&projectID=39894&documentID=44643>
- Glacier National Park. (2016). *Foundation Document: Glacier National Park*. Washington, D.C.: National Park Service.
- Interagency Coordinating Council. (2019, April). *River mileage classifications and components of the National Wild and Scenic Rivers system*. Retrieved from Interagency Council on Wild and Scenic Rivers: <https://www.rivers.gov/documents/rivers-table.pdf>
- Interagency Wild and Scenic River Coordinating Council (IWSRCC). (2018). *Steps to Address User Capacities for Wild and Scenic Rivers*. Retrieved from <https://rivers.gov/documents/user-capacities.pdf>
- IVUMC. (2016). *Visitor Use Management Framework: A guide to providing sustainable outdoor recreation*. Washington D.C.: The Interagency Visitor Use Management Council.
- IVUMC. (2019, February). *Visitor Capacity Guidebook: Managing the Amounts and Types of Visitor Use to Achieve Desired Conditions*. Retrieved from Interagency Visitor Use Management Council : <https://visitorusemanagemet.nps.gov/Framework>
- IWSRCC. (2002). *Wild and Scenic River Management Responsibilities*. Portland, Oregon: Interagency Wild and Scenic Rivers Coordination Council.
- Mirza, S., Wheeler, I., Dalenberg, D., Thomsen, J., Oja, E., & Underwood, A. (2018). *Flathead Wild and Scenic River: 2018 River Use Report*. Missoula: University of Montana.
- U.S. Forest Service. (1980). *Flathead Wild and Scenic River Management Plan*. Kalispell: Flathead National Forest.
- U.S. Forest Service. (1986). *Flathead Wild and Scenic River Recreation Management Direction*. Kalispell: Flathead National Forest.
- U.S. Forest Service. (2003). *River Experience Characterization*. Retrieved May 8, 2019, from Recreation Opportunity Spectrum for River Management: https://www.fs.fed.us/eng/documents/rivers_ros.pdf
- US Forest Service. (2018). *Forest Plan: Flathead National Forest, Flathead, Lake, Lewis and Clark, Lincoln, Missoula, and Powell Counties, Montana*. Kalispell, Montana: USDA Forest Service.
- Wheeler, I., Dalenberg, D., Thomsen, J., & Freimund, W. (2018). *Flathead Wild and Scenic River: 2017 River Use Report*. Missoula: University of Montana Department of Society and Conservation.

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