RRAC Final Products

November 15, 2024

Structured Decision Making

The RRAC (River Recreation advisory Council) was convened to use Structured Decision Making (SDM) to help identify the problem, objectives, and some potential alternatives to help FWP plan for how to manage river recreation in Montana. They were also tasked with recommending the key next steps for FWP to take in managing river recreation.

SDM is a way of thinking:

- *Formalizes* the very human process of making decisions
- Does NOT make the decision– *clarifies it*
- Decisions that are:
    - Transparent
    - Explicit
    - Deliberative

How it's done: PrOACT

- **Pr**oblem: define the problem at hand
- **O**bjectives: identify what an ideal solution would accomplish; what matters?
- **A**lternatives or actions: identify potential solutions to meet objectives and solve the problem
- **C**onsequences (predictive step): predict the effect of alternatives on objectives—what would the outcome be if that decision is chosen, in terms of the effect on objectives?
- **T**rade-offs and optimization (decision analysis step): analyze how to identify the optimal solution to the problem—which alternative best meets objectives, considering the trade-offs inherent in each alternative?

What follows in this document are the final products from the RRAC 3-day workshop: key requests, problem statement, objectives, and alternative actions. (For a more complete record of the process, please refer to the "RRAC Process Notes" document, which also contains the final products shown below, along with the earlier iterations and notes from discussion during the workshop.)

RRAC Key Recommendations

RRAC recommends the following actions to FWP for river recreation planning, based on the group's deliberations:

- ❖ Develop a Statewide River Recreation Management Plan to reflect today's environment, to include the following elements and considerations:
  - Incorporate and update the approach outlined in the 2007 River Recreation Planning Manual
  - Incorporate past work of both Administration and CAC's (Citizen Advisory Council), including:
    - 2004 River Recreation ARM
    - 2014 FWP Commercial Use Rules ARM
    - 2024 FAS Annual Rules
    - Existing, river-specific management plans (e.g., including those for the Blackfoot River, Smith River, and West Fork Bitterroot River)
  - Incorporate the work of the 2024 RRAC
  - Provide guidance on how to manage rivers, including access and recreation, broadly and generally
  - Address management of how commercial and noncommercial (including non-profit groups) usage is allocated across the state
    - Consider the users who will be caught in the middle of any usage reallocation process
  - Develop an equitable, repeatable process for deciding whether to launch a river recreation planning process for a particular area
    - What are the steps? How is the issue to be escalated, and how quickly?
  - Devise a data collection framework
    - The framework should be systematic, recurring, representative, and sufficient to make real-time decisions
    - Determine types of data to collect, including baseline monitoring data that are relevant to objectives (ecological and use data, as well as user-satisfaction), potentially including the following:
      - Fisheries biological: population size, fish size, catch rate
      - Human impacts (bank erosion, human waste, etc.)
      - Electronic Data Collection
      - Degradation of riparian areas
      - Biologically sensitive times/locations (e.g., spawning)
  - Using an adaptive management framework, determine how and when to revisit the decisions about river recreation management, e.g.:
    - Data showing issues arising, ecological or social
    - Public pressure
    - Time since river was last reviewed
  - Identify river use and types
  - Determine when to include a CAC or new RRAC, in all of the above elements

- Make the Statewide Plan a living document – revisit at reasonable interval to stay current (e.g., every 3 years for the first 9 years, then every 5 years thereafter)

❖ Increase capacity for Department to implement and administer regulations and management decisions
- Hire additional personnel to meet management needs

Items to include in the new Statewide River Recreation Plan should include a flowchart of questions of whether to elevate a particular river or stretch into a full-scale planning process. The RRAC recommends the following questions be included:

❖ Is there an issue?
- If yes/maybe, is the issue well understood? (e.g., is a CAC or RRAC needed to analyze further?)
- If not, do not devote resources to solving a nonexistent problem

❖ What is the severity of the issue? (low, medium, high?)
- What types of solutions might be needed, and does determining this require a full decision analysis? (If simple solutions, e.g., then likely no.)

❖ Are there data to analyze the issue?
- If not, are more data needed to understand the issue and its extent?
  - If an analysis and decision is delayed until there is more data collection, will this exacerbate the issue?
  - Is the decision set sensitive to the uncertainty in the data, i.e., are data required to make a decision, or can a decision be made now and more data collected in a later step? (And even if the decision set is sensitive to the uncertainty in the data, can a decision be made, and improved on over time through an adaptive management framework?)
- If yes, do the data support the issue identified?
- Do the data show escalation of the ecological/social issues?

❖ Has a river been reviewed (ever) for recreational conditions/concerns)?
- When was the last time it was reviewed?
- Is the river due for re-analysis after a previous decision was implemented?

Depending on the answers to these types of questions, this then would lead to Department making a recommendation to the Commission to initiate the planning process. In these recommendations, it needs to be clear on who will do the analysis and decision making (e.g., the Department, Commission, a RRAC?). Additionally, it will be important to ensure that the number of rivers/stretches that are put into a formal planning process are kept to a manageable number at any one time.

The rest of this document contains the RRAC's Problem Statement, Objectives, and an Actions Menu for inclusion in the new Statewide River Recreation Plan.

Problem Statement

Montana's river and streams are iconic and world renowned, providing diverse opportunities for recreation enjoyed and cherished by Montana residents and nonresidents alike. Demand for river usage and FAS (Fishing Access Sites) is increasing across all forms of recreation, and types of demands are diverse and continuing to diversify. Recreation includes both noncommercial (including non-profit groups) and commercial use. Increasing demand and diversity of recreation in turn leads to a need for greater management.

In managing river recreation, of utmost importance is stewardship of the ecological integrity of Montana waterways by avoiding negative impacts of river recreation. Montana's rivers, streams, and waterways, and recreational access to them, are held in public trust for current and future generations of Montanans. Water resources are limited and sensitive. Meanwhile, environmental changes have brought increasing water temperatures and changes to hydrology and seasons, which can strain the ecological health of riparian systems and influence where and how river users recreate.

General trends point to increasing user dissatisfaction among river recreationists. Recent recreational surveys show that some users are dissatisfied with parking, launch times, noncommercial and commercial usage numbers, vandalism, trash, and overall impact on natural resources. Some users are also dissatisfied with the volume of overall people and vehicles at river access points. River recreation ebbs and flows across different rivers and stretches and over days and seasons, leading to temporal variations in conflict. Recreationists can be increasingly concentrated as stream flows becomes too low to float/fish. Although traditionally FAS were funded and designated primarily for angling, recent data also suggests there is increasing use of FAS by users who are not angling, which is why Conservation Licenses are now required for all users. Overcrowding is subjective but is a concern some river users have expressed for decades. Perceptions of overcrowding differ among individuals, user groups, times, places, etc., whether at FAS or on the river.

Currently there is not adequate capacity to meet regulatory enforcement needs, and changes to regulations may only be effective with additional capacity. Currently, anglers and commercial users often bear the weight of regulations that other users do not. Education/knowledge of the expectations of river recreationists is needed, but new regulations can be burdensome; new approaches/mechanisms may be helpful (e.g., incentives instead of a punitive approaches). River recreation management can also be costly, and FWP has limited resources, which could limit potential solutions. Implementation of solutions also often lags behind changing conditions. However, taking no action on rivers of concern, while cheaper and easier up front, can ultimately be more costly and lead to lower user satisfaction and decreased stewardship of river resources.

At both statewide and local levels, determining how to manage current and future recreational use is a complex issue. A consistent framework for river recreation management is needed. Such a framework would help address and reduce conflict and improve river stewardship. It would help FWP effectively respond to public concerns and protect the resource even under new challenges. This framework should be values-focused and include steps to managing river recreation to meet

fundamental objectives for river recreation management. The framework should provide an overarching, consistent approach to making decisions for managing river recreation throughout the state. The framework simultaneously needs to be adaptive to meet local concerns and needs, including the impact of decisions on river users, Montana residents, and local economies. Timely and adequate data are needed to develop and apply this framework in order to understand use, measure user satisfaction, evaluate impacts of use, and assess outcomes of management decisions. In general, managing for fewest restrictions is preferred over greater restrictions on use, depending on how restrictions influence the ability to meet fundamental objectives. Options for river management need to be feasible, legal, timely, collaborative, affordable, measurable, enforceable, and reasonable to administer, and may not infringe on Montana's stream access law. Any decisions on how to manage river recreation also needs to consider its benefits and costs across user groups and must be evaluated in the context of the public trust, because river access and recreational access are public trust responsibilities of the department and commission. Regularly revisiting decisions on river management (e.g., every 3-5 years) will be essential to determine the efficacy of previous decisions and changes needed to subsequent decisions about how to manage river recreation.

Objectives

In Structured Decision Making, fundamental objectives define the goals of making a decision. I.e., in a perfect world, what all would be achieved? Of course, a perfect world does not exist, and all decisions require trade-offs. So do the relative importances of meeting the various objectives, and these relative importances will change depending on the decision context. An optimal decision will provide the ability to meet the objectives identified as well as possible, but trade-offs are always required. Explicitly identifying the range of objectives that may be important in making a river recreation decision will enable FWP to explicitly evaluate the trade-offs inherent in each alternative management option. (Note that the language of "minimize" and "maximize" is meant to portray the idea that "ideally this all would be achieved" with the clear understanding that trade-offs are inherent to any decision.)

The following local and regional fundamental objectives were identified as the things the RRAC wants FWP to assess in making river recreation management decisions. The objectives are in no particular order, except to convey the items that were identified as important to consider at the local and regional scales. Local objectives aim to address impacts a decision will have at the local scale at which a decision is focused (e.g., a river section). Regional objectives focus on considerations of how a decision at a local scale affects the broader area. These local and regional objectives are the important things to consider in such decisions, but the relative importance of objectives will vary from one decision to the next. The group also identified process objectives, which convey the general way all decisions about river recreation management should be made.

Local objectives:

1) Maximize stewardship of river resources
    a) Protect/enhance aquatic resources and riparian habitat
    b) Minimize overfishing/negative impacts to fish
    c) Minimize negative impacts to other riparian organisms
    d) Minimize negative human impacts, including but not limited to vandalism, poor behavior, littering, improper human/pet waste management
    e) Maximize knowledge of river users in terms of river etiquette, expectations, resource protection, etc.
2) Maximize satisfaction of river recreationists for each user group type, including (but not limited to, and in no particular order of importance): float anglers, wade anglers, solitude-seekers, wildlife watchers, dog owners (on/near river), river tubers, motorized users, non-motorized users, picnickers, swimmers, tourists/sightseers, hunters, trappers, foragers, campers, hikers, and other user groups, both commercial and noncommercial
    a) Maximize satisfaction with river recreation experience
    b) Maximize access to types of recreation
    c) Maximize opportunity (river days available)
    d) Minimize overcrowding
    e) Minimize user conflict (across users and user groups, including in terms of competition for resources, safety issues, etc.)
    f) Minimize poor behavior

g) Maximize capacity of infrastructure to meet specific user needs
h) Maximize ownership /buy-in of stakeholders in river recreation management decisions
i) Maximize equitability of use

3) Minimize costs/ negative impacts:
   a) Minimize cost of implementing/ administering regulations to FWP
   b) Minimize costs of following regulations to users (noncommercial and commercial)
   c) Minimize negative impact to local communities
   d) Minimize negative economic impact to commercial interests
4) Minimize negative impacts of river recreation to riparian landowners
5) Prioritize Montanans' access and opportunity to engage in river recreation

Regional objectives:

1) Maximize capacity for FWP to implement river recreation management
2) Maximize collaboration with other agencies, communities, NGOs, CAC's, and RRAC's
3) Maximize local opportunity for varieties of use, where compatible, for each user group type, including (but not limited to and in no particular order): float anglers, wade anglers, solitude-seekers, wildlife watchers, dog owners (on/near river), river tubers, motorized users, non-motorized users, picnickers, swimmers, tourists/sightseers, hunters, trappers, foragers, campers, hikers, and other user groups
4) Minimize negative impacts of displacement (voluntarily or otherwise) that leads to a "balloon effect" (pressure in one place displaces to other areas), including:
   a) Minimize negative impacts to private landowners adjacent to FAS areas and river recreation areas
   b) Minimize negative impacts to user satisfaction in other areas
   c) Minimize negative impacts to the river resource in other areas

Process objectives:

1) Manage holistically
2) Make recommendations legal, affordable, collaborative, measurable, enforceable, and reasonable to administer
3) Provide transparency in the decision-making process
4) Make river recreation decisions in a consistent manner statewide using a consistent framework, while simultaneously maximizing the ability to make localized, timely, and flexible decisions
5) Maximize stakeholder involvement in the decision-making process, to build buy-in of stakeholders and provide them the opportunity to influence the outcome and understand different stakeholder perspectives
6) Make decisions that are science-based (data, social, biological)
7) Manage for least restrictive regulations before moving to more restrictive regulations
8) Revisit recommendations regularly under an adaptive management framework (every 3-5 years) to determine efficacy and changes needed

Actions Menu

Below are a set of initial ideas of how different elements of the objectives could be addressed through various management actions. These are an initial set of brainstormed actions and are presented to serve as a starting point only. These actions have **not** been evaluated and are **not** necessarily supported by all group members; instead, the group was tasked with generating as many initial ideas for actions as possible within the short time allocated to the RRAC. The intent is that this list serves as a starting point for a "menu" of actions. In the future, additional actions and new categories of actions should be brainstormed and added to this initial list.

In developing a potential method for managing river recreation in a particular area, river managers could draw from these ideas or brainstorm new ideas to create a "package" of actions (i.e., under SDM, a potential "alternative" decision for river recreation management). A package of actions would aim to help potentially address the RRAC-identified objectives for river recreation management. Each package could include as many of the actions under as many categories as desirable (to optionally include "no action" under certain categories). A subsequent decision analysis would then help determine how well each package (i.e., each SDM alternative) can fulfill management objectives (also depending on the relative importance of meeting each particular objective). An optimal solution invariably requires trade-offs in the capacity to meet the various competing objectives.

Local river actions

(loosely organized from least to most restrictive/resource intensive)

Education

- Signage describing good river etiquette and rules
- Create a non-motorized boating manual
- Require education component to purchase of conservation license, e.g.,
    - Create a short (e.g., 10 minute) video to watch
- Targeted communication campaign about available education resources (e.g., websites), etiquette/good behavior, and required licenses (conservation licenses)
- Create and offer a junior boater program
- Create and offer a rowing certification course
- Create and offer a river use class on river stewardship
- Create and offer a Master River Recreationist educational program or certification program
- FWP personnel, volunteers, and cooperators (e.g., river ambassadors, fish mascot) interact with river resource users at access sites with interactions focused on education, not punitive actions
- FWP enforcement, including punitive actions

Access sites:

- Signage to improve traffic flow/direction
- Separate use by access site, such as catering use for non-boaters (no boat ramps) at some sites
- Modify existing access sites to allow for hand carry, or a separate area for small craft/access

- Different on and off ramps for boat launching
- Collaborate with local communities to redesign existing access sites
- Build more access sites
- Paid launch
    - Including at private lands, funds would go to owner
    - Surge pricing
- Soft closures when FAS are at capacity (e.g., sign boards showing how heavy use is currently for different sites)
- Remote cameras to monitor parking sites to let users check capacity (this may be challenging to do for "surveillance")
- Get parking pass/sticker
- Get pass/sticker to show user has a conservation license

Management:

- Create a program to encourage voluntary distribution of pressure (spreading out) across river system
- Collaborations with local communities, NGOs, agencies to minimize cost to the agency
- Sell/rent a dumpster logos to finance cleanup to increase funding for management of sites and user buy-in
- Create and administer an "Adopt a FAS" program to increase funding and user buy-in
- Provide mesh beverage refuse bags
- Increase/decrease parking to manage use levels
- Provide public transportation to access sites
- Increase law enforcement presence at access sites
- Provide pet waste bags at launches
- PFD loaner program through local community
- Helmets program through local community
- Create more overnight float-in campsite opportunities
    - Revamp overnight float-in campsite reservation system
- Make it easier to get a conservation license
- Cooperators participate in community engagement, education
- Collaboration with user groups to increase FWP capacity
- Work with NGOs to increase FWP capacity, but do not rely on NGO capacity

Method for allocation/limiting activity, as defined with input from:

- Do nothing
- Local working group developed (self-imposed)
- FWP identifies an issue, engage a CAC or RRAC, and brings to the public for public comment and feedback
- Emergency rule

System for assessing, allocating, and limiting activity

- Monitoring of usage
    - End of season survey (random sample of users)
    - License application

    - Electronic data collection (e.g., camera counts, counters)
    - User surveys via license applications/renewals
    - FWP enforcement track records
- FWP allocation of opportunity
    - Designate certain stretches for controlled (boats) vs noncontrolled (innertubes) watercrafts
    - Manage for separate types of use on heavy use stretches by day of week
    - Rest and rotation approach to closures/limits in high use areas to disperse use and impact over space and time
    - Prioritize river days
    - Limit non-resident guides (if legal)
    - Limit non-resident days
    - Limiting resident days
    - Capping outfitting
    - Develop a permit system
- "Pay to Play" on specified waters or stretches (surge pricing)
- Increase FWP personnel to enforce limits

Regional Actions

Minimize impacts of displacement

- Identify where spillover may occur on and across rivers as a result of reallocation or restrictions
- Encourage voluntary/self-imposed restriction of use
- Joint planning of rivers that are affected by reallocation or restrictions on a given river
- Improve infrastructure on adjacent rivers or where recreation spillover occurs to increase capacity for sites to accommodate user displacement
- Increase or reallocate FWP capacity to minimize impacts of displacement
- Establish fees for users to access other waterways if use/restrictions on one river increases use on another to share costs of displacement across impacted rivers
- Create river-specific user fees or a registration system, such as with an app, that is non-transferable to other rivers to limit displacement
- Address concerns of overcrowding in regions where it is present/perceived only, but do not solve a problem that doesn't exist

Manage for diverse user types within a region

- Ensure adequate notification across user groups to weigh in
- Sections of an individual river have a limit, other sections are open
    - Manage portions that are "backcountry" and others are not
- Create social categories of rivers - classify high/low levels of use by river/stretch and manage use accordingly
- Create citizen advisory groups per river or region classifies rivers annually

Note of Explanation:

The council would like express that the process and timeline provided to them was abbreviated and did not allow for full consideration of the topic.

RRAC Members: Approval responses

Member Name	Approval responses
Derek Young	Yes, I approve the proposed recommendations.
Todd Frank	Yes, I approve the proposed recommendations with I hope clear language that this is just the first step.
Ben Schmidt	**No response as of 11/15, 12:00pm.**
Abbey Thomas	Yes, I approve the proposed recommendations**.**
Scott Vollmer	Yes, I approve the proposed recommendations. I cannot approve of the inclusion of rest and rotation and limiting nonresident guides in our alternatives, i.e. actions.
Robert Ray	Yes, I approve the proposed recommendations.
Samuel Schmidt	Yes, I approve the proposed recommendations.
Ross Johnson	Yes, I approve the proposed recommendations.
Dante Bonanini	Yes, I approve the proposed recommendations.
Marcus Strange	Yes, I approve the proposed recommendations.