

# 2019 SLATE RIVER FLOATING MANAGEMENT PLAN



May 2019

Compiled by the Slate River Working Group  
*Crested Butte, Colorado*



# SLATE RIVER FLOATING MANAGEMENT PLAN

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## Acknowledgements

The Slate River Floating Management Plan is made possible by the time and effort of all participating stakeholders (listed on pages 5-6). Additionally, the Crested Butte Land Trust (Land Trust) and the Town of Crested Butte (Town) would like to thank the Upper Gunnison River Water Conservancy District for funding the facilitation process which resulted in this completed 2019 management plan. *Cover Photo: John Holder*





*A shoulder season view of the upper Slate River and Schuylkill Ridge. Credit: Xavier Fane*

## Executive Summary

Together, the Land Trust and Town have facilitated the conservation of over 1,000 acres in the Upper Slate River Valley, a landscape critical to the nature-driven quality of life valued by residents and visitors. As river-recreational use on the Slate River has intensified in the past five years, new concerns about wildlife impacts, private property rights and resource protection have arisen.

In response, the Town and Land Trust convened a Working Group of 18 stakeholders to address emerging management challenges brought on by the increased river use. The goal of the Working Group was to provide input and partner in recommending adaptive river recreation management actions necessary for upholding the ecological integrity of the Slate River.

The geographic scope of the Working Group's effort includes 10.5 miles of the Upper Slate River corridor, from the Oh-Be-Joyful Campground to the north, south to the Skyland bridge. The Working Group has concentrated its efforts on river recreation-specific issues. Therefore, camping, trail use, and other land and river management issues including water temperature, fisheries health, water quality, etc. are not specifically addressed in this plan. However, while the focus of the Working Group is on issues relative to

recreationists floating the Slate River, some management solutions simultaneously address safety, environmental stewardship, and ranch land preservation.

Over the course of five meetings, the Working Group identified shared values relevant to the Upper Slate River, determined areas of concern in need of enhanced management, and developed proposed management solutions. After an extensive public comment period, the Working Group reconvened to finalize the 2019 version of the management plan.

The management solutions focus on seven key areas: private property rights, agricultural rights, wildlife, variable river flows, river etiquette, access and legal framework, and infrastructure needs. The proposed management solutions are intended for short- and long-term implementation and focus on upholding the ecological value of the area while also providing sustainable river-recreation opportunities.

Included in the 2019 plan are multiple adaptive management solutions that take into account the need to collect additional river use, wildlife and flow level data. The Working Group is committed to revisiting the plan prior to each river-season to adjust the management solutions as is necessary.



# 1.0 Introduction

The Slate River Valley is a vital element of the Crested Butte community. Its presence in the heart of Paradise Divide is one of the most prominent characteristics of the Upper Gunnison Valley, distinguishing and defining Crested Butte as an exceptional place to live, visit, and recreate. The close proximity of downtown Crested Butte to a river valley with some of the state's highest-functioning wetlands (Cooper, 1993) combined with a broad range of recreational opportunities, productive grazing lands and unmatched landscapes is very unique, and demands vigilant protection and maintenance.

The Land Trust and Town have facilitated the conservation of more than 1,000 acres located throughout the Upper Slate River Valley, including four miles of river corridor and 210 acres of high-functioning wetlands on the Valley floor. As river recreational use has intensified in the past five years, new concerns about wildlife impacts, private property rights and resource protection have arisen. These issues are compounded by the patchwork of private landowners and public land

managers with significant interests along the banks of the Slate River.

In response, the Land Trust and Town (co-conveners) formed the Slate River Working Group (Working Group), comprised of 18 stakeholders, to provide input, guidance, and ultimately partner in recommending adaptive river recreation management actions necessary for upholding the ecological integrity of the Slate River.

The goal of this document is to provide a framework by which both short- and long-term adaptive management actions can be efficiently and effectively implemented. The management solutions recommended by the Working Group are intended to guide future management actions of the Land Trust and Town on conserved lands, to create a cohesive river and environmental stewardship ethic among river users, and to guide short- and long-term fiscal investment in conservation activities.

Included in the 2019 plan are multiple adaptive management solutions that take into account the need to collect additional river use, wildlife and flow level data. The Working Group is committed to revisiting the plan prior to each river-season to adjust the management solutions as is necessary.



*A birds eye view of the Slate River's path around Crested Butte. Credit: Xavier Fane*



## 1.1 Working Group Co-Conveners and Stakeholders

### Co-Conveners



#### Crested Butte Land Trust

Since 1991, the Land Trust has conserved more than 600 acres via seven conservation easements, and more than 700 acres in nine fee simple acquisitions in the Slate River Valley, including the Gunsight Bridge property. The Land Trust seeks a balanced management approach to uphold the diversity of conservation values throughout the Valley, including the protection of open space, ranching heritage, wildlife habitat, public recreation, and education.



#### Town of Crested Butte

The Town of Crested Butte holds the conservation easements on much of the Land Trust's fee simple acquisition land. As an easement holder, the Town is obligated to ensure that the values of these open space lands are upheld. Additionally, the Town holds the conservation covenant for allowing public river access to the north banks at the Rec Path bridge on the northeast corner of the Town. As a municipality, the Town works in the service of the health, safety, and well-being of its citizens, and believes that sustainable management of the Slate River is important to the long-term vitality of the Gunnison Valley.

### Stakeholders

#### Bureau of Land Management (BLM)



The BLM administers 620 acres of land adjacent to the Slate River from Oh-Be-Joyful Recreation Area along the Lower Loop Trail and River Flats Walk-in Campsites. These areas have grown in recreation use over the past 20 years, causing BLM in 2016 to initiate an environmental assessment to improve management of recreation on these BLM public lands. The Oh-Be-Joyful Recreation Area serves as an important access point to the Slate River Valley. Currently, there are no known unacceptable impacts on BLM public lands from people floating the Slate River. BLM does not limit river use and this management plan and process would not restrict river use or access to the river on BLM public lands.



#### Colorado Parks and Wildlife (CPW)

CPW is responsible for managing wildlife in the Slate River Valley. Impacts to wildlife from growing recreational use is a primary concern to some in the community. CPW provides expert knowledge and scientific information about the health of wildlife in the Slate River Valley, including big game and Great Blue Heron.



#### Gunnison County

Working Group recommendations focus on many geographic areas located in unincorporated Gunnison County. Additionally, the Working Group's planning effort dovetails with the County's Sustainable Tourism and Outdoor Recreation Committee (STORC), a group that acts thoughtfully and proactively to address negative impacts and develop unique approaches to create a sustainable tourism economy and outdoor recreation experience while preserving the natural resources of the county.

#### Skyland Metro District

Skyland Metro District is the owner of the southernmost river access point within the Working Group's geographic scope, the Skyland Bridge.



## 1.1 Working Group Stakeholders (cont.)



### Upper Gunnison River Water Conservancy District (District)

The District's mission is to be an active leader in all issues affecting water resources in the Upper Gunnison River Basin. As part of the Colorado Water Plan, the District is currently creating a comprehensive watershed management plan for the Upper Gunnison River Basin.



### Coal Creek Watershed Coalition (CCWC)

CCWC is a non-advocacy environmental organization that has been actively working to protect and restore watersheds surrounding Crested Butte. CCWC has worked throughout the Upper Slate River since 2011 and wrote the Upper Slate River Watershed Management Plan, which focuses on water quality, mine reclamation and watershed health.



### High Country Conservation Advocates (HCCA)

HCCA's Water Program aims to enhance the health of stream and riparian ecosystems by protecting healthy instream flows, improving water efficiency and conservation through local partnerships, and by using the best science available to collaborate with water resource managers in watershed management planning.



### CB SUP

CB SUP was founded in 2015 by Courtney and Braden Burton. The outfitter rents stand-up paddleboards (SUPs) from retail locations in Crested Butte and Gunnison, and provides guided SUP tours in various locations, including on the Slate River.



### Irwin Guides/Eleven

Irwin Guides/Eleven provide guided outdoor experiences for guests in the Crested Butte area. Among the services offered are float trips on the Slate River.

### Ralph R. Allen and Sons, Inc.

Ralph R. Allen and Sons, Inc. has been actively grazing the Crested Butte area for 120+ years. The corporation has permits and leases through the U.S. Forest Service, BLM, Land Trust, and Town to graze cattle in the Slate River Valley.

### Local River Recreation Representative

Tom Barry is a local river user and advocate who is well connected to and involved with various river-user groups, including Gunnison Valley Paddlers.

### Wildbird Homeowners Association

Wildbird Homeowners Association owns an open space parcel directly adjacent to the Slate River. In recent years, these homeowners have experienced increased trespass by river recreationists.

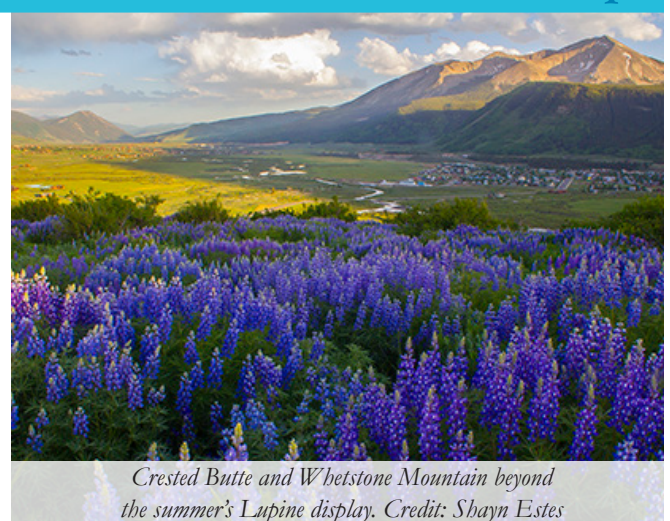
### Private Landowners

Private landowners with private property encompassing the Slate River were working group members. Participants include Wayne Meredith, Wynn and Ryan Martens, and Randi and Tony Stroh.



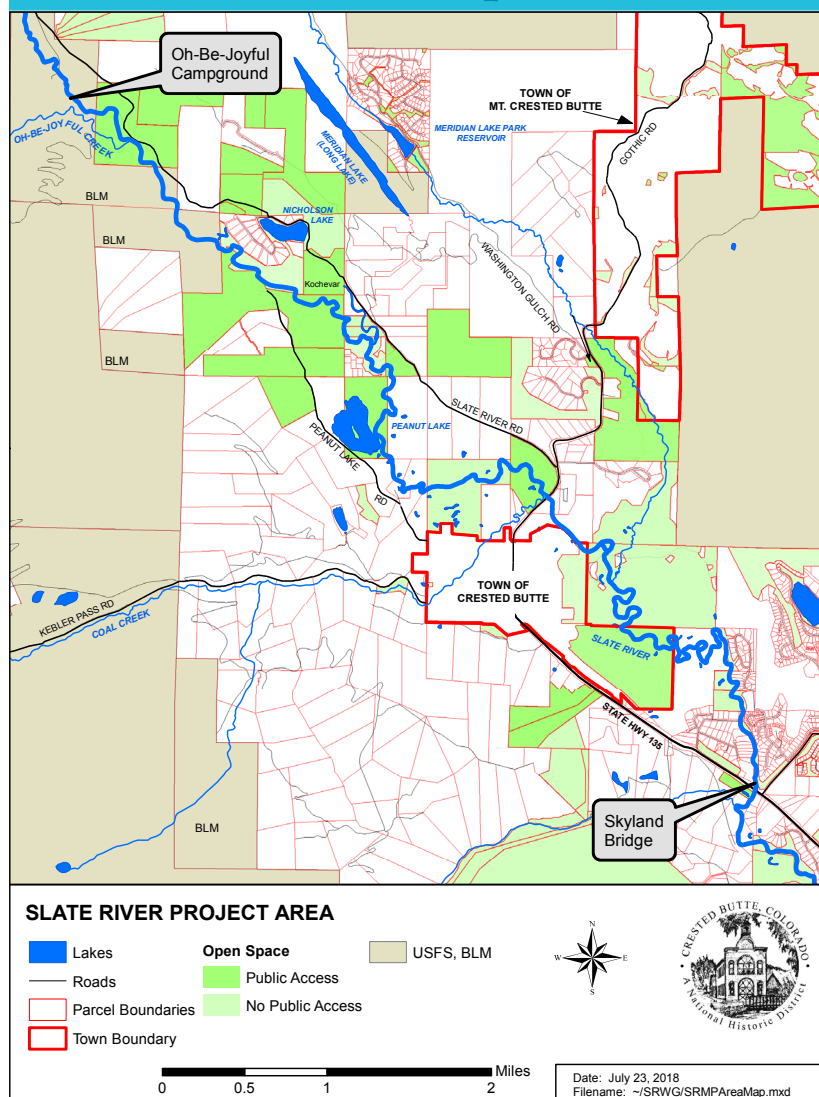
## 1.2 History of the Land Trust & Town's Conservation Partnership

Beginning in the late 1980s, the Town of Crested Butte started to feel the growing pains of increased development in and around town. In response, the Town began to pursue avenues for protecting its surrounding open space. This pursuit resulted in the development of a real estate transfer tax, and eventually the creation of Crested Butte Land Trust in 1991. Since then, the Town and Land Trust have raised and spent millions of dollars protecting open spaces (Watson, 2018). More than \$11 million has been raised through 2016 by the Town's real estate transfer tax, with funds playing a critical role in the acquisition of land and placement of conservation easements on thousands of acres, many of which are within the Slate River management area.



*Crested Butte and Whetstone Mountain beyond the summer's Lupine display. Credit: Shayn Estes*

## 1.3 Project Area & Scope



The geographic scope of the Working Group's proposed plan includes 10.5 miles of the upper Slate River corridor, from the Oh-Be-Joyful campground to the north, south to the Skyland Bridge (see map at left).

Land ownership along the banks of the Slate River is a complex network of federal-administered and privately-held land, Land Trust- and Town-administered open space, and privately-conserved land that is publically accessible.

The need to address management issues stems from rapidly-increasing river recreation activity on this section of the Slate River. The Working Group has concentrated its efforts on river recreation-specific issues. Therefore, camping, trail use, and other land and river management issues including water temperature, fisheries health, water quality, etc. are not specifically addressed in this plan. However, while the focus of the Working Group is on issues relative to recreationists floating the Slate River, some management solutions simultaneously address human health and safety, environmental stewardship, and ranch land preservation.

The goal of this management plan is to be complementary of other management plans and strategies relating to the Slate River and Slate River Valley, including the District's watershed management planning process.



## 1.4 Geography & Geology of the Slate River Valley

The Slate River Valley is located within the Southern Rocky Mountains physiographic province with its characteristic rugged, high-elevation peaks. The topography and geology of the area were influenced by several major landforms in western Colorado, including the Piceance Basin to the northwest, the Elk and West Elk mountains immediately to the north and west, the Sawatch Range to the east, and the San Juan Volcanic Field to the south. Gothic Mountain, Snodgrass and Crested Butte laccoliths are located north, northeast and east-southeast of the Valley, respectively. The Slate River lies within the Gunnison River drainage basin, encompassing approximately 8,000 square miles from the Continental Divide to confluence with the Colorado River in Grand Junction.

## 1.5 Upper Slate River Hydrology

The Slate River is driven by the natural pattern of seasonal peaks caused by snowmelt runoff, and occasional sub-peaks from rain events (Beardsley, 2012). Therefore, the river flows swing dramatically from season to season, and so does the position and shape of the river channel. Downstream from Gunsight Bridge, the Slate River transitions from a tight glacial valley to a wide alluvial valley that runs to Crested Butte. The side drainages through this section tend to be much less steep compared to upper reaches. This stretch of river braids into a complex ecosystem of wetlands. As such, river flows in this stretch are moderate, and heavily influenced by wildlife including beaver dams and riparian vegetation.



*The Slate River Valley from above. Credit: Xavier Fane*



## 2.0 Conservation Values in the Slate River Valley

*The Land Trust and Town seek to balance the protection of open space (including ranch lands), wildlife habitat and public recreation and education. While some people are preferential to one value over another, each value is essential to successful conservation. Below is more in-depth information on the Land Trust's four primary conservation values.*

### 2.1 Agriculture

The Gunnison Valley has a deeply-rooted agricultural heritage and today remains home to a number of multigenerational ranching families. These families rely heavily on seasonally-variable use of private and public lands for grazing cattle, while using their own pastures/hay production to overwinter their livestock. Ranching in the Gunnison Valley not only has helped preserve the beloved viewshed along Highway 135, but also contributes an estimated \$46 million annually to the local economy (Seidl, 2006). The Land Trust is committed to ensuring that these land-based livelihoods persist in the community. To do this, the Land Trust and Town, like the BLM and U.S. Forest Service, provide grazing leases for a number of local ranchers, many of whom make use of the Slate River drainage.



*One of the Valley's most hearty residents.  
Credit: Matt Berglund*

### 2.2 Wildlife



*A Great Blue Heron overlooks the  
Slate River rookery. Credit: Carley Clegg*

A combination of aspen and coniferous forests, diverse willow complexes, and riparian vegetation characterize the habitat types throughout the region and provide critical habitat for an abundance of wildlife in the Slate River corridor. Here one can find several big game species, including moose, elk, and mule deer, and a summer concentration of black bear. The Great Blue Heron is of particular concern in the Slate River corridor relative to increased river use.

#### 2.2.1 Great Blue Heron

Located on Land Trust owned and conserved land is a Great Blue Heron rookery. At 8,900 feet above sea level, this rookery is believed to be one of the highest in the country. The rookery sits in standing dead spruce trees directly above the Slate River and in adjacent wetlands, providing an ideal nesting and foraging area for the birds.

Great Blue Heron populations in the U.S. are considered stable, although declines have been noted in some regions, including the western United States. These majestic birds practice site fidelity, and therefore return to the same nesting site (rookery) each year. A 2018 study of the rookery finds it currently hosts up to 50 adult Great Blue Heron and more than 25 nests, making it a productive rookery (Magee, 2018).

#### 2.2.2 Elk

The upper reaches of the Slate River Valley lie within the summer concentration area for elk. By late summer, elk begin their migration down valley, making use of the dense willow complexes that populate much of the Slate River Valley. Recently-collected spatial distribution data from CPW indicate that herds regularly make use of Anthracite Ridge and the Oh-Be-Joyful drainage. A combination of increased recreation and development in the valley have led to concerns regarding elk distribution and migration patterns.



## 2.3 Recreation

The Slate River Valley has long attracted year-round recreationists, from nordic and backcountry skiers to hikers and bikers making use of Crested Butte's Lower Loop and Lupine trails. Strong local appreciation for the Lower Loop in the early 1990s helped incentivize inception of the Land Trust. Since then, Crested Butte's growth as a recreation-driven economy has attracted an influx of trail users. In fact, a 2015 visitation study indicated that 100,000+ visitors and residents make use of the Slate River trails annually. In recent years, recreational use has expanded to include an influx of river users.



*Lower Loop trail users run alongside the Slate River. Credit: John Holder*



*Early season SUPers enjoy the upper Slate River. Credit: Billy Rankin*

### 2.3.1 River Recreation

Floating the stretch of Slate River between BLM's Oh-Be-Joyful campground and Skyland Bridge provides an incredible recreation experience. The river bends and turns across the floodplain, providing 10.5 miles of meandering fun. The dominant river use is stand-up-paddle boarding (SUP). Recreationists also float the stretch on tubes, rafts and kayaks. Most users launch at the Land Trust's Gunsight Bridge property, or just upstream from Oh-Be-Joyful or at the Town Rec Path Bridge. Observational data suggests that river use has significantly increased in recent years, with the majority of river users being independent locals and/or visitors with some guided groups led by Irwin Guides or CB SUP.

## 2.4 Scenic Views

The Slate River Valley provides the Town its dramatic northern backdrop. Oh-Be-Joyful and Paradise Divide hover over the valley and the meandering flows of the Slate River reflect incredible sunsets behind Paradise Divide. Years of preservation of private lands have created an uninterrupted natural corridor from Town to the Slate River Valley to public lands beyond, overall creating one of the most iconic and scenic views around.



*Hikers take in the view of Paradise Divide at the Lower Loop bench. Credit: John Holder*



## 3.0 Key Issues & Management Solutions

### 3.1 Working Group Values and Concerns

The Working Group convened for five facilitated meetings in May, June, and August 2018 prior to drafting this management plan, and in October 2018 to incorporate public feedback into the 2019 version of the plan. The working group then re-convened in March 2019 to discuss new data collected, anticipated water flows for the summer 2019 season, and new private property concerns that had arisen, which resulted in this updated 2019 version of the plan (see schedule on page 23). The facilitated process helped the Working Group recognize shared values, identify key river use and management challenges, and reach consensus in identifying realistic solutions.

*The working group identified the following shared values relevant to the project scope:*

- Ecosystem health
- Water quality
- Resource protection
- Wildlife habitat
- Wild places
- Sustainability
- Sense of place
- Community benefit
- Respect
- Educated river users
- Balanced management
- Long-term solutions
- Adaptability
- Public access
- Right to float
- Commercial river use
- Historic ranching
- Private property rights

*The following lists areas of concern in need of management attention, as identified by the Working Group. Each area of concern has been discussed at length to develop mutually agreed-upon adaptive management practices.*

- Private Property Rights
- Agricultural Rights
- Wildlife Impacts
- Variable River Flows
- River Etiquette
- Access and Legal Constraints
- Infrastructure Needs



*SUPers paddle the upper Slate River.  
Credit: Billy Rankin*

### 3.2 Private Property Rights

Private property owners throughout the Slate River corridor have witnessed significant trespass issues as a result of increased river use. Trespass issues range from river users making use of adjacent private property to “hang out,” use the “restroom,” etc. Additionally, private property owners observe litter and abandoned floating devices (i.e. tubes) both along the river bank and in the river. Attempts made by private property owners to utilize local law enforcement to cite trespassers have been mildly successful but, in general, fall short due to limited resources of law enforcement agencies.

The Working Group did not address the “right to float” or navigability in their management approaches due to the complex legal issues at the heart of this matter. Rather, the Working Group strove for compromise between paddlers and private property owners and are proposing management solutions that can help alleviate issues that have arisen on private property. Working Group members agree that these issues stem from an at-large lack of understanding and respect of private property boundaries. Also recognized as a driving issue is the absence of an understood river etiquette (discussed in more detail in section 3.6).

## 3.2 Private Property Rights (cont.)

### 3.2.1 Management Solutions

*The Working Group recommends the following management actions to reduce trespass and related issues:*

- Implement a comprehensive signage and outreach plan that educates users on river etiquette, including private property boundaries (see page 28 for more detail)
- Determine opportunities to have an interpretive representative at popular river access points to help educate users on responsible river use (see page 31 for more detail)
- Share Management Plan with local law enforcement and brainstorm ways in which local law enforcement can help private property owners when it comes to recurring trespass issues

## 3.3 Agricultural Rights

Cattle grazing in the region often requires private property fencing, including across the Slate River in four locations (see map at right). These fences are necessary for fencing cattle in and/or out of certain areas. However, when strung across the river, the fencing can create unsafe conditions for floaters. The Land Trust has worked with adjacent landowners to install two floater-friendly river fences across the Slate River. The photo below depicts replacement of barbed wire with a floater-friendly fence. The fences have been effective for safe river travel and cattle exclusion but are costly and a management burden.

Dog and cattle conflicts are also of concern along the river; primarily, dogs accompanying river users sometimes chase and disturb cattle and wildlife. Additionally, the Rec Path river access point has become a popular dog place for people walking dogs off-leash, which the property's conservation covenant does not allow.

### 3.3.1 Management Solutions

#### Fencing

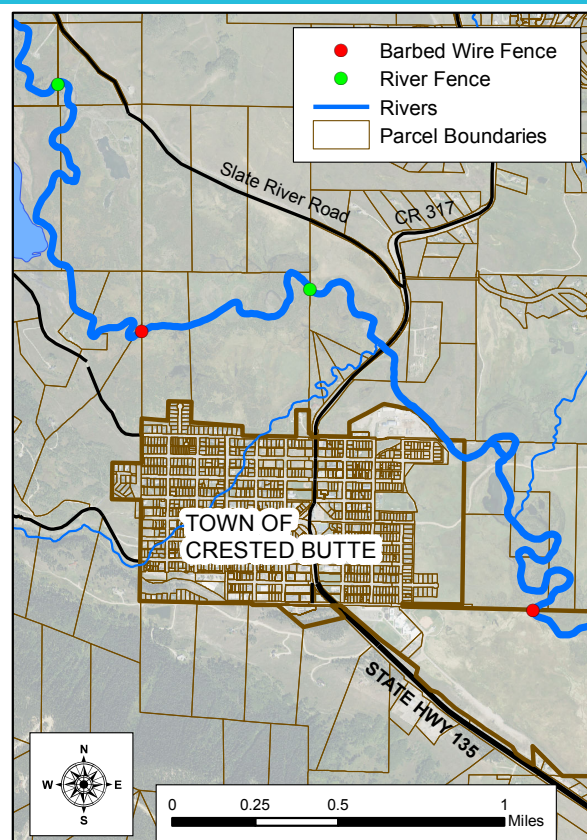
*The Working Group recommends the following management actions relating to fencing needs:*

- Ensure fencing meets wildlife standards
- Educate river users on how to use a river fence
- Establish maintenance plan for current river fences
- Consider alternative river-fence designs that withstand local climate conditions (i.e. snow load)
- Establish funding for installation and maintenance of two additional river fences to replace existing barbed wire fence lines (see map above); additionally, improve fencing at Rec Path to ensure that dogs cannot get through to where cattle are
- Work with ranchers and private property owners to identify additional fencing needs

#### Dogs

*The Working Group recommends the following management actions relating to dogs:*

- Ask river users to not bring dogs floating because of concerns of cattle/wildlife conflict, and likelihood of trespass due to the low probability of a dog staying on craft through long sections of private property
- Educate river users that dogs are legally not permitted to put-in or take-out on the river at the Rec Path bridge



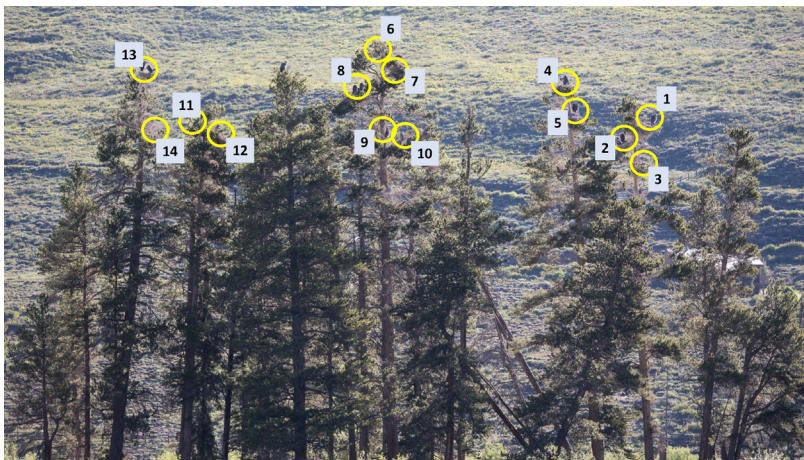
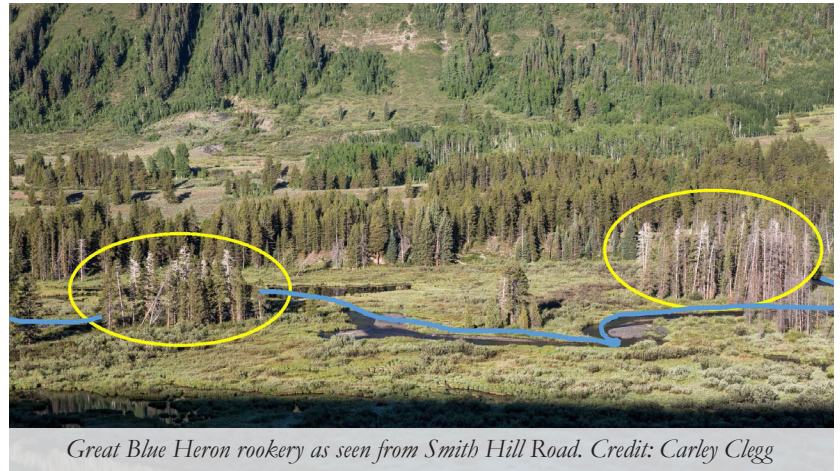


## 3.4 Wildlife Impacts

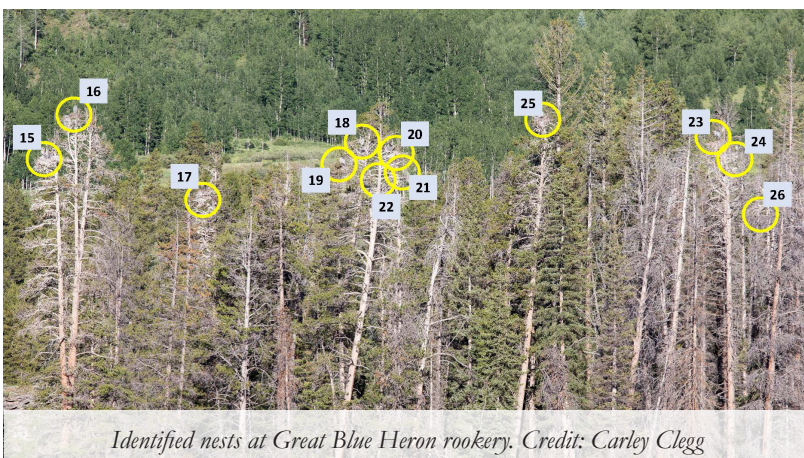
Increased river recreational use has led to community anxiety regarding wildlife disturbance in the Slate River corridor. As noted above, of particular concern are impacts to the Great Blue Heron rookery.

### 3.4.1 Great Blue Heron Rookery

Together with Western Colorado University (WCU), the Land Trust and CCWC developed a study to better understand the Slate River's Great Blue Heron rookery. Preliminary data from the study and the final report was shared with the Working Group to inform a discussion about wildlife impacts. The Slate River meanders directing under the rookery (see photo at right) and in 2018 a total of 26 nests were observed (see photos below).



A combination of observations collected by WCU researchers in 2018 at the Slate River rookery, as well as a literature review of additional Great Blue Heron studies, indicate that Great Blue Heron respond to both visual and aural disturbances and that the proximity to the Heronry is likely to be the main threshold to Heron activity. Recorded observations at the Slate River rookery describe regular occurrences of one or more adult Heron flushing (i.e. flying away from nests) in response to a river user passing underneath the rookery (learn more about the study on page 23).



The study's final report asserted that the earlier phenological stages of nesting (i.e. incubation) are the most critical and that the fledging period is also a vulnerable period. Based on 2018 observations and anticipated river flows for 2019, the working group reached a compromise of publicizing a voluntary no-float period through July 15, 2019 to help protect this critical wildlife habitat. The study found that by July 15, 50% of the Herons have left their nests for the season and this period would protect the rookery from human disturbance during the time of year

with the greatest nest occupancy. Additionally, based on the 2018 data, this period would protect approximately 123 of the 140 biologically sensitive days for the Great Blue Heron (88%) from human disturbance, while allowing for approximately 14-23 float days (based on 2019 flow predictions).



## 3.4 Wildlife Impacts (cont.)

Based on additional input from CPW, the Working Group recommends immediate attention be given to protect the Great Blue Heron rookery via this voluntary no-float period and the additional management solutions proposed below, while continuing to study the impacts of floating under the rookery and adapt the management solutions as needed.

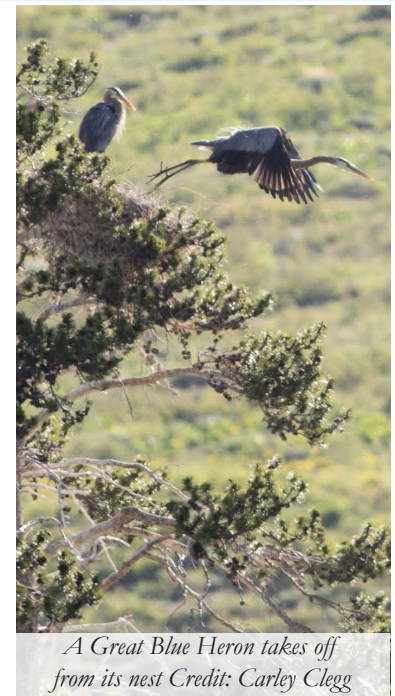
### 3.4.2 Other Wildlife

Recreational impacts to elk in the region are believed to be less acute and require larger-scale management planning than the Working Group's scope allows. However, recommended management practices to benefit Great Blue Heron will have positive impacts on other Slate River wildlife, including elk, beaver, mule deer, and waterfowl. As mentioned in section 1.3, this management plan does not address fisheries' health in the Slate River.

### 3.4.3 Management Solutions

*The Working Group recommends the following management actions to minimize river recreationists' disturbance to wildlife on/near the Slate River:*

- Institute and publicize a voluntary no-float period on the upper reach of the river (from Gunsight Bridge to the Rec Path (excluding BLM administered portions of the river) from March 15 - July 15 to protect Heron brood rearing during their critical incubation period
- Land Trust and CCWC continue its partnership with WCU to monitor the Heron rookery and collect data in regards to impacts from river recreation and related variables (i.e. group size, travel frequency, time of day) to inform ongoing adaptive management solutions
- Designate and publicize/sign the stretch of river from Gunsight Bridge to the Rec Path as a quiet zone (see page 31 for more detail)
- Encourage and educate recreationists on protocols for quiet zone and other river etiquette



*A Great Blue Heron takes off from its nest Credit: Carley Clegg*

## 3.5 Variable River Flows

The Slate River currently lacks a defined floating season and the Working Group sees the need to develop an agreed-upon floating season. Too high of flows can lead to unsafe conditions and inability to float under bridges (which can result in trespassing). A defined floating season will help mitigate private property concerns while preventing river users from floating in unsafe conditions when flows are too high or dragging their crafts along the river bottom when flows are too low, making for an undesirable river experience.

The Working Group designated a Flow sub-committee to develop recommendations for defining a floating season. The short-term recommendation from the Flow sub-committee for the 2018 season was to determine the season based on observation of when the river is too low to float; on June 20, 2018 (at 110 CFS as measured at the Baxter Gulch gage), the upper stretch was determined too low to float, and on July 2, 2018 (at 37 CFS as measured at the Baxter Gulch gage), the lower stretch was determined too low to float. Signage was placed at Gunsight Bridge and the Rec Path to relay this information.

Due to the dynamic nature of the Slate River, and the reality that some river users are more experienced than others and therefore can more easily navigate varying flow levels, it is recognized that stating a simple "black and white" floating season is not a workable solution. The Flow sub-committee, therefore, is charged with developing a high-medium-low flow standard, and a messaging system to define floating parameters for the Slate River, for use in 2019 and beyond. *Because trespass is not an issue on public land (BLM), flow messaging will convey to river users that when the river is considered too low to float, floating on BLM sections of the river is still permitted.*



## 3.5 Variable River Flows (cont.)

### 3.5.1 Management Solutions

*The Working Group recommends the following river flow management actions:*

- Collaborate with the Upper Gunnison River Basin Watershed Management Planning effort to collect and analyze river recreational-user data and correlate survey data with flow level ranges (see page 23 for more detail on this process)
- Develop high-medium-low flow standards for the upper and lower stretches of the Slate River and utilize signage, outreach and staff gauges at put-ins and take-outs to publicize the message
- Explore the possibility of a river use study in 2019 and beyond through WCU's Master in Environmental Management program (see page 23 for more detail)
- Convene a group of key stakeholders prior to each floating season to discuss expected river flows on the Slate River and how they might affect outreach methods for that given season

## 3.6 River Etiquette

The Working Group recognizes that at the core of effective river management lies river etiquette. Floating the Slate River is a special experience, and a lack of user etiquette compromises access and takes away from the wildness and serenity of the recreational opportunity.

There currently are no defined river ethic or parameters of recommended use for the Slate River. Frequent infractions of proper river etiquette in recent years include large-sized groups, loud/amplified music, use of river bank as restrooms, littering, trespassing, lack of proper gear including life jackets, and a general lack of preparedness by floaters.

The Working Group seeks to build a river ethic that is understood and promoted by locals and visitors, and has developed agreed-upon floating parameters which are already being incorporated into signage and outreach materials.



*SUPers float the upper Slate River towards Mt. Crested Butte. Credit: Billy Rankin*

### 3.6.1 Management Solutions

*The Working Group recommends the following management actions to improve river etiquette compliance on the Slate River:*

- Develop and promote parameters for responsible river use (see page 28 for more detail)
- Utilize a comprehensive signage and outreach plan, as well as an interpretive representative at access points to educate users on river etiquette (see page 28 for more detail)
- Work towards a voluntary fee and/or permit system to utilize as a tool to educate river users on proper river etiquette

*The Working Group also discussed the likelihood that river recreational use on the Slate River will continue to grow, and that while encouraging responsible river use is a critical first step, considerations must be made to define the river's carrying capacity.*



## 3.7 Access & Legal Framework

### 3.7.1 Access Points

The Slate River flows through a patchwork of federally-administered land, private and public conserved land, and privately-owned land. There currently are four legal access points for recreationists to put-in/take-out of the river:



#### Oh-Be-Joyful Campground

- Public Land administered by BLM
- Unrestricted river access



#### Gunsight Bridge

- Owned by Land Trust with conservation easement held by the Town
- Unrestricted river access (managed for commercial use)



#### Rec Path Bridge

- Privately-owned with conservation covenant held by the Town
- Public access easement for north side of the river (*most users are currently accessing via the south side of the river*)



#### Skyland Bridge

- Owned by the Skyland Metropolitan District
- Not legally specified, but public access/take-out allowed via the recreation path bridge



## 3.7 Access & Legal Framework (cont.)

### 3.7.2 Legal Framework

The Working Group reviewed all current land management plans, conservation easements and conservation covenants on land parcels encompassing this stretch of the Slate River to ensure compatibility with proposed management approaches. The list below (corresponding with the map on page 19) indicates parameters and restrictions of certain properties along the river corridor.

#### 1. Oh-Be-Joyful Campground

- Public land administered by BLM
- Campground recently came under a management plan, resulting in designated campsites, permanent toilets, and improved parking
- BLM requires a permit for commercial use

#### 2. Gunsight Bridge

- Owned by Land Trust, with conservation easement held by Town
- Conservation values: open space, wildlife habitat, education, recreation, agriculture
- De-minimus (*too minor to merit consideration*) commercial recreational use permitted
- Agricultural grazing lease in place

#### 3. Lower Loop

- Section of Lower Loop area (as shown on map) is public land administered by BLM
- Section of Lower Loop area (as shown on map) is owned by Land Trust, with conservation easement held by Town
- Conservation values: open space, wildlife habitat, recreation, agriculture
- De-minimus commercial use permitted
- Agricultural grazing lease in place
- *The Working Group agreed that although this area is not a designated access point, river users could exit the river on the border of BLM and Land Trust parcels at the bench (#3 on map). The Working Group suggests that tubers consider taking out at this point to hike back to Gunsight Bridge via the Lower Loop Trail. This avoids what is often too long a float for tubers. This recommendation has been incorporated into the signage and outreach plan on page 28.*

#### 4. Divine Property

- Owned by Rick Divine, with conservation easement held by Land Trust
- Conservation values: wetlands, riparian areas, natural wildlife habitat, open space

#### 5. Wildbird

- Privately-owned pedestrian community
- Management values: open space, wildlife habitat, agriculture
- Aggressive noxious weed management program

#### 6. Rice Property

- Owned by the Land Trust, with restrictive covenant
- Conservation values: open space, wildlife habitat
- Access easement for Spehar and Kapushion family on Kapushion Ditch No. 1
- Portion of property grazed
- Between 2011 and 2014, multiple riparian restoration improvements were implemented on the property, requiring long-term monitoring commitments

## 3.7 Access & Legal Framework (cont.)

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### 7. Peanut Lake

- Owned by Land Trust, with conservation easement held by Town
- Conservation values: open space, natural habitat of wetlands, wildlife
- 2015: River restoration/bank stabilization to prevent breach of Peanut Lake
- Project enrolled in five-year Army Corps monitoring plan

### 8. Kapushion Property

- Owned by Kapushion family, with conservation easement held by Land Trust
- Conservation values: wildlife and plant habitat, open space, agriculture

### 9. Confluence Site

- Owned by Land Trust
- Conservation values: open space, wildlife habitat, public recreation, agriculture
- Agricultural grazing lease in place

### 10. Cypress Foothills

- Privately-owned
- Boater easement to be provided by the developer and held by Town to provide access

### 11. Verzuh Ranch (and Rec Path Bridge)

- Privately-owned by Ryan and Wynn Martens, with conservation covenant held by Town
- Easement for river access to Slate River on north side
- Public trail access via Rec Path
- No commercial use allowed
- No dogs allowed to river (dogs allowed on-leash on trail)

### 12. McCormick Ranch

- Privately-owned land comprised of seven lots
- No public river access, public trail access to Tony's trail permitted on McCormick Ranch Road
- No dogs allowed to river or trail
- No commercial use allowed
- No obstructions to floating the Slate River shall be erected, with the exception of fences to control cattle
- Agricultural grazing lease in place

### 13. Town Ranch

- Owned by Town, with conservation covenant requiring protection of wetlands
- Limited over-land access permitted

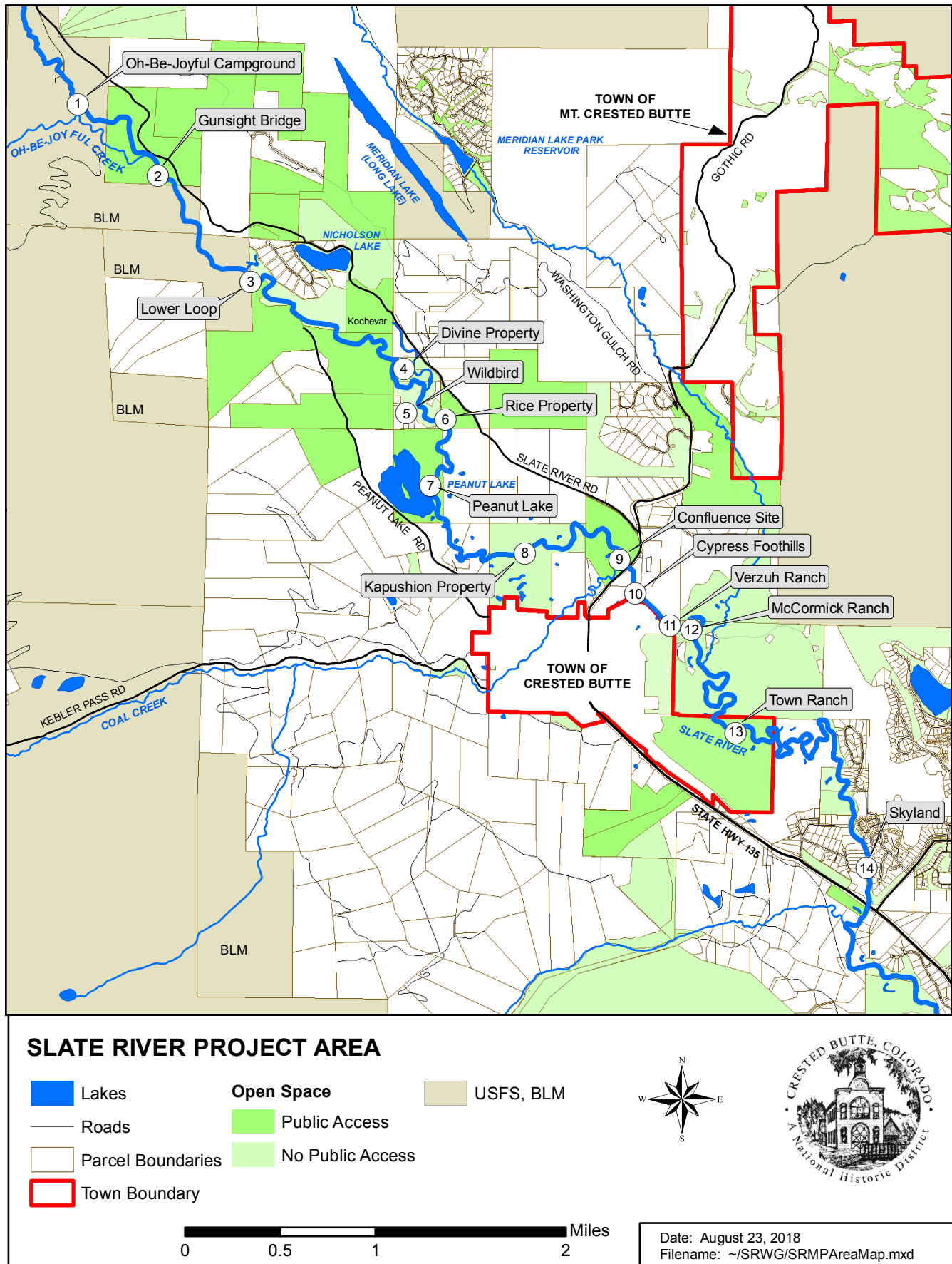
### 14. Skyland

- Owned by Skyland Metropolitan District, managed by board of directors
- No specified easement or management plans, but public access/take-out allowed via the recreation path bridge
- *SUP/tubing use of the Slate River is not recommended beyond Skyland due to swiftwater downstream.*

The only violations noted in extensive review of legalities is use of the Rec Path river access point for guided commercial trips and for use as an off-leash dog walking and/or floating area. The Working Group discussed allowing controlled commercial use here as an opportunity to provide a beneficial example of river etiquette for other river users.



### 3.7 Access & Legal Constraints (cont.)



## 3.7 Access & Legal Framework (cont.)

### 3.7.3 Management Solutions

#### Commercial Use

*The Working Group recommends the following management actions to ensure compliance with access and other legal mandates:*

- Utilize this management plan and Land Trust protocol as guiding documents for managing commercial use of the Slate River. (The Land Trust currently uses its *New and Improved Use Protocol* to inform commercial users of the process by which the organization balances commercial use with the conservation values it's tasked with protecting. The Land Trust currently tracks and schedules requests per calendar year, and is planning to create a more comprehensive commercial use program. This program will more clearly define the parameters of commercial use and the process by which commercial operators may apply for use of conserved lands.)

#### Dogs

*The Working Group recommends the following management actions to ensure compliance with access and other legal mandates:*

- Ensure consistent enforcement of existing dog regulations at Rec Path bridge

## 3.8 Infrastructure Needs

The Working Group collaboratively brainstormed infrastructure improvements for river access points that will help relieve the stressors presented by increased river recreational use. (Oh-Be-Joyful was not discussed, in light of recent BLM management planning for improvements to the site.)

#### *Infrastructure Recommendations:*

#### Gunsight Bridge

- Temporary restroom/Port-a-Potty
- Protection of sensitive areas from vehicle traffic and parking (e.g. utilizing big boulders to block cars from accessing certain places)
- Additional kiosk/signage board



*The new Gunsight Bridge, built in 2018. Photo courtesy of the Crested Butte Land Trust. (Photo: John Holder)*



## 3.8 Infrastructure Needs (cont.)

### Rec Path

- Bike racks to encourage river users to bike shuttle on the Deli Trail
- Permanent restrooms
- Signage and language that make sense for river users as well as dog walkers, bikers, hikers, etc., to be posted at the permanent kiosk already in place
- Dog fencing around the bridge
- Carts/bike trailers to transport river craft to the river
- Craft launching and loading area
- Formalized parking areas in the neighborhood near the Rec Path put-in
- Work to address the condition/usability of the legal river access point (north side) while fixing/rehabilitating/revegetating the south river bank (see top right photo).



*It is noted that the Town is working to solve parking issues within its boundaries, which will help alleviate parking issues at the Rec Path.*

### Skyland

- Additional gravel on the river take-out to prevent slipping
- Permanent restrooms
- Bike rack to encourage biking rather than driving; explore feasibility of utilizing public transportation and/or biking for running shuttle
- Signage to indicate that Skyland is the last take-out before encountering swift water downstream



### 3.8.1 Management Solutions

#### Infrastructure

*Plans for improvements need to be investigated for each river access point. Many of these improvements will have larger financial impacts. The Working Group recommends the following management actions to develop infrastructure improvements:*

- Identify any easement constraints that may prohibit certain improvements
- Work with the managing jurisdictions to identify fiscal impacts of needed infrastructure and investigate improvements that provide necessary amenities to river users
- Work to reduce impacts from vehicular traffic at put-ins and educate users to not park multiple vehicles

#### Streambank Improvements

While the official designated access point at the Rec Path bridge is on the north bank, most users are putting in on the south bank. Both sides of the river at the bridge have experienced some damage and erosion. After consulting with the property owners at the Rec Path bridge, the co-conveners will look into designating one official side of the river for access, and working with experts to improve and revegetate the other streambanks.



Upper Slate River and adjacent wetlands upstream from Gunsight Bridge. Credit: Lydia Stern

## 4.0 Appendix

### 4.1 Photo Credits

All photos in this management plan are courtesy of the Crested Butte Land Trust, Town of Crested Butte, and Irwin Guides.

*Thank you to the following photographers for sharing their photos of the Slate River Valley:*

Xavier Fane	Billy Rankin
Lydia Stern	Matt Berglund
Carley Clegg	Jerry Clark
John Holder	Mark Beardsley
Trent Bona	Shayn Estes

### 4.2 Bibliography

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## 4.3 Working Group Meeting Schedule

The Working Group met on May 16, June 6, June 20, June 27, and August 22, 2018 prior to drafting the management plan and then on October 10, 2018 to refine and finalize the 2019 management plan after incorporating stakeholder edits and public input. The Working Group then re-convened twice in March 2019 to provide progress updates on management projects, as well as discuss and adapt the management plan based on 2019 flow predictions and the Great Blue Heron Study final report.

*Meeting minutes can be viewed at [www.cblandtrust.org/project/slate-river-working-group](http://www.cblandtrust.org/project/slate-river-working-group).*

## 4.4 Great Blue Heron Study

Together with Western Colorado University (WCU), the Land Trust and CCWC developed a study to better understand the Slate River's Great Blue Heron rookery.

### The Great Blue Heron study objectives:

1. Document Great Blue Heron life cycle phenology
2. Determine basic demography of Great Blue Heron at Slate River Rookery
3. Quantify Great Blue Heron activity budgets during incubation and brood rearing periods
4. Document potential disturbances to Great Blue Heron and quantify Great Blue Heron response

The following tables show the annual cycle of breeding events for the Great Blue Herons at the Slate River rookery in 2018 (table 2), the Great Blue Heron Nesting phenology at the Slate River rookery (table 3), the human disturbances adjacent to the Slate River rookery (table 9), and the number of active Great Blue Heron nests compared to the time of year in summer 2018 (figure 4).

*The final report can be viewed at [www.cblandtrust.org/project/slate-river-working-group](http://www.cblandtrust.org/project/slate-river-working-group).*



*Western student, Megan Zareba, observes the rookery*

**Table 2. Annual cycle of breeding events for Great Blue Herons at the Slate River rookery in 2018.**

Life cycle event	2018 dates	Mid-March to Mid-August (155 Days)
Spring migration, Arrival	13 March	
Gathering Grounds	Not observed	
Pair formation	No data	
Nest building	13 March – ?, No data	
Egg laying	9 April – 21 May (6 weeks)	
Incubation/Egg Stage	9 April – 23 June (10 weeks)	
Hatching	7 May – 23 June (7 weeks)	
Brooding/Nestling Stage	7 May – 15 August (15 weeks)	
Fledging	3 July – 15 August (7 weeks)	
Fledgling Stage	Fledglings largely disappeared immediately after fledging	
Second Broods	None observed	
Fall migration/Departure	Adults and fledglings departed the Slate River wetlands soon after fledging. We do not have data on their locations.	

The first Great Blue Herons were observed on 13 March 2018. The first observed chick in the nest was 9 May (but the nest had two chicks, so the first chick likely hatched two days earlier on 7 May). The incubation length of GBHE is 27-29 days (Vennesland and Butler 2011), therefore, by back dating from hatch date, egg laying/incubation began on approximately 9 April. The last nest hatched its first of two chicks on 21 June (the last chick likely hatched two days later on 23 June). The first fledglings (n=2) departed nest #5 on 3 July (both were seen in the nest on 2 July) and the last heron chick fledged between 13-15 August. No second nest attempts were observed. Chicks and adults did not remain in the Slate River wetlands post-fledging; most of the 117 herons departed by mid-August and either dispersed to local water bodies or further away, but we do not know the location of the herons from the Slate River colony after leaving the nests.

## 4.4 Great Blue Heron Study (cont.)

Table 3. Great Blue Heron nesting phenology at the Slate River rookery in Crested Butte, Colorado. Data are from 2018 breeding season. Hatch dates represent the date the first chick was observed in the nest. One fledge date indicates all chicks had fledged, multiple fledge dates indicate range of fledge dates within a nest (chicks first observed in nest 21 on 19 June, but were older; estimated hatch date 9 June).

Colony Location	Nest Number	Number of Chicks	Hatch Dates	Number of Fledged Chicks	Fledge Dates
Lower Colony	1	2	9 May	2	9 July
	2	5	15 May	5	11 July (4), 16 July (1)
	3	4	1 June	4	23 July (3), 24 July (1)
	4	2	7 June	2	24 July (1), 30 July (1)
	5	2	17 May	2	3 July
	6	1	13 June	1	2 August
	7	2	29 May	2	7 July
	8	4	18 May	4	11 July
	9	3	21 May	3	11 July (2), 16 July (1)
	10	3	29 May	3	16 July
	11	3	29 May	3	9 July, 11 July (2)
	12	2	21 June	2	12 August (1), 15 August (1)
	13	4	18 May	4	16 July (3), 18 July (1)
	14	2	19 May	2	6 July
Upper Colony	15	4	17 May	4	9 July
	16	2	22 May	2	23 July (1), 30 July (1)
	17	1	3 June	1	13 July
	18	2	13 June	2	16 July (1), 26 July
	19	5	9 May	5	9 July
	20	4	18 May	4	9 July (2), 16 July (2)
	21	2	9 June*	2	19 July (2)
	22	1	30 May	1	11 July
	23	Unoccupied	NA	Unoccupied	NA
	24	3	25 May	3	16 July (1), 19 July (1), 23 July (1)
	25	2	7 June	2	30 July (1), 1 August (1)
	26	2	22 May	2	18 July (2)
	25 active	67	9 May – 21 June	67 100% of chicks	3 July to 15 August

Table 9. Human activities adjacent to the Slate River Great Blue Heron colony and potential disturbance related to eight types of human events. Data collected from 26 May to 1 August 2018 in 59 1-hr sampling bouts. Total number of people was not observed for cars and trucks, so this is a conservative number.

Human Activity	Number of Events	Percent of Total Events	Number of Noise Events	Number of People	Adult Heron Alerts	Chick Heron Alerts	Adult Heron Flushes
Cars and trucks	2,719	77.0%	36	na	8	157	1
Total bikes	447	12.7%	2	896	2	7	0
Smith Hill bikes	276	7.8%	0	586	0	2	0
Slate River Road bikes	167	4.7%	2	296	2	4	0
Wildbird bikes	4	0.1%	0	14	0	1	0
Planes and helicopters	229	6.5%	4	na	0	28	0
Runners and hikers	51	1.4%	4	169	0	5	1
Dirt bikes, motorcycles, 4-wheelers	45	1.3%	36	42	0	17	0
Radios and alarms	7	0.2%	7	na	0	7	0
Livestock	2	<0.1%	1	4	0	1	0
River recreation	20	0.6%	3	76	19	11	37
Total	3,520	100%	93	1187	29	233	39

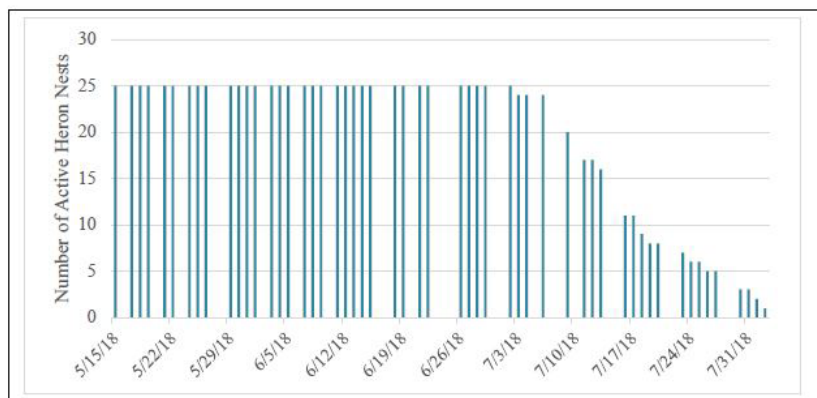


Figure 4. Number of active Great Blue Heron nests relative to time of year at the Slate River rookery in summer 2018.

## 4.5 Recreational Flow Data

The Upper Gunnison River Water Conservancy District (District) is currently administering surveys as part of its watershed management planning process to collect data on recreational flows for all floatable reaches in the East River watershed (which encompasses the Slate River). The working group held an event at the Crested Butte Public House on July 23, 2018 to collect data utilizing surveys (shown on pages 24-27). The Working Group co-conveners will work with the District to correlate survey data with flow levels to develop and publicize a high-medium-low flow standard for the upper and low stretches of the Slate River.

In addition, the co-conveners will consider collaborating with WCU's Masters in Environmental Management (MEM) program to design and implement a study to collect detailed data on river-use between Oh-Be-Joyful and Skyland Bridge. In 2015, the Land Trust and BLM collaborated with WCU's MEM program to collect visitation data for the Slate River Valley trail system. This data has been critical for securing funding and informing management decisions; currently, little river-use data exists for this reach of river.



## 4.5 Recreational Flow Data (cont.)

### Slate River Gunsight Bridge to Crested Butte

Name: \_\_\_\_\_ E-mail: \_\_\_\_\_

Additional Surveys? \_\_\_\_\_ Yes \_\_\_\_\_ No

1. Circle the type of craft(s) you have used on this reach?

Kayak    Whitewater raft    Float fishing    Stand-up Paddleboard (SUP)    Innertube    Other

2. How do you decide whether to float this reach? (e.g. name of USGS gage, website, location of an indicator rock, etc.)? If unsure, leave blank.

3. What do you enjoy about this reach? Examples: relaxing float, social opportunity, close to town, exciting and difficult whitewater, etc.

4. Does this reach have any notable obstacles or hazards? Examples: large strainers, fences, low bridges, etc.

5. During the float, do you touch the river bottom or river banks? Do not include put-in or take-out. Please, explain where and why.

6. After touching the river bottom or river bank, are you able to continue floating the reach?

7. Are there unsafe times to float this reach? Provide explanation and estimate flow, if possible. Examples: low bridge becomes impassable, too rowdy for my skill level, etc.

8. Could this reach benefit from infrastructure improvements? Examples: parking areas, bathrooms, boater-friendly fences, etc.

## 4.5 Recreational Flow Data (cont.)

### Upper Gunnison River Water Conservancy District Recreational Use Survey

#### Reach Use Calendar: Slate River Gunsight Bridge to Crested Butte

**Instructions:** Put an "X" in the box for the week that you float the reach. For example, if you float the reach from June 1 to June 15 put an X in the first two June boxes. Leave rows blank if you don't float in that type of craft.

The flow presented below is an estimate of the flow for the bottom of the reach, based on the watershed area relative to the nearest downstream gage.

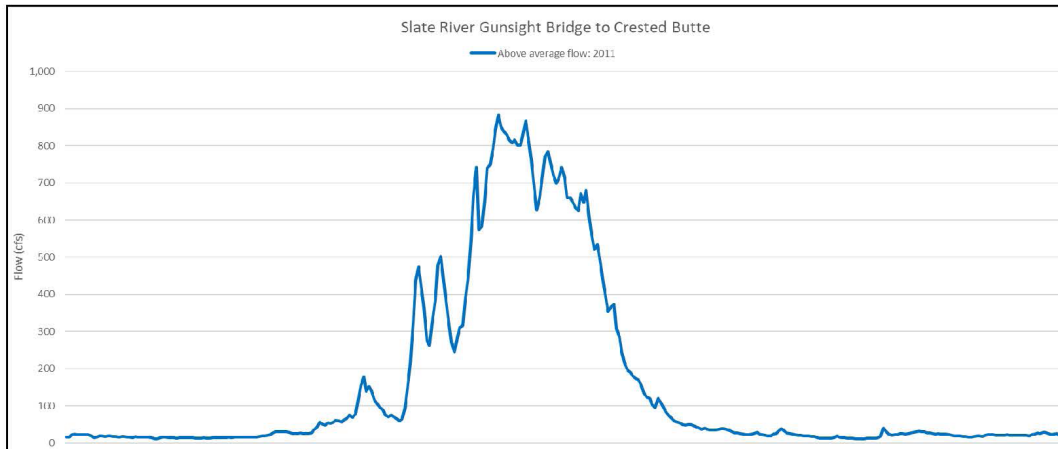
#### Definitions for Kayak and Whitewater boating:

Low flow: Lowest possible flow. May be considered more technical. Boney!

Medium flow: average flow conditions. When you would teach your friend to run the reach.

High flow: high flow conditions with faster water, bigger features. Rowdy!

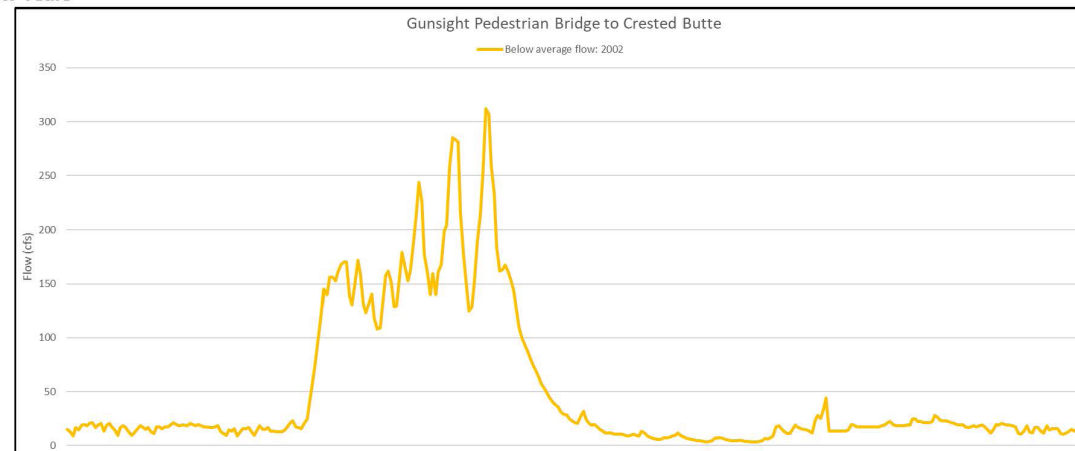
#### High Flow Years



Activity	April				May				June				July				August				September			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Kayak																								
Whitewater																								
Rafting																								
Float Fishing																								
SUP and Tubing																								

### Upper Gunnison River Water Conservancy District Recreational Use Survey

#### Low Flow Years



Activity	April				May				June				July				August				September			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Kayak																								
Whitewater																								
Rafting																								
Float Fishing																								
SUP and Tubing																								



## 4.5 Recreational Flow Data (cont.)

### Slate River Crested Butte to East River

Name: \_\_\_\_\_ E-mail: \_\_\_\_\_

Additional Surveys? \_\_\_\_\_ Yes \_\_\_\_\_ No

1. Circle the type of craft(s) you have used on this reach?

Kayak    Whitewater raft    Float fishing    Stand-up Paddleboard (SUP)    Innertube    Other

2. How do you decide whether to float this reach? (e.g. name of USGS gage, website, location of an indicator rock, etc.)? If unsure, leave blank.

3. What do you enjoy about this reach? Examples: relaxing float, social opportunity, close to town, exciting and difficult whitewater, etc.

4. Does this reach have any notable obstacles or hazards? Examples: large strainers, fences, low bridges, etc.

5. During the float, do you touch the river bottom or river banks? Do not include put-in or take-out. Please, explain where and why.

6. After touching the river bottom or river bank, are you able to continue floating the reach?

7. Are there unsafe times to float this reach? Provide explanation and estimate flow, if possible. Examples: low bridge becomes impassable, too rowdy for my skill level, etc.

8. Could this reach benefit from infrastructure improvements? Examples: parking areas, bathrooms, boater-friendly fences, etc.

## 4.5 Recreational Flow Data (cont.)

### Upper Gunnison River Water Conservancy District Recreational Use Survey

#### Reach Use Calendar: Slate River Crested Butte to East River

**Instructions:** Put an "X" in the box for the week that you float the reach. For example, if you float the reach from June 1 to June 15 put an X in the first two June boxes. Leave rows blank if you don't float in that type of craft.

The flow presented below is an estimate of the flow for the bottom of the reach, based on the watershed area relative to the nearest downstream gage.

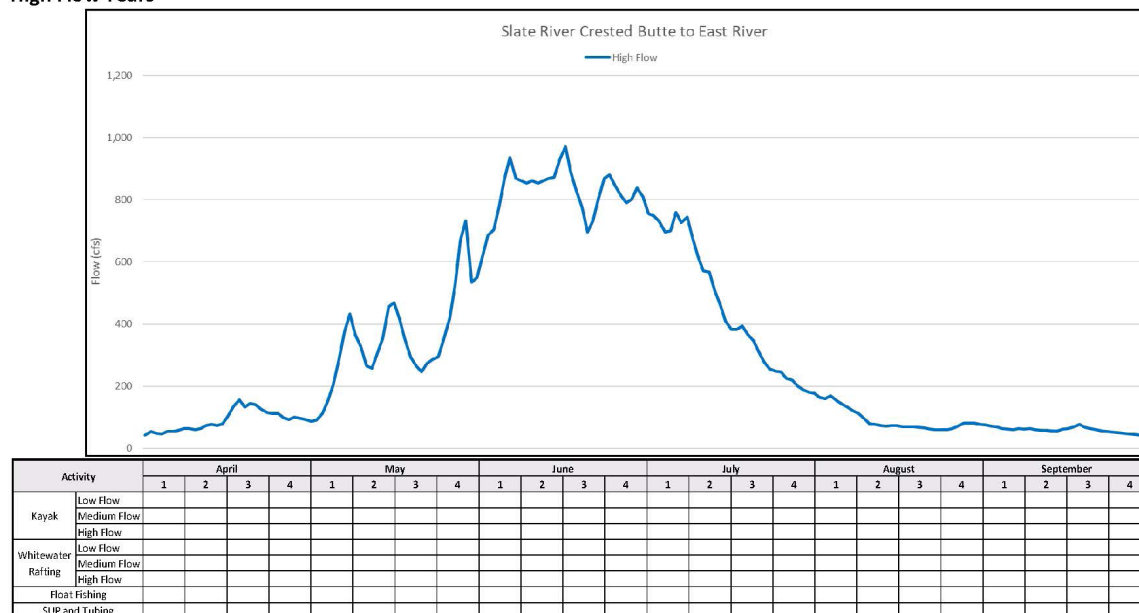
#### Definitions for Kayak and Whitewater boating:

Low flow: Lowest possible flow. May be considered more technical. Boney!

Medium flow: average flow conditions. When you would teach your friend to run the reach.

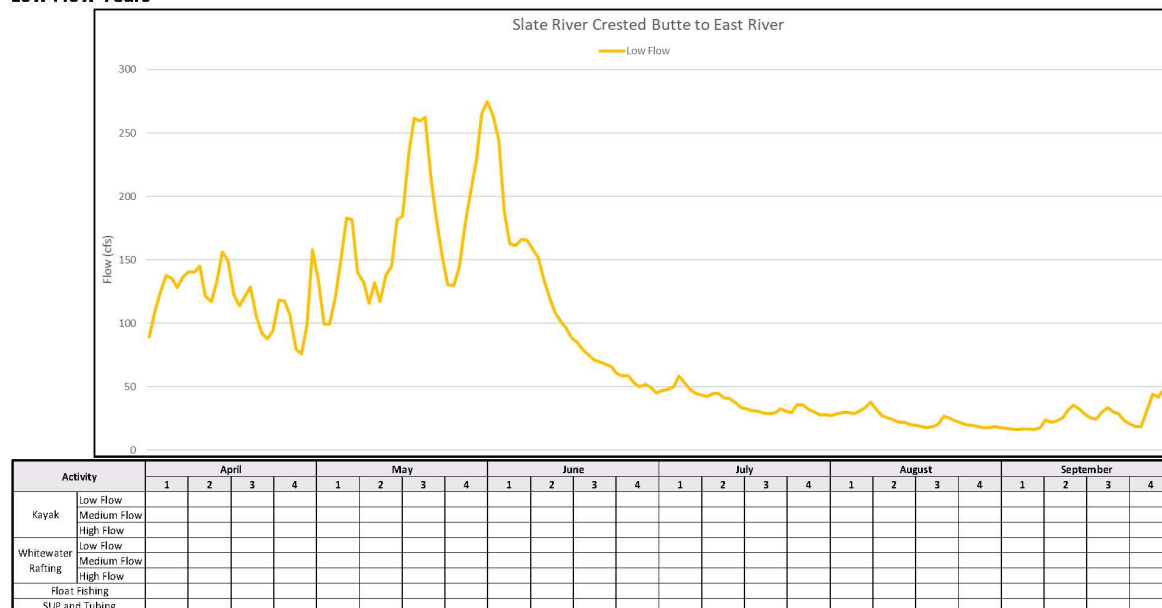
High flow: high flow conditions with faster water, bigger features. Rowdy!

#### High Flow Years



### Upper Gunnison River Water Conservancy District Recreational Use Survey

#### Low Flow Years





## 4.6 Signage & Outreach Plan

### 4.6.1 Recommended River Use Parameters & Etiquette

The working group suggests the following river user parameters and etiquette to be incorporated into a comprehensive signage and outreach plan:

#### Slate River Floating Information

*Planning a trip to SUP the Slate? The Slate River is a wild and special place—the river meanders through public and private property, critical wildlife habitat, high-quality wetlands, and agricultural lands grazed by livestock. With your stewardship, we can keep it wild for future generations. Help our community keep it wild by adhering to the following river etiquette:*

##### River Access

- Only use designated river access points to put-in and take-out on the river.
- The only access points are:

*Upper Reach:* Oh-Be-Joyful Campground, Gunsight Bridge, River Flats, Rec Path Bridge

*Lower Reach:* Rec Path Bridge, Skyland Bridge

- Parking isn't a plenty—please carpool or ride your bike to the access points.

*\*\*Remember, you cannot leave the river mid-float, you must use an access point to start and finish. Please note that much of what you float through is private property.*

##### Be a Good Neighbor

- Respect our neighbors and do not go on private property.
- Please leave your dogs at home. To be respectful of wildlife, cattle, and our neighbors, it is recommended to not float with your furry friend. Dogs are legally not permitted to put-in or take-out on river at Rec Path Bridge.
- No amplified music or sound systems. From Gunsight Bridge to the Rec Path is a quiet float zone due to critical wildlife habitat.
- Float in groups of six people or fewer. Please space out from other groups when you launch and let faster groups float through while on the river.
- Don't be that guy: don't litter and pack out your trash.
- Go before you float! Don't use the river bank as a toilet.

##### Don't be Scarin' the Herons—Voluntary No-Float Period in Effect until July 15

The Slate River wetlands provides a fragile refuge for resident and migratory wildlife, including, Great Blue Heron, Elk, and Waterfowl. The stretch of river from Gunsight Bridge all the way to the Rec Path Bridge has a voluntary no-float period from March 15-July 15 due to the critical nesting period of the Great Blue Heron rookery. After July 15, if the conditions allow for floating, float respectfully and quietly. Wait at the Lower Loop bench to regroup and begin extra quiet travel through the rookery. Watch for the signs that indicate you're traveling through their home.

*\*\*Please note that during this voluntary no-float period, or when the river is too low to float, recreationists are still permitted to float on the public lands administered by the BLM, which would mean from Oh-Be-Joyful Campground to River Flats.*

##### Go with the Flow

Make sure you are comfortable with conditions, and float at your own risk. The Slate River is snow-melt driven; peak flows can lead to dangerous conditions, and by mid-late summer, the water level becomes too low to float, making for an unenjoyable experience. It is your responsibility to check conditions before heading out. It's suggested to talk to local shop and outfitter personnel about the current conditions.

##### No Lifeguard on Duty!

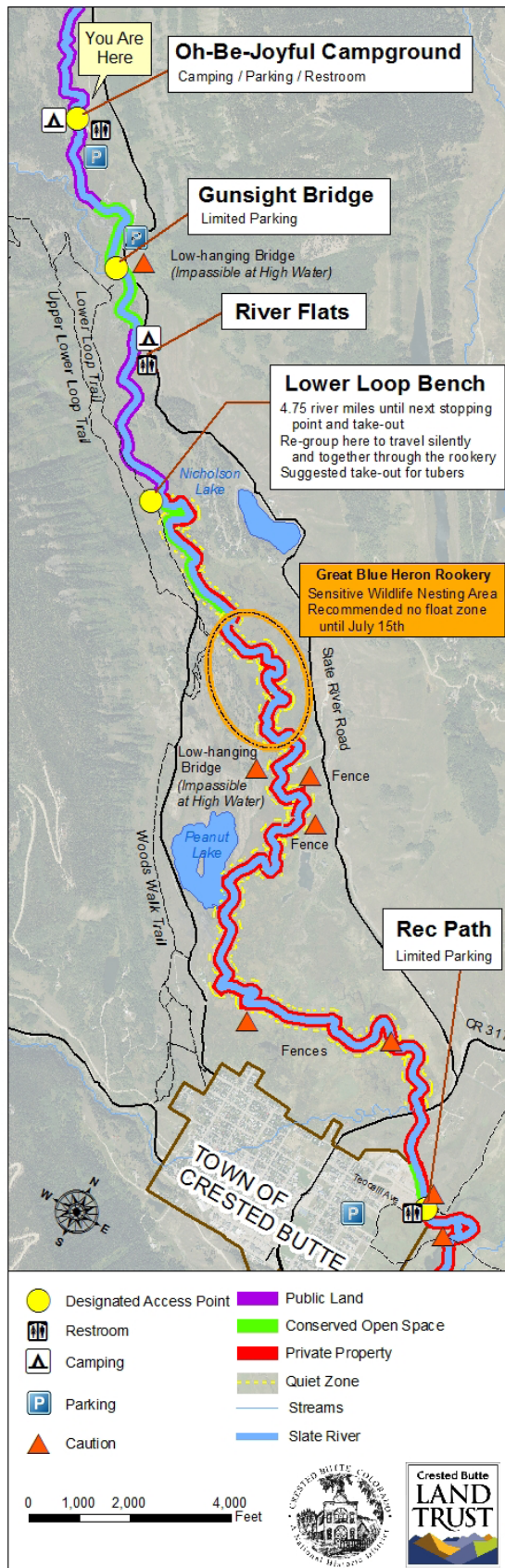
Avoid becoming a statistic—wear a PFD! Dangerous obstacles such as strong currents, rocks and log jams can be hazardous at both high and low flows. Be prepared for changing weather & river conditions, and long stretches through private land and without a restroom. Tubing is not recommended.

##### Cow-abunga

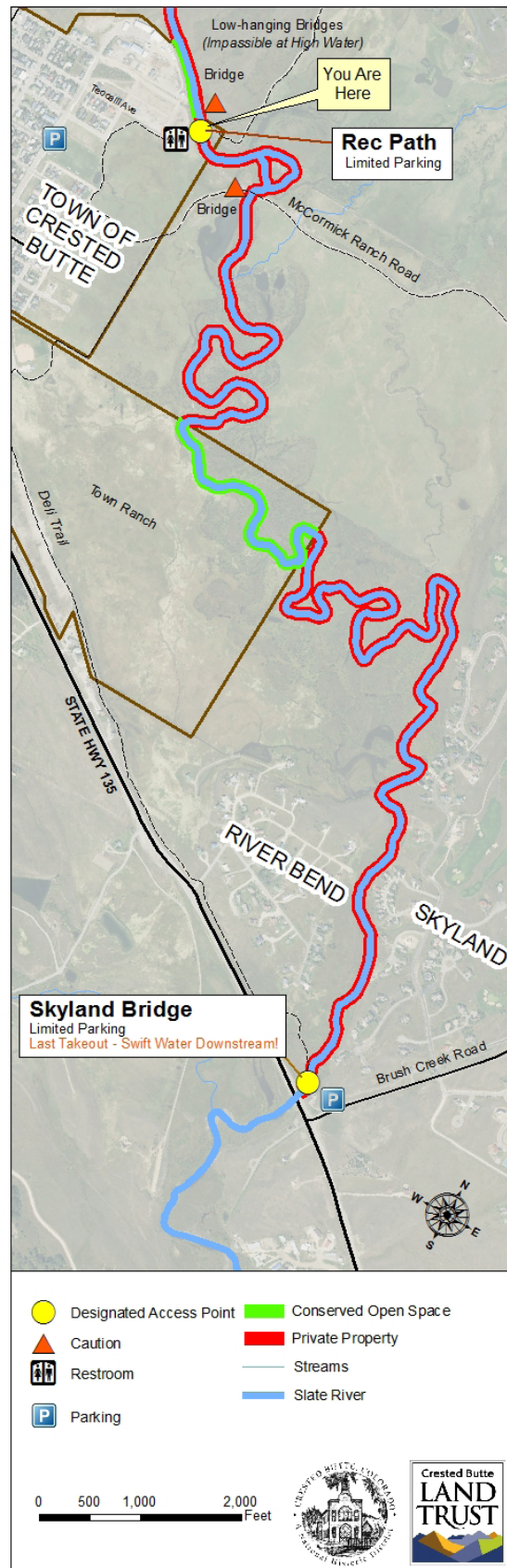
We share this area with local ranchers and their cattle. Fences are needed to keep cattle from wandering. When you encounter a river fence (made of white plastic), hold tight and float underneath the fence; it is designed for this purpose! If you encounter any cows near the river, show them the same respect you would any other user.

## 4.6 Signage & Outreach Plan (cont).

### Upper Slate River



### Lower Slate River





## 4.6 Signage & Outreach Plan (cont).

### 4.6.2 Signage

#### Access Point Signage

The Working Group recommends consistent use of signage throughout the river corridor, including uniform informational signs at each access point (Oh-Be-Joyful, Gunsight Bridge, Rec Path, and Skyland Bridge) and the Lower Loop bench. Each sign will include information on river use and etiquette, and a river map. Signs will be consistent in look and design, coordinated with other recreational signage in the Valley, and with information tailored to the specific access point (for example, the Skyland Bridge sign will additionally indicate the take-out to river users. An example of information to be included on the sign is shown on the right, which has information about floating the Animas River in Durango, Colorado.



#### River Corridor Signage

The Working Group agrees that it will be beneficial to place signs along certain river banks throughout the corridor to indicate private property versus public property.

Signage will be consistent in look and design to those at access points, rather than installing generic “No Trespassing” signs that have proven ineffective. Utilizing red private property signs (“Entering Private Property” and “Still on Private Property”) in collaboration with individual landowners – will indicate to river users that they should stay on their crafts and not stop on river banks. Additionally, green signs will be placed when entering conserved property owned by the Crested Butte Land Trust or Town of Crested Butte. An additional sign will be placed at the Lower Loop bench on Land Trust property indicating that after that boundary, river users will be floating through private property all the way down the river until the Rec Path bridge.



The Working Group will also work with the BLM to place “Entering and/or Leaving Public Land” signs (shown at left) on BLM parcel boundaries for Oh-Be-Joyful and River Flats.

Signs already have been placed on the lower Slate River (June 2018) as a trial run to test visibility and recreationist adherence, with plans to work with property owners on the upper stretch placing signs during Fall 2018 when flows are low and Heron have left their nests.

#### Flow Signage

After high-medium-low flow standards are developed to provide guidance on when to float, a system for communicating this information will be vital. Signage at each access point will indicate conditions relating to advisability of river use, including warning when flows are so low that touching the river bottom downstream is inevitable.

“Too Low to Float” signage (see photo at right) was posted at Gunsight Bridge and the Rec Path bridge in June 2018 based on consensus of the Flow sub-committee and observations from commercial river users. Future flow signage will have similar messaging and design as signs placed at access points to ensure consistency.

#### ATTENTION RIVER USERS

**Go with the flow.** The Slate River is a snow-melt driven river. Water levels can decrease rapidly during the summer months. When this occurs, trespassing on downstream property is highly likely. Please consider coming back to float next season.

**It is recommended that  
this stretch of river is  
now too low to float  
without trespassing on  
downstream private property.**

*Thank you for understanding.*



## 4.5 Signage & Outreach Plan (cont).



### Great Blue Heron Rookery Quiet Zone Signage

In Spring 2018, Crested Butte Land Trust placed two signs (see photos at left) to indicate a quiet zone through the Great Blue Heron Rookery (250 feet above and below the rookery). Based on Summer 2018 feedback, the Land Trust potentially will change locations or add additional signage to remind river users they are floating through a critical quiet zone.

### 4.6.3 Educational Guide/Brochure

The Working Group recommends creating an educational guide/brochure based on the agreed-upon river information and etiquette (page 28), utilizing similar design and language as used in all signage, ensuring consistency and to create a recognizable “brand” regarding Slate River use and etiquette. The educational guide will be distributed via commercial river outfitters, outdoor retail shops, the Crested Butte/Mt. Crested Butte and Gunnison Chambers of Commerce, lodging outlets and short-term renters, coffee shops, and wherever otherwise advisable.

### 4.6.4 Comprehensive Outreach Plan

The Working Group recommends working with commercial river outfitters, the Chambers of Commerce, the Gunnison-Crested Butte Tourism Association, Travel Crested Butte, The Land Trust, Bureau of Land Management, and other prominent partners whose websites can be used to post information from the educational guide, furthering the impact of consistent messaging directed at those wanting to float the Slate River.

Working with a video producer, one or more videos that educate users on proper river etiquette on the Slate River will be produced, then shown on the websites mentioned above and posted via social media as part of an educational campaign. The campaign will be coordinated with the organizations mentioned above, and will additionally utilize local newspapers and KBUT Community Radio to share information on floating the Slate River throughout Spring and Summer 2019. The campaign will adjust messaging in accordance with river flow and conditions until recommendations include the river is too low to float for the remaining season. When the river is considered too low to float, the message will additionally inform users that they can continue to float the BLM portions of river (from Oh-Be-Joyful to Lower Loop bench), as trespass is not an issue on public land.

### 4.6.5 Interpretive Representatives at Access Points

An interpretive and educational representative at Slate River access points is believed to be a highly effective method for educating river users. Recommendations include exploring the use of volunteers or a paid employee at put-ins during peak floating periods.

The Land Trust has suggested securing funding to broaden its summer seasonal stewardship position to include work as an interpretive representative on the river with dedicated time each week rotating between the Gunsight Bridge and Rec Path Bridge access points. The goal is to utilize this position to additionally collect river-user information to help guide and adapt future management decisions.



## 4.7 Implementation Timeline

*The list below identifies which management solutions will be short-term versus long-term.*

**Short-term solutions:** *Short-term management solutions are actions that have been identified by the Working Group to be implemented in 2019.*

- Implement a comprehensive signage and outreach plan that educates users on river etiquette and floating parameters
- Institute and publicize a voluntary no-float period on the upper reach of the river (from Gunsight Bridge to the Rec Path) from March 15 - July 15 to protect Heron brood rearing during their most vulnerable periods
- Secure funding for Land Trust and CCWC continue its partnership with WCU to monitor the Heron rookery and collect data in regards to impacts from river recreation and related variables (i.e. group size, travel frequency, time of day) to inform ongoing adaptive management solutions
- Secure funding to have an interpretive representative at popular river access points to help educate users on responsible river use
- Collaborate with WCU's MEM program to plan and implement a river use study in 2019 and beyond
- Collaborate with the Upper Gunnison River Basin Watershed Management Planning effort to collect and analyze river recreational-user data and correlate survey data with flow level ranges; develop high-medium-low flow standards for the upper and lower stretches of the Slate River and utilize signage, outreach and staff gauges at put-ins and take-outs to publicize the message
- Share Management Plan with local law enforcement and brainstorm ways in which local law enforcement can help private property owners when it comes to recurring trespass issues; work with local law enforcement to ensure active and consistent enforcement of existing dog regulations at Rec Path bridge
- Secure funding for installation and maintenance of two additional river fences to replace existing barbed wire fence lines and establish maintenance plan for current river fences; improve fencing at Rec Path bridge
- Work with private landowners at Rec Path bridge and commercial guiding companies to develop commercial use parameters for put-in and take-out at Gunsight Bridge and Rec Path bridge
- Work with the private landowners at Rec Path bridge and ecologists to designate one official side of the river for access while improving and revegetating the other streambanks

**Long-term solutions:** *Long-term solutions are typically larger infrastructure projects that require greater financial commitments, ongoing actions to influence user behavior, and additional studies/monitoring that will require extended periods of time to complete.*

- Begin planning for infrastructure improvements; identify any easement constraints that may prohibit certain improvements
- Work with the managing jurisdictions to identify fiscal impacts of needed infrastructure and investigate improvements that provide necessary amenities to river users
- Work to reduce impacts from vehicular traffic at put-ins
- Work towards a voluntary fee and/or permit system to utilize as a tool to educate river users on proper river etiquette

The Slate River Floating Management Plan is an adaptive management plan. The Working Group recognizes the need to collect more data when it comes to river use, wildlife impacts, flow levels and more. The Working Group is committed to revisiting the management plan and activities/impact prior to each river season, and adapt management solutions as needed.

## 4.8 Estimated Cost Summary

Infrastructure	Explanation	Estimated Cost
<b>Signage</b>		
Oh-Be-Joyful signage	Smaller signage to complement existing BLM signage.	\$ 100
Gunsight Bridge signage	New river use-specific kiosk.	\$ 5,000
Rec Path signage	River use-specific panels for existing kiosk.	\$ 2,000
Skyland signage	New kiosk and river-use specific panels.	\$ 6,000
Property Boundary signage	20-30 12'x12' property boundary signs for river corridor.	\$ 700
<i>Signage Total</i>		<i>\$ 13,800</i>
<b>Outreach Plan</b>		
River etiquette video	Informational video about floating on the river.	\$ 1,000.00
River etiquette material	Maps and brochures.	\$ 500
<i>Outreach Total</i>		<i>\$ 500</i>
<b>River Fences</b>		
Kapushion property fence	1 river fence at western Kapushion property boundary.	\$ 3,500
Lacy property fence	1 river fence for Lacy property.	\$ 3,500
Rec Path fence	Improve rec path fence to ensure dogs cannot get through to where cattle are.	\$ 2,500
<i>River Fence Total</i>		<i>\$ 9,500</i>
<b>Great Blue Heron Monitoring</b>		
2019 Monitoring	Student hire, data analysis and report writing, and travel expense.	\$ 8,500
<i>Monitoring Total</i>		<i>\$ 8,500</i>
<b>2019 River Use Study</b>		
River Use Study	Western MEM student hire, study design and implementation, and travel.	\$ 4,500
<i>River Study Total</i>		<i>\$ 4,500</i>
<b>Infrastructure Needs</b>		
2019 temporary restrooms	Portable toilet service for 16 weeks on Slate River Road, Rec Path and Skyland Bridge	\$ 3,600
Permanent restrooms	Permanent Restrooms for Rec Path and Skyland	\$ 220,000
Bike racks	Bike racks for Rec Path and Skyland to encourage bike shuttling.	\$ 1,000
Bank restoration	Bank restoration at Rec Path Bridge.	\$ 4,000
Boulder work at Gunsight Bridge	Boulder placement around parking area at Gunsight Bridge.	\$ 1,500
Gravel at Skyland	Gravel for Skyland take-out path.	\$ 500
<i>Infrastructure Total</i>		<i>\$ 230,600</i>
<b>TOTAL</b>		<b>\$ 267,400</b>