

APPENDIX A. Action Implementation Summaries

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| SM-1 Seek water contracts with Upper Yampa Water Conservancy District to meet instream flow and the City of Steamboat Springs' streamflow objectives. | |
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| Objectives Addressed | Management Objectives 6, 7, 8 |
| Lead Organization | City of Steamboat Springs Public Works (Water Resources) Colorado Water Trust |
| Partners | Upper Yampa Water Conservancy District, The Nature Conservancy, Catamount Metro District, Tri-State Generation and Transmission, Colorado Water Conservation Board, Colorado Parks and Wildlife |
| Ideas for Implementation | Since 2012, the Colorado Water Trust has been able to secure water through annual contracts with the Upper Yampa Water Conservancy District from Stagecoach Reservoir to provide additional flows to the Yampa River's decreed instream flow between Morrison Creek and Lake Catamount, and then farther downstream to the City of Steamboat at their wastewater treatment outfall. In addition, the City has begun to utilize its own water in Stagecoach Reservoir. The Water Trust will continue to assess whether and how much water is needed in a given year, seek to contract for that amount, and develop water shepherding mechanisms to deliver that water downstream. |
| Timeframe | Annually as needed. |
| Cost Estimate | Annual costs have been between \$0 and \$140,000, depending on the water year type. That does not include the Water Trust staff's time in negotiating the deal, obtaining approvals, and fundraising for the payments. |
| Potential Funding Sources | The Yampa River Water Fund (if created), The Nature Conservancy, CWCB water acquisition funding, private donors, |

| SM-2 Identify water rights owned by the City of Steamboat Springs that could benefit late summer flows and implement projects as appropriate. | |
|--|--|
| Objectives Addressed | Management Objectives 6, 7, 8 |
| Lead Organization | City of Steamboat Springs Public Works (Water Resources) |
| Partners | Colorado Water Trust |
| Ideas for Implementation | The City has hired the Colorado Water Trust to analyze parts of the City's water rights portfolio for opportunities to restore streamflow. Legal tools exist to restore flows within Colorado's existing water law framework and the Prior Appropriation System. Putting these tools to use in the Yampa River could provide a demonstration project that translates to other projects and basins. |
| Timeframe | April-May 2018, ongoing |
| Cost Estimate | Project development and implementation costs will be highly dependent on the scope of any potential projects identified by the Water Trust. |
| Potential Funding Sources | City of Steamboat Springs, Yampa River Water Fund (if created), CWCB water acquisition funding. |

| SM-3 Explore other voluntary, market-based streamflow restoration projects. | |
|--|---|
| Objectives Addressed | Management Objectives 6, 7, 8 |
| Lead Organization | Colorado Water Trust |
| Partners | Community Agriculture Alliance, Colorado State University Extension Service |
| Ideas for Implementation | Conduct outreach to the above partners to explore opportunities to enter into voluntary, compensated projects with other water users in the upper Yampa basin to enhance the health of the Yampa River and its tributaries. |
| Timeframe | Initiate in 2018/2019 and then ongoing |
| Cost Estimate | Unknown |
| Potential Funding Sources | Yampa River Water Fund (if created), CWCB water acquisition funding, private foundations |

| SM-4 Improve City of Steamboat Springs water diversion structures. | |
|---|--|
| Objectives Addressed | Management Objectives 1, 3 |
| Lead Organization | City of Steamboat Springs Parks and Recreation |
| Partners | City of Steamboat Springs Public Works (Water Resources) |
| Ideas for Implementation | <p>The City owns and maintains a number of diversion structures that divert water for irrigation of parks and open space. Some of these structures may benefit from efficiency and structural improvements that promote water conservation and fish habitat enhancement. This infrastructure must also be maintained to ensure that the City’s water rights can be put to beneficial use and are not at risk of abandonment.</p> <p>Task 1 - Interview Division of Water Resources Commission on the state of each diversion structure</p> <p>Task 2 - Conduct a structural inventory and field assessment of diversion structures and identify opportunities for improvement</p> <p>Task 3 - Prioritize structural improvements based on the following criteria:</p> <ol style="list-style-type: none"> 1. State of the structure - are repairs needed to preserve and use the water right? Are impacts to river channel form and habitat apparent? Are there recreational safety issues? 2. Structure ownership - is it exclusively City-owned or are there other ditch owners to coordinate? 3. Feasibility - can the structure be modified to improve fish habitat, safety, natural channel processes, and/or efficiency? <p>Task 4 - Identify partners and funding sources</p> <p>Task 5 - Design and build projects</p> |
| Timeframe | <p>Task 1 - 2018</p> <p>Tasks 2 and 3- 2018-2019</p> <p>Task 4 - 2019-2020</p> <p>Task 5 – 2020-2028</p> |
| Cost Estimate | <p>Task 1 - 4 - Staff resources</p> <p>Task 5 - Cost will vary depending upon project. Headgate improvements could be \$5,000-\$10,000. Diversion structure plus habitat improvements could be \$50,000 - \$250,000.</p> |
| Potential Funding Sources | Staff resources, City of Steamboat Springs General Fund, Yampa/White/Green Basin Roundtable, Trout Unlimited, Upper Yampa Water Conservancy District, Yampa River Water Fund (if created), Natural Resources Conservation Service, CWCB |

| RE-1 Establish a native riparian revegetation program for implementing the identified revegetation projects in areas historically disturbed along the Yampa River through Steamboat. | |
|---|--|
| Objectives Addressed | Management Objectives 3, 5, 6 |
| Lead Organization | City of Steamboat Springs Parks and Recreation Yampa Valley Sustainability Council (YVSC) |
| Partners | City Council, City of Steamboat Springs Public Works, Friends of the Yampa, Yampa Valley Fly Fishers, Riverkeeper, Yampa Valley Land Trust, Colorado State Forest Service (CSFS), Colorado Parks & Wildlife (CPW), private landowners |
| Ideas for Implementation | <p>The Land and Stream Restoration Opportunities Report analyzed and prioritized opportunities to conduct on-the-ground restoration projects to meet the Plan’s management objectives. Many of these projects were for riparian revegetation. These projects could help improve aquatic life, channel form and process, and water quality. In addition the Water Temperature Management Opportunities Report indicated that riparian shading could help to reduce water temperatures warming due to sunlight. YVSC’s Re-Tree Program, CPW’s Riparian Plant Nursery, and other efforts have coordinated successful riparian plantings in the past and will be leveraged to implement a larger-scale, targeted riparian plant restoration effort based on the opportunities identified in this plan.</p> <p>Task 1 - Convene a project team, refine objectives, contract a project manager</p> <p>Task 2 - Establish a long-term plan for riparian vegetation restoration, protection, and monitoring using the Yampa River Health Assessment and the Land and Stream Restoration Opportunities Report (Appendix D) to prioritize project locations, conduct on-the-ground inventory, and develop maps.</p> <p>Task 3 - Develop a short-term implementation plan for current riparian vegetation protection and restoration projects - focus on protecting existing growth with fencing to reduce beaver disturbances</p> <p>Task 4 - Develop a procurement plan for riparian vegetation materials consistent with the goals of both short-term and long-term restoration planning (i.e. seasonal nursery, permanent nursery, or buying from existing CSFS nursery).</p> <p>Task 5 - Coordinate volunteer groups to harvest, maintain, plant, and care for plants in addition to any construction related to a new nursery. Incorporate education and awareness about river health and actions people can take by leveraging existing programs, organizations, and volunteer events.</p> |

Appendix A: 2018-2019 Action Implementation Summaries

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| Timeframe | Initiate project planning and funding in 2018 Implement phase one 2019-2021 Long-term implementation -10+ years |
| Cost Estimate | \$250,000 (including grant and in-kind match) over three years. \$75,000/year |
| Potential Funding Sources | City of Steamboat Springs General Fund, Colorado Healthy Rivers Fund, Yampa/White/Green Basin Roundtable Grant, Yampa Valley Fly Fishers, CWCB Watershed Restoration Grant, CSFS, US Environmental Protection Agency 319 Grant |

RE-2 Work with public and private partners to develop and implement projects that restore watershed health within the Upper Yampa watershed.

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| Objectives Addressed | Management Objective 2 |
| Lead Organization | Upper Yampa River Watershed Group |
| Partners | City of Steamboat Springs, Routt County, Community Agriculture Alliance, Colorado State University Extension Service, Yampa Valley Land Trust, Natural Resources Conservation Service (see 2016 Upper Yampa River Watershed Plan for more detail) |
| Ideas for Implementation | Pursue long-term sustainable funding source(s) for the actions and projects identified in the 2016 Upper Yampa River Watershed Plan that support watershed health and this plan’s Management Objectives. Implementation activities include: <ul style="list-style-type: none"> -Improve communications and networking – develop a communications plan -Provide training and better resources (e.g. GIS mapping, etc.) for staffs -Create a toolkit of best management practices – post on website -Support agriculture that uses best management practices -Support large-scale land conservation and wildlife corridor efforts |
| Timeframe | Submit grant applications in 2018-2019 funding cycles. |
| Cost Estimate | To be determined |
| Potential Funding Sources | CWCB Watershed Restoration Grant Program, Yampa/White/Green Basin Roundtable, Yampa Valley Community Foundation, partners annual budgets |

| RE-3 Fund and implement USGS Proposed Nutrient and Sediment Source Evaluation for the Upper Yampa Basin. | |
|---|--|
| Objectives Addressed | Management Objectives 5, 6, 7 |
| Lead Organization | Upper Yampa River Watershed Group |
| Partners | US Geological Survey (USGS), City of Steamboat Springs, Routt County, Upper Yampa Water Conservancy District, Colorado Parks and Wildlife, Trout Unlimited, US Forest Service |
| Ideas for Implementation | An analysis of the nutrient and sediment loading and the sources in the Upper Yampa River will inform future decision-making and Colorado Department of Public Health & Environment water quality standards. A grant for the project is available from the USGS and the Upper Yampa Water Conservancy District has agreed to be the fiscal agent for the project. Matching funds are currently sought for the project. |
| Timeframe | Work with partners to secure matching funds for the project in 2018. Six- to eight-month project once it gets off the ground. |
| Cost Estimate | \$144,500 |
| Potential Funding Sources | USGS, Colorado Healthy Rivers Fund, CWCB, Mount Werner Water and Sanitation District, Morrison Creek Water and Sanitation District, partner organizations |

| PL-1 Review and improve the effectiveness of the City of Steamboat Springs waterbody setbacks standards for implementing the objectives of the stream management plan | |
|--|---|
| Objectives Addressed | Management Objectives 2, 3, 4, 5 |
| Lead Organization | City of Steamboat Springs Planning (as directed by City Council) |
| Partners | City Council, City of Steamboat Springs Public Works, City “Stream Team,” Upper Yampa River Watershed Group, Colorado Parks and Wildlife, CWCB, local development community |
| Ideas for Implementation | <p>The purpose and intent of current waterbody setback standards are unclear and may not be effective at mitigating the potential impacts of development to stream health, wildlife, visual corridors, and public safety.</p> <p>Task 1 - Establish purpose and scope for revised standards</p> <p>Task 2 - Review current code language and research waterbody setback best practices from other communities</p> <p>Task 3 - Develop and propose revised standards</p> <p>Task 4 - Seek public input and incorporate modifications</p> <p>Task 5 - Adopt revised standards</p> |
| Timeframe | 2019; approximately six-month process |
| Cost Estimate | \$30,000 plus staff resources |
| Potential Funding Sources | City of Steamboat Springs General Fund, CO Department of Local Affairs, CWCB, Community Development Block Grant, US Environmental Protection Agency |

| PL-2 Review existing City of Steamboat Springs plans and regulations to identify areas to improve consistency and compliance with the stream management plan. | |
|--|--|
| Objectives Addressed | Multi-Objective |
| Lead Organization | City of Steamboat Springs Planning (as directed by City Council) |
| Partners | City Council, City of Steamboat Springs Public Works, City of Steamboat Springs Parks and Recreation, City of Steamboat Springs City Manager’s Office, City “Stream Team,” Routt County, numerous community partners |
| Ideas for Implementation | Evaluate Steamboat Springs Area Community Plan Chapter 7 - Natural, Scenic, and Environmentally Sensitive Areas and integrate the science and objectives of the stream management plan Task 1 - Convene a project team and refine scope and purpose Task 2 - Review existing plan(s) and identify potential revisions Task 3 - Seek public input and incorporate comments Task 4 - Develop and propose plan amendments Task 5 - Identify code changes to respond to plan amendments Task 6 - Adopt plan amendments |
| Timeframe | 2019-2020; approximately nine-month process |
| Cost Estimate | \$75,000 (consultant) plus staff resources |
| Potential Funding Sources | City of Steamboat Springs General Fund, CO Department of Local Affairs, various environmental or planning grants |

| PL-3 Integrate green infrastructure concepts and improvements into City of Steamboat Springs standards, policies, and procedures. | |
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| Objectives Addressed | Management Objectives 2, 3, 8 |
| Lead Organization | City of Steamboat Springs Public Works (Engineering) |
| Partners | City of Steamboat Springs Planning, development community |
| Ideas for Implementation | <p>Task 1 - Update City's Drainage Criteria, which includes requirements for green infrastructure at time of development/redevelopment</p> <p>Task 2 - Incentivize integration of green infrastructure that exceeds minimum standards. Process may include:</p> <ul style="list-style-type: none"> • Identification of potential incentives • Integration into processes, codes, and standards • Develop public-private granting program for construction of green infrastructure <p>Task 3 - Integrate green infrastructure into City capital projects and retrofit existing infrastructure to incorporate green infrastructure</p> |
| Timeframe | <p>Task 1 - Initiate in 2018; implement by July 2019</p> <p>Task 2 - Initiate in 2019; implement by 2021</p> <p>Task 3 - Ongoing</p> |
| Cost Estimate | <p>Task 1 - \$50,000 plus staff resources</p> <p>Task 2 - 2a) Staff resources 2b) Staff resources 2c) \$500,000 over 5 years (\$100,000/year) plus staff resources</p> <p>Task 3 - \$500,000 over 5 years (\$100,000/year) plus staff resources (integration into Capital Project Scoping & Budget)</p> |
| Potential Funding Sources | <p>Tasks 1, 2, 3- City of Steamboat Springs General Fund</p> <p>Task 2c and 3- Yampa River Water Fund (if created), CO Department of Public Health and Environment, CWCB, CO Department of Transportation Colorado Healthy Rivers Fund, US Environmental Protection Agency</p> |

| PL-4 Establish an interdisciplinary City "Stream Team" to coordinate and review City infrastructure projects, regulatory updates, and other projects, programs, and policies within the City that may affect river health. | |
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| Objectives Addressed | Multi-Objective |
| Lead Organization | City of Steamboat Springs Public Works (Water Resources) |
| Partners | City of Steamboat Springs Public Works (Engineering), City of Steamboat Springs Planning, City of Steamboat Springs Parks and Recreation, City of Steamboat Springs City Manager's Office, City of Steamboat Springs General Services |
| Ideas for Implementation | <p>A multi-disciplinary team will convene to review policies, procedures, and codes; assist in master planning efforts; advise City capital projects when river health may be concerned; and monitor progress on this plan's management objectives. The intent of the group is to provide technical expertise in these varied efforts, to inform budgets, to develop work plans, and seek funding for implementation projects that meet the objectives of this plan.</p> <p>Task 1 - Identify "Stream Team" members Task 2 - Meet to refine scope and purpose Task 3 - Schedule regular semi-monthly meetings plus additional meetings on an as-needed per project basis</p> |
| Timeframe | Initiated in 2018 |
| Cost Estimate | Staff resources - hours depend upon number and type of projects. Estimate 10-20 hours/year per staff member, roughly 8 staff members |
| Potential Funding Sources | City of Steamboat Springs General Fund |

| PL-5 Identify high priority parcels for acquisition for open space due to location in floodplain or high value riparian habitat | |
|--|--|
| Objectives Addressed | Management objectives 2, 4, 5, |
| Lead Organization | City of Steamboat Springs Parks and Recreation |
| Partners | Yampa Valley Land Trust, The Nature Conservancy, CPW, private landowners |
| Ideas for Implementation | Much of the riparian corridor in the project area is conserved as open space, yet two parcels remain that provide high riparian value, floodplain protection, and wildlife habitat. Work with partners to raise funds to acquire these parcels and put into the City's Open Space program. |
| Timeframe | 2020 – Purchase parcel 1 2021 – Purchase parcel 2 |
| Cost Estimate | \$3.8 million (parcel 1~ \$2.2 million; parcel 2~ \$1.6 million) |
| Potential Funding Sources | City of Steamboat Springs Purchase of Development Rights Program, Yampa River Water Fund, Ducks Unlimited, Great Outdoors Colorado, CWCB, CPW |

| ED-1 Develop a K-12 Yampa River curriculum and partner with statewide organizations to enhance understanding of the value of the Yampa River. | |
|--|---|
| Objectives Addressed | Multi-Objective |
| Lead Organization | Yampa/White/Green Basin Roundtable, Public Education Participation & Outreach Committee (PEPO) |
| Partners | Community Agriculture Alliance, Yampatika, Friends of the Yampa, school districts in the Yampa, White, and Green river basins. |
| Ideas for Implementation | <p>To increase public knowledge about water issues relating to the Yampa/White/Green river basins, the Roundtable has proposed to develop and implement a K-12 Yampa River Curriculum that provides grade-appropriate programs and speakers that align with State education standards. This program will enhance awareness about Yampa River uses (i.e. agricultural, municipal, industrial, recreational, and environmental) and their impacts and benefits in addition to educating students about what makes a river healthy and how to preserve ecosystems while balancing all of the water uses. This project will occur in multiple phases:</p> <p>Phase 1 - Conduct educator interviews to determine curriculum needs and develop a program scope.</p> <p>Phase 2 - Develop a Water Education Toolbox and corresponding curriculum and conduct a pilot program in one of the local schools.</p> <p>Phase 3 - Implement the Yampa River curriculum in all of the willing schools in the Yampa/White/Green river basins.</p> |
| Timeframe | <p>Phase 1 - Summer 2018</p> <p>Phase 2 - Fall 2018-Spring 2019</p> <p>Phase 3 - Fall 2019 and beyond</p> |
| Cost Estimate | <p>Phase 1 - \$5,000-7,000</p> <p>Phase 2 - \$15,000-20,000</p> <p>Phase 3 - \$25,000-50,000</p> |
| Potential Funding Sources | <p>Phase 1 & 2 - already funded through Yampa/White/Green Basin Roundtable Water Supply Reserve Fund Grant</p> <p>Phase 3 -may be funded in part by the Roundtable, but additional scoping still required.</p> |

| ED-2 Improve education and awareness about river health and actions people can take by leveraging existing programs and organizations. | |
|---|---|
| Objectives Addressed | Multi-Objective |
| Lead Organization | Upper Yampa River Watershed Group |
| Partners | Friends of the Yampa, Yampa Valley Sustainability Council, Yampatika, Community Agriculture Alliance, City of Steamboat Springs; Routt County |
| Ideas for Implementation | <p>Pursue grant funding or other funding source(s) for a staff person for the Watershed Group that could be dedicated to education and awareness programs. There are many low-cost programs that can be implemented. A holistic, river system approach is needed. The Watershed Group could help bring the broader picture into view and enhance collaboration as individual project implementation takes place.</p> <ul style="list-style-type: none"> -Create a networking platform allowing all stakeholders to communicate with one another – collaboration going forward is key -Develop a website that establishes a centralized location to collect and distribute “all things watershed” -Hold regular public meetings to serve as a forum for public participation -Hold an annual Watershed Expo -Work with farmers/ranchers to get input and buy-in for implementing best practices |
| Timeframe | Identify and pursue funding opportunities in 2018 and submit grant applications within 2018-2019 funding cycle |
| Cost Estimate | \$50,000-\$100,000 per year |
| Potential Funding Sources | Colorado Healthy Rivers Fund, partner organizations |

| ED-3 Establish long-term funding sources for Yampa River management, such as the Yampa River Water Fund with The Nature Conservancy. | |
|---|---|
| Objectives Addressed | Multi-objective - A long-term funding source could help implement actions and projects to further many of the management objectives of the plan. |
| Lead/Coordinating Organization | The Nature Conservancy |
| Working Group Partners | The following partners have agreed to participate in the steering committee as the group enters the Design Phase: City of Steamboat Springs, Moffat County, Routt County, Yampa Valley Community Foundation, Upper Yampa River Watershed Group, Friends of the Yampa, Yampa/White/Green Basin Roundtable, Colorado Water Trust |
| Ideas for Implementation | <p>The Nature Conservancy in partnership with the Yampa Valley Community Foundation has initiated a process to explore the opportunity for a Yampa River Water Fund. A Water Fund is a financial tool to help fund and implement conservation and restoration projects to improve water quality and supply. The Nature Conservancy is coordinating the process of bringing together a Working Group of local stakeholders to evaluate the feasibility and establish the structure for the Water Fund.</p> <p>The key phases of the process for establishing the fund are the following:</p> <ul style="list-style-type: none"> • Rapid Feasibility Assessment (January –June 2018) - Identifies whether a Water Fund is an appropriate tool for addressing water goals in the Yampa Valley. • Design Phase (Summer and Fall 2018) – Develops a strategic plan, governance model, business case, as well as other key guidance structures on how the fund will operate that are tailored to the local context. • Creation Phase (Winter 2018/2019) – Plans for and conducts an official public launch event and finalizes legal agreements. |
| Timeframe | Initiated fall 2017. If the Water Fund is successfully established, then long-term operation is estimated to begin in Spring 2019. |
| Cost Estimate | Staff time for the Yampa Valley Community Foundation, Working Group members, and The Nature Conservancy. Operation of the Water Fund will have additional costs beyond the scope of this action. |
| Potential Funding Sources | The Nature Conservancy has secured \$50,000 in funding to cover the expenses associated with the design phase (legal and financial expertise, among other expenses). Potential investors in the Yampa River Water Fund include utilities, businesses, private donors, and government agencies. |