

Yampa River Health Assessment & Streamflow Management Plan

2019 Annual Report

Background

The City of Steamboat Springs adopted the Yampa River Health Assessment and Streamflow Management Plan (Plan) in August of 2018. In addition to incorporating an in depth assessment of the health of the Yampa River from the Chuck Lewis State Wildlife Area to the Steamboat Springs Wastewater Treatment Facility, the plan identified water management, land and stream restoration, land-use planning, and education and outreach strategies to meet its goals and objectives. The stream health assessment, streamflow-stream temperature models, and stakeholder feedback informed objectives and monitoring indicators that were established along with a strategy to evaluate and report progress toward these objectives. This Annual Report provides a summary for City Council and the community of the following:

- Status of the implementation of the short-term action items identified in the plan (see 2019-2020 priorities table below)
- Recommendations on new actions to be added to the short-term action plan (see 2019-2020 priorities table below)
- Updates on monitoring indicators of progress toward management objectives
- Summary of any other significant events and trends identified by the City

What: Yampa River Health Assessment and Streamflow Management Plan Updates

Who: City of Steamboat Springs Stream Team

When: Annually and every ten years

How:

- Annual Report on progress and new actions
- Comprehensive update of all plan components every ten years

2018-2019 Highlights

Although progress was made on every action item, several projects were particularly successful and highlighted the value of this stream management planning effort.

Streamflow Restoration - 2018 was a particularly dry year with sub-average snowpack, runoff, and summer precipitation. In addition to depleted flows for recreation and aquatic life that triggered voluntary closures of the river to recreational users, the Yampa River experienced its first “call” or administration of water rights on the main stem in history. This call triggered a series of events including the delivery of Stagecoach Reservoir water to consumptive uses, such as the City’s parks and water supply intake and to Tri-State Generation and Power’s Craig Station. The call also brought the City of Steamboat Springs, the Colorado Water Trust, The Nature Conservancy, the Colorado Water Conservation Board, Tri-State Power and Generation, and Upper Yampa Water Conservancy District together to purchase additional water and to time releases in a way that optimized their benefit to the river. The success of this effort demonstrated the importance of securing a reliably supply of stored water for the Yampa River in times of drought, so the City of Steamboat Springs, the Colorado Water Trust, and The Nature Conservancy began working with the Upper Yampa Water Conservancy District on legal and pricing strategies for environmental and recreational water in Stagecoach Reservoir.

Yampa Riparian Forest Restoration - While the stream management plan identified releases from Stagecoach Reservoir as one strategy to improve stream temperature, the stream flow-stream temperature models predicted that these releases combined with the enhancement of the riparian forest would be most effective at reducing stream temperature. This finding helped the City of Steamboat Springs and its partners, the Yampa Valley Sustainability Council and the Colorado State Forest Service, secure \$175,000 in Capital Improvement Projects budget, Colorado Water Conservation Board grants, and a significant private contribution to develop and implement both short- and long-term plans for riparian forest restoration through and above Steamboat Springs. While site selection and preparation, planting methods, tree monitoring and care, and tree cultivation are all being conducted by a team of restoration experts, community volunteers (particularly youth) are planting the trees. Not only do these volunteer efforts further the objectives to restore the riparian forest and to reduce stream temperature, they also foster a culture of stewardship of the Yampa River.



Stream Team – The City of Steamboat Springs formed a “Stream Team” to advise, assist, and make recommendations on City policies, procedures, plans, and projects related to the health of the Yampa River and its tributaries. Stream Team is an interdisciplinary team of City Staff with expertise in Water Resources, Engineering, Floodplain Management, Planning and Community Development, Open Space, Recreation, Legal, and City Management.

Yampa River Fund - Funding and capacity are essential ingredients to the implementation of any plan. Without them plans gather dust on a shelf. But rural economies, like the one in Steamboat Springs, have limited resources for tackling stream health projects and programs without help from partners. The Nature Conservancy recognized this funding gap when it facilitated the development of the Yampa River Fund, an endowment fund that will generate annual contributions for flow restoration and riparian restoration projects in addition to water infrastructure improvements that benefit agriculture and the environment. This fund will launch on September 19th, 2019 with over \$2 million raised toward the \$4.7 million target. It was this plan that catalyzed the development of the Yampa River Fund.

Monitoring Indicators

The frequency of monitoring indicators is on an annual, 2-year, 5-year, 10-year, and post-flood event basis, so limited monitoring has occurred to date. With that said, the City of Steamboat Springs with its partners, the Colorado Division of Water Resources, USGS, and the Colorado River District continue to monitor continuous stream temperature from above Lake Catamount to below the wastewater treatment facility.

Regional Trends

The success of the Yampa River Health Assessment and Streamflow Management Plan has informed and enabled a broader-scale effort by the Yampa-White-Green Basin Roundtable to integrate water management for the entire Yampa River Basin through the development of an Integrated Water Management Plan (IWMP). This effort reflects the consensus among regional water managers that preventing water quantity scarcity or water quality degradation will require regional-scale collaboration. The IWMP will help to further the goals and objectives of the Yampa River Health Assessment and Streamflow Management Plan.

2019-2020 Priority Actions

ID	ACTION	LEAD ORGANIZATION	PARTNERS	Status/Recommendations
Streamflow Management				
SM-1	Seek water contracts with Upper Yampa Water Conservancy District to meet instream flow and City streamflow objectives.	-City of Steamboat Springs Public Works (Water Resources) -Colorado Water Trust	Upper Yampa Water Conservancy District, The Nature Conservancy, Catamount Metro District, Tri-State General & Transmission, CWCB, CPW	Initiated and On-Going Colorado Water Trust, City of Steamboat Springs, and The Nature Conservancy presented to the Upper Yampa Water Conservancy District about Environmental Recreation Contract (ERC) water at the May 2019 Board Meeting. The District is reviewing its policies and procedures for pricing and leasing ERC water. The Colorado Water Trust continues to take the lead on contract negotiations with the District. The City is taking the lead on measuring and modeling the effectiveness of these releases for reducing stream temperature.
SM-2	Identify water rights owned by the City of Steamboat Springs that could benefit late summer flows and implement projects as appropriate.	City of Steamboat Springs Public Works (Water Resources)	Colorado Water Trust	Initiated City Staff continue to evaluate opportunities to put its water rights to beneficial use by restoring flows. No specific project has been implemented to date.
SM-3	Explore other voluntary, market-based streamflow restoration projects.	Colorado Water Trust	Community Agriculture Alliance, Colorado State University (CSU) Extension Service	Initiated and Ongoing The Colorado Water Trust is working with a number of partners convened by the Yampa-White-Green Basin Roundtable on an Integrated Water Management Plan for the whole Yampa Basin that will explore these opportunities.

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SM-4	Improve City of Steamboat Springs water diversion structures.	City of Steamboat Springs Parks and Recreation	City Public Works (Water Resources)	<p>Initiated</p> <p>City Water Resources and Parks & Recreation have conducted field assessments and identified the need to improve multiple structures, including the Windsor Ditch, Gilroy Ditch, and Park City Main Lateral. Considering integration into the Parks & Rec Yampa River Restoration 5-Year CIP.</p>
Land & Stream Restoration				
RE-1	Establish a native riparian revegetation program for implementing the identified revegetation projects along the Yampa River through and around Steamboat.	City of Steamboat Springs Parks and Recreation	Yampa Valley Sustainability Council, City Public Works, Friends of the Yampa, Yampa Valley Fly Fishers, Riverkeeper, Yampa Valley Land Trust, Colorado State Forest Service, CPW, private landowners	<p>Initiated and Ongoing</p> <p>The City of Steamboat Springs partnered with the Yampa Valley Sustainability Council's ReTree Program and the Colorado State Forest Service to implement raise \$175,000 (3-year project) to restore the riparian forest on public-owned parcels, such as the Chuck Lewis State Wildlife Area and Rotary Park, and to develop a 20-year restoration plan to extend upstream to Catamount Reservoir.</p>
RE-2	Work with public and private partners to develop and implement projects that restore watershed health within the Upper Yampa watershed.	Yampa White Green Basin Roundtable	City of Steamboat Springs, Routt County, Community Agriculture Alliance, CSU Extension, Natural Resources Conservation Service, Upper Yampa River Watershed Group, Trout Unlimited, The Nature Conservancy, River Network.	<p>Initiated and Ongoing</p> <p>The Yampa White Green Basin Roundtable kicked off an Integrated Water Management Plan in 2019 that will identify watershed scale projects and diversion structure improvements in the Yampa Basin as a whole. This will be a 5-year effort.</p>

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RE-3	Fund and implement US Geological Survey (USGS) proposed nutrient source evaluation for the Upper Yampa River Basin.	Upper Yampa River Watershed Group	USGS, City of Steamboat Springs, Routt County, Upper Yampa Water Conservancy District, CPW, Trout Unlimited, US Forest Service	To be completed by Spring 2020. Move to Valuable Activities to Continue. This analysis was funded by multiple agencies and will inform watershed-scale restoration activities to reduce nutrient loading and the proliferation of algae. The results will inform potential alternative compliance solutions for the City's Wastewater Treatment Facility.
RE-4	Further evaluate projects in the Yampa River Structural Master Plan and the Yampa River Restoration 5-Year Capital Improvements Plan and incorporate the Stream Management Plan objectives.	City of Steamboat Springs Parks & Recreation	City Stream Team	New 2019-2020 Action Item. Stream Team will evaluate these plans and determine next steps.
RE-5	Conduct a wetlands construction or enhancement feasibility assessment to improve riparian vegetation and to offset impacts within the City	City Manager's Office	City Stream Team, City Public Works, City Planning Dep't.	New 2019-2020 Action Item. This project is part of the City's STAR Sustainability Goals.
Land Use & Planning				
PL-1	Review and improve the effectiveness of the City of Steamboat Springs waterbody setback standards for implementing the objectives of the stream management plan.	City of Steamboat Springs Planning	City Council, City Public Works, City Stream Team, UYRWG, CPW, CWCB, local development community	Initiated. The Planning Department is currently working on this project with direction from Planning Commission and input from the Stream Team. Staff anticipates presenting proposed changes to City Council in late 2019/early 2020.

ID	ACTION	LEAD ORGANIZATION	PARTNERS	Status/Recommendations
PL-2	Review existing City of Steamboat Springs plans and regulations to identify areas to improve consistency and compliance with the stream management plan.	City of Steamboat Springs Planning,	City Council, City Public Works, City Parks and Recreation, City Manager's Office, City Stream Team, Routt County, numerous community partners	Initiated & On-Going The following planning efforts incorporated findings from the stream management plan in 2019: Parks & Recreation Master Plan, Routt County Hazard Mitigation Plan, Engineering Standards, Water Supply Master Plan, Regulation 33 – Stream Temperature Standards. The Planning Department has reviewed the Community Area Plan and the Community Development Code to identify areas related to stream system health.
PL-3	Integrate green infrastructure concepts and improvements into City of Steamboat Springs standards, policies, and procedures.	City of Steamboat Springs Public Works (Engineering)	City Planning and Community Development, City Public Works, local development community	Initiated and Task 1 Complete. Task 1 - The City revised and adopted new Engineering Drainage Standards and Standard Operating Procedures that incorporate green infrastructure requirements for developments that exceed 1-acre, including City Capital Projects. Task 2-3 to be initiated in 2020.
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.	City of Steamboat Springs Public Works (Water Resources)	City Public Works, City Planning, City Parks and Recreation, City Manager's Office, City General Services	Initiated and on-going. The City's Stream Team was established in early 2019 and a Charter outlines the scope and composition and the Stream Team. Stream Team has already provided technical guidance for the waterbody setback updates and the Stream Management Plan Annual Update and Monitoring.
PL-5	Identify high priority parcels for acquisition for open space due to location in floodplain or high value riparian habitat.	City of Steamboat Springs	Yampa Valley Land Trust, The Nature Conservancy, CPW, private landowners	On-going. The Stream Team will evaluate and set criteria for this action item.
Education & Outreach				

ID	ACTION	LEAD ORGANIZATION	PARTNERS	Status/Recommendations
ED-1	Develop a K-12 Yampa River curriculum and partner with statewide organizations to enhance understanding of the value of the Yampa River.	Yampa White Green Basin Roundtable	Community Agriculture Alliance, Yampatika, Friends of the Yampa, school districts within the Yampa, White, and Green River basins	Initiated. The Yampa White Green Roundtable funded the feasibility and scoping of this program. Yampatika has scoped a 3-year, \$125k project for which they have requested Roundtable funds.
ED-2	Improve education and awareness about river health and actions people can take by leveraging existing programs and organizations.	Yampa White Green Basin Roundtable	Friends of the Yampa, Yampa Valley Sustainability Council, Yampatika, Community Agriculture Alliance, City of Steamboat Springs, Routt County, The Nature Conservancy	Move to Valuable Activities to Continue. The Yampa White Green Roundtable's Public Education Participation & Outreach Committee has partnered with the Community Agriculture Alliance on water education for the Yampa Basin and these efforts will continue.
ED-3	Establish long-term funding sources for Yampa River management, such as the Yampa River Water Fund with The Nature Conservancy.	The Nature Conservancy	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	Completed. Move to Valuable Activities to Continue. The City, the Yampa White Green Basin Roundtable, and other water stakeholders teamed up with The Nature Conservancy to establish the Yampa River Fund. A Collaboration and Administration Agreement outlines the fund governance structure. The Yampa River Fund launches in Sept. 2019 with over \$1.7 million.