



# COLORADO WATER CONSERVATION BOARD



## WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: June 25, 2014

*8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental  
Improvements and Floodplain Mitigation, Denver*

Name of Water Activity/Project

The Greenway Foundation

Name of Applicant

Metro Basin Roundtable

Amount from Statewide Account:

\$300,000

Amount from Basin Account(s):

\$150,000

Total WSRA Funds Requested:

\$450,000

Approving Basin Roundtable(s)

*(If multiple basins specify amounts in parentheses.)*

51-019-3575

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### Required Exhibits

- Statement of Work, Budget, and Schedule
- Project Map
- As Needed (i.e. letters of support, photos, maps, etc.)

### Appendices – Reference Material

- Program Information
- Insurance Requirements
- WSRA Standard Contract Information (Required for Projects Over \$100,000)
- W-9 Form (Required for All Projects Prior to Contracting)

## **Instructions**

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: <http://cwcb.state.co.us> Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Craig Godbout - WSRA Application  
Colorado Water Conservation Board  
1580 Logan Street, Suite 200  
Denver, CO 80203  
[Craig.godbout@state.co.us](mailto:Craig.godbout@state.co.us)

If you have questions or need additional assistance, please contact Craig Godbout at: 303-866-3441

### **Part I. - Description of the Applicant** (Project Sponsor or Owner):

The Greenway Foundation  
1855 South Pearl Street, Suite 40  
Denver, CO 80210

FEIN#: 51-019-3575  
Jeff Shoemaker, Executive Director  
[jeff@greenwayfoundation.org](mailto:jeff@greenwayfoundation.org)  
(303) 818-8078 (mobile)  
(303) 455-7109 (office)

Alternate Contacts:  
Marge Price  
[marge@capitolrepresentatives.com](mailto:marge@capitolrepresentatives.com)  
(303) 619-6521 (mobile)

(303) 433-1804 (office)

David Howlett

[david@capitolrepresentatives.com](mailto:david@capitolrepresentatives.com)

(303) 619-6520 (mobile)

(303) 433-1804 (office)

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

- ☐ Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
- ☐ Public (Districts) – authorities, Title 32/special districts, (conservancy, conservation, and irrigation districts), and water activity enterprises.
- ☐ Private Incorporated – mutual ditch companies, homeowners associations, corporations.
- ☐ Private individuals, partnerships, and sole proprietors are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
- ☒ Non-governmental organizations – broadly defined as any organization that is not part of the government.

3. Provide a brief description of your organization

The Greenway Foundation is the 501(c)3 non-profit organization that has, since 1974, been dedicated to the environmental and recreational reclamation of the South Platte River (and its tributaries) within the Denver Metro Area. More information on The Greenway Foundation can be found at: [www.greenwayfoundation.org](http://www.greenwayfoundation.org).

The Greenway Foundation has a long history successfully delivering multi-objective South Platte River Improvement projects from conceptual planning through construction. Most recently, the Greenway Foundation initiated the River North (RINO) and River South (RISO) Greenway Master Plans, which resulted in a community-build vision of environmental and recreation improvements along the South Platte River through the City and County of Denver. Following adoption of the RINO and RISO Master Plans, the Greenway Foundation partnered with the City and County of Denver and the Urban Drainage and Flood Control District to secure nearly \$25 million in funding for flood control, environmental and recreation improvements identified in RISO along the South Platte River just north of Dartmouth Avenue to 20th Street. Construction of these improvements is underway and will be complete by June 2015.

Since 1974, The Greenway Foundation has helped to facilitate the investment of \$130 million of public and non-profit resources in the South Platte River and adjacent waterways in the Denver metropolitan region. The following is a list of the types of projects that have been successfully built:

- 100 miles of trail constructed through the metropolitan Denver area
- 100 acres of parks, open space and natural areas developed and engaged
- 100,000 linear feet of waterway improvements created – environmental, recreational and water quality
- 11 miles of the South Platte River (SPR) Greenway in Denver
- 13 miles of Cherry Creek Greenway below Cherry Creek Reservoir
- Initiated construction of SPR Greenway in Adams County and Arapahoe County
- Initiated construction of Bear Creek Greenway in Arapahoe, Denver and Jefferson Counties
- Initiated construction of Cherry Creek South Greenway in Arapahoe and Douglas counties
- Created connection of SPR Greenway in Douglas County with C-470 and Chatfield State Park

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

N/A

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

☒

The Applicant will be able to contract with the CWCB using the Standard Contract

☐

The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant.

The Greenway Foundation does not have TABOR limitation with regard to grant money received from the State of Colorado.

## Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

<input checked="" type="checkbox"/>	Nonconsumptive (Environmental or Recreational)
<input type="checkbox"/>	Agricultural
<input type="checkbox"/>	Municipal/Industrial
<input type="checkbox"/>	Needs Assessment
<input type="checkbox"/>	Education
<input type="checkbox"/>	Other

Explain:

2. If you feel this project addresses multiple purposes please explain.

In addition to design of environmental and recreational improvements to this reach, the project will lead to design of solutions to in-river sedimentation problems and diminished capacity of the South Platte River channel, which has resulted in significant properties and structures judged to be in the 100-year floodplain (that were not mapped as such). These include Pepsi Center and student housing at the Auraria Higher Education Campus, among others.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

<input type="checkbox"/>	Study	<input checked="" type="checkbox"/>	Implementation
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4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

Please provide clarification of this question.

4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

Latitude:

39° 44' 21" N

Longitude:

104° 59' 3" W

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

This design will continue to build on the legacy of multi-objective river access, recreational enhancements and environmental and habitat improvements that are the key elements of the River North (RINO) and River South (RISO) Greenway master plans and the subsequent South Platte River Vision Implementation Plan (SPRVIP) and Confluence Park master plan. Components of the SPRVIP address some of the non-consumptive needs in the State and build upon the consensus-based environmental and recreational improvements described in the RINO and RISO Greenway master plans and Confluence Park master plan. In addition, these proposed improvements will progress design of the mitigation of a floodplain problem that impacts the area from Interstate 25 bridge that crosses the South Platte River near Mile High Stadium downstream to 19<sup>th</sup> Street as presented in the April 4, 2014, McLaughlin Whitewater Design Group South Platte River Floodplain Study – Speer Boulevard to 8<sup>th</sup> Avenue memorandum and the May 5, 2014 McLaughlin Whitewater Design Group Amendment to the South Platte River Floodplain Study Memorandum dated April 4, 2014.

If approved by the Metro Basin Roundtable and CWCB, this Water Supply Reserve Account (WSRA) grant will progress the RINO, RISO, Confluence Park and SPRVIP multi-objective recreation and habitat improvements from conceptual design to 60 Percent design for a portion of the South Platte River between 8th Avenue to 20<sup>th</sup> Street. The design effort will focus on validating design criteria, preparing preliminary design drawings and specifications, preparing 60 percent design documents and identifying required permits for river improvements in the following reaches described in the SPRVIP: Sun Valley Riverfront Park, Gates Crescent Park, Fishback Landing Park, Elitch Gardens/Centennial Gardens, Confluence Park, Commons Park and the river corridor downstream to 20<sup>th</sup> Street. Specific improvements target non-consumptive needs including multi-use river access facilities, channel bank modifications to provide additional habitat, and modification of existing drop structures to provide state-of-the-art boating and fishing experiences, as well as enhanced aquatic and terrestrial habitat through the length of the reach, tubing, wildlife enhancements, and pool and riffle habitat, as well as floodplain mitigation in this urban environment. The initial findings of the April 4, 2014 and May 5, 2014 memoranda conclude that extensive sediment deposition in the mile reach upstream of Confluence Park to Interstate 25 contributes to an increase in the 100-year effective floodplain limits when compared to the 2012 LOMR.

This project represents a portion of the SPRVIP and is identified in the Metro Basin Needs Assessment Report (March 2011) addressing non-consumptive needs, specifically targeting habitat restoration, recreation and floodplain mitigation improvements. In addition, it addresses the extensive deposition of sediment in the mile reach upstream of Confluence Park to 8<sup>th</sup> Avenue that contributes to an increase in the 100-year floodplain

limits when compared to the 2012 LOMR.



### Part III. – Threshold and Evaluation Criteria

1. Describe how the water activity meets these **Threshold Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

- a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.<sup>1</sup>

This water activity meets the eligibility requirements outlined in Part 2 of the Water Supply Reserve Account Criteria and Guidelines. This water project (structural and non-structural) will be presented to the Metro Basin Roundtable (the basin in which the activity will occur) at their July 14, 2014 meeting.

The Greenway Foundation is a non-governmental organization, eligible for WSRA grants. The proposed recreation and habitat improvement design will address non-consumptive needs and will not restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted by Colorado law and is consistent with CRS 37-75-102. The water activity meets the provisions of Section 37-75-104 (2) (c). This water activity will assist the basin and the state in addressing non-consumptive needs. The proposed in-channel recreation and habitat improvements are identified in the Metro Basin Needs Assessment Report (March 2011).

In addition to the habitat quality and recreational opportunities in this reach of the South Platte River, there are significant investments in improving recreational opportunities and habitat upstream and downstream of this reach, a few examples are bulleted below:

- UDFCD, Arapahoe County and Trout Unlimited have implemented recreation and habitat improvements in South Platte Park downstream of Chatfield Reservoir.
- The City and County of Denver, UDFCD and other funding partners are implementing the South Platte River Vision Implementation project between Grant Frontier Park and Johnson-Habitat Park, focusing on multi-objective recreation and habitat improvements recommended in the RISO plan.
- The Metro Wastewater Reclamation District is implementing a six-phase habitat improvement program in multiple reaches of the South Platte River in Adams

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<sup>1</sup> 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

County.

More continuous reaches with variability of depth, velocity and cover regimes will attract and support a more diverse assemblage of fish species. In addition, more connected recreational opportunities will increase the value of this amenity. There is strong community support and regional momentum associated with implementing multi-objective South Platte River improvements. Initiating this project now will continue to leverage this momentum and will result in more continuous reaches of the South Platte River with improved habitat and recreational opportunities throughout the most densely populated portion of the Front Range. This 60 percent design will provide the level of detail required to develop more accurate construction cost opinions, which will be used to identify and secure the funding that will be required to construct this project.

Support from CWCB, will allow the Team to develop a design that provides enhanced recreation opportunities, enhanced habitat for aquatic and terrestrial species, elimination of non-native and invasive riparian vegetation and establishment of native riparian vegetation, in addition to the additional flood mitigation and stream stabilization benefits that the City and UDFCD intend to implement, resulting in the most efficient use of limited funding resources.

- b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRTs evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

The Metro Basin Roundtable will consider the application at its July 14, 2014 meeting.

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.<sup>2</sup> The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

Yes. This water activity will address some of the Front Range nonconsumptive needs as described in the Metro Basin Needs Assessment Report (March 2011). The Metro Basin Needs Assessment report identified this reach of the South Platte River as a recreational focus area.

- d) Matching Requirement: For requests from the **Statewide Fund**, the applicants will be required to demonstrate a **25 percent** (or greater) match of the total grant request from the other sources, including by not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the contract or purchase order between the applicant and the State of Colorado is executed. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

Urban Drainage and Flood Control District and the City and County of Denver have pledged \$450,000 in matching funds to develop this 60% design.

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<sup>2</sup> 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

2. For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

**Evaluation Criteria** – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three “tiers” or categories. Each “tier” is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. WSRA grant requests for projects that may qualify for loans through the CWCBC loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCBC loan/WSRA grant package. For these CWCBC loan/WSRA grant packages, the applicant must have a CWCBC loan/WSRA grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

**Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs**

- a. The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).
- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.
- c. The water activity helps implement projects and processes identified as helping meet Colorado’s future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable’s basin-wide water needs assessment.

**Tier 2: Facilitating Water Activity Implementation**

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).
- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

**Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits**

- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.
- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.
- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.
- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.
- j. The water activity is complimentary to or assists in the implementation of other CWCBC programs.

Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

**Please attach additional pages as necessary.**

***(NOTE: The following is an overview of The Greenway Foundation's responses to the Evaluation Criteria Tier 1, Tier 2 and Tier 3. Responses to the Supplemental Scoring Matrix Applied to Evaluation Criteria Tiers 1-3 follow the overview.)***

The proposed water activity meets multiple objectives in the Tier 1 criteria. The proposed project addresses non-consumptive needs in the South Platte River and will promote collaboration between the Metro Basin Roundtable and the State of Colorado as well as intrabasin interests. Collaboration with the Metro Basin Roundtable and the State of Colorado as well as intrabasin interests will be a direct result of participation in the kickoff meeting and project workshop described in the attached Scope of Work.

The project will be presented to the Metro Basin Roundtable at their July 14, 2014 meeting. This project will progress implementation of an identified project and process in the Metro Basin Needs Assessment Report (March 2011) addressing non-consumptive needs, specifically targeting habitat restoration and recreation improvements.

The proposed improvements will integrate multi-objective recreation, habitat and floodplain mitigation enhancements that will benefit the Front Range community and one of the most densely-populated areas in the State of Colorado. This water activity will best leverage existing funding commitments, use of public and private resources and will result in constructed improvements. Because of the momentum and broad community support associated with the River Vision Implementation Plan, currently being constructed upstream of this reach, this project is an ideal candidate for implementing nonconsumptive improvements in the South Platte River through Denver.

This project meets multiple objectives in the Tier 2 Evaluation Criteria. WSRA funds are necessary for successful completion of the project and further leveraging of local monies. A significant investment has been expended to date to develop this South Platte River vision, as portrayed in the RINO, RISO and RVIP plans.

Project stakeholders (The Greenway Foundation, the City and County of Denver and the Urban Drainage and Flood Control District) have already secured \$450,000 in matching funds, but the current scope does not include establishment of a riparian floodplain within this area or non-native and invasive vegetation removal along the west bank of the South Platte River. Improvements within this reach will amplify the benefit of recreation and habitat improvements that are being constructed downstream as part of the River Vision Implementation by expanding the reach of the South Platte River with continuous in-channel habitat diversity and enhanced recreational opportunities.

Funding is needed to further leverage efficiencies from the River Vision program, hence the basis for this application. The amount of matching funds far exceeds the 25 percent requirement; in fact, the committed matching funding is 100 percent of the grant request.

Community support for this effort is strong. The former Mayor of Denver, now Governor Hickenlooper, officially endorsed this three-plus year planning and visioning effort. In addition, Denver City Council issued a proclamation in November 2010 supporting the River

Vision Implementation Plan. The Greenway Foundation has an excellent track record of delivering improvements to the South Platte River and tributaries for 40 years.

This project meets multiple objectives in the Tier 3 Evaluation Criteria. The water activity helps meet identified environmental and recreational needs, as identified in the Metro Basin Needs Assessment Report and provides a high level of benefit to Colorado in relationship to the amount of funds requested. CWCB participated in the development of the RISO plan and design of recreation and habitat improvements (at Grant Frontier, Pasquinel's Landing and Overland Pond parks). This project will maximize benefits by providing more continuous habitat diversity within the South Platte River in Denver and build on the work CWCB has funded associated with this project over the last three years.

## Supplemental Scoring Matrix Applied to Evaluation Criteria Tiers 1-3

Statewide Water Supply Reserve Account Grant Applications Only

In order to help applicants better understand how staff determines the level at which a Statewide Account application meets the evaluation criteria, the supplemental scoring matrix included below was designed. No minimum score is required for Statewide Account applications to be eligible for funding, but the tool will be used to help staff compare grants for this increasingly competitive grant program. However, the Scoring Matrix will not eliminate or disqualify an application and the Board retains the final decision making authority.

*100 points possible*

**Tier 1: Promotes cooperation and meets water management goals/needs: Water activity addresses identified needs and or gaps, is multiple purpose, addresses interests of multiple basins, and/or promotes cooperation. 60 total points possible**

1. Environment: The water activity addresses environmental needs or gaps.  
*7 points possible. Points are additive.*

Potential improvements to be incorporated into the preliminary design may include, but are not limited to:

- creation of larger emergent bench to accommodate wetland filtration basins
- wetlands design
- fishing access design
- boat launch with fish habitat design
- trail and boardwalk design and
- revegetation and riparian habitat restoration.

- a. Indicates helps, or studies how to meet BRT identified environmental gap/need: **1 pnt**

This grant will significantly help the City and County of Denver and Urban Drainage and Flood Control District to address the nonconsumptive needs in this reach of the river by planning new and improved in-river fish habitat, revegetation and riparian habitat improvements, wetlands design, along with the urgent channel improvements

to address problems they have recently identified.

b. Measurably & actively protects or restores Environmental Gap: **2 pnts**

With the study not yet underway, it is difficult to assess how to measure improvements to river health and to fish, wildlife and riparian habitat in this very urban reach. At the same time, there will be measurable environmental improvements from the work that will be done to improve flow in the main channel of the river and that the plan developed will call for adding wetlands along the river where possible.

c. Is a Project and/or Method that meets a need identified in needs assessment and/or BIP: **2 pnts**

Project will include improvements to the South Platte River that will serve multiple purposes – remove sediment to improve channel flow, improve river health and provide protection of aquatic species, as well as address need for recreation opportunities.

d. Has active participation from at least one other relevant organization or non-governmental organization(s) as demonstrated by support letters, match, or other means: **2 pnts**

In addition to The Greenway Foundation (prime sponsor of this study request), the Urban Drainage and Flood Control District, City and County of Denver Public Works and City and County of Denver Parks and Recreation departments are active participants in this study and will be fully involved in implementing the recommendations that result from this study. Letters from each entity are included in the grant application package.

2. Municipal & Industrial: The water activity addresses municipal or industrial needs or gaps through conservation, reuse, agricultural sharing, completion or development of identified projects or processes, and/or other methods.

*7 points possible. Points are additive.*

a. Indicates helps, or studies how to meet BRT identified M&I gap/need: **1 pnt**

To the extent that preventing water loss due to flooding and improving the flow and health of the river in central Denver adds to the amount of water that flows to downstream users, this project does meet a portion of the identified gap. As the WISE project is implemented, reusing some water in the South Platte and using some water rights that allow use to extinction, every drop of water in the river will be valuable. Restoring the river channel will help improve delivery of WISE and downstream users' shares.

b. Measurably & actively develops new or conserved water to meet M&I Gap: **2 pnts**

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No

- c. Is a Project and/or Method that meets a need identified in needs assessment and/or BIP: **2 pnts**

No

- d. Has active participation from at least one other relevant organization or non-governmental organization(s) as demonstrated by support letters, match, or other means: **2 pnts**

In addition to The Greenway Foundation, Urban Drainage and Flood Control District, City and County of Denver Public Works Department and City and County of Denver Parks and Recreation Department will be partners. Letters from are included in this grant application package.

3. Agriculture: The water activity addresses agricultural needs or gaps.

*7 points possible. Points are additive.*

- a. Indicates helps, or studies how to meet BRT identified agricultural gap/need: **1 pnt**
- b. Measurably & actively develops new or conserved water to meet Agricultural Gap: **2 pnts**
- c. Is a Project and/or Method that meets a need identified in needs assessment and/or BIP: **2 pnts**
- d. Has active participation from at least one other relevant organization or non-governmental organization(s) as demonstrated by support letters, match, or other means: **2 pnts**

4. Recreation: The water activity addresses recreational needs or gaps.

*7 points possible. Points are additive.*

- a. Indicates helps, or studies how to meet Recreational Gap: **1 pnt**

This study will lead to 60 percent design of revised and improved in-river recreation course. A boat chute was constructed in the river at Confluence Park in the early 1980s. Since then, there have been significant improvements in design for such amenities.

- b. Measurably & actively develops new or conserved water to meet Recreational Gap: **2 pnts**

Planning process will lead to 60 percent design of sediment removal and improvement of river flow in the mile-long section of the river from 8<sup>th</sup> Avenue downstream to 19<sup>th</sup> Street. It will also result in design of an improved in-river recreation course. CWCB



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nonconsumptive needs study (2011-2012) identified recreation as the top need in this reach of the river.

- c. Is a Project and/or Method that meets a need identified in needs assessment and/or BIP: **2 pnts**

The study will lead to 60 percent design of recreation facilities – top need identified in the Non-Consumptive Use Assessment completed in 2011.

- d. Has active participation from at least one other relevant organization or non-governmental organization(s) as demonstrated by support letters, match, or other means: **2 pnts**

A letter from Denver Parks and Recreation Department is included.

5. Interstate Compacts: The water activity addresses interstate compacts.

*7 points possible. Points are additive.*

- a. Indicates helps, or studies how to meet BRT identified compact issue/need: **1 pnt**
- b. Measurably & actively protects or meets the identified compact issue/need: **2 pnts**
- c. Is a Project and/or Method identified in needs assessment and/or BIP: **2 pnts**
- d. Has a letter from the Colorado Attorney General's Office or the Division of Water Resources substantiating that the grant addresses compact related issues or needs: **2 pnts**

6. Multiple Basins: Activity addresses needs or interests of multiple basins (where relevant, a basin of origin letter of support is required to achieve minimum points).

*16 points are possible. Points are additive.*

- a. Indicates helps meet multiple basin needs: **2 pnts**

Improving river flow, habitat and river health of the South Platte River through central Denver will have a positive effect on downstream areas that are part of the South Platte Basin.

- b. Has letters demonstrating support from 2-3 basin roundtables: **2 pnts**

Letter from Metro Basin Roundtable will be sought following their meeting on July 14. Letter from South Platte Basin Roundtable will also be requested, though funding from that basin will not be requested for this grant.

- c. Has letters demonstrating support from 4-6 basin roundtables: **2 pnts**

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- d. Has letters demonstrating support for 7-9 basin roundtables: **2 pnts**
- e. Has letters of support from all affected basin roundtables: **2 pnts**
- f. Has matching commitment from 2-3 basin roundtables: **2 pnts**
- g. Has matching commitment from 4-6 basin roundtables: **2 pnts**
- h. Has matching commitment from 7-9 basin roundtables: **2 pnts**

7. Multi-Purpose & Cooperative Projects: The water activity addresses multiple needs or issues and promotes cooperation and collaboration.

*6 points possible. Points are additive.*

- a. The project has evidence of active participation from three or more partners: **2 pnts**

The Greenway Foundation, Urban Drainage and Flood Control District, City and County of Denver Public Works Department and City and County of Denver Parks and Recreation Department are active participants in this study – and follow-on projects will result from the study.

- b. The project has evidence of active participation from more than one of the interests listed above (Environment, M&I, Agriculture, Recreation, Interstate Compacts): **2 pnts**

Yes. Environment, recreation and in addition flood prevention and river health will aid downstream agricultural interest, too. That will help quantity and quality of water delivered to the lower portion of the South Platte Basin as well as the Metro Basin for M&I and agricultural use.

- c. The project has evidence of conservation component: **2 pnts**

Improving the capacity of the South Platte River channel through Denver will help prevent flooding in times of severe storms. Preventing water loss through flooding equates to conservation of water for downstream users.

8. Intrabasin: Activity is effective in addressing intra-basin needs or issues.

*3 points possible. Points are additive.*

- a. Activity addresses needs in more than one watershed within a basin: **1 pnt**

No

- b. Activity addresses a defined concern, goal, or measurable outcome identified in the basin through SWSI, the Basin Needs Assessments, Colorado's Water Plan, or the Basin Implementation Plans: **2 pnts**

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Addresses recreational need in the Metro Basin as identified in the nonconsumptive needs plan. (Colorado Water Plan and Basin Implementation Plan are still being completed for the Metro/South Platte basins. This addresses flood prevention and wildlife and channel and river health improvements in the Denver portion of the river from 8<sup>th</sup> Avenue to 20<sup>th</sup> Street – and downstream from there as well.

**Tier 2: Facilitates Water Activity Implementation:** Activity has a demonstrated need and/or significant match

*25 points possible*

1. **Matching Commitment – Basin Funds:** Basin account match compared to the total percent of grant request (basin + statewide).

*9 points possible*

- a. 6% - 25% Basin Match: **2 pnts**
- b. 26% - 50% Basin Match: **3 pnts**

The Greenway Foundation is requesting \$150,000 from the Metro Basin Roundtable Account. In addition, \$300,000 is requesting from the Statewide Account for a total of \$450,000 from the WSRA program for a total WSRA grant request of \$450,000. This represents a 33% Basin Match.

- c. 51% - 75% Basin Match: **4 pnts**
- d. 76% - 100% Basin Match: **5 pnts**
- e. 101% – 200% Basin Match: **6 pnts**
- f. 201% – 300% Basin Match: **7 pnts**
- g. 301% – 400% Basin Match: **8 pnts**
- h. 401% or greater Basin Match: **9 pnts**

2. **Matching Commitment – Other Sources:**<sup>2</sup> Match percentages based on the total percent of the grant request (basin + statewide), which may include loans or grants from sources other than the WSRA grant program, applicant cash and/or in-kind match, partner cash and/or in-kind match.

*9 points possible*

- a. 5% non-WSRA Match: **1 pnt**
- b. 6% - 25% non-WSRA Match: **2 pnts**
- c. 26% - 50% non-WSRA Match: **3 pnts**
- d. 51% - 75% non-WSRA Match: **4 pnts**
- e. 76% - 100% non-WSRA Match: **5 pnts**

The Greenway Foundation is requesting a total of \$450,000 from the WSRA program (\$150,000 from the Metro Basin Roundtable Account and \$300,000 from the Statewide Account). This will be matched by \$450,000 from the City and County of Denver and Urban

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Drainage and Flood Control District. This represents a 100% non-WSRA Match.

- f. 201% – 300% non-WSRA Match: **7 pnts**
- g. 101% – 200% non-WSRA Match: **6 pnts**
- h. 301% – 400% non-WSRA Match: **8 pnts**
- i. 401% or greater non-WSRA Match: **9 pnts**

3. Grant Funding critical to success:

*7points possible*

- a. The applicant has demonstrated that project will likely not proceed without statewide grant due to lack of funds: **4 pnts**

Without WSRA Metro Basin Roundtable Account and Statewide Account funding the proposed *8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental Improvements and Floodplain Mitigation, Denver* design study would not be able to proceed. In order to undertake a design study that addresses the three components of the design study – nonconsumptive environmental improvements, nonconsumptive recreational improvements and in-river sedimentation and diminished capacity of the South Platte River channel to contain the 100-year floodplain solutions, it is estimated that at least \$900,000 will be needed to undertake this design study. Of this amount, \$450,000 will come from the City and County of Denver and Urban Drainage and Flood Control District. Project sponsors would be short \$450,000 of the estimated amount to undertake the design study without WSRA funding. The work coming out of this study will undoubtedly require extensive in-river work and could involve dewatering at least one section of the river bed. Therefore, going to 60 percent design at this time will save substantial dollars.

- b. The applicant has demonstrated that they have explored all other types/avenues of funding: **3 pnts**

The City and County of Denver has made preliminary application for the State of Colorado FEMA-funded Hazardous Mitigation Grant Program (HMGP). In order to be invited to make full application a benefit-cost ratio of 1:1 must be met. The City's pre-application has established a benefit-cost ratio of .33. It is not expected that the City will be invited to submit a full HMGP application.

The U. S. Army Corps of Engineers is about to embark on a Denver County Feasibility Study. However, the study will focus on the River North area (from 20<sup>th</sup> Street downstream to the Denver-Adams County line) and in East Harvard Gulch and Sanderson Gulch upstream of this identified study area (8<sup>th</sup> Avenue to 20<sup>th</sup> Street). It will not include the 8<sup>th</sup> Avenue to 20<sup>th</sup> Street reach of the South Platte River.

The WSRA program is the only funding source that would provide the needed resources to make up the gap between the \$450,000 in City and County of Denver and Urban Drainage

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and Flood Control District funding and the additional \$450,000 needed to undertake the 8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental Improvements and Floodplain Mitigation, Denver design study.

### **Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits:**

*15 points possible*

1. Addresses Issues of Statewide Value: The water activity helps sustain agriculture or open space, or meets environmental or recreational needs, or meets M&I needs, or helps M&I conservation efforts, or assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters (A minimum of two (2) activities must be met in order to score any points).

*5 points possible. 1 pnt for the first two, 1 pnt each thereafter.*

The Greenway Foundation 8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental Improvements and Floodplain Mitigation, Denver design study would meet nonconsumptive needs as identified in the 2011 Metro Basin Roundtable Needs Assessment as both preliminary design of environmental and recreational improvements will be undertaken in addition to preliminary design of solutions to in-river sedimentation problems and diminished capacity of the South Platte River channel which has resulted in approximately 35 structures judged to be in the 100-year floodplain (that were not mapped as such).

The design study will identify projects that will meet environmental and recreational nonconsumptive goals of the Metro Basin Roundtable, including creation of larger emergent bench to accommodate wetland filtration basins, wetlands design, fishing access design, boat launch with fish habitat design, trail and boardwalk design, and revegetation and riparian habitat restoration. Projects, such as creating larger emergent bench to accommodate wetland filtration basins, wetlands design, and revegetation and riparian habitat restoration, contribute to creating a healthier river that benefits downstream agricultural users and contributes to maximizing the utilization of state waters.

2. Threatened and Endangered Species: The water activity assists in the recovery of threatened and endangered wildlife/fish species or Colorado State species of concern.

*5 points possible*

3. Cost-Benefit is High for Colorado: The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.

*5 points possible*

- a. Scope of work builds on previous studies, existing data, and other relevant information to bolster the application; or proposed project completed a feasibility study; or the project

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budget was prepared by an licensed engineer:

**1 pnt**

The Greenway Foundation *8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental Improvements and Floodplain Mitigation, Denver* design study will make use of information from previous studies, existing data, and other relevant information to bolster this application. Examples include the 2010 River Vision Implementation Plan; 2010 U. S. Army Corps of Engineers Reconnaissance Study Addendum for Denver County, Denver and Adams Counties Study, South Platte River and Tributaries, Section 905(b) (WRDA 86), Preliminary Analysis; 2009 River South (RISO) Greenway Master Plan; 2008 River North (RINO) Greenway Master Plan; 2006 Greenprint Denver Plan; 2004 Weir Gulch Inventory and Rehabilitation Plan; 2003 Denver Parks and Recreation Game Plan; 2003 Water Conservation Plan, City of Denver Parks and Recreation; 2003 U. S. Army Corps of Engineers Denver County Project Feasibility Study; 1983 Urban Drainage and Flood Control District South Platte River Hydrologic Study – Chatfield Dam to Sand Creek (Merrick); and 1972 Sanderson Gulch/Weir Gulch Major Drainageway Planning.

b. Applicant has successfully completed similar projects in the past: **1 pnt**

Working with the City and County of Denver, The Greenway Foundation has successfully completed work on two WSRA study grants (2011 and 2012) for Grant Frontier, Pasquinel's Landing and Overland Pond parks along the South Platte River in Denver. Since completion of the above studies, more than \$24.5 million in improvements are being constructed in and along the South Platte River in Denver, part of the first phase of River Vision Implementation Plan projects. A WSRA grant for construction (2013) is one element in this overall funding.

Since 1974, The Greenway Foundation has been involved in creating:

- Over 100 miles of interconnected multi-use waterway trails throughout the Metro Denver area
- Over 100 acres of urban parks, natural areas and open space enhancements along the South Platte and its tributaries throughout the Denver metropolitan area
- Over 100,000 linear feet of water quality, recreational and environmental improvements to the South Platte River and its tributaries throughout the Denver metropolitan area
- A youth education/summer camp/youth employment program - known as South Platte River Environmental Education (SPREE) - that provides opportunities to over 7,000 young people annually to, get outside, play, learn, and engage with Nature In Their Own Back Yard". SPREE has earned more CAEE (Colorado Alliance for Environmental Education) Excellence in Environmental Education awards than any other program in Colorado.

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- Community engagement events - including South Platte RiverSweeps and South Platte RiverFest that bring citizenry engagement for our city's greatest natural resources - our urban waterways
- Signature fundraising/friend raising events that support the mission of The Greenway Foundation including Reception on the River, Gala on the Bridge and After Party on the Bridge

With the tradition of The Greenway Foundation's four decades of fully engaging in the four legs of the "progress chair" - public, private, political and philanthropic - TGF is proud to be part of a partnership, involving over 15 additional river advocates, that since 2007, has resulted in:

- 2008 - the River North (RINO) Greenway Master Plan
- 2009 - the River South (RISO) Greenway Master Plan
- 2010 - A compilation/integration/engagement of these two significant visioning efforts into the River Vision Implementation Plan (RVIP), which was officially recognized and endorsed by the office of the Mayor of Denver and Denver City Council
- 2011 - the initiation of the effort to begin obtaining the funding required to create over \$75 million of short term recommendations with RVIP
- 2012-2014 – undertook the Greenway PURE Trash Reduction Campaign funded through a grant from EPA/Colorado Department of Public Health and Environment that focused on developing a public information and education effort to ultimately reduce and eliminate trash from the Denver metropolitan area's South Platte River and adjacent waterways
- 2014 - the initiation of the construction of five of the RVIP recommendations that will result in \$25 million of new environmental, recreational and water quality improvements to Denver's South Platte River Greenway in five different neighborhoods
- 2014 – the U. S. Army Corps of Engineers will undertake an examination of the South Platte River corridor and adjacent waterways through the Denver County Feasibility Study to identify possible environmental restoration and flood damage reduction projects

c. Applicant has active participation of professional contractors or partners with experience:

**1 pnt**

The Greenway Foundation has a 40-year track record working with professional contractors and/or partners coordinating design studies, grant applications and construction projects in the South Platte River corridor and adjacent waterways in the Denver metropolitan area. The Greenway Foundation has worked extensively with the City and County of Denver and Urban Drainage and Flood Control District on studies, grant applications and construction projects. Examples of studies include the 2008 River North (RINO) Greenway Master Plan, 2009 River South (RISO) Greenway Master Plan, 2010 River Vision Implementation Plan

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(RVIP), 2012 Great Outdoors Colorado River Corridors Initiative grant application. As previously noted, The Greenway Foundation is currently working with the City and County of Denver and Urban Drainage and Flood Control District as part of the \$24.5 million in construction projects currently underway in the South Platte River corridor, including the WSRA-funded design study at Grant Frontier, Pasquinel's Landing and Overland Pond parks. Other examples of construction projects include managing the construction of over 100 miles of interconnected multi-use waterway trails throughout the Denver metropolitan, 100 acres of urban parks, natural areas and open space enhancements along the South Platte and its tributaries throughout the Denver metropolitan area, and over 100,000 linear feet of water quality, recreational and environmental improvements to the South Platte River and its tributaries throughout the Denver metropolitan area.

- d. The water activity is complimentary to or assists in the implementation of other CWCB programs, for example water made available to the CWCB for the Stream and Lake Protection Program or compact compliance purposes: **1 pnt**

The Greenway Foundation *8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental Improvements and Floodplain Mitigation, Denver* design study will compliment other CWCB programs, including the Watershed Protection and Restoration program in addition to the Nonconsumptive Needs effort.

- e. Incorporates volunteers and/or education efforts to maximize public involvement and the opportunity to educate the public about water related to basin needs, issues, water availability, and solutions: **1 pnt**

The Greenway Foundation's Spring and Fall RiverSweep events along the river being hundreds of volunteers to help with tree planting, river cleanup, mulching, invasive species removal, and many other tasks. These volunteers are added to the volunteer databases of both The Greenway Foundation and the City and County of Denver Parks and Recreation, and all of them are directed to information about the waterways throughout the year. Many area residents participate year after year. Many corporate sponsors bring large groups of their employees to help.

The Greenway Foundation's SPREE program brings 7000 Denver Public Schools students down to the river for environmental education experiences each year from 1<sup>st</sup> through 6th grades. Summer programs bring hundreds more. Curricula in these award winning programs include water quality, wildlife and riparian habitat studies, water conservation and trash prevention and elimination. Programs for parents have been added as the programs have grown. And older students are becoming River Rangers, a step toward environmental studies as career choices. A new environmental education center is being constructed at Johnson-Habitat Park where SPREE headquarters is located as part of the River Vision Implementation Plan.



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The Greenway Foundation has extensive experience in engaging the public in South Platte River and adjacent waterways studies and projects over its 40-year history. For example, major public outreach efforts were undertaken for the 2010 River Vision Implementation Plan; 2009 River South (RISO) Greenway Master Plan; 2008 River North (RINO) Greenway Master Plan; and the 2012-2014 Greenway PURE Trash Reduction Campaign (EPA/Colorado Department of Public Health and Environment funded project).

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### Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

The water activity will consist of structural and non-structural improvements in the South Platte River in Denver. The water activity will progress design of recreation and habitat improvement concepts presented in the community-based, multi-stakeholder vision documents – the South Platte River Vision Implementation Plan (RVIP), River South (RISO) Greenway Master Plan and Confluence Park master plan. In addition, the water activity will progress design and mitigation of a floodplain problem that impacts the area from 8<sup>th</sup> Avenue downstream including the Interstate 25 bridge that crosses the South Platte River near Mile High Stadium downstream to 20th Street. The problem was recently identified and presented in the April 4, 2014, McLaughlin Whitewater Design Group South Platte River Floodplain Study – Speer Boulevard to 8<sup>th</sup> Avenue memorandum and the May 5, 2014 McLaughlin Whitewater Design Group Amendment to the South Platte River Floodplain Study Memorandum dated April 4, 2014. It is believed there are no water rights or uses thereof that would be affected by this design or the follow-on construction.

2. Please provide a brief narrative of any related studies or permitting issues.

The water activity will build upon the findings in the South Platte River Vision Implementation Plan (November 2010), River South (RISO) Greenway Master Plan (January 2010) and Confluence Park Master Plan (draft May 2013). In addition, the water activity will build upon the April 4, 2014, McLaughlin Whitewater Design Group South Platte River Floodplain Study – Speer Boulevard to 8<sup>th</sup> Avenue memorandum and the May 5, 2014 McLaughlin Whitewater Design Group Amendment to the South Platte River Floodplain Study Memorandum dated April 4, 2014. The initial findings of the April 4, 2014, and May 5, 2014, memorandums found that extensive sediment deposition in the approximately one-mile reach upstream of Confluence Park to Interstate 25 contributes to an increase in the 100-year effective floodplain limits when compared to the 2012 LOMR.

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### 3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.** All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

**Please provide a detailed statement of work using the template in Exhibit A.** Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

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### **REPORTING AND FINAL DELIVERABLE**

**Reporting:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Deliverable:** At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

### **PAYMENT**

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 10 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

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Signature:



Applicant: Jeff Shoemaker, Executive Director, The Greenway Foundation

Project Title: *8<sup>th</sup> Avenue to 20<sup>th</sup> Street, Recreation and Environmental Improvements and Floodplain Mitigation, Denver*

**Return an electronic version (hardcopy may also be submitted) of this application to:**

Craig Godbout – WSRA Application  
Colorado Water Conservation Board  
1580 Logan Street, Suite 200  
Denver, CO 80203  
303-866-3441, ext. 3210 (office)  
303-547-8061 (cell)  
[craig.godbout@state.co.us](mailto:craig.godbout@state.co.us)

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### Exhibit A

#### Statement of Work

**WATER ACTIVITY NAME** – *8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Multi-Objective Recreation and Environmental Improvements and Floodplain Mitigation Design, Denver*

**GRANT RECIPIENT** – The Greenway Foundation

**FUNDING SOURCE** – Metro Basin Roundtable Account \$150,000; Statewide Account \$300,000; Urban Drainage and Flood Control District \$225,000; City and County of Denver (Public Works) \$225,000

#### INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to **no more than 200 words**; this will be used to inform reviewers and the public about your proposal)

The *8<sup>th</sup> Avenue to 20<sup>th</sup> Street In-River, Recreation and Environmental Improvements and Floodplain Mitigation, Denver* project submitted by The Greenway Foundation will undertake design of multi-objective river access, recreational enhancements and environmental and habitat improvements included in the River North (RINO) and River South (RISO) Greenway master plans and the subsequent (adopted) South Platte River Vision Implementation Plan (SPRVIP) and Confluence Park plan for the South Platte River corridor in Denver. If approved, this Water Supply Reserve Account (WSRA) grant will answer needs identified in the Metro Basin Needs Assessment Report (March 2011) by addressing non-consumptive needs, specifically targeting habitat restoration, recreation and floodplain mitigation. This water activity will progress design of the mitigation of a floodplain problem that impacts the area from the I-25 bridge across the South Platte River near Mile High Stadium downstream to 20th Street as presented in the 2014 McLaughlin Whitewater Design Group South Platte River Floodplain memoranda. It will address extensive deposition of sediment in the one-mile reach upstream of Confluence Park that contributes to an increase in the 100-year floodplain limits when compared to the 2012 LOMR. New information places student housing at Auraria Higher Education Center and Pepsi Center in the floodplain.

#### OBJECTIVES

List the objectives of the project

This Statement of Work below, and the related Budget included in this grant application describe the scope of work for final design of these improvements. Urban Drainage and Flood Control District and the City and County of Denver have committed \$450,000 (combined) to support this project. The requested \$450,000 from the WSRA will fund one-half of the budget.

The design effort will focus on validating design criteria, preparing preliminary design drawings and specifications, preparing 60 percent design documents and identifying required permits for river improvements in the following reaches described in the SPRVIP: Sun Valley

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Riverfront Park, Gates Crescent Park, Fishback Landing Park, Elitch Gardens/Centennial Gardens, Confluence Park, Common Park and the area downstream to 20<sup>th</sup> Street. Specific improvements target non-consumptive needs including boating, tubing, fishing and wildlife enhancements, as well as floodplain mitigation in this urban environment. In addition, the water activity will build upon the April 4, 2014, McLaughlin Whitewater Design Group South Platte River Floodplain Study – Speer Boulevard to 8<sup>th</sup> Avenue memorandum and the May 5, 2014 McLaughlin Whitewater Design Group Amendment to the South Platte River Floodplain Study Memorandum dated April 4, 2014. The initial findings of the April 4, 2014 and May 5, 2014 memorandums found that extensive sediment deposition in the mile reach upstream of Confluence Park to Interstate 25 contributes to an increase in the 100-year effective floodplain limits when compared to the 2012 LOMR.

Improvements in these reaches, as identified in the SPRVIP, include developing a more defined low-flow channel, multi-use river access facilities, channel bank modifications to provide additional habitat, and modification of existing drop structures to provide state-of-the-art boating and fishing experiences, as well as enhanced aquatic and terrestrial habitat through the length of the reach and removal of non-native and invasive riparian vegetation. Implementation of this project will greatly improve river access, improve the river's wildlife habitat, provide a water quality benefit and provide additional floodplain mitigation in this reach. The project includes development of pool and riffle habitat and recreation opportunities, bank stabilization and additional riparian habitat.

Where possible, new wetland and riparian habitats will be created with self-sustaining native vegetation. In addition to providing recreation and habitat benefits, these areas will be designed to help pre-treat urban stormwater runoff from adjacent neighborhoods that previously discharged directly into the South Platte River.

This water activity addresses nonconsumptive needs and meets the needs and interests of the Metro Basin as a part of the South Platte River watershed. This proposed project will help sustain environmental and recreational needs and is of statewide significance. This project represents a portion of the SPRVIP and is identified in the Metro Basin Needs Assessment Report (March 2011) addressing non-consumptive needs, specifically targeting habitat restoration, recreation and floodplain mitigation improvements. In addition, it addresses the extensive deposition of sediment in the mile reach upstream of Confluence Park to 8<sup>th</sup> Avenue that contributes to an increase in the 100-year floodplain limits when compared to the 2012 LOMR.

### **TASKS**

Provide a detailed description of each task using the following format

#### **Task 1 – Project Management and Meetings** **Description of Task-Method/Procedure**

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Upon Notice to Proceed, the Project Team will develop the Project Management Plan (PMP) to detail the project approach, quality management procedures, communication protocols, budget, and schedule for the project. As part of the PMP, the Team will work with the stakeholders to define expectations including required input on the design features and the deliverables including plans and specifications. The PMP will also include a summary of anticipated coordination between stakeholders and permitting agencies.

A detailed project schedule will be developed and updated on an as needed basis to reflect any substantive changes in the plan.

The Team will provide monthly progress reports which will accompany invoices and include task status, critical decisions, planned activities and an updated schedule.

The Team will submit monthly invoices for review and approval. Invoices will include the monthly progress report and a schedule update.

### **Deliverables**

- Project Management Plan
- Monthly progress reports (12 assumed)
- Bi-weekly progress meetings and summaries

### **Task 2 – Data Acquisition**

#### **Description of Task-Method/Procedure**

The Team will conduct/participate in a project kick-off meeting with stakeholders. The kick-off meeting will address the following:

- Project and scope overview
- Schedule
- Communications procedures
- Review of information currently available
- Requests for additional information
- Goals and expectations

The kick-off meeting will include a visit to the project site by the Team and interested stakeholders to assess and confirm site conditions and further identify project issues.

The Team will obtain information regarding the project and project site, as available. The Team will contact Denver City staff and Urban Drainage and Flood Control District to identify the existence of current aerial photography, a Flood Hazard Area Delineation (FHAD), Systems Outfall Planning Study, and updated hydrologic information and/or hydraulic modeling. The Team will review all information obtained and incorporate pertinent data into the project on an as-needed basis.

The Team's land surveyor will supplement available topographic, planimetric and utility information with site surveys of the project area. Project site mapping (Channel corridor) will



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include a topographic survey accurate to 0.25-foot and the development of 0.5-foot contour topography using NAVD88-92 vertical datum. The surveyor will identify tributary drainage facilities including storm drain and culvert inverts. Project area topographic mapping will be developed so that the data can be used in AutoCAD 3D 2007/2008 software to cut cross-sections and analyze project volumetrics. Planimetric mapping will include all surface features including the identification of known adjacent property boundaries, known easements or rights-of-way that may be affected by the proposed work. The utility survey will include subsurface, surface and overhead utility structures in the vicinity of the existing channel that could be affected by the proposed construction, initially using record drawings from utilities and agencies. Major utility crossings that may be affected by proposed improvements will be visually located using either invasive or non-invasive means, depending on the risk associated with excavation near the utility.

The Team's land surveyor will establish project benchmarks tied to permanent land survey system monuments that will be utilized throughout the project to locate existing and proposed facilities.

The Team's land surveyor will identify storm drain invert elevations at up to 20 locations in the project area tributary watershed. Where major utilities are identified (water transmission, sewer or high-pressure gas interceptor pipelines and fiber optic or other communication conduit bundles), the Team will visually locate the horizontal and vertical location of the crossing through potholing or other means, as necessary. For budgeting purposes, the Team has assumed that up to 20 crossings will be located in this way using up to two (2) potholes each.

The Team's geotechnical consultant will obtain necessary information to develop a design for the improvements, describe the field exploration, testing and analysis of the settlement under the design loading conditions. The goal of the geotechnical design is to limit non-uniform settlement of the improvements, and provide recommendations required for design and construction including structural foundation recommendations, concrete mix recommendations, and soil bearing strengths.

The Team's geotechnical consultant will complete additional geotechnical borings (to supplement available existing geotechnical information) to determine the geologic condition and groundwater regime beneath the channel and at locations of interests (drop structures). Ground water levels will be noted at each borehole. The borings will be completed using a drill rig supplied and operated by a local drilling company. An engineer or geologist will observe the drilling, obtain samples, and prepare a descriptive field log of each exploration.

Samples obtained from the exploration program will be tested to determine pertinent index and engineering properties. The laboratory tests may include moisture content, moisture/density relationship, grain size distribution, Atterberg limit determination, swell tests, and laboratory resistivity tests. Chemical testing will be performed to assess corrosion potential and the possible existence of hazardous materials.

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The Team will evaluate general geotechnical and groundwater conditions along the channel based on the results of the subsurface exploration program and field and laboratory testing. The Team will prepare a geotechnical report signed by a professional engineer registered in the State of Colorado. Information presented in the report will include: boring logs; laboratory test results; a discussion of subsurface conditions; the anticipated location of the groundwater table as it may affect the project; geologic hazards; geotechnical parameters for use in the design; geotechnical construction considerations and recommendations for bedding material, suitability of reusing on-site materials as fill, and backfill recommendations.

### **Assumptions**

- Available survey and geotechnical information will be supplied by Urban Drainage and Flood Control District and City and County of Denver.
- The Team will seek to address any identified water quality issues through design considerations and will not attempt to identify the source or make recommendations for source control.
- The Team will identify right-of-way and easement information from the Denver County Assessor's Office.
- Up to ten utility visual locations utilizing potholing or a non-invasive technique will be conducted.

### **Deliverables**

- The Team will provide a kick-off meeting and site visit summary.
- A summary of existing data obtained will be incorporated as background information in the Preliminary Design Report.
- The Team will provide project base mapping developed in this task.
- Project mapping will be included in the Final Preliminary Design Report.
- Geotechnical related design considerations will be included in the pre-design report.

## **Task 3 – Preliminary Design Development**

### **Description of Task-Method/Procedure**

The Team will perform site planning activities that will confirm preferred channel improvements utilizing existing hydrology and updated hydraulic analyses described in Task 5.

The Team will facilitate a meeting with stakeholders to review and refine the proposed channel improvements.

Investigation of the presence and location of existing utilities will be required. The Team is assuming that pressure and/or gravity pipelines may be present and may require crossing agreements to be obtained from the utility owners. In addition, construction access and other agreements may be needed from adjacent property owners. The Team will assist with identifying required agreements with adjacent property owners.

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The Team will summarize the results of Tasks 1 through 3 in a Draft Preliminary Design Report (PDR). The PDR will include modeling results, permitting requirements and critical path permits, constructability review, recommended design standards, and geotechnical recommendations. The team will build on the information developed as part of the Preliminary Design Report for the South Platte River Implementation Project – Grant Frontier/Overland Final Design to maximize efficiencies. An electronic copy (PDF) of the Draft PDR will be transmitted to stakeholders. The Team will attend a meeting with stakeholders to discuss comments on the Draft PDR prior to finalization. The Team will finalize the PDR by addressing comments received in the draft PDR review meeting. The final PDR will also be transmitted to stakeholders (in PDF format).

Following completion of the Preliminary Design Report, the Team will develop preliminary design drawings that will be taken to a 30 percent design level of completion. These predesign drawings will be included in the Final Preliminary Design Report.

The intent of the 30 percent deliverable is to set-up the plan and profile sheets, and provide typical details for structures and improvements; not all site-specific details will be included in the drawings. Preliminary Design drawings will be developed for the following improvements:

- A. Sun Valley Riverfront Park
- B. Gates Crescent Park
- C. Fishback Landing Park
- D. Elitch Gardens/Centennial Gardens
- E. Confluence Park
- F. Commons Park
- G. Area downstream to 20<sup>th</sup> Street

Potential improvements that will be incorporated into the preliminary design may include, but are not limited to the following:

- Creation of larger emergent bench to accommodate wetland filtration basins
- Wetlands design
- Fishing access design
- Boat launch with fish habitat design
- Trail and boardwalk design
- Revegetation and riparian habitat restoration

### **Deliverables**

- Existing and Proposed Conditions 100-year flow HEC-RAS analysis, and proposed conditions analysis using range of design flows.
- Electronic file model input and output data will be included in the Preliminary Design Report.
- Proposed Improvement Workshop
- Preliminary Design Report Review Workshop

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- Workshop documentation
- Preliminary and Final PDR PDFs, including 30 percent complete design drawings and a list of required technical specifications included in the Final PDR.
- Opinion of Probable Construction Cost

### **Task 4 - 60 Percent Design Development**

#### **Description of Task-Method/Procedure**

The Team will prepare 60% design documents – in accordance with recognized City and/or Urban Drainage and Flood Control District Standards which are similar in size, scope, and budget to the Project. The specific scope included for each submittal is described in more detail below.

#### **Deliverables**

- 60% Submittal Package

The Team will work with the stakeholders to refine the preliminary design to meet the overall construction budget for each project area based on the available funding and its requirements.

- The Team will refine the preliminary design drawings based on stakeholder comments and additional detail will be provided as the design develops. This includes revising the preliminary design drawings for the project areas described above and advancing the design to a 60% level of completion. One drawing package will be prepared and will include design for the project area.
- The Team will develop an opinion of probable construction cost (OPCC) cost. The resulting OPCC will be a class 2 estimate (per ASTM E 2516 Cost Estimating Guide).
- The Team will develop a draft Project Manual, which includes technical specifications. The Team assumes the City and County of Denver or UDFCD will provide procurement, contracting and general requirements for project construction. Procurement, Contract and General Requirements will include City or UDFCD standard Contract Forms, and General and Supplementary Conditions.
- The submittal package may include the following documents for the overall project:
  - Cover Sheet
  - General Notes and Standard Symbols Sheet(s)
  - Survey Control Plan
  - Demolition/Removal Plans
  - Utility Plans
  - Existing Conditions Plan Sheets
  - Site Plan Sheets
  - Grading Plan Sheets
  - Channel Plan and Profile Sheets (existing & proposed)
  - Channel Cross Sections
  - Landscaping Plans and Details

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- Irrigation Plans and Details
- Standard and Project Specific Details
- Erosion Control Plans & Narrative (for SWMP)
- Draft Project Manual (Technical Specifications)
- Class 2 OPCC
- Draft Drainage Report
  - The plans will be consistent with the City's requirements (scale, detail, layout and configuration, etc.).
  - The deliverable will meet, at a minimum, the submittal requirements specified in the City and County of Denver Capital Project Engineering Plan Review Submittal Checklist.
  - The Team will provide an electronic copy (.pdf) of the 60% plan set.
- The Team assumes only one 60% submittal for the overall project will be prepared. The City will submit the 60% design documents to PCO for review. The Team assumes the 60% design will be developed in coordination with the City and UDFCD during progress meetings to maintain the schedule and avoid multiple submittals.

### **Task 5 – Floodplain Analysis and Hydraulic Modeling**

#### **Description of Task-Method/Procedure**

The Team will perform a detailed analysis of the 100-year floodplain and quantify the impacts to structures based on the information presented in the April 4, 2014, McLaughlin Whitewater Design Group South Platte River Floodplain Study – Speer Boulevard to 8th Avenue memorandum and the May 5, 2014 McLaughlin Whitewater Design Group Amendment to the South Platte River Floodplain Study Memorandum dated April 4, 2014.

Existing and proposed conditions flow characteristics within the project reach will be evaluated. The Team will utilize this site-specific information to refine conceptual channel improvements and finalize the design. The Team will utilize HEC-RAS and modify the effective hydraulic model to quantify hydraulic characteristics of the improvements for each deliverable milestone.

#### **Deliverables**

- Existing and Proposed Conditions HEC-RAS models and results.
- Electronic file model input and output data will be included in the Preliminary Design Report and the CLOMR.

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### **REPORTING AND FINAL DELIVERABLE**

**Reporting:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Deliverable:** At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs. 3

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### **BUDGET**

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above. **Total Costs**

See attached Budget (Greenway Denver WSRA CWCB Grant Fees 6-25-14)