



COLORADO WATER CONSERVATION BOARD

**WATER SUPPLY RESERVE ACCOUNT
GRANT APPLICATION FORM**



South Platte River Recreation and Habitat Improvement Preliminary Design

Name of Water Activity/Project

Approving Basin Roundtable

\$250,000

Amount from Statewide Account

\$200,000

Total Amount of Funds Requested

Amount from Basin Account

\$25,000 from Metro Basin and \$25,000 from South Platte Basin

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1. Reference Information
2. Insurance Requirements (Projects Over \$25,000)
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Form Revised March 2009

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/approval is outlined in Attachment 1.

Once approved by the local Basin Roundtable, the applicant should submit this application, a detailed statement of work, detailed project budget, and project schedule to the CWCB staff by the application deadline.

The application deadlines are:

- Basin Account – 60 calendar days prior to the bi-monthly Board meeting
- Statewide Account – 60 calendar days prior to the September Board meeting

Board Meeting Dates	Basin Account Deadlines	Statewide Account Deadlines
July 20-21, 2010	May 21, 2010	n/a
September 21-22	July 23, 2010	July 23, 2010
November 16-17	September 17, 2010	n/a
January 2011	60 days prior	n/a
March 2011	60 days prior	n/a
May 2011	60 days prior	n/a
July 2011	60 days prior	n/a
September 2011	60 days prior	60 days prior

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/IWMD>.

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:

Mr. Todd Doherty
Colorado Water Conservation Board
Water Supply Planning Section
WSRA Application
1580 Logan Street, Suite 200
Denver, CO 80203
Todd.Doherty@state.co.us

If you have questions or need additional assistance, please contact Todd Doherty of the Water Supply Planning Section at 303-866-3441 x3210 or todd.doherty@state.co.us.

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Part A. - Description of the Applicant (Project Sponsor or Owner);

1. Applicant Name(s):

Jeff Shoemaker

Mailing address:

The Greenway Foundation
5299 DTC Boulevard, Suite 710
Greenwood Village, CO 80111

Taxpayer ID#:

51-019-3575

Email address:

wjs@greenwayfoundation.org

Phone Numbers: Business:

(303) 818-8078

Home:

Fax:

(303) 455-7234

2. Person to contact regarding this application if different from above:

Name:

Position/Title

3. Eligible entities that may apply for grants from the WSRA 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) – special, water and sanitation, conservancy, conservation, irrigation, or 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.

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4. Provide a brief description of your organization

The Greenway Foundation is the 501c3 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
<http://www.greenwayfoundation.org/home/index.html>

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

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6. 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 copy of this standard contract is included in Attachment 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.

7. 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.

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Part B. - Description of the Water Activity

1. Name of the Water Activity/Project:

South Platte River Recreation and Habitat Improvement Preliminary Design

2. What is the purpose of this grant application? (Please check all that apply.)

☐

Environmental compliance and feasibility study

☐

Technical Assistance regarding permitting, feasibility studies, and environmental compliance

☐

Studies or analysis of structural, nonstructural, consumptive, nonconsumptive water needs, projects

Study or Analysis of:

☐

Structural project or activity

☐

Nonstructural project or activity

☐

Consumptive project or activity

☐

Nonconsumptive project or activity

☒

Structural and/ or nonstructural water project or activity

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3. 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.

This Water Supply Reserve Account (WSRA) grant will progress the River North Greenway Master Plan (RINO), River South Greenway Master Plan (RISO), and South Platte River Vision Implementation Plan (RVIP) recreation and habitat improvements from conceptual design to preliminary design for a four mile reach of the South Platte River between Dartmouth Avenue and Alameda Avenue. Specifically, WSRA funding will be used to establish design criteria, prepare preliminary design drawings and specifications and identify required permits for river improvements in the following reaches described in the South Platte RVIP: Grant Frontier Park and Overland Regional Park reach, and the Vanderbilt and Johnson-Habitat Park reach. Specific improvements target non-consumptive needs including boating, tubing, fishing and wildlife enhancements in this urban environment.

We recognize that final design will be required prior to constructing these improvements. The Greenway Foundation is committed to pursuing other sources of funding for final design and construction of these proposed improvements. Possible funding sources include remaining Shattuck Chemical settlement funds, City and County of Denver bond funds, Urban Drainage and Flood Control District, U. S. Fish and Wildlife Service programs, National Fish and Wildlife Foundation programs, Colorado Division of Wildlife programs, and Colorado Department of Public Health and Environment programs. Based on The Greenway Foundation's excellent track record of delivering improvements to the South Platte River and tributaries over the last 35-years, we have a high degree of confidence that we will obtain funding for final design once the preliminary design is complete and the design criteria are established. This Preliminary Design proposal is the next logical step in a sequence of events that will lead to the realization of these non-consumptive use benefits.

Improvements in these two reaches, as identified in the attached scope of work, include 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 through the length of the park. Implementation of this project will greatly improve the limited river access, improve the river's wildlife habitat and provide a water quality benefit in these reaches. The project includes design development of pool and riffle habitat and recreation opportunities, bank stabilization and additional riparian habitat. By laying back the side slopes along the river, 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 treat urban stormwater runoff from adjacent neighborhoods that previously discharged directly into the South Platte River.

This water activity addresses non-consumptive needs and meets the needs and interests of multiple basins. This proposed project will help sustain environmental and recreational needs and is of statewide significance. This project represents a portion of the South Platte RVIP and is identified in the Metro Basin Needs Assessment Report (March 2011), addressing non-consumptive needs, specifically targeting habitat restoration and recreation improvements.

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Part C. – 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.¹

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) was presented to, and unanimously approved by the Metro Basin Roundtable (the basin in which the activity will occur) at their July 6, 2011 meeting. It has also been presented to, and approved by the South Platte Basin Roundtable at their July 12, 2011 meeting. There was one minority opinion in opposition to the proposed project (Weld County Municipal Seat - Harold Evans). Mr. Evans asked the BRT if the Basin funds should be used on projects in the Basin. There was discussion with other Basin Members concluding that the project is worthwhile and improvements in the South Platte River will benefit the South Platte Basin as a whole. Attached are letters of support for the proposed water activity from the Metro and South Platte Basin Roundtable Chairs.

The Greenway Foundation is an 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 both basins in addressing non-consumptive needs. The proposed in-channel recreation and habitat improvements are specifically described in the Metro Basin Needs Assessment Report (March 2011). Completion of this Preliminary Design is the next logical step in a sequence of events that will lead to the realization of these non-consumptive use benefits.

¹ 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.

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- 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 and South Platte Basin Roundtables are in agreement and have approved the proposed water activity. Letters from the Metro and South Platte Basin Roundtable Chairs are attached.

- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² 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 non-consumptive 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. In addition, this proposed project is specifically identified in the Metro Basin Needs Assessment Report.

Letters from the Metro and South Platte Basin Roundtable Chairs are attached.

² 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.

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- d) Matching Requirement: For requests from the Statewide Fund, the applicants is required to demonstrate a 20 percent (or greater) match of the request from the Statewide Account. 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 application was submitted to the CWCB. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in Part D of this application)

The matching funds for the proposed water activity are being provided by the Metro Basin and South Platte Basin Roundtables (\$25,000 from each BRT).

The Greenway Foundation will continue to pursue other sources of funding for final design and construction of these proposed improvements. Possible funding sources include remaining Shattuck Chemical settlement funds, City and County of Denver bond funds, Urban Drainage and Flood Control District, U. S. Fish and Wildlife Service programs, National Fish and Wildlife Foundation programs, Colorado Division of Wildlife programs, and Colorado Department of Public Health and Environment programs.

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2. For Applications that include a request for funds from the Statewide Account, describe how the water activity meets the **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

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

Refer to letters of support from the Metro and South Platte Basin Roundtables.

The proposed improvements will integrate recreation and habitat enhancements that will benefit the Front Range community.

This water activity is the next critical step in implementing non-consumptive improvements in the South Platte River through a portion of Denver. This specific project has been identified in the Metro Basin Needs Assessment Report (March 2011).

Part D. – 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 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. This water activity will progress design of recreation and habitat improvement concepts presented in the community-based, multi-stakeholder vision documents - the RISO Master Plan and South Platte RVIP.

2. Please provide a brief narrative of any related or relevant previous studies.

The water activity will build upon the findings in the South Platte River Vision Implementation Plan (March 2011), the River South Greenway Master Plan (January 2010) and the River North Greenway Master Plan (April 2009).

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.

Please provide a detailed statement of work using the following template. Additional sections or modifications may be included as necessary. Please define all acronyms. If a grant is awarded an independent statement of work document will be required with correct page numbers.

Attachment 1 – Scope of Work

Introduction and Background

Continuing the legacy of river access, as envisioned for the South Platte River Greenway in the 1970's, is a cornerstone of the River North and River South Greenway Master Plans (RINO and RISO, respectively), and the subsequent South Platte River Vision Implementation Plan (RVIP). Components of the RVIP 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.

This Water Supply Reserve Account (WSRA) grant will progress the RINO, RISO, and RVIP recreation and habitat improvements from conceptual design to preliminary design for a portion of the South Platte River between Dartmouth Avenue to Alameda Avenue. The design effort will focus on establishing design criteria, preparing preliminary design drawings and specifications and identifying required permits for river improvements in the following reaches described in the RVIP: Grant Frontier Park and Overland Regional Park reach, and the Vanderbilt and Johnson-Habitat Park reach. Specific improvements target non-consumptive needs including boating, tubing, fishing and wildlife enhancements in this urban environment.

Improvements in these two reaches, as identified in the RVIP, include 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 through the length of the park. Implementation of this project will greatly improve the limited river access, improve the river's wildlife habitat and provide a water quality benefit in these reaches. The project includes development of pool and riffle habitat and recreation opportunities, bank stabilization and additional riparian habitat. By laying back the side slopes along the river, 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 treat urban stormwater runoff from adjacent neighborhoods that previously discharged directly into the South Platte River.

This water activity addresses non-consumptive needs and meets the needs and interests of multiple basins. This proposed project will help sustain environmental and recreational needs and is of statewide significance. This project represents a portion of the RVIP and is identified in the Metro Basin Needs Assessment Report (March 2011), addressing non-consumptive needs, specifically targeting habitat restoration and recreation improvements.

Summarized below is the proposed Scope of Work.

Task 1 – Project Management and Meetings

Upon Notice to Proceed, the project team will initiate preparation of a Project Management Plan (PMP) to detail the project approach, quality management procedures, design change notice and log, contact list, communication protocols, budget, and schedule for the project. The PMP will define project tracking using a variety of tools including a Project Risk Register, constructability review and conflict resolution. The PMP will also include the detailed scope, schedule including key milestones and deliverables, project team, and budget. As part of the PMP, the team will work with the stakeholders to define expectations including required input on the channel design features and the deliverables including plans and specifications. The PMP will also include a summary of anticipated coordination between stakeholders and permitting agencies. The final section of the PMP will address quality assurance and quality control, including names of technical reviewers and technical review milestones. The PMP is anticipated to contain the following sections:

1.0 Summary of Work and Schedule

a. Scope of work

- b. Stakeholder expectations
 - c. Budget
 - d. Schedule with tasks, meetings, milestones and delivery dates
- 2.0 Project Team
 - a. Team structure, including subconsultants
 - b. Team contact list
- 3.0 Communications and Document Management
 - a. Meeting schedule
 - b. Regulatory requirements
 - c. Outside agency coordination
 - d. Communications protocol
 - e. Project file index and directory structure
- 4.0 Quality Management
 - a. QA/QC Plan
 - b. Project team responsibilities
 - c. Constructability review
 - d. Project risk register
 - e. Conflict resolution
 - f. Design changes and acceptance

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, an updated schedule and changes to the PMP.

The team will maintain a project eRoom to facilitate scheduling, project documents, and related coordination. Members will be added to the e-Room at the stakeholders' request. The team will hold biweekly internal conference calls to update project progress, schedule, and specific design issues. Summaries from these meetings will be posted to the eRoom.

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
- eRoom start-up and maintenance
- Monthly progress reports (12 assumed)
- Bi-weekly progress meetings and summaries

Task 2 – Data Acquisition

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 obtain topographic, planimetric and utility surveys of the project area. Project site mapping (Channel corridor) will include a topographic survey accurate to 0.25-feet and the development of 0.5-foot contour topography using NAVD88-92 vertical datum. 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 adjacent property boundaries, 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 ten crossing 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 geotechnical borings 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. It is anticipated the 10 borings will be completed to an average depth of approximately 20 feet or until 10 feet of firm, competent material is encountered, whichever is deeper. 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.

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

- Surveyor will field survey up to 20 storm sewer invert elevations.
- 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.
- Up to ten geotechnical borings 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 – Site Planning

The Team will perform site planning activities that will confirm preferred channel improvements utilizing existing hydrology and updated hydraulic analyses. 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. The Team will utilize HEC-RAS and modify the effective hydraulic model to predict hydraulic characteristics of the improvements. The Team is assuming that one-

dimensional, steady-state modeling will be sufficient for assessing existing and proposed conditions, but will be prepared to conduct dynamic modeling if required.

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

The Team will identify necessary regulatory approval for implementation of the proposed channel improvements. This task will include initial contact with relevant regulatory agencies, as necessary, to identify submittal and permit application requirements, permit and submittal review schedules and application and submittal fees, if any. Permits, agreements and approvals for the channel will be required from several local, state and federal agencies as described below.

The South Platte River is considered *Waters of the U.S.* and, therefore, subject to the permitting requirements contained in Sections 401 and 404 of the Clean Water Act as administered by the USACE. The Team will conduct an on-site pre-application conference with representatives of the USACE Tri-Lakes District Office to assess site conditions and identify 404 Permit application requirements. The Team assumes that an Individual 404 Permit will be required. The Team will perform a jurisdictional wetland delineation, habitat and threatened and endangered species survey to include in a Preliminary Design Report.

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.

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. An electronic copy (PDF) of the Draft PDR will be uploaded to the eRoom. 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 posted to the eRoom (in PDF format).

Deliverables:

- Proposed Conditions HEC-RAS analysis using range of flows
- Hardcopy and electronic file model input and output data will be included in the Preliminary Design Report
- Proposed Improvement Workshop
- Preliminary Design Report Review Workshop
- Workshop documentation

Task 4 – Preliminary Design

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. Preliminary Design of Grant – Frontier Park to accommodate:

- Laying back of river banks
- 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

All existing active recreation features would remain, for example the playground, Greenway Trail and parking.

B. Preliminary Design of Pasquinel's Landing Park to accommodate:

- The creation of a backwater pond
- Laying back of river banks
- Creation of larger emergent bench to accommodate wetland filtration basins
- Wetlands design
- Boat launch with fish habitat design
- Fishing access design
- Trail design (relocation of Greenway Trail)
- Revegetation and riparian habitat restoration

All existing active recreation features would remain, for example the playground.

C. Preliminary design of the River access and boat launch just south of West Florida Avenue.

D. Preliminary design of riparian habitat along the River from West Dartmouth Avenue to West Florida Avenue.

E. Preliminary design of fish habitat adjacent to river banks for both game fish and high planes fish.

Deliverables:

- Preliminary and Final PDR PDFs, including 30 percent complete design drawings and a list of required technical specifications included in the Final PDR.

Proposed Schedule for South Platte River Recreation and Habitat Improvement Preliminary Design

Task	Date											
	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12
Task 1 - Project Management and Meetings ¹												
Task 2 - Data Acquisition												
Task 3 - Site Planning												
Task 4 - Preliminary Design Development												

1. Assumed notice to proceed November 1, 2011

Proposed Cost Summary

Labor												
Personnel:	Senior Project Manager	Engineer/Scientist 0	Engineer/Scientist 6	Engineer/Scientist 3	Senior Designer/Drafter	Designer/Drafter	Landscapist Architect	Landscapist Architect Support	Capital Representative	Admin/Word Processing	Total Hours	Total Labor Cost
Hourly Rate:	\$225.00	\$225.00	\$145.00	\$95.00	\$120.00	\$90.00	\$140.00	\$70.00	\$100.00	\$85.00		
Task 1 - Project Management and Meetings	88		24				36	16	60		224	\$ 35,440
Task 2 - Data Acquisition			24	64		20					108	\$ 11,360
Task 3 - Site Planning			136	292	24	40	48	104	32	64	740	\$ 76,560
Task 4 - Preliminary Design Development		32	96		120		120	600			968	\$ 94,320
Total Hours:	88	32	280	356	144	60	204	720	92	64	2,040	
Cost:	\$19,800	\$7,200	\$40,600	\$33,820	\$17,280	\$5,400	\$28,560	\$50,400	\$9,200	\$5,440		\$ 217,700

Other Direct Costs				
Item:	Copies No.	Mileage Miles		
Units: Unit Cost:	\$0.25	\$0.505		
Task 1 - Project Management and Meetings		99		\$ 50
Task 2 - Data Acquisition	300	148		\$ 150
Task 3 - Site Planning	3400			\$ 850
Task 4 - Preliminary Design Development	4000			\$ 1,000
Total Units:	7700	247		
Cost:	\$1,925	\$125		\$ 2,050

Subcontractors					
	Units: Unit Cost:	Stilwell Utility Locates \$1.10	Survey Firm \$1.10	Geotechnical Firm \$1.10	
Task 1 - Project Management and Meetings					
Task 2 - Data Acquisition		\$ 15,000	\$ 7,500	\$ 5,000	\$ 30,250
Task 3 - Site Planning					
Task 4 - Preliminary Design Development					
Total Units:		15,000	7,500	5,000	
Cost:		\$16,500	\$8,250	\$5,500	\$ 30,250

Total Costs					
		Labor	Sub-contract	Other Direct Costs	Total Project Cost
Task 1 - Project Management and Meetings		\$ 35,440		\$ 50	\$ 35,490
Task 2 - Data Acquisition		\$ 11,360	\$ 30,250	\$ 150	\$ 41,760
Task 3 - Site Planning		\$ 76,580		\$ 850	\$ 77,430
Task 4 - Preliminary Design Development		\$ 94,320		\$ 1,000	\$ 95,320
Total Cost:		\$ 217,700	\$ 30,250	\$ 2,050	\$ 250,000

July 13, 2011

Todd Doherty
Colorado Water Conservation Board
Water Supply Planning Section, WSR Application
1580 Logan Street, Suite 200
Denver, CO 80203

Dear Mr. Doherty:

Todd

The Metro Basin Roundtable (BRT) has determined that conducting the South Platte River Recreation and Habitat Improvement Preliminary Design is an important element in addressing the Metro BRT's basin non-consumptive needs. The preceding studies conducted by The Greenway Foundation identified areas with the most potential to enhance and increase greenways, public fish areas, flatwater and whitewater boating, waterfowl hunting, native riparian vegetation, and the abundance of aquatic life habitat. Based on the findings in the River North Greenway Master Plan (RINO), River South Greenway Master Plan (RISO) and the South Platte River Vision Implementation Plan (RVIP), improvements are greatly needed in this reach to increase the quality and abundance of existing habitat; in addition, there is limited access to the South Platte River through Denver and these stakeholder and community-developed improvements will provide much needed recreation access to the South Platte River through this densely populated portion of the State. The requested amount to be considered by the Metro Basin Roundtable is \$25,000.

At the July 6, 2011, Metro BRT meeting, the membership unanimously voted to recommend funding for the South Platte River Recreation and Habitat Improvement Preliminary Design in the amount of \$25,000; the Metro Basin Roundtable supports The Greenway Foundation's request for Statewide funds in the amount of \$200,000. There was a quorum present at the July meeting and the vote was unanimous in favor of the funding request.

Attached please find the application and supporting materials for this project. If you require additional information, please notify me accordingly.

Sincerely yours,



Rod Kuharich
Chair, Metro Basin Roundtable