

# Regional Restoration Master Plan

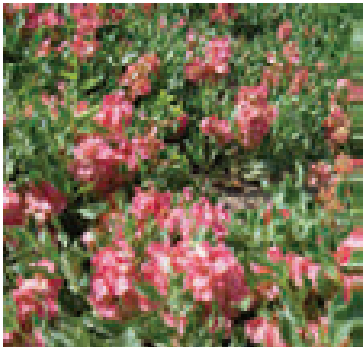
▲ Northeast Greenway Corridor



**Request for Rocky Mountain Arsenal Natural Resource Damages Funding**

A regional, integrated greenway and open space network for the Northeast Denver Metropolitan Area | July 2012





# Regional Restoration Master Plan

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## Northeast Greenway Corridor

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**Dear Trustees:**

It is with great pleasure that I am providing you, on behalf of the Northeast Greenway Corridor Advisory Committee and the Northeast Greenway Corridor Working Group, the Regional Restoration Master Plan for the Northeast Greenway Corridor. This plan accomplishes several important things and is the culmination of months of coordination and assessment work, especially by the NGC Working Group.

As you are well aware, the landmark settlement with the United States Army and Shell Oil Company provided a unique opportunity to invest in natural resource protection in the vicinity of the Rocky Mountain Arsenal National Wildlife Refuge. The settlement created two funds – the Foundation Fund and the Recovery Fund. In January 2009, the Colorado Natural Resource Trustees established the Northeast Greenway Corridor Advisory Committee to review and recommend project proposals from the Foundation Fund.

This Plan includes the Advisory Committee’s consensus recommendation for eleven projects totaling just over \$10 million. This Natural Resource Damages (NRD) investment is expected to be leveraged with roughly \$31 million of investment from local jurisdictions and other entities. The proposed projects cover over 800 acres and numerous riparian corridors. These projects are discussed in further detail in Chapter V of our report.

The Working Group also solicited project proposals for the Recovery Fund. A total of fifteen proposals were submitted for potential funding from the Recovery Fund. While it is recognized that the monies from the Recovery Fund might not be available for immediate distribution, it is hoped that legislative action can help these monies become available more quickly

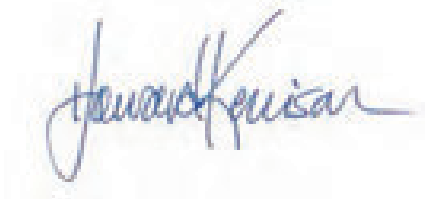
than current projections indicate. We are working with members of the General Assembly to determine if there is an approach to allow these funds to be allocated in the next two years.

These NRD investments, of course, are not being made in isolation. Several state and local jurisdictions, along with some non-profit organizations, have made and are planning to make additional investments in this part of the metropolitan area. In aggregate, these investments are creating a network of open space, protected stream and riparian corridors, and restored ecosystems that will be a natural resource legacy for the Front Range.

With your decision to fund these Foundation Fund projects, you will greatly enhance the natural resources in the metropolitan area. And, we believe that future investment of the Recovery Fund monies will not only supplement this initial investment, but will be catalytic in supporting future local government investment as well.

Thank you for your ongoing support throughout this process. We look forward to discussing the particulars of these projects, individually or in aggregate, and to your decision.

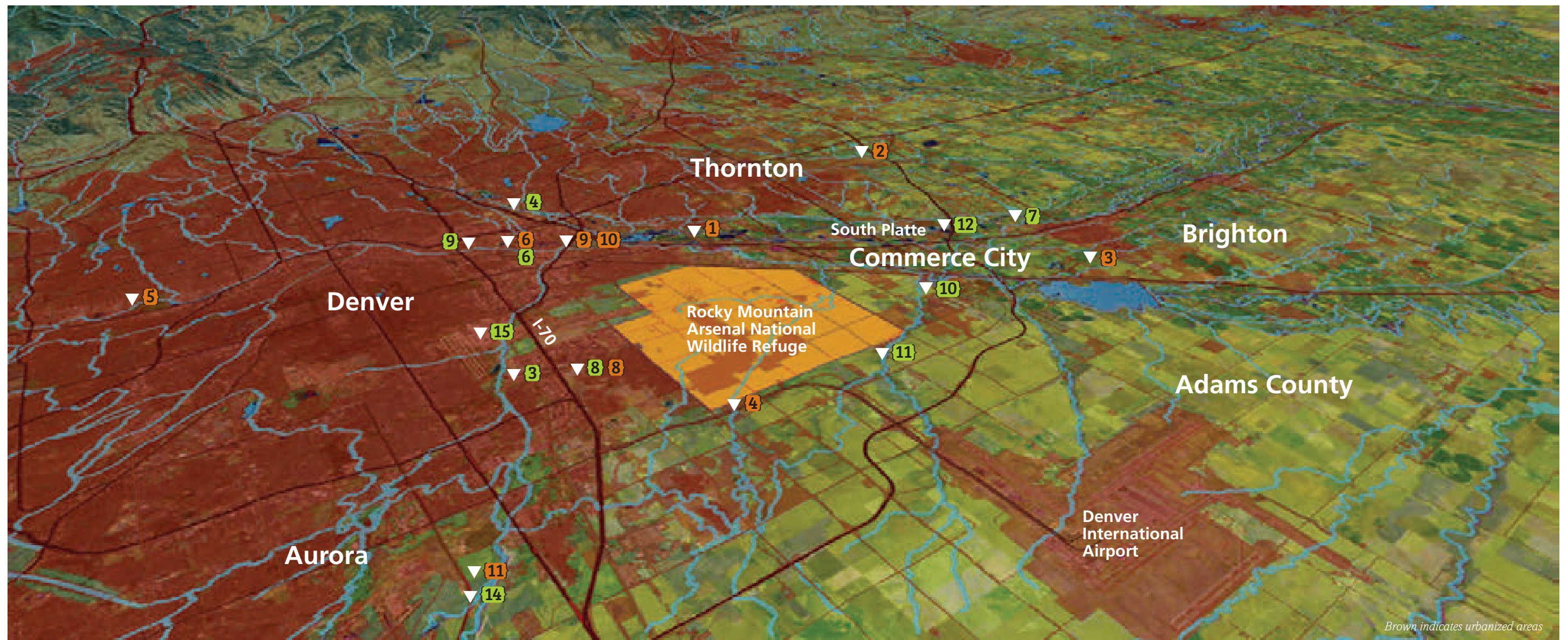
Sincerely,



Howard Kenison, Chair, Working Group  
Northeast Greenway Corridor Advisory Committee



**A settlement of 27 million dollars has the potential to leverage an additional 48 million dollars in environmental restoration projects.**



## FOUNDATION FUND PROJECTS

- |                             |                                    |
|-----------------------------|------------------------------------|
| <b>1</b> 88th Avenue        | <b>6</b> Heron Pond                |
| <b>2</b> Big Dry Creek      | <b>7</b> Invasive Species Removal* |
| <b>3</b> Eagle Preservation | <b>8</b> Montbello                 |
| <b>4</b> First Creek        | <b>9</b> Sand Creek 1              |
| <b>5</b> Grant Frontier     | <b>10</b> Sand Creek 2             |
|                             | <b>11</b> Triple Creek             |

## RECOVERY FUND SUBMITTALS

- |                                |                                |  |
|--------------------------------|--------------------------------|--|
| <b>1</b> Aquifer Storage*      | <b>6</b> Heron Pond Expansion  | <b>11</b> Second Creek Corridor          |
| <b>2</b> Bird Habitat*         | <b>7</b> Ken Mitchell          | <b>12</b> South Platte                   |
| <b>3</b> Bluff Lake Habitat    | <b>8</b> Montbello Open Space  | <b>13</b> Suburban Area Restoration*     |
| <b>4</b> Clear Creek Cleanup   | <b>9</b> Platte Farm           | <b>14</b> Triple Creek                   |
| <b>5</b> Community Initiative* | <b>10</b> Second Creek Cleanup | <b>15</b> Westerly/Sand Creek Confluence |

\*unmapped



# I.

## A UNIQUE OPPORTUNITY FOR THE FRONT RANGE

The Colorado Front Range is a dramatic, and globally unusual, environment where the western edge of the Great Plains shortgrass prairie suddenly rises to meet the foothills of the Rocky Mountains. This meeting of ecosystems creates a narrow band of high biodiversity where plains and mountain species intermix, following connecting threads of habitat.

Creeks spill from mountain canyons onto the flat prairie, gathering into larger and larger rivers. The canyons-then-creeks-then-rivers not only provide a precious source of water to sustain life, they also provide essential, connected passageways for humans, and wildlife, and plant species to move from the mountains, across the plains, and back again.

The abundant wildlife, deep prairie soils, and relatively mild climate have always attracted humans.

Plains Indians hunted bison along the Front Range. Later, the area was homesteaded and used to grow crops and raise cattle. The discovery of gold greatly accelerated growth in the 1800's, which has continued until today. The Front Range now boasts a population of over a million people.

In the 1940's, the United States Army purchased a large Front Range property, the Rocky Mountain Arsenal, and began to manufacture chemical warfare agents and incendiary munitions for the World War II war effort. After the war, the Army leased portions of the property to Shell Oil Company who manufactured agricultural pesticides and other chemical products at the site until the 1980s.

In the 1980's the United States Army and Shell began a cleanup of the Rocky Mountain Arsenal site.

In addition to stopping the leaching of chemicals, other measures were taken to cut off the flow of surface and groundwater from the arsenal, and to restore environmental habitats on the Arsenal itself. The result is the Rocky Mountain Arsenal National Wildlife Refuge.

Now, in partnership with the State of Colorado, the effort goes a significant step further.

The United States Army, and Shell Oil, allocated \$27.4 million to restore, replace, and acquire resources similar to those injured by the previous activities at the Rocky Mountain Arsenal.

Under the direction of the Colorado Natural Resource Trustees, this funding is being used as matching funds to enable projects that will make a major contribution to improving and restoring natural functions of the

waterways and their associated environments along the Front Range of the Rockies. The result of this initiative is projects valued at several times the amount of Natural Resource Damages funding alone.

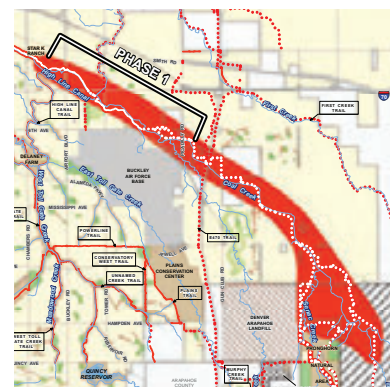
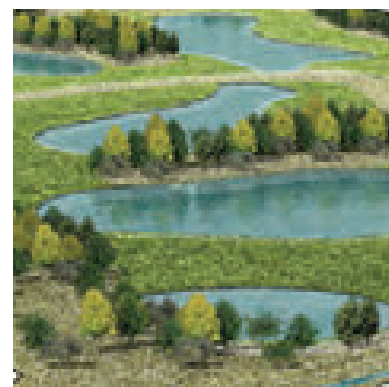
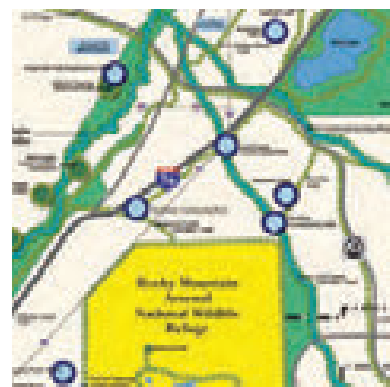
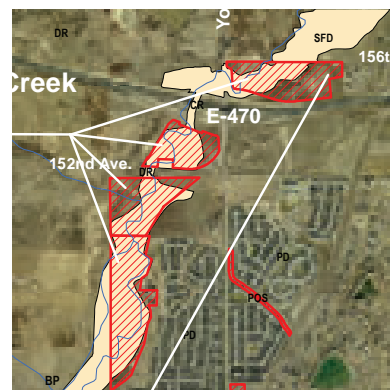
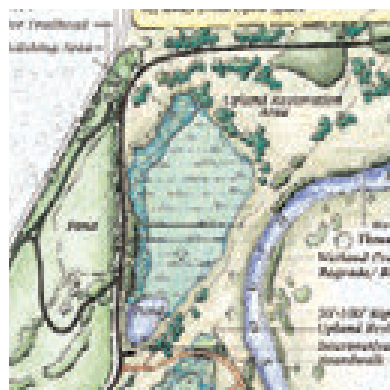
During the fall of 2011, a vision for this effort was developed:

*Colorado will create and preserve first class habitat to complement the outstanding natural resources at the Rocky Mountain Arsenal National Wildlife Refuge. A new system of stream and river corridors, riparian ecosystems, wildlife migration routes, and recreational trails will provide an integrated greenway network across jurisdictional boundaries within the Denver metropolitan area.*

In accomplishing this vision, the projects funded in part by Natural Resource Damages (NRD) funds will:

- » Acquire threatened parcels of land.
- » Link stream and river corridors.
- » Restore and enhance riparian habitat.
- » Provide buffers and habitat for plants and animals.
- » Enhance the quality of surface and groundwater.
- » Provide ecological connectivity and restore wildlife migration routes.
- » Expand the greenway network.
- » Provide opportunities for trails and public use.
- » Remove invasive plant species.

In a metropolitan area that experiences ever increasing growth pressure, the diminishing natural ecosystems are significant assets to retain and maintain; the NRD and the matching grant funding will make a significant contribution to enhancing these resources and the quality of life along the Front Range for current and future generations.





# II.

## THE LAWSUIT, THE SETTLEMENT, AND MOVING FORWARD

### A. History of the Rocky Mountain Arsenal Property

The Rocky Mountain Arsenal (RMA) is a 27-square mile property located in Adams County, Colorado, about eight miles northeast of downtown Denver.

In 1942, the United States Army purchased the RMA property to manufacture chemical warfare agents and incendiary munitions for the World War II war effort. After the war, the Army leased portions of the property to Shell Oil Company (Shell) who manufactured agricultural pesticides and other chemical products at the site until the 1980s. During that time, the Army continued to manufacture chemical warfare agents at the site, including Sarin nerve agent, and used areas of the RMA to fill and store munitions, demilitarize chemical weapons, and mix hydrazine rocket fuels for the United States Air Force.

As a result of these activities, hazardous substances were released into the environment, injuring natural resources at and around the RMA. In the 1980s, the Army and Shell began an extensive cleanup of the RMA site pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, or the Superfund Law), under the oversight of the Environmental Protection Agency, the Colorado Department of Public Health and Environment, and the Tri-County Health Department.

During the 1980s, the United States Fish and Wildlife Service became involved in management of wildlife at the site. In 1992, Congress passed the Rocky Mountain Arsenal National Wildlife Refuge Act, which established the Rocky Mountain Arsenal National Wildlife Refuge on approximately 15,000 acres of the RMA site.

### B. Natural Resource Damages Lawsuits

On December 9, 1983, the State of Colorado sued the United States and Shell in federal court pursuant to CERCLA, seeking compensation for injury to natural resources at and around the RMA. These lawsuits, separate from State legal claims concerning the cleanup of the site, were placed on hold while the nature and extent of the cleanup was decided.

In 2008, the parties settled the lawsuits. The settlement, finalized in two consent decrees – one between the State of Colorado and Shell, the other between the State of Colorado and the United States – contained three components.

First, Shell donated 100 acres of land immediately north of the RMA to Commerce City. This land was placed in a conservation easement held by Adams County.

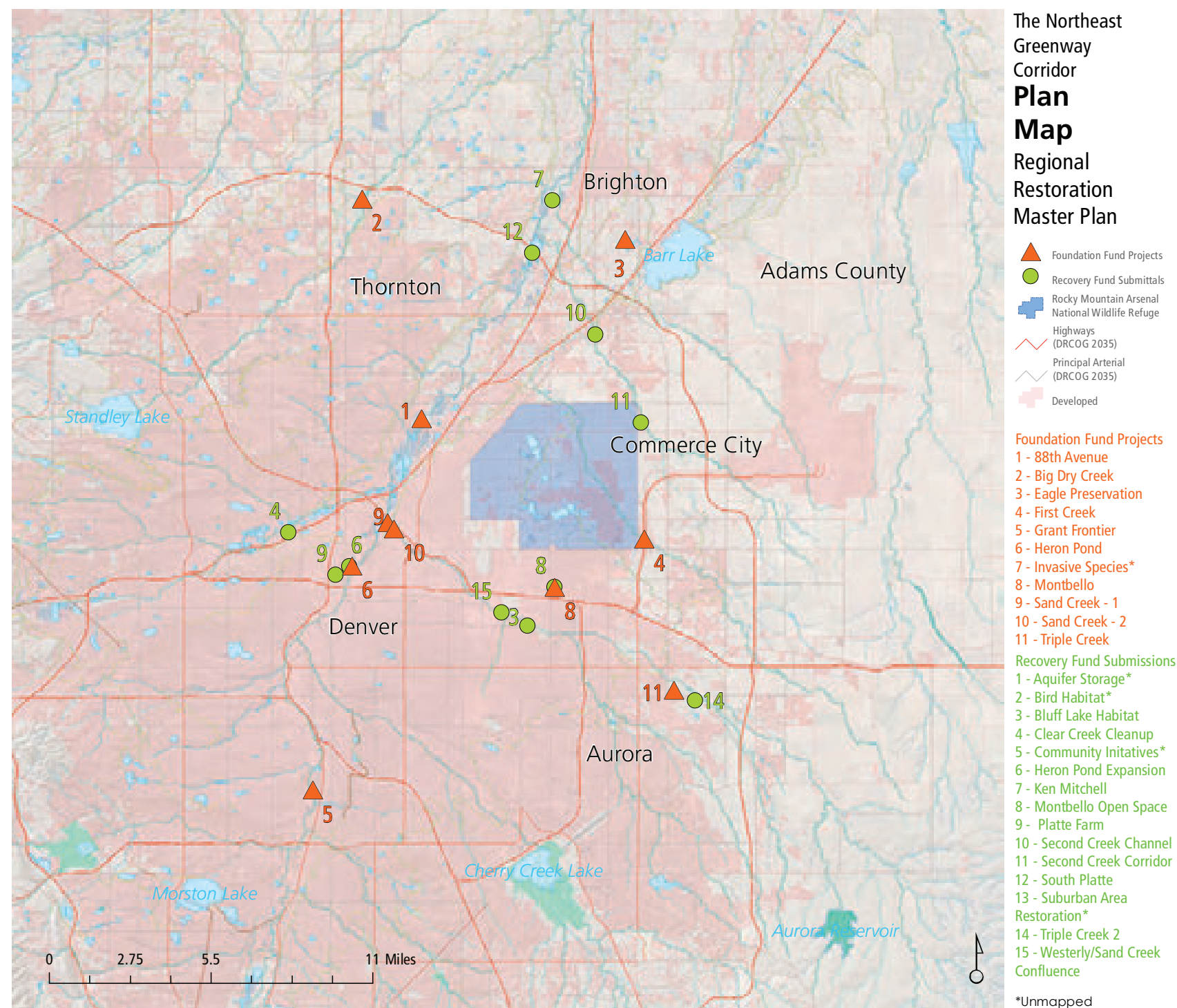


Figure 1: Regional Restoration Plan Map

Second, Shell donated \$10 million to the Natural Resources Foundation Fund to be used to fund projects associated with the Northeast Greenway Corridor.

Finally, Shell and the Army paid \$17.4 million to the State Natural Resources Recovery Fund to fund projects that will restore, replace, and acquire the equivalent of the natural resources injured at the RMA.

The final decisions concerning the use of these funds are made by the Colorado Natural Resources Trustees – a group composed of the Colorado Attorney General, the Executive Director of the Colorado Department of Public Health and Environment, and the Executive Director of the Colorado Department of Natural Resources.

**C. The Advisory Committee, Working Group and the Project Selection Process**

To assist in selecting Greenway projects for the Foundation Fund monies, the Trustees formed an Advisory Committee and a Working Group in January 2009 (see Appendix B). An inter-jurisdictional Northeast Greenway Corridor Leadership Committee existed prior to the formal resolution that created the Advisory Committee and had explored ways to establish an integrated greenway and open space network across jurisdictional boundaries.

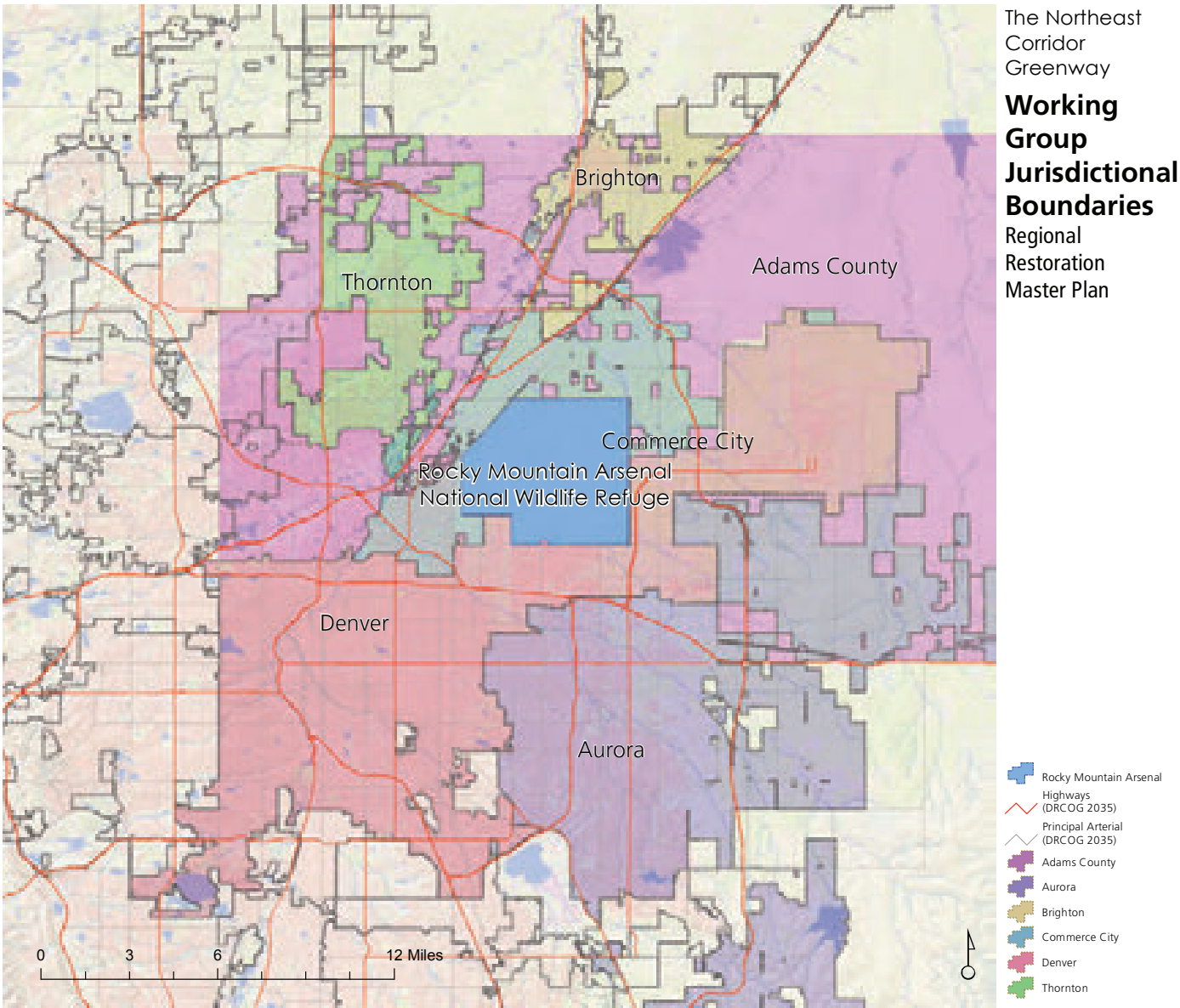
The Advisory Committee consists of elected officials in the vicinity of the RMA, specifically the Chair of the Adams County Board of Commissioners, the Mayor of the City of Aurora, the Mayor of the City of Brighton, the Mayor of the City of Commerce City, the Mayor of the City and County of Denver, and the Mayor of the City of Thornton (See Appendix A). The Advisory Committee also includes a representative from the Sand Creek Regional Greenway Partnership and a representative of Shell. The Advisory Committee is charged with reviewing and making recommendations

to the Trustees for award of Foundation Fund monies. This Plan includes the recommended projects.

In turn, the Advisory Committee established a Working Group staffed by open space, recreation, natural resource, and park professionals from each jurisdiction as well as the Sand Creek Regional Greenway Partnership and Shell (See Appendix E). In 2009, the Advisory Committee, through the Working Group, presented the Trustees with a plan to develop an integrated set of projects that would seek recommendations for both the Foundation Fund money ear-marked for Greenway projects and for the Recovery Fund. The Trustees supported this plan with the stipulation that they first need to repay the Hazardous Substance Response Fund and the General Fund approximately \$2.4 million from the interest the Recovery Fund accrues. The rate of return on the fund has been lower than originally expected, resulting in the necessity to delay the expenditure of Recovery Fund monies in accordance with CRS Section 25-16-104.7. In 2011, the Working Group began a facilitated process to recommend Foundation Fund projects. It also established procedures to solicit project proposals for the Recovery Fund, and to place projects from both funds in the context of a broader regional master plan for open space and ecological protection in the area surrounding the RMA site (See Appendix G).

During the course of its facilitated process, the Working Group committed to transparency and consensus-based decision-making. The Group also emphasized its goal of leveraging both Foundation Fund and Recovery Fund projects with matching funds. The overall process pursued by the Working Group is outlined in Appendix F.

In early 2012, the Working Group reached consensus on the package of Northeast Greenway Corridor projects to recommend to the Advisory Committee for the \$10 million of Foundation Fund monies. The



Working Group formally endorsed the recommended projects in March 2012. These Foundation Fund projects are described in detail in Chapter V.

The Working Group also determined that it would “cast the net broadly” in providing information about the Natural Resource Damages (NRD) Recovery Fund opportunities while soliciting partnerships from other entities. In “casting the net broadly” for the Recovery Fund, the Working Group solicited Statements of Interest from additional parties and held a public

workshop in February 2012. It also approved a project website to convey information about the NRD funding process. The website went live in January 2012 at [www.northeastgreenwaycorridor.org](http://www.northeastgreenwaycorridor.org). Beyond the website, other outreach included targeted emails, press releases, and coverage in radio and print media. Applications for Recovery Fund monies were submitted in April 2012. These are described in detail in Chapter VI.



# III.

## RESTORE, REPLACE, ACQUIRE

The natural resources that were injured, destroyed, or lost as a result of the release of hazardous substances from the Rocky Mountain Arsenal (RMA) Superfund Site included:

- » Surface water
- » Groundwater systems (including aquifers and groundwater-surface water interactions)
- » Soil
- » Wildlife and associated habitats
- » Wetlands

The common theme in this list is water. Chemicals polluted surface water and groundwater, which then contaminated soil, plants, and animals in the area.

The projects that will be enabled by Natural Resource Damages (NRD) funds will make a major contribution to improving and restoring the natural functions of the waterways and their associated environments in the vicinity of the former Rocky Mountain Arsenal.

### A. Mitigation Context

Two aspects of the mitigation of the natural resource injuries at the Arsenal property are:

- » The creation of the Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)
- » The funding (through the Foundation Fund and Recovery Fund) of projects to preserve and/or rehabilitate natural resources similar to those injured at the Rocky Mountain Arsenal

Each of these is described briefly below.

### B. The Rocky Mountain Arsenal National Wildlife Refuge

While the Rocky Mountain Arsenal property was originally secured to prevent access to military operations and to protect people from the activities on the property, one result was the preservation of a large, contiguous mosaic of lands and habitat from the encroachment of development. As a result, it became

an inadvertent preserve for native plants, habitat, and wildlife—a largely intact remnant of the habitat and ecological systems that once resided in the Denver area.

The creation of the Rocky Mountain Arsenal National Wildlife Refuge preserves this large contiguous area of grasslands, traversed by riparian drainages, and dotted with ponds and woodlands.

### C. Foundation Fund Projects and Recovery Fund Submittals

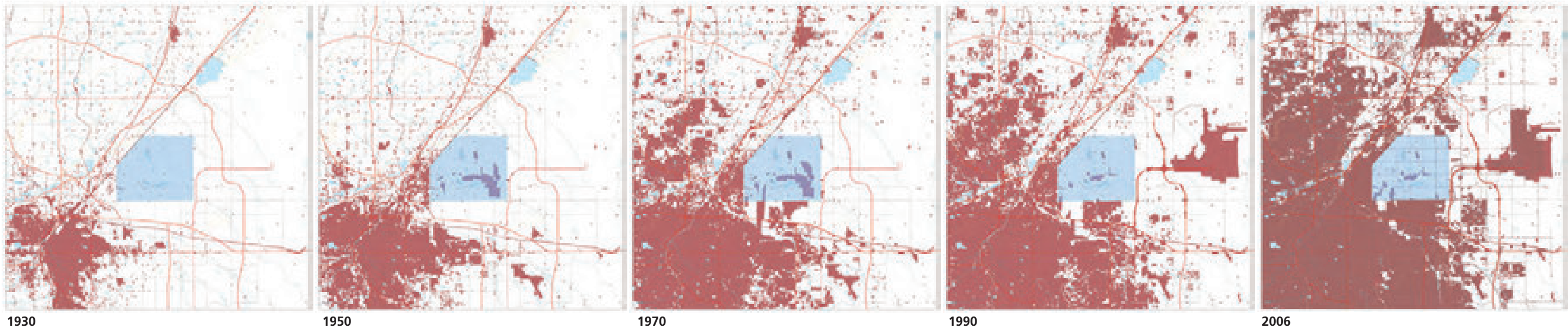
The Foundation Fund projects and Recovery Fund submittal provide a connected, physical expansion of the ecosystems at the RMANWR. Upland areas will be preserved from human development and restored to functioning native grassland habitat, holding topsoil and filtering run-off on its way to creeks. Stream reaches will be re-connected and returned to their historic beds. Riparian corridors will be protected and buffered from parking lots and streets. Restored riparian tree and shrub diversity will again be habitat for migrating and

residential birds; linear riparian corridors can provide safe passage for wildlife and fish once again.

Accomplishing these meaningful projects is an urgent and challenging task, primarily because of the rapid urbanization taking place in the Front Range (see Figure 1: Urban Growth), and fragmentation of land ownership in and around RMANWR. The urban growth maps below illustrate the urbanization trends in this area over the past several decades. Continued growth in this quadrant of the Denver metropolitan area is an ongoing and increasing threat to efforts to protect or enhance the remaining stream and river corridors, riparian ecosystems, shortgrass and mixed-grass prairies, and wildlife migration routes.

There are a number of efforts underway by state and local governments, and non-profit entities to continue to invest in the natural resource amenities such as investments into river corridors by Great Outdoors Colorado. The use of NRD monies will complement, support, and provide a foundation for future natural resource and open space investments in this area.

Figure 1: Urban Growth Adjacent to the Rocky Mountain Arsenal (1930-2006)





D. Rocky Mountain Arsenal  
Ecological Context

In a pristine state, the dominant ecosystem at the Rocky Mountain Arsenal would be a shortgrass prairie. Shortgrass prairie represents the western-most extension of the American Great Plains. Prior to European settlement, this grassland occupied the area

from the shared border of Wyoming and Nebraska, south to the desert grasslands of New Mexico. It dominated the majority of the current Northeast Greenway Corridor project area.

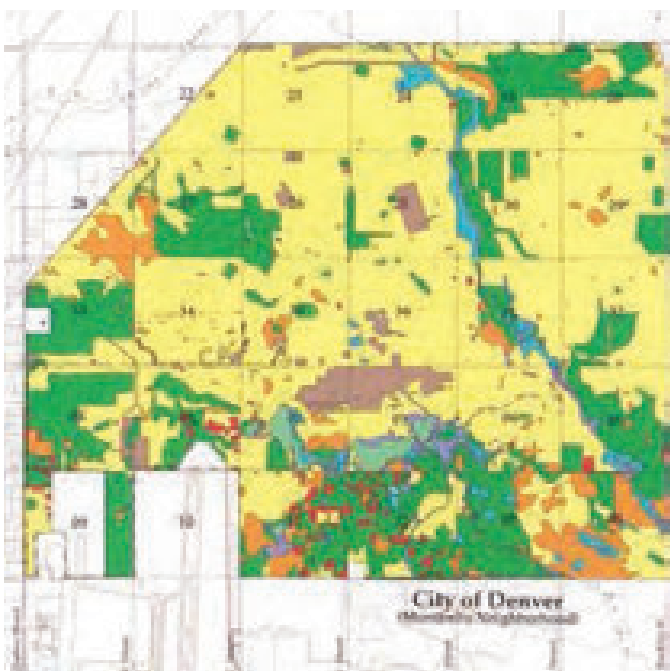
Named for the predominance of short, warm season grasses such as buffalo grass and grama grasses, the shortgrass prairie also includes a large and distinctive

assemblage of wildflowers (Sunflowers, Locoweed, and Scarlet Globemallow) and low shrubs (including multiple sage species, and Rabbitbrush). Most prairie plants grow in a mosaic of vegetation patches with bare soil between.

Herds of buffalo and pronghorn moved across the shortgrass prairie, as did Black-tailed Prairie Dog colonies. Black- and White-tailed Jackrabbits burrowed and foraged in these grasslands. Most prairie birds are summer residents; Meadowlarks, numerous sparrow species, Burrowing Owls, and larks migrated to the grasslands to breed, returning south in the winter. Maps to the right show the vegetation distribution at the Refuge and wildlife movement corridors in the vicinity of the Refuge.

Creeks and rivers, all tributary to the South Platte, would have been a dramatic visual and habitat break in the vast grassland. These waterways connected the plains to the montane valleys and more critically, were the most constant source of water on the shortgrass prairie. They also provided habitat for the only trees to be found on the prairie. Riparian woodlands of native cottonwood galleries with shrub, grass, and wildflower understories would have represented vertical habitat structure and cover for foraging and nesting, shade, and protection from storms.

The riparian corridor along these streams would have been a dynamic habitat; regularly being influenced by flood events as well as fires. Mule and White-tailed Deer would have moved along these corridors. Migrating birds would have followed the riparian corridors and rested in their cover. Some would stay and reproduce each summer, fewer would be year-round residents. Eagles and other raptors would also use these woodlands for roosts and hunting perches.



Vegetation distribution (RMANWR)



Wildlife movement (RMANWR)



# IV.

## SELECTING PROJECTS

To assist the Advisory Committee and Trustees in selecting which projects to fund, the State representatives and the Working Group established a two-level review process: Screening Criteria and Evaluation Criteria.

The Screening Criteria are a coarse, first filter in reviewing all projects. To be considered for funding, projects must first meet the Screening Criteria. Then, projects that meet the Screening Criteria are analyzed and compared using a second, finer filter of various Evaluation Criteria. Graphically, the process is reflected below.

### A. Screening Criteria

The Colorado Natural Resource Trustees identified specific Screening Criteria to ensure projects funded with Natural Resource Damages (NRD) funds are consistent with both the law and the requirements of the Trustees.

The Criteria include:

- » The project must restore, replace, or acquire the equivalent of the natural resources (and/or their ecological services) that were injured by hazardous substance releases from the Rocky Mountain Arsenal (RMA) (see Chapter III).
- » The project must be located in the vicinity of the RMA, or demonstrate an ecological nexus to the injured natural resources (i.e., provide benefit to local ecology or habitat that suffered the original injury).
- » The project must be consistent with

the legal requirements for the use of NRD funds. NRD funds may be used to augment existing or ongoing projects that meet the NRD criteria, as long as they do not duplicate current activities, and address the restoration objectives.

- » The project must be consistent with the objectives and goals of the Rocky Mountain Arsenal National Wildlife Refuge.
- » The project must comply with laws, including local ordinances and zoning.
- » The project must be consistent with the protection of public health and safety.

- » The project must be consistent with local and regional planning, including resource management plans.
- » The project should provide matching funds. At a minimum, the proposal must include matching funds or in-kind services equaling at least 25 percent of the total project cost.

### B. Evaluation Criteria

In addition to the Screening Criteria above, the Northeast Greenway Corridor Working Group, in collaboration with representatives for Colorado's Natural Resource Trustees, developed additional Evaluation Criteria to further evaluate project submittals. The Evaluation Criteria are organized into five categories.

#### 1. Environmental

- Amount of benefit to the damaged natural resources.
  - » Surface water
  - » Groundwater systems
  - » Soils
  - » Biological resources (fish and other aquatic biota, wildlife, terrestrial and aquatic vegetation and associated habitats, wetlands)
- Addresses a critically important local or regional environmental resource.
- Proximity and/or connectivity to regional natural system (riparian, uplands).
- System-focus (multiple resources and/or actions).

#### 2. Connectivity to the damaged resources

- Proximity to the RMA.
- Ecological or geographical connection to the RMA.

#### 3. Project Feasibility

- Demonstrated high likelihood of success, technically feasible and procedurally sound.
- Project completion (identified project timeline and completion date). Is the project shovel ready?

#### 4. Sustainability

- Degree to which benefits to natural resources will be sustained over the long-term, based on project design.
- Identify the amount of, and responsible party for, permanent support (e.g., maintenance) and protection (e.g., land ownership or easements) to be provided to a project area.

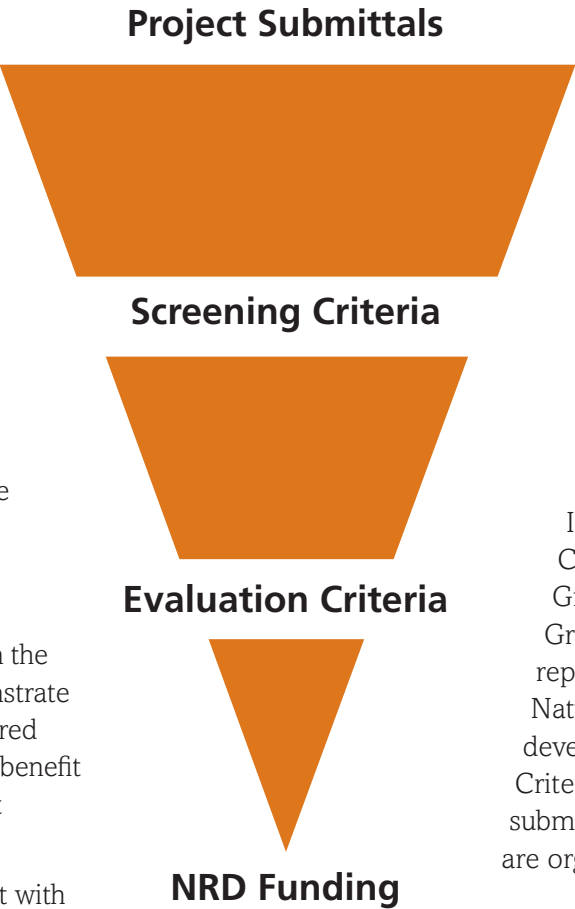
#### 5. Cohesive Regional Plan

- Demonstrate how the project contributes to an integrated regional restoration plan.
- Clearly, it is difficult to weigh these varied criteria against each other. All were considered equally important. In the aggregate, these criteria were used to help identify projects that:
- » Were ecologically significant.
  - » Provided benefit to the same natural resources that were injured at the RMA.
  - » Were technically feasible and procedurally sound.
  - » Could be implemented with certainty.
  - » Would be sustainable over time.
  - » Were cost-effective with measurable outcomes.
  - » Used matching funds to leverage the investment of NRD funds.

### C. Application Process

A similar application process was used for both the Foundation Fund and the Recovery Fund. The Working Group studied a list of Evaluation Criteria developed by State representatives. Both groups together then discussed the criteria – with the result that several criteria were combined to simplify the application process.

Second, the Working Group oversaw preparation of a formal application packet to be used for both funds. The application packet included both the Screening and Evaluation criteria. Applicants were instructed to first indicate if they complied with each of the *Screening Criteria*, and then to describe how they complied with each of the *Evaluation Criteria*. The Criteria descriptions are provided in Appendix C.







# FOUNDATION FUND PROJECTS

Table 1: Recommended Foundation Fund Projects

	Project Name	Jurisdiction	Requested NRD Funding	Total Funding
1	88th Avenue	Adams	\$1,750,000	\$3,100,000
2	Big Dry Creek	Thornton	\$750,000	\$1,700,000
3	Eagle Preservation	Brighton	\$500,000	\$1,000,000
4	First Creek	Denver	\$500,000	\$6,500,000
5	Grant Frontier	Denver	\$1,000,000	\$6,100,000
6	Heron Pond	Denver	\$500,000	\$6,000,000
7	Invasive Species Removal	Sand Creek Regional Greenway Partnership	\$50,000	\$80,000
8	Montbello	Denver	\$500,000	\$1,450,000
9	Sand Creek 1	Commerce City	\$1,500,000	\$2,000,000
10	Sand Creek 2	Commerce City	\$1,100,000	\$1,750,000
11	Triple Creek	Aurora	\$2,000,000	\$11,578,820
Totals			\$10,150,000	\$41,258,820

## A. Overview of Foundation Fund Project Submittals

Each jurisdiction in the Working Group initially identified one or more projects that met the criteria. The Working Group members then each presented, to the Working Group as a whole, their projects and the justification for each. The Working Group felt that all the projects met both the Screening and Evaluation Criteria and, in comparing relative merit and synergies, was quickly able to refine the list to a set of projects that totaled \$10.15 million.

Another step involved identification and categorization of matching funds. A spreadsheet was developed in which applicants were asked to list each project’s basic components and the amount of funding requested from the Foundation Fund for each item. Also required was the amount and sources of matching funds, and whether the match met Natural Resource Damages Criteria or would be characterized as an “Other Match.”

The Working Group was pleased to find that, together, the matching funds greatly exceeded the 25 percent minimum threshold criterion: matches that meet the Natural Resource Damages (NRD) criteria total 2.39 times the Foundation Fund monies requested. In addition, matches totaling 62 percent of the Foundation Fund monies requested were categorized as “Other Match.” Altogether, this investment of the \$10.15 million will leverage approximately \$31 million — which constitutes over 3 times the Foundation Fund monies requested.

The Foundation Fund projects are recommended for immediate implementation. Figure 3 shows their locations and Table 1 provides information about proposed funding.

## B. Detailed Descriptions

Descriptions of each project are presented on the following pages.

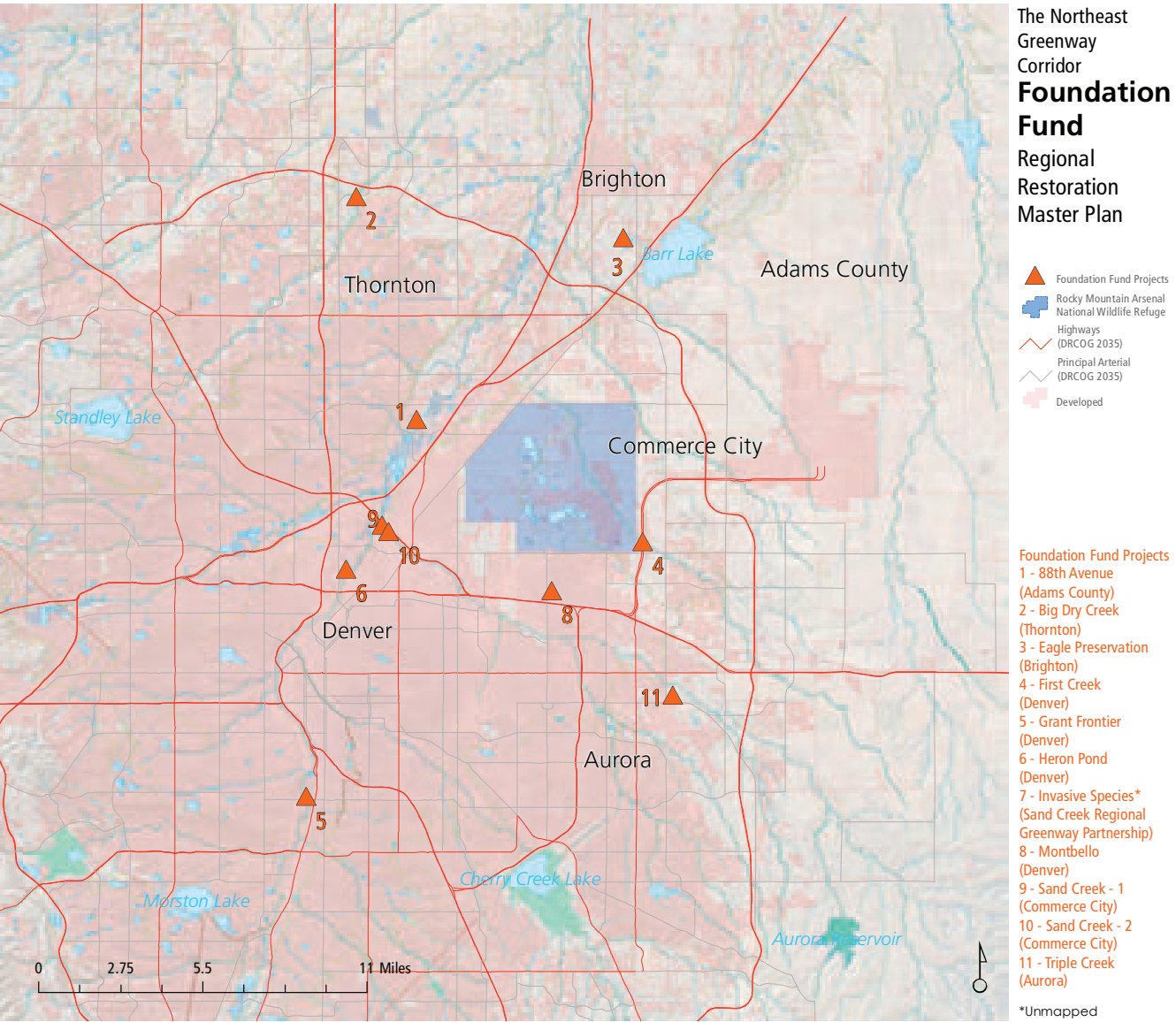


Figure 3: Natural Resource Foundation Fund Projects



# 1

## 88th Avenue, Adams County

### Grant purpose:

Within a 246-acre property already owned by Adams County that is adjacent to the South Platte River:

- » To enhance a 120-acre riparian forest and upland habitat through removal and control of invasive plant species, and the planting of Cottonwood Trees.
- » To enhance ecological integrity and function for two former gravel ponds (11 acres and 5 acres) by improving fish habitat and littoral zone function, as well as increase areas of natural shoreline and wetland habitat to benefit wildlife habitat.
- » To reroute an existing pedestrian trail away from high-priority habitat.
- » To construct two side channels to prevent erosion and embankment failure in the South Pond, slowing and temporarily storing floodwater, and protecting habitat improvements from erosion and filling during South Platte River flood events.
- » To rehabilitate the west bank of the South Platte River from a steep gravel embankment to a natural, gently sloping, and meandering river edge.

### Ecological benefits:

*Surface water*—Will help filter runoff from urban development to the west, temporary storage, and settling/cleansing of floodwaters.

*Groundwater*—Provides groundwater recharge to offset contamination plumes related to RMA.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$1,750,000	\$600,000	\$1,350,000	\$3,100,000	34%	77%	246.0

*Soils*—Similar soils, and thus habitat growing type, as within the RMA.

*Vegetation*—Restores a variety of native habitats similar to those at the RMA, and removes weeds and invasive species.

*Wildlife*—Restores food sources and cover for wildlife (including fish) and helps preserve/improve migration corridor along the South Platte River.

### Proximity to the RMA and other natural systems:

Approximately 2 miles west of the RMA.

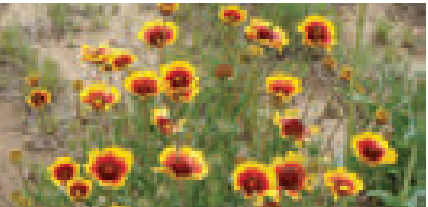
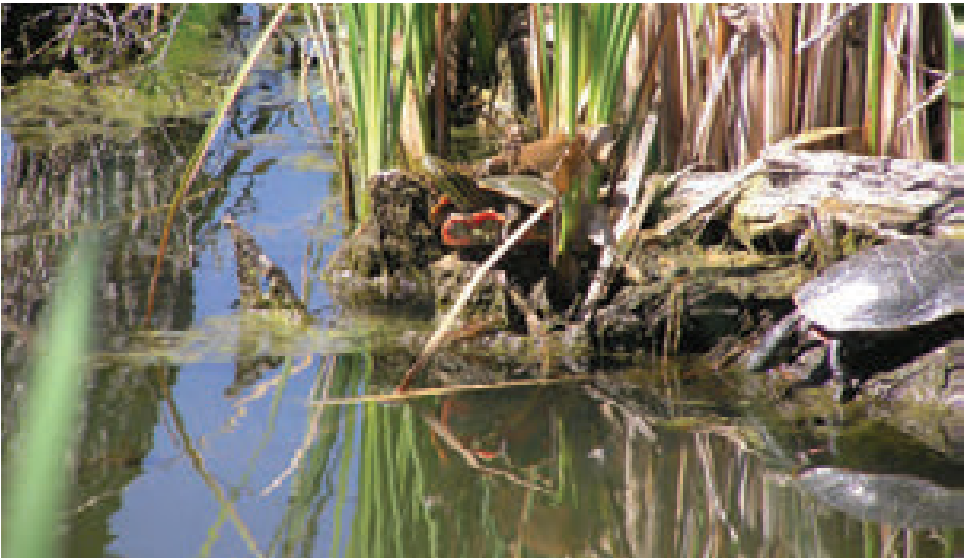
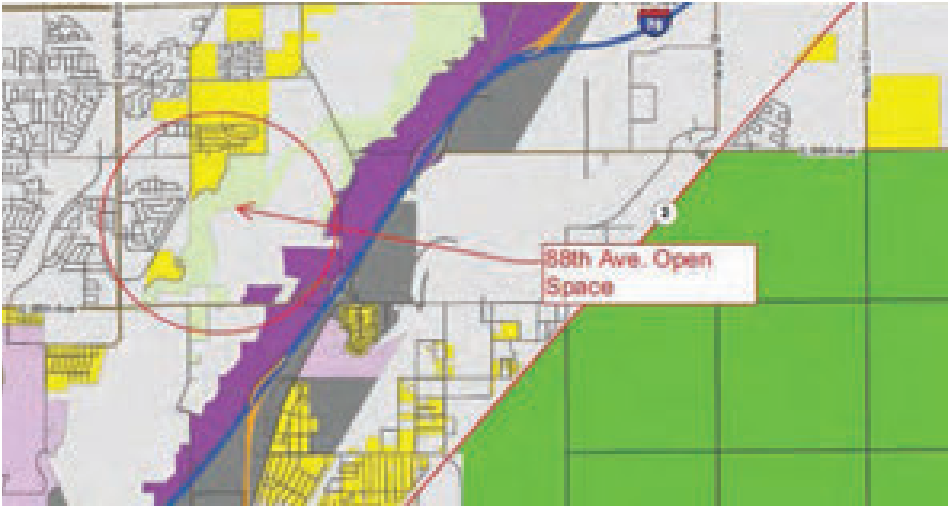
Part of the South Platte River Corridor, which is the largest and most important drainage in the metropolitan area, and an important wildlife habitat and movement corridor.

### Matching funds and partners:

- » Total project cost is \$3.1 million, of which the grant will provide \$1.75 million, 56 percent of the total project cost.
- » Anticipated partners: Urban Drainage and Flood Control District, Colorado Division of Wildlife.



88th Avenue existing conditions



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Matching Fund Calculation, 88th Avenue						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Design and Engineering Services	\$250,000	\$100,000	Adams County Parks			\$100,000
		\$150,000	Adams County Open Space Sales Tax			\$150,000
Recreation Improvements: Natural Surface Trails, Trailhead, Parking Lot, Restroom, Picnic Shelters, Fishing Access Improvements, Interpretive Signage.	\$500,000	\$250,000	Adams County Open Space Sales Tax			\$250,000
		\$250,000	CO Parks & Wildlife: Fishing is Fun Grant			\$250,000
Habitat Restoration, Replacement & Enhancement	\$2,350,000					
South Pond Fishery and shoreline Improvements: Earthwork, habitat creation		\$450,000	NRD	\$450,000		
		\$100,000	Adams County Parks		\$100,000	\$100,000
Re-routing and restoration of South Platte River Trail		\$275,000	NRD	\$275,000		
		\$200,000	Adams County Open Space Sales Tax		\$200,000	\$200,000
South Platte River Flood Control and Water Quality Improvements: side channel spillways for South Pond		\$380,000	NRD	\$380,000		
		\$100,000	Urban Drainage and Flood Control District		\$100,000	\$100,000
South Platte River Channel Improvements		\$150,000	NRD	\$150,000		
		\$100,000	Urban Drainage and Flood Control District		\$100,000	\$100,000
North Pond shoreline improvements: Earthwork, habitat creation		\$295,000	NRD	\$295,000		
		\$100,000	Adams County Open Space Sales Tax		\$100,000	\$100,000
Riparian Forest & Upland Habitat Enhancement: invasive removal, plantings		\$200,000	NRD	\$200,000		
<b>Totals</b>	<b>\$3,100,000</b>	<b>\$3,100,000</b>		<b>\$1,750,000</b>	<b>\$600,000</b>	<b>\$1,350,000</b>
				<b>NRD Leverage</b>	<b>Total Leverage</b>	
				<b>34%</b>	<b>77%</b>	







# Big Dry Creek, Thornton

Grant purpose:

- » To preserve existing natural and wildlife habitat that is at risk for development through acquisition. This includes the acquisition of approximately 130+ acres of property along the Big Dry Creek corridor within the City of Thornton's growth boundary in Adams County for use as open space.
- » To restore and enhance existing degraded habitats. This includes stream bank stabilization

and restoration within the floodplain, removal of non-native and invasive trees and shrubs, revegetation and establishment of appropriate trees, shrubs and native grasses. This will increase wildlife opportunities at existing City-owned park and open space properties for the reaches from I-25 to 136th Avenue north of 144th Avenue to 156th Avenue, and for newly purchased open space properties.

- » To continue the protection and preservation of the creek corridor, riparian ecosystems, wildlife habitat, and movement routes.
- » To create a conservation easement to preserve the land in perpetuity.
- » To create important and needed buffers.

Ecological benefits:

The project includes the preservation and restoration of similar natural resources that were damaged or lost at the RMA and will directly impact the preservation and restoration of the Big Dry Creek corridor.

- Groundwater*—The creek is part of the floodplain.
- Soils*—Streambank stabilization and restoration.
- Vegetation*—Removal of non-native and invasive trees and shrubs, revegetation and establishment of native trees, shrubs, and grasses.
- Wildlife*—The Dry Creek corridor provides wildlife movement constrained between I-25 and the residential developments to the east. Supports deer, coyotes, foxes, raptors (including Bald Eagles), and a variety of woodland, wetland, and grassland small mammals, birds, and reptiles. The creek also supports a diverse fish community and is suitable for some sensitive native species.

Proximity to the RMA and other natural systems:

As it crosses under I-25 between 128th Ave. and 136th Ave., Big Dry Creek is approximately 10 miles northwest of the RMA. It provides an ecological connection to the RMA through its similar prairie habitat, and important wildlife habitat and movement routes for a variety of birds, small mammals, and reptiles. With this project the City will be preserving and reestablishing an ecosystem that has been degraded over time due to impacts by development and urbanization.

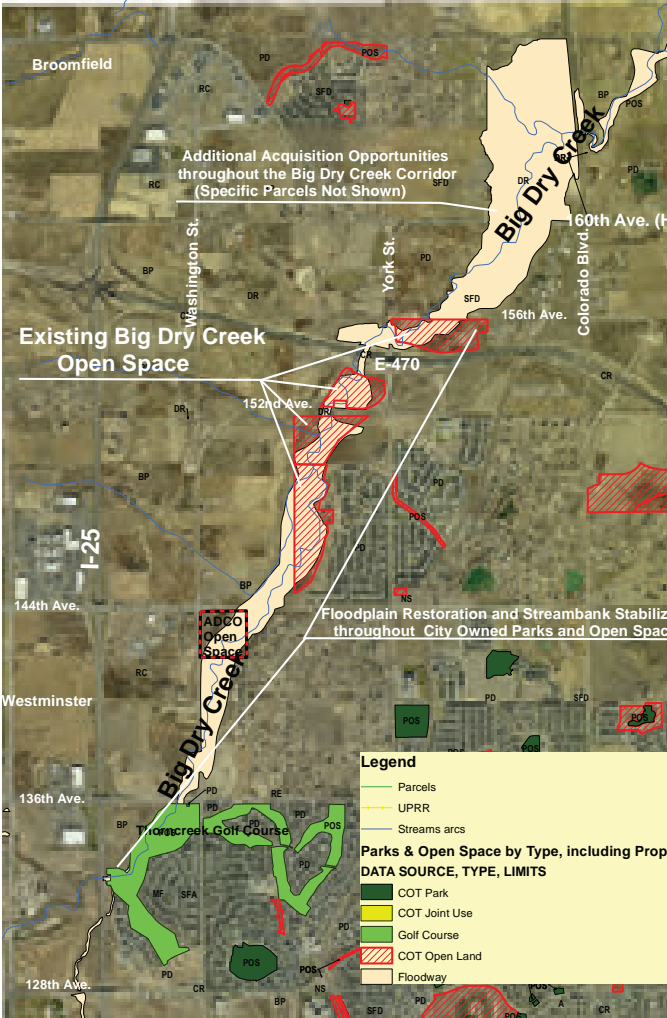
Big Dry Creek is also a regionally important drainageway and will link to other future open space dedications and purchases.

Matching funds and partners:

- » Total project cost is \$1.7 million, of which the grant will provide \$0.75 million, 44 percent of the total project cost.
- » *Anticipated partners:* Adams County Open Space Sales Tax.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$750,000	\$950,000	\$950,000	\$1,700,000	127%	127%	130.0

Matching Fund Calculation, Big Dry Creek						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 130+ acres	\$1,200,000	\$500,000	NRD	\$500,000		
		\$200,000	City of Thornton		\$200,000	\$200,000
		\$500,000	Adams County Open Space Sales Tax		\$500,000	\$500,000
Habitat Restoration earthwork	\$500,000	\$50,000	NRD	\$50,000		
		\$25,000	City of Thornton		\$25,000	\$25,000
		\$100,000	NRD	\$100,000		
streambank stabilization		\$75,000	City of Thornton		\$75,000	\$75,000
		\$25,000	NRD	\$25,000		
invasive species removal		\$25,000	Adams County Open Space Sales Tax		\$25,000	\$25,000
		\$75,000	NRD	\$75,000		
planting, seeding and establishment		\$50,000	City of Thornton		\$50,000	\$50,000
		\$75,000	Adams County Open Space Sales Tax		\$75,000	\$75,000
Totals	\$1,700,000	\$1,700,000		\$750,000	\$950,000	\$950,000
				NRD Leverage	Total Leverage	
				127%	127%	







# Eagle Preserve, Brighton

**Grant purpose:**

To acquire three parcels (42.2-acres) adjacent to Lutz Lake, Higgins Lake, and Meggers Lake that will be the central core of a larger, future 178-acre open space known as Prairie Lakes Regional Wildlife Sanctuary. The property will be placed in a conservation easement and returned to, and maintained in, a natural state to preserve water quality and habitat for birds and wildlife.

**Ecological benefits:**

*Surface water*—Restoring the northern parcel from farming to natural habitat will reduce runoff and aid in filtering large-runoff events into the nearby lakes and drainages.

*Vegetation*—The properties contain wetlands, a riparian corridor, as well as a dry lakebed, and previously farmed land that will be converted into prairie grassland.

*Wildlife*— The area has had little human activity for 20 years, and wildlife use is already high. Observed bird species include: Great Blue Heron, Double-crested Cormorant, American White Pelican, Stilt Sandpiper, Cliff Swallow, Canada Goose, Blue-winged Teal, American Avocet, Mourning Dove, Western Kingbird, Barn Swallow, European Starling, Red-winged Blackbird, Western Meadowlark, Common Grackle, Bullock’s Oriole, Lark Bunting, House Sparrow, Yellow-headed Blackbird, House Wren, Northern Harrier, Swainson’s Hawk, Red-tailed Hawk, American Kestrel, Bald Eagle, and others.

**Proximity to the RMA and other natural systems:**  
The properties are approximately 7.5 miles from the RMA. These properties will form the central core of a larger, future 178-acre open space known as Prairie Lakes Regional Wildlife Sanctuary.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$500,000	\$500,000	\$950,000	\$1,000,000	100%	190%	42.2

Matching Fund Calculation, Eagle Preserve						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 42.2 acres of Eagle Preserve land	\$1,000,000	\$500,000	NRD	\$500,000		
		\$100,000	City of Brighton		\$100,000	\$100,000
		\$400,000	Adams County Open Space Sales Tax		\$400,000	\$400,000
Totals	\$1,000,000	\$1,000,000		\$500,000	\$500,000	\$500,000
				NRD Leverage	Total Leverage	
				100%	100%	

**Matching funds and partners:**

- » Total project cost is \$1 million, of which the grant will provide \$0.5 million, 50 percent of the total project cost.
- » Anticipated partners: Adams County Open Space Sales Tax.



# 4 First Creek, Denver

## Grant purpose:

To acquire 100 feet on either side of the First Creek channel, install channel improvements, and revegetate with native plants.

The project will:

- » Protect and enhance the First Creek riparian corridor immediately upstream of the RMA.
- » Provide an upland buffer between the riparian corridor and future urban development.
- » Restore the buffer to native prairie habitat.
- » Mitigate the effects of urban development.

## Ecological benefits:

*Surface water*—Stream channel and riparian habitat improvements will mitigate effects of increased stormwater from local urban development, reduce erosion potential during peak flows, moderate peak flow discharges, and improve water quality.

*Groundwater*—Slowing surface waters will increase the infiltration of shallow groundwater within the First Creek drainage, increasing the reliable source of clean alluvial groundwater to the overall RMA system.

*Soils*—Creating a natural stream bank will reduce erosion from downcutting. Buffering the stream from otherwise more intensive runoff will also reduce soil erosion.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$500,000	\$5,500,000	\$6,000,000	\$6,500,000	1100%	1200%	36.0

Matching Fund Calculation, First Creek						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquisition (Floodplain)	\$2,200,000	\$2,200,000	Private Landowners-Donation		\$2,200,000	\$2,200,000
Acquisition (Upland Prairie)	\$500,000	\$500,000	NRD	\$500,000		
Park Amenities; trails, benches, signage	\$500,000	\$500,000	City of Denver			\$500,000
Habitat Restoration	\$3,300,000				\$3,300,000	\$3,300,000
earthwork/soil remediation		\$2,600,000	City of Denver/RTD			
invasive species removal		\$200,000	City of Denver/RTD			
planting		\$500,000	City of Denver/RTD			
Totals	\$6,500,000	\$6,500,000		\$500,000	\$5,500,000	\$6,000,000
				NRD Leverage	Total Leverage	
				1100%	1200%	

*Vegetation*—The project will restore the natural form and function of a plains stream system within a meandering stream channel and revegetation improvements to wetland and woody riparian habitat as well as include enhancement to adjacent upland prairie vegetation.

*Wildlife*—Habitat restoration will benefit small mammals, Mule Deer, fox, migratory song birds, and raptors, including Bald Eagles. It will also contribute to establishing a wildlife corridor between the RMA and upper reaches of First Creek.

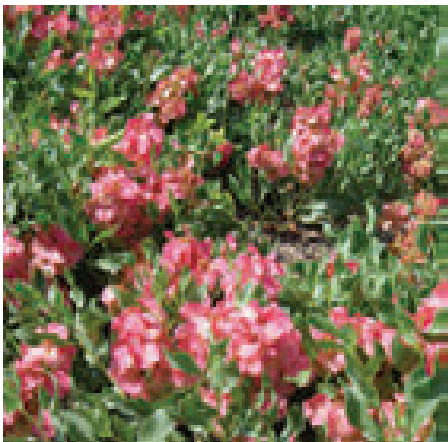
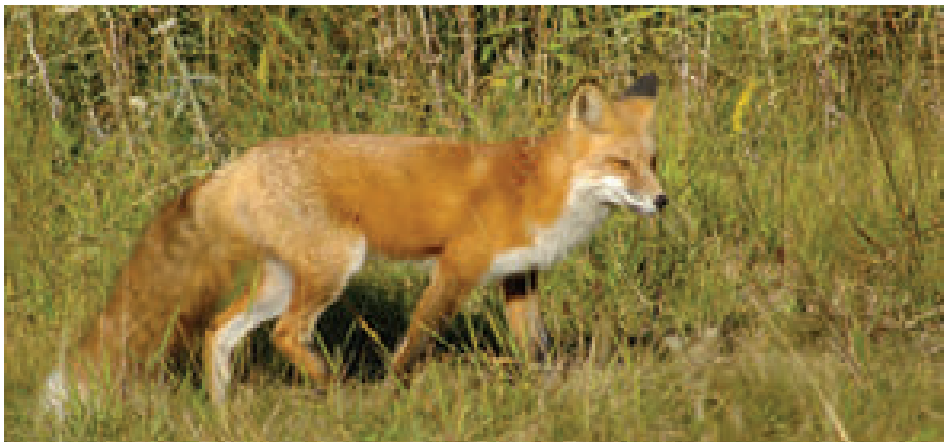
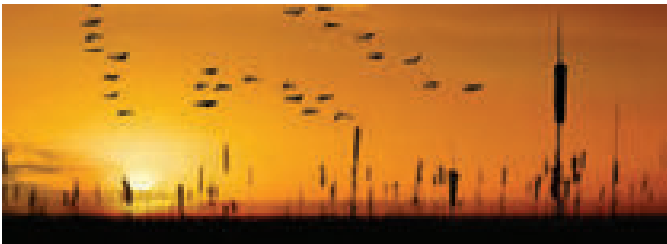
## Proximity to the RMA and other natural systems:

The project is located immediately adjacent (east) and upstream on First Creek from the RMA.

The project would restore and enhance a 1.4 mile reach of a plains stream and riparian system, which is an increasingly rare yet important regional environmental resource.

## Matching funds and partners:

- » Total project cost is \$6.5 million, of which the grant will provide \$.5 million, 8 percent of the total project cost.
- » Anticipated partners: Urban Drainage and Flood Control District, Regional Transportation District.



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## Grant Frontier, Denver

### Grant purpose:

To restore and enhance the riparian habitat along 1.75 miles of the South Platte River. The steep side slopes of the existing river channel will be set back to allow a terraced floodplain, which will be revegetated with native wetland, riparian, and upland species. Existing drop structures will be reconstructed to improve aquatic habitat and diversity.

This project is part of an overall effort to restore the South Platte River to an ecologically healthy and sustainable greenway that supports both wildlife habitat and recreational users.

### Ecological benefits:

**Surface water**—Grading back the steep side slopes to establish a floodplain terrace, and revegetation, will dissipate the erosive effects of high flows, allow flooding and natural deposition of sediments, all of which will improve downstream water quality.

**Groundwater**—The South Platte River in this area receives inflows from shallow aquifers, which have been impacted by urban and industrial uses along the river. The terraced, revegetated floodplains will provide natural filtration of surface and groundwater flows.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$1,000,000	\$4,250,000	\$5,100,000	\$6,100,000	425%	510%	Unknown

### Matching Fund Calculation, Grant Frontier

Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Park Amenities; trails, benches, signage, wetland boardwalk, playground	\$850,000	\$550,000	GOCO			\$550,000
		\$300,000	City of Denver			\$300,000
Habitat Restoration	\$5,250,000					
earthwork/soil remediation		\$3,100,000	Shattuck NRD/City of Denver/UDFCD	\$200,000	\$2,900,000	\$2,900,000
invasive species removal		\$250,000	City of Denver/UDFCD		\$250,000	\$250,000
instream habitat development		\$1,500,000	Shattuck NRD/GOCO/City of Denver/Trount Unlimited/CDOW	\$600,000	\$900,000	\$900,000
planting		\$400,000	City of Denver/NRD	\$200,000	\$200,000	\$200,000
<b>Totals</b>	<b>\$6,100,000</b>	<b>\$6,100,000</b>		<b>\$1,000,000</b>	<b>\$4,250,000</b>	<b>\$5,100,000</b>
				<b>NRD Leverage</b>	<b>Total Leverage</b>	
				<b>425%</b>	<b>510%</b>	



**Soils**—Scouring and erosion of soils will be reduced by project channel improvements. Establishment of riparian vegetation will also help hold the soils in place.

**Vegetation**—The project will establish a mosaic of native wetland, riparian, and upland vegetation.

**Wildlife**—The project will improve riparian habitat for birds, wildlife and aquatics. The South Platte River is already a major habitat corridor for a variety of wildlife species, including many small mammals, foxes, Coyotes, Raccoons, migratory songbirds, and raptors. Removing the non-native and invasive tree species and improving drop structures and construction of riffles with natural cobble and gravel will improve habitat for aquatic insects, fish, amphibians, birds and other wildlife.

### Proximity to the RMA and other natural systems:

The project is located approximately 10 miles from the RMA, and has a direct hydrologic connection to the

RMA via the South Platte River and its tributaries.

The South Platte River is not only the central drainage way of the region, it also provides important wildlife habitat. This project will be one step in improving the overall South Platte River corridor as a wildlife habitat and migration corridor.

### Matching funds and partners:

- » Total project cost is \$6.1 million, of which the grant will provide \$1 million, 16 percent of the total project cost.
- » Anticipated partners: Great Outdoors Colorado (GOCO), Colorado Water Conservation Board, Shattuck NRD Funds, Urban Drainage and Flood Control District.



# 6 Heron Pond, Denver

## Grant purpose:

To reconfigure and enhance, with native planting, a planned regional water detention facility (Urban Drainage and Flood Control District) to create 20 acres (15 acres of water) of diverse wetland and riparian habitat adjacent and create a single large, destination natural area with abundant wildlife habitat, walking trails, overlooks, sitting areas for birding and environmental education. The area will be Denver’s first officially designated natural area.

## Ecological benefits:

*Surface water*—The purpose of the original project is to create settling ponds to allow pollutants to settle out

of runoff before discharge into the South Platte River. Recontouring and establishing native vegetation will further filter and immobilize contaminants and slow the discharge into the South Platte River, portions of which were damaged by past RMA activities.

*Groundwater*—The project further promotes and improves infiltration into the groundwater, in particular during and after high flows.

*Soils*—The project reduces scouring and erosion during high flow periods, allowing formation of a nutrient-rich soil base for long-term vegetation growth and regeneration.

*Wildlife*—The proposed project will include a diverse complex of open water habitat interspersed with

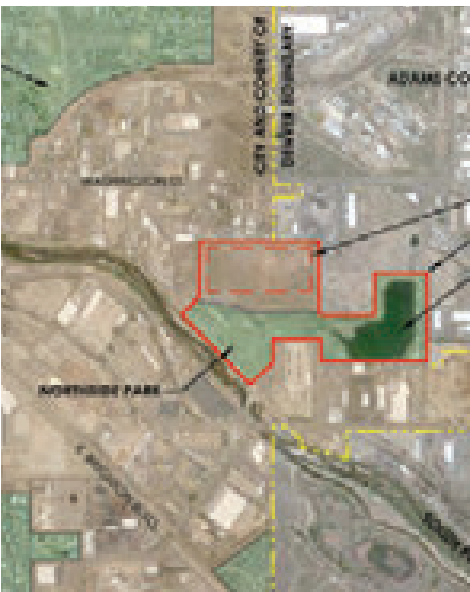
wetlands and sporadically inundated mudflat areas. Habitat restoration benefits small mammals, grassland birds (particularly migratory songbirds, waterfowl and raptors). In combination with the surrounding properties, this site creates a total of 35 acres of wetlands and native habitat.

## Proximity to the RMA and other natural systems:

The site is located approximately 4 miles from the RMA. The site has hydrologic and ecological connectivity to the RMA through its direct connection the South Platte River, a regionally significant biological resource.

## Matching funds and partners:

- » Total project cost is \$6 million, of which the grant will provide \$0.5 million, 8 percent of the total project cost.
- » Anticipated partners: Denver Public Works, GOCO, Urban Drainage and Flood Control District.



Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$500,000	\$5,050,000	\$5,500,000	\$6,000,000	910%	1100%	20.0

Matching Fund Calculation, Heron Pond						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 22 acres	\$2,100,000	\$2,100,000	City of Denver		\$2,100,000	\$2,100,000
Park Amenities	\$450,000	\$350,000	GOCO			\$350,000
trails, benches, signage, wetland boardwalk		\$100,000	City of Denver			\$100,000
Habitat Restoration	\$3,450,000					
earthwork/soil remediation		\$3,000,000	City of Denver/NRD	\$300,000	\$2,700,000	\$2,700,000
invasive species removal		\$250,000	City of Denver		\$250,000	\$250,000
planting		\$200,000	NRD	\$200,000		
Totals	\$6,000,000	\$6,000,000		\$500,000	\$5,050,000	\$5,500,000
					NRD Leverage	Total Leverage
					1010%	1100%



7

Invasive Species Removal, Sand Creek Regional Greenway Partnership

Grant purpose:

To remove invasive Russian Olive trees and Tamarisk trees along waterways in jurisdictions surrounding RMA in order to improve the ecological health of regional waterways. This project will continue and complement major initiatives by all NGC partners that have removed thousands of Russian Olive trees and Tamarisk trees in the northeast metro region over the last twenty years.

Ecological benefits:

As projects sites have yet to be identified, benefits identified here are general, specific benefits will be site specific.

*Vegetation*— Russian Olive trees and Tamarisk trees are considered noxious weeds in Colorado. Both species form dense stands that out-compete native riparian trees and shrubs and interfere with natural plant succession. Russian Olive

stands are less diverse in terms of structure and species composition than native communities. Removal of these invasive species benefits the establishment of more diverse and functional native riparian vegetation.

*Wildlife*—Stands of Russian Olive have been shown to support less wildlife species diversity than native riparian communities. Removal of these species will allow for re-establishment of native riparian communities with natural functions that support additional wildlife.

Proximity to the RMA and other natural systems:

The project area is along rivers and streams within jurisdictions surrounding the Rocky Mountain Arsenal National Wildlife Refuge. Local jurisdictions will decide which areas are the most important for invasive species removal.

Matching funds and partners:

- » Total project cost is \$0.08 million, of which grant will provide \$0.05 million, or 63 percent of the total project cost.
- » Anticipated partners: Sand Creek Regional Greenway Partnership, Mile High Youth Corps, Xcel Energy Foundation, and Adams County Open Space Sales Tax.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$50,000	\$30,000	\$30,000	\$80,000	60%	60%	30.0

Matching Fund Calculation, Invasive Species Removal						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Habitat Restoration	\$80,000	\$50,000	NRD	\$50,000		
invasive species removal		\$30,000	Xcel Energy Foundation, SCRGP, and Adams County Open Space Sales Tax		\$30,000	\$30,000
Totals	\$80,000	\$80,000		\$50,000	\$30,000	\$30,000
				NRD Leverage	Total Leverage	
				60%	60%	



Yellow indicates potential area of invasive species removal around the Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)

# 8 Montbello, Denver

### Grant purpose:

To acquire 5.5 acres of vacant land, create native prairie, and enhance riparian and wetland habitat along the edges of an existing pond. These enhanced terrestrial and aquatic habitats will provide opportunities for birding and environmental education. Walking trails, an interpretative kiosk, and sitting areas will be constructed with other funds.

This project is intended to introduce underserved youth to Colorado’s natural resources. It will be a transformational achievement for a community with decades of environmental justice issues and direct impact of the RMA.

### Ecological benefits:

*Surface water*—Enhancing the ecological function of the existing detention basin/water quality pond will reduce runoff and increase removal of pollutants from the water. Proposed riparian plantings increase the filtration and immobilization of contaminants.

*Groundwater*—Improvements to the pond will promote and increase infiltration during and after storm events. Wetland and riparian vegetation communities will benefit groundwater.

*Soils*—The project will improve soils by reducing erosion and allowing the development of a nutrient rich soil base for revegetation.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$500,000	\$700,000	\$950,000	\$1,450,000	140%	190%	5.5

Matching Fund Calculation, Montbello						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 4 acres	\$1,100,000	\$500,000	NRD	\$500,000		
		\$350,000	GOCO		\$350,000	\$350,000
		\$250,000	Private Foundation		\$250,000	\$250,000
Park Amenities; trails, signage, outdoor learning	\$250,000	\$250,000	GOCO			\$250,000
Habitat Restoration	\$100,000					
earthwork/soil remediation		\$50,000	City of Denver/ELK		\$50,000	\$50,000
invasive species removal		\$20,000	City of Denver/ELK		\$20,000	\$20,000
planting		\$30,000	City of Denver/ELK		\$30,000	\$30,000
Totals	\$1,450,000	\$1,450,000		\$500,000	\$700,000	\$950,000
				NRD Leverage	Total Leverage	
				140%	190%	



*Vegetation*—The site currently contains a mix of disturbed grassland, detention pond, and a small area of riparian vegetation. The proposed project will create a more diverse and natural complex of riparian, wetland, and native prairie plant communities.

*Wildlife*—The created wetland, riparian, and prairie areas will provide habitat for small mammals – including prairie dogs, grassland birds and raptors in close proximity of the native habitats on the Refuge and the Sand Creek Regional Greenway.



### Proximity to the RMA and other natural systems:

The Site is located one mile south of the RMA. Montbello shares a 3 mile border with the RMA. This site is important in the region as it protects an open space where there is not much available open or natural land. Site is home to a resident prairie dog population, a food source for raptors.

### Matching funds and partners:

- » Total project cost is \$1.45 million, of which the grant will provide \$0.5 million, 34 percent of the total project cost.
- » Anticipated partners: GOCO, Gates Family Foundation.



# 9 Sand Creek 1, Commerce City

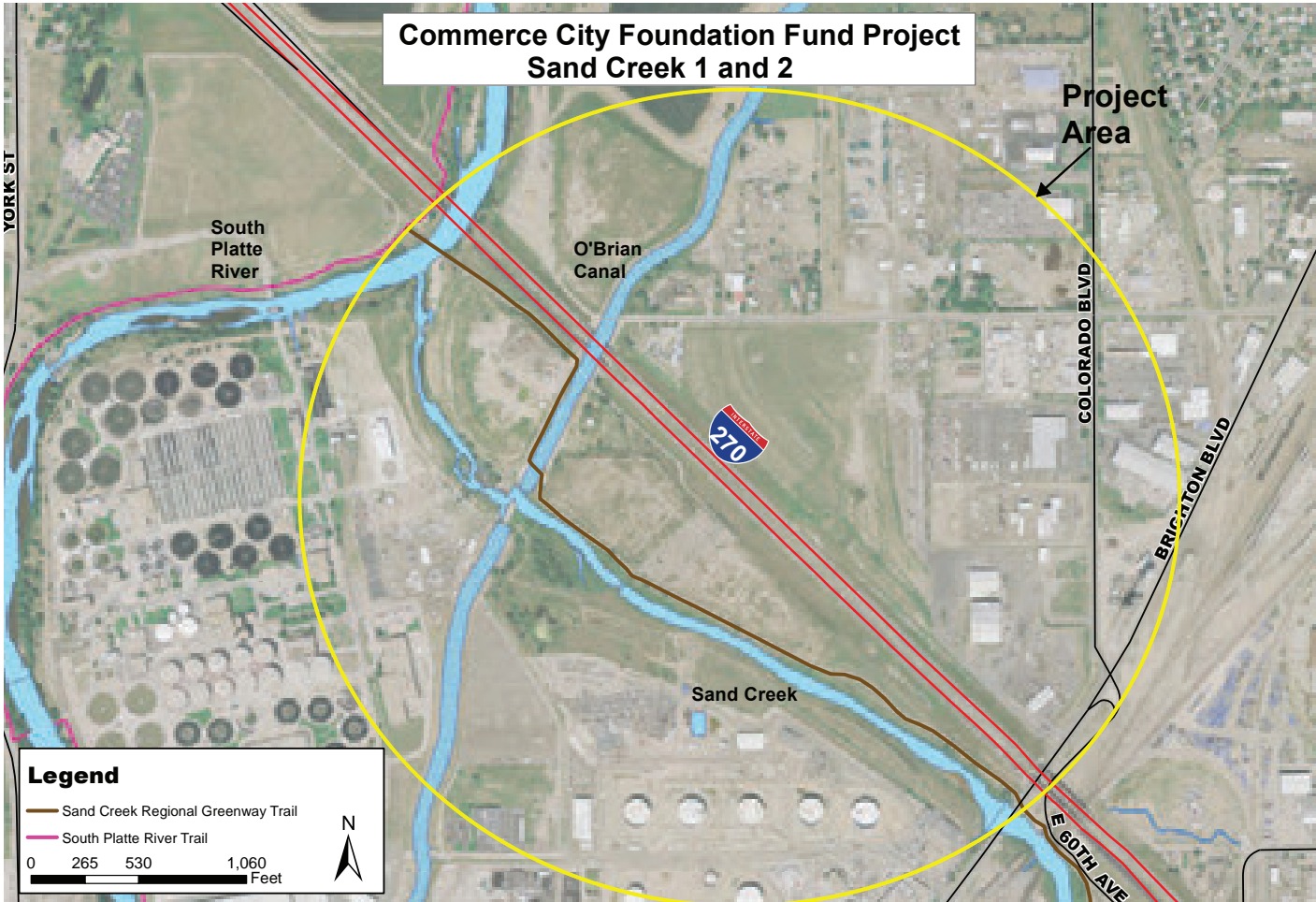
## Grant purpose:

The site is located on Sand Creek. The South Platte River and Sand Creek are important resources not only to Commerce City but also to the Denver metro area. Acquiring a site adjacent to these waterways and restoring it will provide additional habitat for birds as well as aquatic and terrestrial species. Restoring an industrial site with native vegetation will not only improve the aesthetics in this corridor but ensure that the surrounding waterways are not contaminated from uses on the property. Commerce City proposes acquiring an approximately 12-acre site and re-vegetating the property, creating additional riparian and upland habitat.

The acquisition and restoration of this property is included in the Sand Creek Regional Greenway Master Plan for the area and will continue the diligent work on the Sand Creek corridor that has been ongoing for over 15 years.

## Ecological benefits:

- Vegetation*— Restoring an industrial site with native vegetation
- Wildlife*— Restoring habitat for birds as well as aquatic and terrestrial species



## Proximity to the RMA and other natural systems:

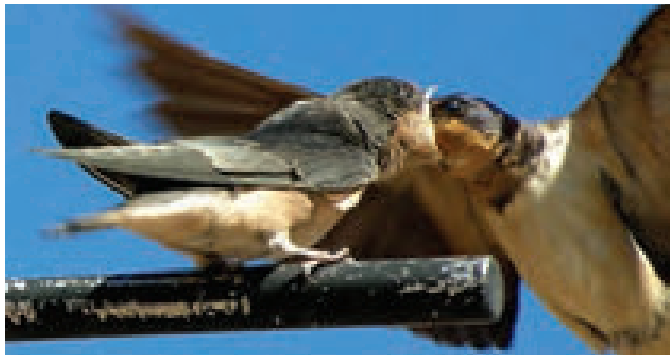
The site is located slightly less than 3 miles from the RMA.

The site has hydrologic and ecological connectivity to the RMA through its direct connection the South Platte River and Sand Creek, both of which are regionally significant biological resources.



## Matching funds and partners:

- » Total project cost is \$2.0 million and the grant request is for \$1.5 million, 75 percent of the total project cost.
- » Anticipated partners: Environmental Protection Agency, Adams County Open Space Sales Tax.



Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$1,500,000	\$500,000	\$500,000	\$2,000,000	33%	33%	12.0

Matching Fund Calculation, Sand Creek 1						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Property Acquisition	\$1,500,000	\$1,500,000	NRD	\$1,500,000		
Restoration	\$500,000	\$500,000	Commerce City		\$500,000	\$500,000
Totals	\$2,000,000	\$2,000,000		\$1,500,000	\$500,000	\$500,000
				NRD Leverage	Total Leverage	
				33%	33%	

10

Sand Creek 2, Commerce City

Grant purpose:

Sand Creek is an important resource not only to Commerce City but to the Denver metro area. Acquiring a site adjacent to these waterways and restoring it will provide additional habitat for birds as well as aquatic and terrestrial species. Restoring an industrial site with native vegetation will not only improve the aesthetics in this corridor but also ensure that the surrounding waterways are not contaminated from future uses on the property. Commerce City proposes acquiring an approximately 20-acre site, remediating existing contamination and re-vegetating the property, creating additional riparian and upland habitat. This project will continue the diligent work on the Sand Creek corridor that has been ongoing for over 15 years.

Ecological benefits:

*Vegetation*— Restoring an industrial site with native vegetation

*Wildlife*— Restoring habitat for birds as well as aquatic and terrestrial species

Proximity to the RMA and other natural systems:

The site is located slightly less than 3 miles from the RMA.

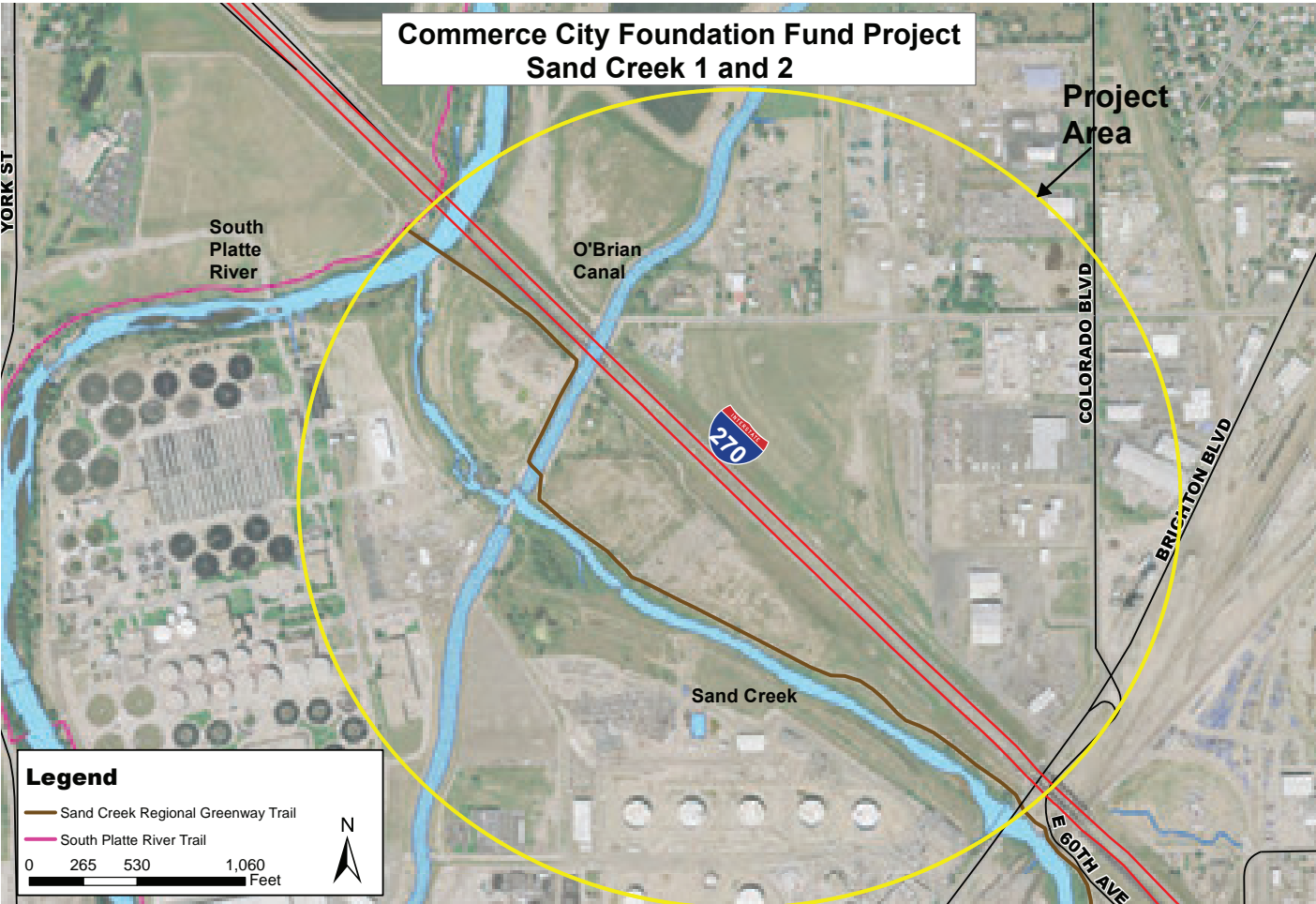
The site has hydrologic and ecological connectivity to the RMA through its direct connection the South Platte River and Sand Creek, both of which are regionally significant biological resources.

Matching funds and partners:

- » Total project cost is \$1.75 million and the NRD grant request is \$1,200,000, 69 percent of the total project cost.
- » Anticipated partners: Adams County Open Space Sales Tax.

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$1,100,000	\$650,000	\$650,000	\$1,750,000	59%	59%	20.0

Matching Fund Calculation, Sand Creek 2						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Property Acquisition	\$900,000	\$900,000	NRD	\$900,000		
Cleanup/Restoration	\$850,000	\$200,000	NRD	\$200,000		
		\$650,000	Commerce City		\$650,000	\$650,000
Totals	\$1,750,000	\$1,750,000		\$1,100,000	\$650,000	\$650,000
				NRD Leverage	Total Leverage	
				59%	59%	





11

Triple Creek, Aurora

Grant purpose:

To help acquire three parcels, totaling approximately 265 acres, along the Triple Creek corridor to protect habitat and prevent future development in the riparian area.

The project will replace similar habitat that was damaged at the RMA. The three parcels will be protected with a conservation easement that permanently protects areas of biological and ecological resources. The project will

implement the recommendations of a 2009 study to acquire this property.

- » To protect the riparian corridor and maintain uninterrupted wildlife habitat and suitable migration corridors for raptors, song birds, and mammals.
- » To enhance and extend the habitat connectivity along a series of three upstream corridors, which

Requested NRD Funding	Proposed Match that Meets NRD	Total Match	Total Project Cost	Leverage NRD	Leverage Total	Project Area (Acres)
\$2,000,000	\$6,052,500	\$9,578,820	\$11,578,820	303%	479%	265.0

Matching Fund Calculation, Triple Creek						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 265 acres (Star K Buffer, 6th and Coal Expansion, Confluence Open Space)	\$8,051,500	\$2,000,000	NRD	\$2,000,000		
		\$2,854,000	GOCO		\$2,854,000	\$2,854,000
		\$1,500,000	Adams County Open Space Sales Tax		\$1,500,000	\$1,500,000
		\$1,482,500	Arapahoe County Open Space Sales Tax		\$1,482,500	\$1,482,500
		\$183,000	Aurora		\$183,000	\$183,000
		\$33,000	The Trust for Public Land		\$33,000	\$33,000
Trailhead and Trails	\$3,527,320	\$2,146,000	GOCO			\$2,146,000
		\$1,017,500	Arapahoe County Open Space Sales Tax			\$1,017,500
		\$156,820	Adams County Open Space Sales Tax			\$156,820
		\$200,000	State Trails			\$200,000
		\$6,000	The Trust for Public Land			\$6,000
Totals	\$11,578,820	\$11,578,820		\$2,000,000	\$6,052,500	\$9,578,820
				NRD Leverage	Total Leverage	
				303%	479%	

connect to and are upstream of the Sand Creek Greenway, including Sand, Coal, and Senac Creeks.

- » To create a functioning shortgrass prairie ecosystem. To prevent urbanization and associated impacts.
- » To protect existing wetlands.
- » To provide future wetland banking.

Ecological benefits:

Star K Buffer Parcel

The parcel will be managed as part of the larger 200-acre Star K Ranch Natural Area, which supports a mixed-grass prairie plant community.

Surface water— Provide open space buffer that will protect water quality at Sand Creek, by preventing erosion and sedimentation.

Soils— Preserve rich floodplain soils.

Wildlife— Property provides wildlife habitat for Mule Deer that regularly forage in the area, as well

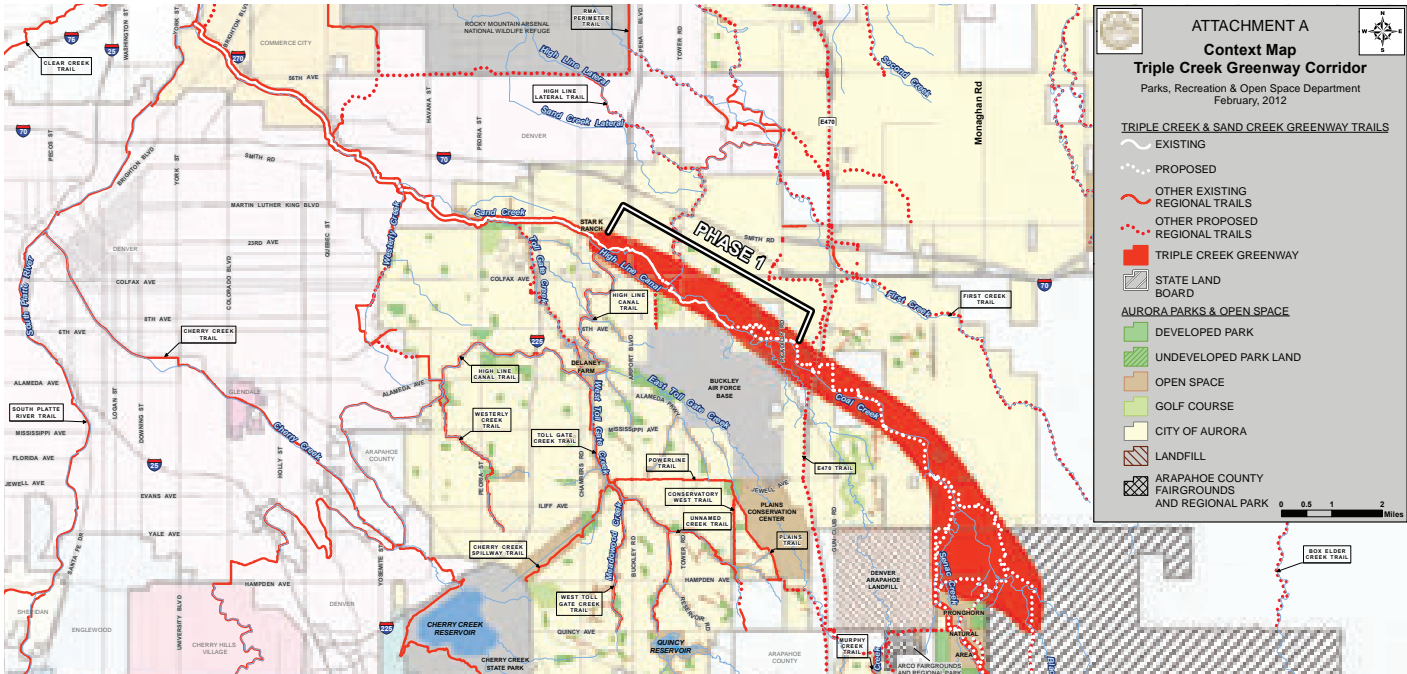
as foxes, Coyotes, rabbits, and numerous bird and waterfowl species. Several Black-tailed Prairie Dog colonies occur on the site, providing prey for Bald Eagles and Ferruginous Hawks, both Species of Special Concern in Colorado. These colonies also provide suitable habitat during breeding season for Burrowing Owls, a Colorado Threatened Species.

6th and Coal Expansion Parcel

This 168-acre property will be restored to a functioning shortgrass prairie ecosystem and managed as part of the larger Sand Creek Riparian Preserve.

Soils— Portions of the property include historic riverbed and the soils are primarily sands and sandy loams prone to invasive and nuisance species, proliferation of which degrades soil stability, habitat, and results in erosion and eventual sediment transport (i.e., loss of soil).

Vegetation—Will replace shortgrass prairie, a habitat that was damaged at the RMA.



*Wildlife*— A prominent ridge runs east to west, dividing the property. Two Black-tailed Prairie Dog colonies provide food for the Bald Eagles and Ferruginous Hawks that nest in the cottonwood galleries in the riparian corridor along Sand Creek, just south of the property. Both colonies also provide excellent habitat for Burrowing Owl, Red-tailed Hawk, Swainson’s Hawk, Northern Harrier, Great Horned Owls. Loggerhead Shrike, Western Kingbird and Meadowlark are all commonly seen foraging in this mosaic of shortgrass, mixed-grass and scrublands prairie community. A recent trail camera study on the adjacent City-owned open space yielded photos of Bobcat, Coyote, Mule Deer, and White-tailed Deer. Black-tailed Jackrabbits and Cottontail Rabbits are also present on this property. The complex and stratified cover system allows for a wide diversity of prey and predator species to interact.

**Confluence Open Space Parcel**

This 65-acre parcel comprises a former sand and gravel mine and the confluence of two major tributaries to Sand Creek.

*Surface water / Groundwater / Soils*—Careful restoration of this site will actively attenuate contaminants in the water and local environment, and limiting pesticide and herbicide application will further aid the long-term health and function of the groundwater. This provides an opportunity for wetland banking as a benefit to natural resources by providing habitat and biological treatment of waters. Improved and well-managed wetland boundaries will also prevent bank erosion, aquatic nuisance species, and invasive species in the riparian zone. Water quality improvements at this site will benefit Sand Creek and the South Platte River downstream, both potentially impaired water bodies for e-coli, arsenic, and selenium.



*Wildlife / Vegetation*— Extensive wetland vegetation and ponds cover roughly one-third of the property, providing year-round habitat for numerous waterfowl and beavers that occupy two lodges in the wetlands. This regionally significant wetland marsh ecosystem supports a wide variety of plant and animal species. Cattail and bulrush vegetation, together with the abundant willow and cottonwood saplings lining the shores, provide excellent nesting cover and a haven for White-tailed Deer, Mule Deer, Coyotes, Raccoons, foxes and other mammals. Remnant galleries of native cottonwood on the north side of Sand Creek recently hosted a nesting pair of Bald Eagles, and Great Horned

Owls, American Kestrels, Red-tailed Hawks and Swainson’s Hawks also nest throughout this riparian woodland. Several disturbed areas contain noxious weeds that require treatment.

**Proximity to the RMA and other natural systems:**

Triple Creek is within three miles of the RMA. The project will increase connectivity to a series of three stream corridors, which connect to and are upstream of the Sand Creek Regional Greenway, including Sand, Coal and Senac Creeks. It also provides important ecological and geographical connections to the RMANWR.

In addition its physical proximity, Sand Creek functions as a wildlife migration corridor for deer, Coyotes, foxes and other mammals that move between the RMA, the South Platte River and the Eastern Plains. Resident Bald Eagles, Ferruginous Hawks, and Burrowing Owls increase potential genetic diversity to resident populations that inhabit the RMA. Additional protected properties along the Sand Creek corridor could provide new homes for dispersing young birds that travel between the two areas.

**Matching funds and partners:**

- » Total project cost is \$11.6 million, of which the grant will provide \$2.0 million, or 17 percent of the total project cost.
- » Anticipated partners: GOCO, Adams County Open Space Sales Tax, Arapahoe County Open Space Sales Tax, and the Trust for Public Lands.

**Star K Buffer Parcel**—The Trust for Public Land (TPL) has an option agreement to purchase the property that expires on August 29, 2012. Upon notification of this application and other pending funds, TPL will complete the required due diligence items, including a qualified appraisal, an environmental assessment, and a conservation easement for permanent protection of the property that includes an endowment for long-term stewardship and monitoring.

**6th and Coal Expansion parcel**—The Trust for Public Land (TPL) has initiated discussions with the landowners about a potential conservation sale and secured Letters of Intent. Upon notification of this application and other pending funds, TPL will continue negotiations with the landowners and complete the required due diligence items, including a qualified appraisal, an environmental assessment, and a conservation easement for permanent protection of the property that includes an endowment for long-term stewardship and monitoring.



C. Calculating the Match

1 - 88th Avenue, Adams County						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Design and Engineering Services	\$250,000	\$100,000	Adams County Parks			\$100,000
		\$150,000	Adams County Open Space Sales Tax			\$150,000
Recreation Improvements: Natural Surface Trails, Trailhead, Parking Lot, Restroom, Picnic Shelters, Fishing Access Improvements, Interpretive Signage.	\$500,000	\$250,000	Adams County Open Space Sales Tax			\$250,000
		\$250,000	CO Parks & Wildlife: Fishing is Fun Grant			\$250,000
Habitat Restoration, Replacement & Enhancement	\$2,350,000					
South Pond Fishery and shoreline Improvements: Earthwork, habitat creation		\$450,000	NRD	\$450,000		
		\$100,000	Adams County Parks		\$100,000	\$100,000
Re-routing and restoration of South Platte River Trail		\$275,000	NRD	\$275,000		
		\$200,000	Adams County Open Space Sales Tax		\$200,000	\$200,000
South Platte River Flood Control and Water Quality Improvements: side channel spillways for South Pond		\$380,000	NRD	\$380,000		
		\$100,000	Urban Drainage and Flood Control District		\$100,000	\$100,000
South Platte River Channel Improvements		\$150,000	NRD	\$150,000		
		\$100,000	Urban Drainage and Flood Control District		\$100,000	\$100,000
North Pond shoreline improvements: Earthwork, habitat creation		\$295,000	NRD	\$295,000		
		\$100,000	Adams County Open Space Sales Tax		\$100,000	\$100,000
Riparian Forest & Upland Habitat Enhancement: invasive removal, plantings		\$200,000	NRD	\$200,000		
Totals	\$3,100,000	\$3,100,000		\$1,750,000	\$600,000	\$1,350,000
				NRD Leverage	Total Leverage	
				34%	77%	

2 - Big Dry Creek, Thornton						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 130+ acres	\$1,200,000	\$500,000	NRD	\$500,000		
		\$200,000	City of Thornton		\$200,000	\$200,000
		\$500,000	Adams County Open Space Sales Tax		\$500,000	\$500,000
Habitat Restoration earthwork	\$500,000	\$50,000	NRD	\$50,000		
		\$25,000	City of Thornton		\$25,000	\$25,000
streambank stabilization		\$100,000	NRD	\$100,000		
		\$75,000	City of Thornton		\$75,000	\$75,000
invasive species removal		\$25,000	NRD	\$25,000		
		\$25,000	Adams County Open Space Sales Tax		\$25,000	\$25,000
planting, seeding and establishment		\$75,000	NRD	\$75,000		
		\$50,000	City of Thornton		\$50,000	\$50,000
		\$75,000	Adams County Open Space Sales Tax		\$75,000	\$75,000
Totals	\$1,700,000	\$1,700,000		\$750,000	\$950,000	\$950,000
					NRD Leverage	Total Leverage
					127%	127%

3 - Eagle Preservation, Brighton						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 42.2 acres of Eagle Preserve land	\$1,000,000	\$500,000	NRD	\$500,000		
		\$100,000	City of Brighton		\$100,000	\$100,000
		\$400,000	Adams County Open Space Sales Tax		\$400,000	\$400,000
Totals	\$1,000,000	\$1,000,000		\$500,000	\$500,000	\$500,000
					NRD Leverage	Total Leverage
					100%	100%

4 - First Creek, Denver						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquisition (Floodplain)	\$2,200,000	\$2,200,000	Private Landowners-Donation		\$2,200,000	\$2,200,000
Acquisition (Upland Prairie)	\$500,000	\$500,000	NRD	\$500,000		
Park Amenities; trails, benches, signage	\$500,000	\$500,000	City of Denver			\$500,000
Habitat Restoration	\$3,300,000				\$3,300,000	\$3,300,000
earthwork/soil remediation		\$2,600,000	City of Denver/RTD			
invasive species removal		\$200,000	City of Denver/RTD			
planting		\$500,000	City of Denver/RTD			
<b>Totals</b>	<b>\$6,500,000</b>	<b>\$6,500,000</b>		<b>\$500,000</b>	<b>\$5,500,000</b>	<b>\$6,000,000</b>
					<b>NRD Leverage</b>	<b>Total Leverage</b>
					<b>1100%</b>	<b>1200%</b>

5 - Grant Frontier, Denver						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Park Amenities; trails, benches, signage, wetland boardwalk, playground	\$850,000	\$550,000	GOCO			\$550,000
		\$300,000	City of Denver			\$300,000
Habitat Restoration	\$5,250,000					
earthwork/soil remediation		\$3,100,000	Shattuck NRD/City of Denver/UDFCD	\$200,000	\$2,900,000	\$2,900,000
invasive species removal		\$250,000	City of Denver/UDFCD		\$250,000	\$250,000
instream habitat development		\$1,500,000	Shattuck NRD/GOCO/City of Denver/Trout Unlimited/CDOW	\$600,000	\$900,000	\$900,000
planting		\$400,000	City of Denver/NRD	\$200,000	\$200,000	\$200,000
<b>Totals</b>	<b>\$6,100,000</b>	<b>\$6,100,000</b>		<b>\$1,000,000</b>	<b>\$4,250,000</b>	<b>\$5,100,000</b>
					<b>NRD Leverage</b>	<b>Total Leverage</b>
					<b>425%</b>	<b>510%</b>

6 - Heron Pond, Denver						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 22 acres	\$2,100,000	\$2,100,000	City of Denver		\$2,100,000	\$2,100,000
Park Amenities	\$450,000	\$350,000	GOCO			\$350,000
trails, benches, signage, wetland boardwalk		\$100,000	City of Denver			\$100,000
Habitat Restoration	\$3,450,000					
earthwork/soil remediation		\$3,000,000	City of Denver/NRD	\$300,000	\$2,700,000	\$2,700,000
invasive species removal		\$250,000	City of Denver		\$250,000	\$250,000
planting		\$200,000	NRD	\$200,000		
<b>Totals</b>	<b>\$6,000,000</b>	<b>\$6,000,000</b>		<b>\$500,000</b>	<b>\$5,050,000</b>	<b>\$5,500,000</b>
					<b>NRD Leverage</b>	<b>Total Leverage</b>
					<b>1010%</b>	<b>1100%</b>

7 - Invasive Species Removal, Sand Creek Regional Greenway Partnership						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Habitat Restoration	\$80,000	\$50,000	NRD	\$50,000		
invasive species removal		\$30,000	Xcel Energy Foundation, SCRGP, and Adams County Open Space Sales Tax		\$30,000	\$30,000
<b>Totals</b>	<b>\$80,000</b>	<b>\$80,000</b>		<b>\$50,000</b>	<b>\$30,000</b>	<b>\$30,000</b>
					<b>NRD Leverage</b>	<b>Total Leverage</b>
					<b>60%</b>	<b>60%</b>





8 - Montbello, Denver						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 4 acres	\$1,100,000	\$500,000	NRD	\$500,000		
		\$350,000	GOCO		\$350,000	\$350,000
		\$250,000	Private Foundation		\$250,000	\$250,000
Park Amenities; trails, signage, outdoor learning	\$250,000	\$250,000	GOCO			\$250,000
Habitat Restoration	\$100,000					
earthwork/soil remediation		\$50,000	City of Denver/ELK		\$50,000	\$50,000
invasive species removal		\$20,000	City of Denver/ELK		\$20,000	\$20,000
planting		\$30,000	City of Denver/ELK		\$30,000	\$30,000
Totals	\$1,450,000	\$1,450,000		\$500,000	\$700,000	\$950,000
					NRD Leverage	Total Leverage
					140%	190%

9 - Sand Creek 1, Commerce City						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Property Acquisition	\$1,500,000	\$1,500,000	NRD	\$1,500,000		
Restoration	\$500,000	\$500,000	Commerce City		\$500,000	\$500,000
Totals	\$2,000,000	\$2,000,000		\$1,500,000	\$500,000	\$500,000
					NRD Leverage	Total Leverage
					33%	33%

10 - Sand Creek 2, Commerce City						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Property Acquisition	\$900,000	\$900,000	NRD	\$900,000		
Cleanup/Restoration	\$850,000	\$200,000	NRD	\$200,000		
		\$650,000	Commerce City		\$650,000	\$650,000
Totals	\$1,750,000	\$1,750,000		\$1,100,000	\$650,000	\$650,000
					NRD Leverage	Total Leverage
					59%	59%

Matching Fund Calculation, Triple Creek						
Components	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Acquire 265 acres (Star K Buffer, 6th and Coal Expansion, Confluence Open Space)	\$8,051,500	\$2,000,000	NRD	\$2,000,000		
		\$2,854,000	GOCO		\$2,854,000	\$2,854,000
		\$1,500,000	Adams County Open Space Sales Tax		\$1,500,000	\$1,500,000
		\$1,482,500	Arapahoe County Open Space Sales Tax		\$1,482,500	\$1,482,500
		\$183,000	Aurora		\$183,000	\$183,000
		\$33,000	The Trust for Public Land		\$33,000	\$33,000
Trailhead and Trails	\$3,527,320	\$2,146,000	GOCO			\$2,146,000
		\$1,017,500	Arapahoe County Open Space Sales Tax			\$1,017,500
		\$156,820	Adams County Open Space Sales Tax			\$156,820
		\$200,000	State Trails			\$200,000
		\$6,000	The Trust for Public Land			\$6,000
Totals	\$11,578,820	\$11,578,820		\$2,000,000	\$6,052,500	\$9,578,820
					NRD Leverage	Total Leverage
					303%	479%

Foundation Fund Totals						
	Total Cost	Funding by Source	Sources	Request from Trustees	Match that Meets NRD Criteria	Total Match
Totals	\$41,258,820	\$41,258,820		\$10,150,000	\$24,782,500	\$31,108,820
					NRD Leverage	Total Leverage
					244%	306%



# VI.

## RECOVERY FUND SUBMITTALS

Table 2: Recovery Fund Submittals

	Project Name	Jurisdiction/ Organization	Requested NRD Funding	TOTAL Project Cost
1	Aquifer Storage	The Site Specific Advisory Board of the Rocky Mountain Arsenal	\$12,000,000	\$28,000,000
2	Bird Habitat	Sand Creek Regional Greenway Partnership and Environment for the Americas	\$1,000,000	\$2,000,000
3	Bluff Lake Habitat	Bluff Lake Nature Center	\$992,000	\$1,700,000
4	Clear Creek Cleanup	Adams County	\$2,000,000	\$4,000,000
5	Community Initiative	Earth Force	\$0	\$40,000
6	Heron Pond Expansion	Denver	\$500,000	\$1,500,000
7	Ken Mitchell	Brighton	\$2,500,000	\$4,000,000
8	Montbello Open Space	Environmental Learning for Kids	\$1,000,000	\$2,000,000
9	Platte Farm	Groundwork	\$600,000	\$1,200,000
10	Second Creek Channel	Commerce City	\$2,600,000	\$4,000,000
11	Second Creek Corridor	Commerce City	\$750,000	\$1,000,000
12	South Platte	Adams County	\$3,000,000	\$5,000,000
13	Suburban Area Restoration	National Wildlife Federation - Rocky Mountain Regional Center	\$466,500	\$768,000
14	Triple Creek -2	Aurora	\$4,000,000	\$8,000,000
15	Westerly/Sand Creek Confluence	Denver	\$2,000,000	\$8,700,000
Totals			\$33,408,500	\$71,908,000

The Northeast Greenway Corridor (NGC) Advisory Committee and the Working Group have focused much of their efforts on identifying projects for the Foundation Fund. At the same time, the Recovery Fund represents a sizeable opportunity for local jurisdictions and non-profits to invest in protecting natural resources. This chapter discusses the availability of the Recovery Fund, and summarizes the project submittals received to date.

### A. Funding Availability

The Recovery Fund consists of \$17.4 million from Shell Oil Company and the United States Army. Part of the challenge with the Recovery Fund is the timing of the availability of these funds. The Legislature approved funds to be used to litigate the State’s Natural Resource Damages (NRD) at the Rocky Mountain Arsenal (RMA). This money must be repaid using the accrued interest from the \$17.4 million settlement. Currently, the money is in an account generating interest, but in the current economic environment, the interest being generated is modest. Unless the interest rates increase or there is some alternative repayment approach, the Recovery Fund monies will not be available for perhaps five years (i.e., 2017). Various creative mechanisms are being explored to meet the repayment obligation and have the Recovery Fund monies be available for project activity sooner.

### B. Overview of Recovery Fund Submittals

In spite of the uncertain timing of the funding for the Recovery Fund, the Northeast Greenway Corridor Advisory Committee, through its Working Group, solicited candidate projects in order to make an early assessment of the number and type of viable projects that have merit ecologically.

The initial step in the Recovery Fund solicitation was a broad outreach of press releases, e-newsletters, fact sheets, public meeting advertisements, website announcements, and a direct email invitation to as many groups as could be reasonably identified. Next, a public workshop was held in February 2012 for all interested parties. Also, the Northeast Greenway Corridor website shared and updated information about the Recovery Fund and included the process for submitting project proposals.

Fifteen project proposals were submitted in April 2012 requesting \$33 million in NRD funding, which with matching funds, create projects with a total cost (benefit) of \$72 million.

A summary of the project submittals is shown in Table 2 and their locations are illustrated on the following map.

Projects were evaluated based on the NRD Screening Criteria, which require that projects help “restore, replace, and/or acquire the equivalent of the natural resources injured by releases of hazardous substances at or from the Arsenal” and other Evaluation Criteria established by the Advisory Committee and the Working Group.

The assessment of these projects was conducted by State representatives and is considered preliminary.

The Recovery Fund project submittals were sorted into three groups, as summarized in Table 3. These groupings reflect the degree to which the projects appear to adequately address the Screening and Evaluation Criteria.

The first category contains six projects, requesting \$12.5 million in NRD funding; these projects were considered quite strong and well documented. The second group of six projects, requesting \$8.3 million in NRD funding, had issues that the reviewers felt need to be more clearly explained with additional detail, planning or budgeting. The reviewers felt that the projects in Group 3 either do not meet the Screening or Evaluation Criteria or there are serious questions about the technical feasibility or sustainability of the project. Having said this, it should be reinforced that there were no presentations of these project proposals to the State representatives other than through the initial written submittals. Therefore these evaluations are considered preliminary.

As was the process with the Foundation Fund projects, once there is more certainty about timing of the Recovery Fund funding the State representatives would (a) want to meet with project proponents to refine and hone their proposals and (b) determine if there are other viable projects that should be considered.

### C. Next Steps

Once there is clarity about the timing of the availability of the Recovery Fund monies, some additional outreach to local governments and other potentially interested parties is recommended.

If Recovery Fund monies become available relatively soon (e.g., before the end of 2013), it is recommended that (a) a number of the Recovery Fund submittals that are designated in Group 1 receive consideration



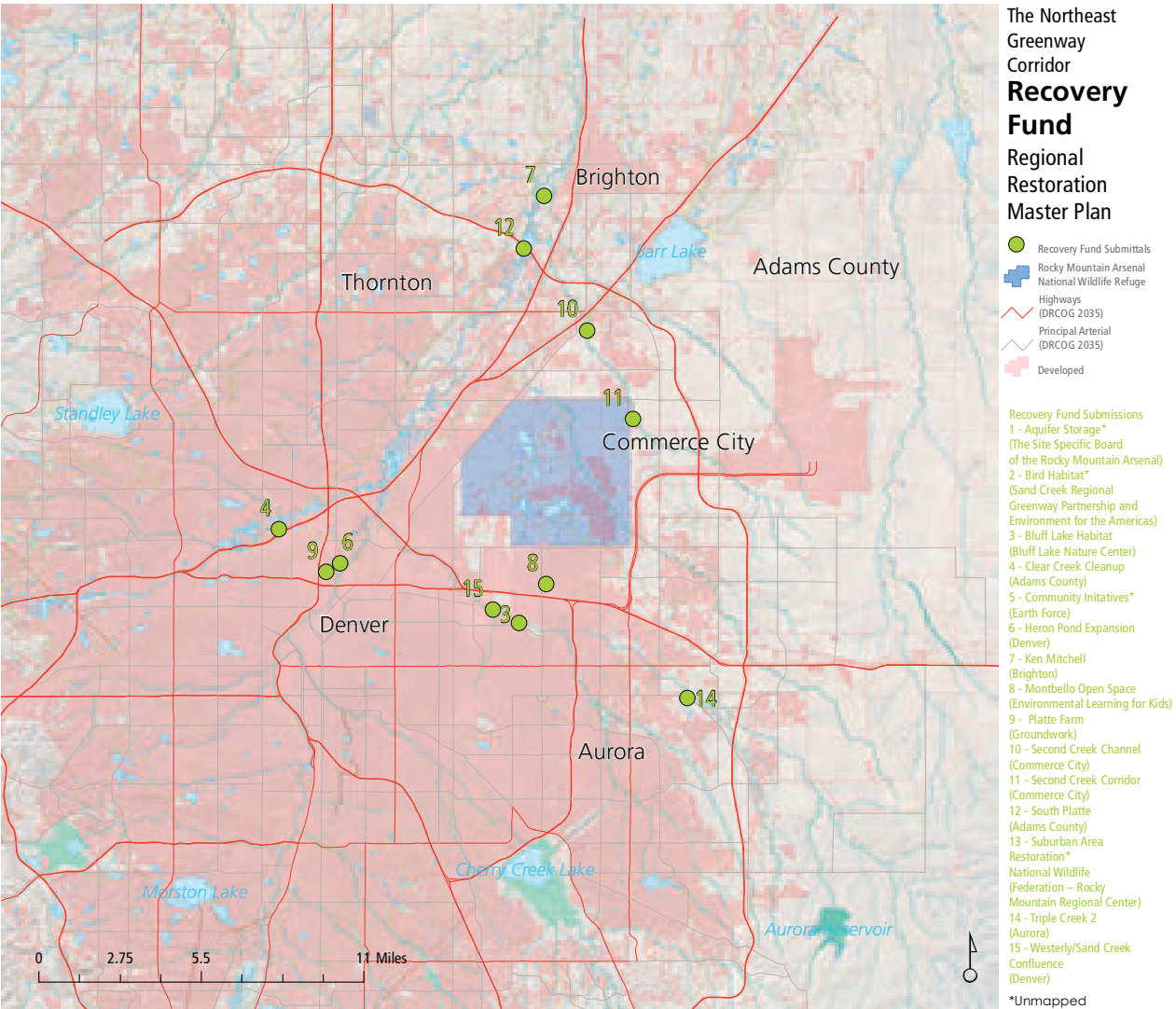


Figure 4: Natural Resource Recovery Fund Submittals

from the Trustees, (b) Group 2 projects be reviewed with project proponents to determine if the proposals can be strengthened or refined, and (c) there be a time-limited outreach to modify Group 3 projects and request additional proposals.

If the monies are not available until 2014 or beyond, it is suggested that these projects be considered and updated, and that there be more extensive outreach to solicit additional project proposals.

The Trustees will make the final determination on Recovery Fund submittals and may approve funding over the next several years.

Table 3: Preliminary Assessment of Recovery Fund Submittals					
	Project Name	1 Meets Screening and Evaluation Criteria; Well Developed	2 Projects are Conceptual; More Info or Discussion Needed	3 Project Does Not Meet Screening Criteria	Explanation or Comment
1	Aquifer Storage			\$12,000,000	Project appears to be highly conceptual. Significant questions related to feasibility, water rights, sustainability, location.
2	Bird Habitat	\$1,000,000			Appears to be an implementable project. Specific objectives, plans and sites not identified. Anticipate that several candidate areas will be identified with site and species-specific targeted restoration goals.
3	Bluff Lake Habitat	\$992,000			Clearly presented. Some questions regarding budget, but overall appears to be solid project.
4	Clear Creek Cleanup	\$2,000,000			Valuable connectivity. Questions about total project budget and funding for restoration. CDOT is willing seller.
5	Community Initiative			\$0	Seems like a partnering opportunity, but not sufficient in and of itself.
6	Heron Pond Expansion		\$500,000		Expansion of Heron Pond Natural Area through conversion of 20-acre Northside Park. Complements Foundation Fund project. Need clarity about restoration goals, tasks and costs.
7	Ken Mitchell		\$2,500,000		Need more detail regarding the restoration plan and associated costs.
8	Montbello Open Space		\$1,000,000		Need to have clarity about the restoration that will be accomplished and its consistency with NRD funding criteria as well as connectivity (e.g., a trail) to the Arsenal.
9	Platte Farm		\$600,000		Have preliminary landscape design, but isolated from other open space sites and the Arsenal. Greatest concern, given size and location, is long-term sustainability of and stewardship for the site.
10	Second Creek Channel	\$2,600,000			Valuable in terms of reconnecting the stream corridor and providing additional wetlands and riparian habitat.
11	Second Creek Corridor		\$750,000		Valuable in terms of enhancing corridor. Need more detailed restoration plan and associated budget.
12	South Platte		\$3,000,000		Difficult to know if the acquisition is viable. Would like to know if this is solely an acquisition or are some funds being used for restoration.
13	Suburban Area Restoration			\$466,500	Largely training and education focused.
14	Triple Creek -2	\$4,000,000			This could be a Group 1 project assuming the money is for acquisition. Consistent with overall Triple Creek protection strategy. If the funds are for restoration, a more detailed plan with more detailed cost estimates will be needed.
15	Westerly/Sand Creek Confluence	\$2,000,000			Close to Bluff Lake. Has a process in place for obtaining the matching funds. Design apparently in hand, but not submitted.
Total		\$12,592,000	\$8,350,000	\$12,466,500	

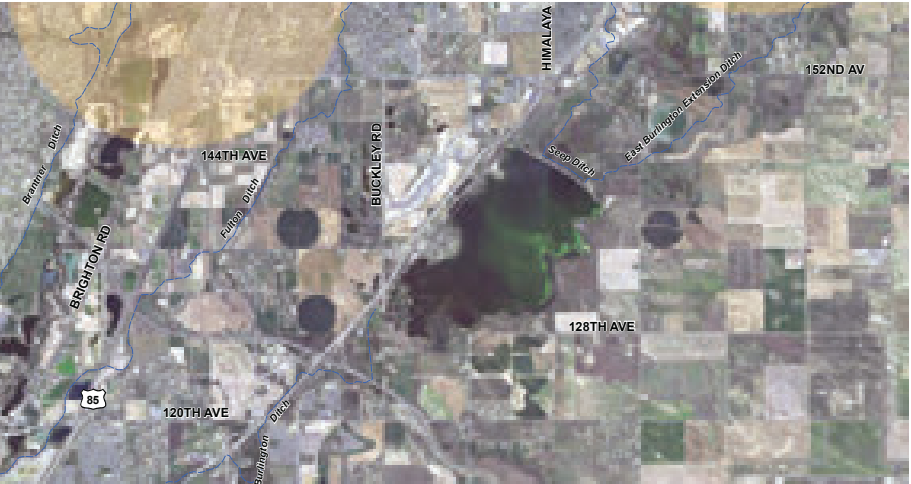
D. Detailed Descriptions

The Recovery Fund proposals are included in their entirety as Appendix D. Brief descriptions of the projects are shown below.

1 Aquifer Storage, The Site Specific Advisory Board of the Rocky Mountain Arsenal				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$12,000,000	\$16,000,000	\$28,000,000	133%	Unknown

The proposed project indicates it will be an example of responsible natural resource protection, restoration and development with benefits to multiple interested parties and communities. The project will consist of a Porosity Storage Reservoir, which is a water reservoir built underground in natural alluvial deposits that is separated and enclosed by walls made of natural materials. It is said that this type of storage provides substantial benefits to water resources and allows use of the ground above. The reservoir will have two cells, one with active water storage to be used to replace and acquire equivalent natural resources that were injured by hazardous substance releases at the RMA, and the other cell will be filled and left full to create an artificial wetland to replace damaged areas. The entire site, above ground, will be put in a conservation easement for use as open space or natural habitats with educational benefits to the community. This project will be located along the South Platte River with geographic and hydrologic connectivity to the injured areas at the Arsenal.

**Matching funds and partners:**  
Total project cost is \$28 million, of which the proponents are requesting \$12.0 million, 43 percent of the total project cost.  
Anticipated partners: Unknown



2 Bird Habitat, Sand Creek Regional Greenway Partnership and Environment for the Americas				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$1,000,000	\$1,000,000	\$2,000,000	100%	100.0

Colorado’s grassland habitats once covered almost 40 percent of the State, but today are one of the most threatened habitats in North America. The grasslands east of the Rocky Mountains are especially vulnerable, because rapid urbanization, invasive plants, livestock grazing, and other factors have resulted in significant loss of this habitat. The impacts to grassland habitat are reflected in the decline of grassland bird species, such as Bobolink, Grasshopper Sparrow, Horned Lark, and even the State bird, the Lark Bunting. Birds are ideal indicators of environmental health, and this project proposes to restore grassland habitats and their associated riparian corridors surrounding the RMANWR, using avian biodiversity and abundance as a primary indicator of success. Working with a variety of partners, the project will target areas in the northeast area of the metro region for intensive invasive weed removal, native species planting, and restoration of native ecosystems for increased habitats for native bird species. The partners will work closely with the experts at the Rocky Mountain Arsenal National Wildlife Refuge and the Denver Zoological Foundation to restore native shortgrass and mixed-grass prairie habitat in the areas surrounding the RMANWR.

**Matching funds and partners:**  
Total project cost is \$2.0 million, of which the proponents are requesting a grant of \$1.0 million, 50 percent of the total project cost.



Anticipated partners: Denver Zoological Foundation, Aurora Parks and Open Space, Commerce City Parks and Recreation, Adams County Parks and Community Resources, and the Rocky Mountain Arsenal National Wildlife Refuge.

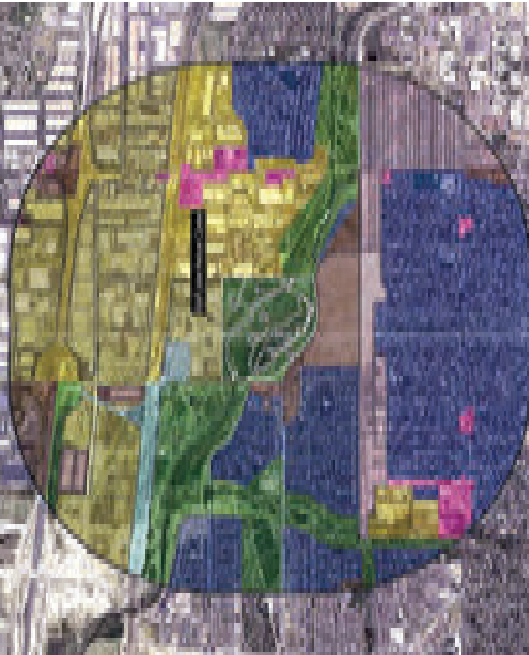
3 Bluff Lake Habitat, Bluff Lake Nature Center				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$992,000	\$708,000	\$1,700,000	71%	31.0

This proposed restoration project consists of three components that will enhance critical wildlife habitat in the riparian, wetland, and nearby grassland areas of Bluff Lake Nature Center, a 123-acre wildlife refuge and science education center along Sand Creek in Denver.

**Component One** provides a reliable water source to assure that Bluff Lake contains sufficient water year-round to sustain wildlife. Currently, the lake empties during the summer and fall dry seasons, as the only water source is direct precipitation and the stormwater run-off from an approximately 760 acre area of Aurora that drains into Bluff Lake.

**Component Two** expands the lake depth and footprint, creates additional wildlife habitat, and restores the functionality of the turn-of-the-century dam at Bluff Lake to prevent seepage and conserve valuable surface water.

**Component Three** increases wildlife diversity by creating pockets in the existing cattail monoculture and re-contouring and re-vegetating the



nearby grassland. This will increase plant biodiversity and attract a larger variety of migrating, breeding and over-wintering birds and wildlife.

**Matching funds and partners:**  
Total project cost is \$1.7 million and the NRD request is for \$992,000, 58 percent of the total project cost.  
Anticipated partners: Individual donors, Denver Water and volunteers.

CENTER; COURTESY DOUG PENSINGER



#### 4 Clear Creek Cleanup, Adams County

Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$2,000,000	\$2,000,000	\$4,000,000	100%	31.0

This project involves a 31-acre parcel of land currently owned by Colorado Department of Transportation (CDOT). The land is located on the south bank of Clear Creek. It has been utilized for gravel extraction and material storage. There is a small pond located on the property. The site is industrial and heavily degraded with no native vegetation or habitat present. The proposal is to acquire this property and reclaim it for native habitat. The project seeks NRD funds to acquire the parcel. The parcel will be cleaned up by CDOT before the sale.

##### Matching funds and partners:

Total project cost is \$4.0 million and the NRD request is for \$2.0 million, 50 percent of the total project cost.

Anticipated partners: The Urban Drainage and Flood Control District and Adams County Open Space Sales Tax.



#### 5 Community Initiative, Earth Force

Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$0	\$40,000	\$40,000	n/a	160.0

This project is educational and they do not appear to be requesting any NRD support. The proposal is to engage Denver communities in improving their local watershed by building the capacity and understanding of our youth, educators and community partners to identify watershed quality issues and take steps to solve those problems. By embedding this problem solving approach within the education of youth in informal and formal science programs, they plan to provide a community-based approach to improvement of the health of the watershed. The approach is closely aligned with community priorities, including Greenprint Denver, the EPA's Urban Waters South Platte River Plan for Action, and the Rocky Mountain Arsenal National Wildlife Refuge CMP.

##### Matching funds and partners:

Total project cost is \$40,000 and the requested NRD grant amount is \$0.

Anticipated partners: Unknown.



#### 6 Heron Pond Expansion, Denver

Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$500,000	\$1,000,000	\$1,500,000	200%	Unknown

In 2005, Heron Pond Natural Area became the first City and County of Denver site to gain the official status of a designated natural area. This project is for the City and County of Denver to expand and enhance Denver Parks' Heron Pond Natural Area. It would convert the adjacent 20-acre Northside Park from a primarily bluegrass traditional park into a series of wetlands, riparian habitat and native grasses, thereby doubling the size of this natural area adjacent to the South Platte River. With this project, Denver Parks will nearly triple the size of this Natural Area and seamlessly integrate the property with the South Platte River corridor. The goal is to create a single large, destination natural area with abundant wildlife habitat, walking trails, overlooks and sitting areas for birding and environmental education.

The site is located approximately four miles from the Rocky Mountain Arsenal National Wildlife Refuge (RMANWR)

##### Matching funds and partners:

Total project cost is \$1.5 million and the grant request is for \$500,000.

Anticipated partners: GOCO, City of Denver, Suncor.

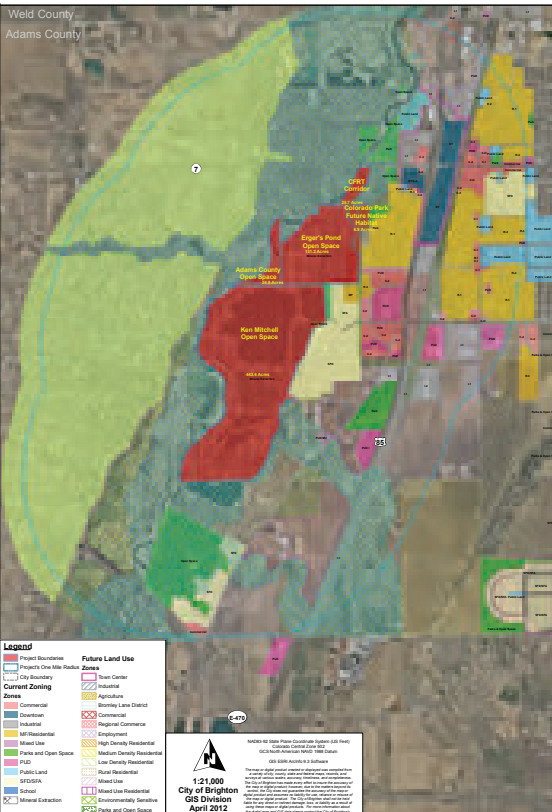


7 Ken Mitchell, Brighton				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$2,500,000	\$1,500,000	\$4,000,000	60%	4.5

This City-owned wildlife habitat restoration project is located on 632 acres within the City of Brighton, adjacent to the South Platte River. The site has been used for gravel mining. The center of the site includes three lakes, old cottonwoods and soil that has been disturbed.

It is proposed that grant funding be used to remove a land bridge in one of the Ken Mitchell Lakes, using the soil to create a wetland adjacent to the lake bank. Bank stabilization and re-vegetation will be a major focus. There is an urgent need for Brighton to complete this project since the mining is presently being completed. This is a highly visible and vital restoration project that will enhance the Platte River corridor with needed wildlife habitat.

The Ken Mitchell Open Space and Platte River Wildlife Habitat Restoration project is part of the Northeast Greenway Corridor cohesive regional planning effort, part of the Brighton Open Space Plan (dated August 2001), the Adams County Open Space Plan (A Balanced Environment for the Future}, and the Brighton Parks and Recreation Master Plan Update (dated February 2008).



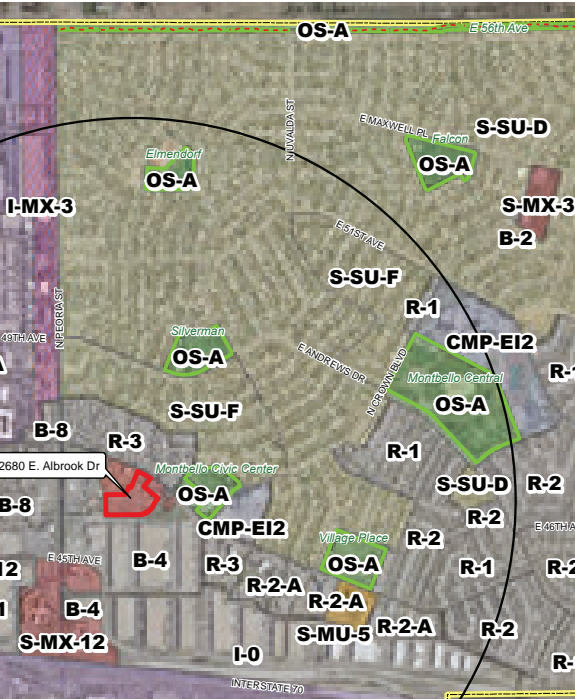
**Matching funds and partners:**  
Total project cost is \$4.0 million and the grant request is for \$2.5 million, 63 percent of the total project cost.

Anticipated partners: The City of Brighton, Adams County Open Space Sales Tax, and the Urban Drainage and Flood Control District.

8 Montbello Open Space, Environmental Learning for Kids				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$1,000,000	\$1,000,000	\$2,000,000	100%	5.5

The proposed project involves the acquisition and restoration of 4.52 acres of undeveloped land in the Montbello community. The site is located approximately one mile from the Rocky Mountain Arsenal National Wildlife Refuge. It is proposed that this site will serve as both a habitat anchor and trailhead to the Refuge. This site is at high risk of development. It will establish an important community connection to the natural environment in an urban setting otherwise devoid of open space. Restoration of riparian communities and upland native prairie would improve habitat for wildlife and provide new opportunities to learn about wildlife in an urban setting.

In Denver, the Montbello community is directly adjacent to the Refuge. This project will serve as an access point to the Refuge and utilize existing trail systems within the Refuge to connect the communities through the Sand Creek Regional Greenway and other trail systems in the City. Currently the only entrance into the Refuge is located in Commerce City and is more than 11 miles from the center of Montbello, which makes it inaccessible to the majority of the inhabitants of this affected community. It is the goal of this project that this multi-purpose design serves as a model for future urban open space projects in Denver and throughout the region.



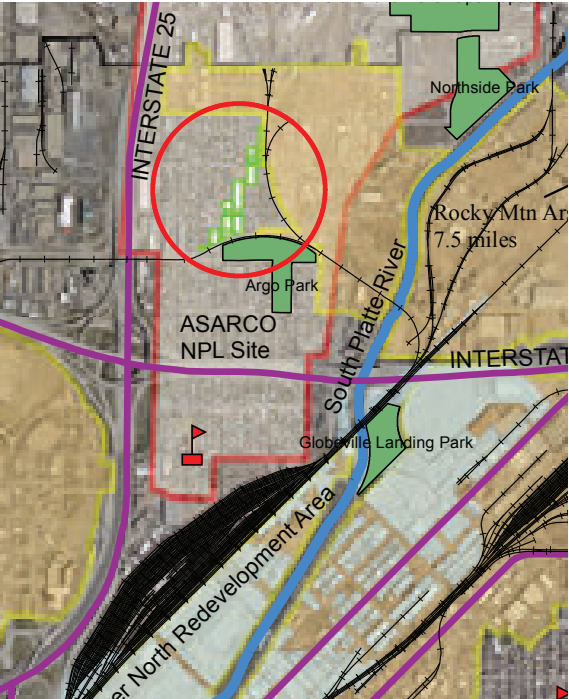
**Matching funds and partners:**  
Total project cost is \$2.0 million and the grant request is for \$1.0 million, 50 percent of the total project cost.

Anticipated partners: The City & County of Denver, Great Outdoors Colorado the Piton Foundation and the Gates Family Foundation.

9 Platte Farm, Goundwork				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$600,000	\$600,000	\$1,200,000	100%	12.0

This proposal is for the restoration of 5.5 acres of dilapidated land in the heart of the north Denver Globeville neighborhood to a shortgrass prairie natural area. The newly named Platte Farm Open Space (PFOS) is currently plagued by illegal dumping, car joy-riding, and other illegal activities. The native vegetation has been replaced by invasive weeds. The site has stormwater issues, with major flooding during large summer rainstorms. Despite its current condition, the nearby residents see its potential as a community amenity that could provide a unique opportunity to have “a little bit of country” in the heart of the very industrial Globeville neighborhood.

A resident steering committee has worked with Groundwork Denver (GWD) over the last four years to create a vision for the site that includes restoration of the land to a native shortgrass prairie. The site would consist of low-water use native landscaping, low-impact design to handle the stormwater, and simple walking trails so residents can experience a natural area similar to that at the Rocky Mountain Arsenal National Wildlife Refuge within their own local community. A full set of professional landscape drawings and design-development level construction drawings has been completed with the input of many community residents. In 2012, Denver will complete title work, an environmental assessment and a site survey.



**Matching funds and partners:**  
Total project cost is \$1.2 million, of which the grant will provide \$600,000, 50 percent of the total project cost.

Anticipated partners: The Colorado Health Foundation, the Gates Family Foundation, the Xcel Energy Foundation, the CDBG and GOCO, The City and County of Denver, the National Park Service, the Musser Foundation, and the EPA.



10 Second Creek Channel, Commerce City				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$2,600,000	\$1,400,000	\$4,000,000	54%	Unknown

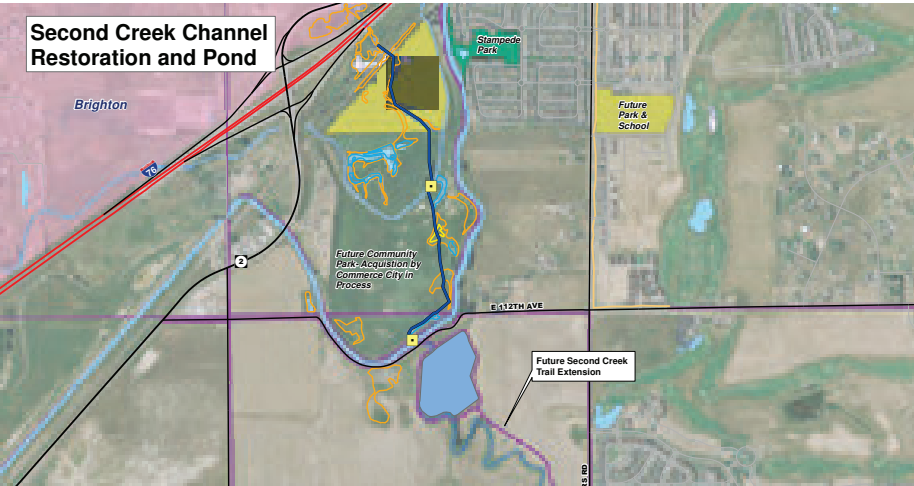
The project will allow Second Creek to flow downstream of the O’Brian Canal, reconnecting the creek reaches that were severed by the canal with the following measures. 1) Creation of a 15 to 20 acre detention pond and enhancement/creation of riparian corridor. 2) To provide significant wetland and riparian habitat and groundwater recharge. 3) To significantly benefit the Second Creek stream, riparian, and wetland habitat.

The site will improve surface water by restoring the historic Second Creek channel. A new water quality pond will be created just south of the O’Brian Canal positively affecting the groundwater system in the area. It will help preserve rich floodplain soils. Design will create a variety of wetland and riparian plans, creating habitat for small mammals, fish, amphibians, and wildlife as well as connect a movement corridor between the South Platte River and the Second Creek headwaters. Gently sloping banks on the water quality pond will support a variety of wetland plants.

The site is a significant natural amenity as well as an integral part of the stormwater system. Groundwater and surface water are extremely important regional natural resources that will benefit from the proposed project. Constructing the natural channel downstream of the O’Brian Canal will help restore the original flow of Second Creek. Reestablishing this downstream connectivity will also address a long-standing regional wildlife movement issue.

**Matching funds and partners:**  
Total project cost is \$4.0 million, of which the grant will provide \$2.6 million, or 65 percent of the total project cost.

Anticipated partners: The Urban Drainage and Flood Control District.

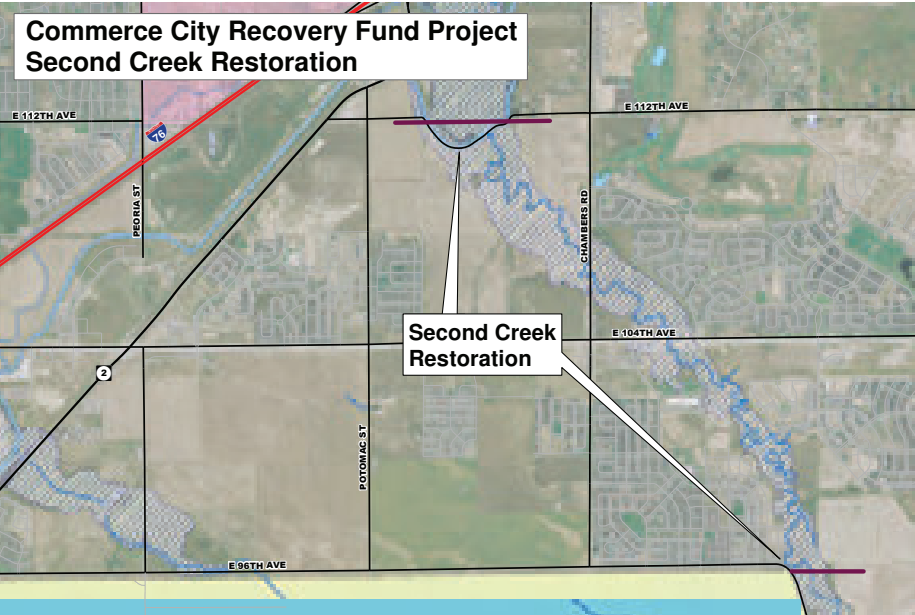


11 Second Creek Corridor, Commerce City				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$750,000	\$250,000	\$1,000,000	33%	up to 120 acres

Historically, Second Creek was an intermittent stream with a mix of defined channels and grass-lined swales. Agriculture use and development have significantly changed the vegetation that exists along Second Creek. Commerce City has an opportunity to restore approximately two miles of the creek corridor with native vegetation. A comprehensive plan will be created and the corridor will be improved through a combination of weed control, seeding and the planting of native species. Upon completion this project will replace lost habitat, restore water quality functions of the riparian corridor, and increase native species diversity.

**Matching funds and partners:**  
Total project cost is \$1.0 million and the NRD request is for \$750,000, 75 percent of the total project cost.

Anticipated partners: Adams County Open Space Sales Tax.



12 South Platte River Acquisition, Adams County				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$3,000,000	\$2,000,000	\$5,000,000	67%	98.0

This project involves the purchase of floodplain and important riparian and wetland habitat adjacent to and abutting the South Platte River in Adams County. Two focus areas and three separate landowners are being considered for land acquisition.

The first focus area is six parcels just north of the Adams County Regional Park, along the west bank of the South Platte River owned by two separate landowners. The parcels together are 98 acres. Adams County started negotiations with these two landowners many years ago. Due to unwilling sellers and over-market-value landowner offers Adams County has been unable to acquire the parcels. The County has had appraisals conducted and standing offers for acquisition are still on the table. Recent circumstances have made the negotiations for some of the parcels more likely.

The second focus area is along the east bank of the South Platte River to the Northeast of the Adams County Regional Park. This parcel consists of approximately 150 acres of riparian habitat and surface water. A former gravel mining lake exists that is about 120 acres in size. It is important South Platte River habitat and will provide a contiguous buffer for the river and Regional Park.

**Matching funds and partners:**  
Total project cost is \$5.0 million and the NRD grant request is for \$3.0 million, 60 percent of the total project cost.

Anticipated partners: The Urban Drainage and Flood Control District and Adams County Open Space Sales Tax.

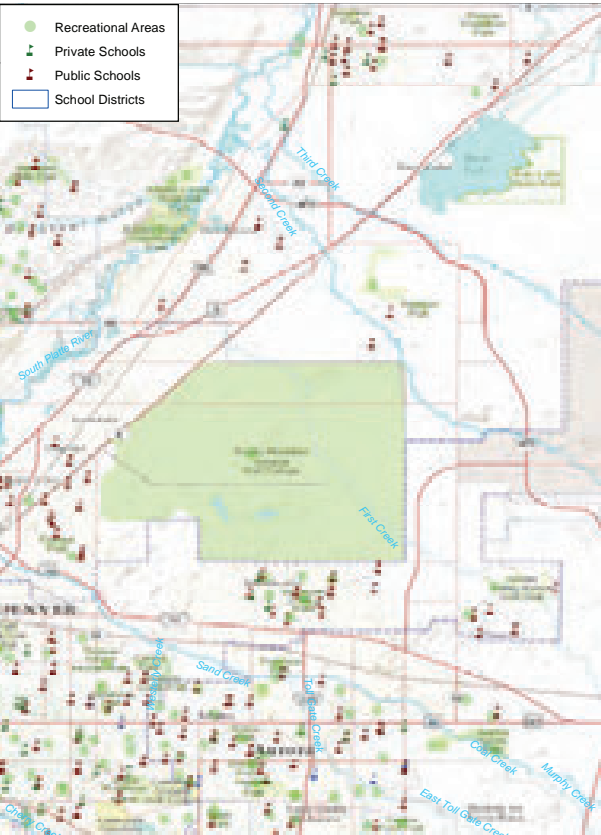


13 Suburban Areas Restoration, National Wildlife Federation – Rocky Mountain Regional Center				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$466,500	\$301,500	\$768,000	65%	Unknown

This proposal is to provide support to private property owners, community efforts and local schools in ecological restoration as part of broad implementation and training. This program will provide the physical resources to: attract and support wildlife, reduce the use of water for gardening, remove invasive and non-native plants, increase carbon stored in the landscape, filter pollutants and reduce stormwater runoff. NWF will recruit residents to participate in restoration work on their own land, leveraging the greatest possible acreage in close proximity and having a profound impact on the environmental health of the community.

**Matching funds and partners:**  
Total project cost is \$768,000 and the NRD grant request is for \$456,500, 61 percent of the total project cost.

Anticipated partners: Private property owners and volunteers.



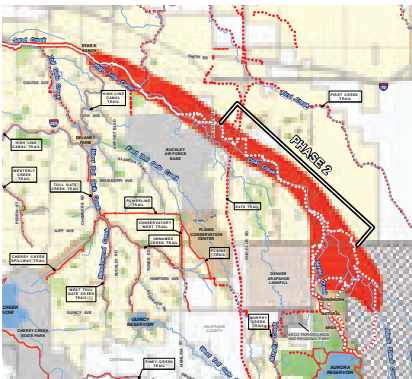
14 Triple Creek 2, Aurora				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$4,000,000	\$4,000,000	\$8,000,000	100%	Unknown

This project is intended to help in the completion of the acquisition of wildlife buffer and trail/stream corridor. The project will help protect riparian habitat from development pressure in the Sand Creek watershed. This funding will help acquire and preserve several properties that will expand and buffer the greenway and protect the natural functions of Sand Creek and Coal Creek. These properties will be permanently protected through conservation easements designed to enhance and protect their unique ecological and biological resources.

The second phase of the Corridor Plan focuses on extending the greenway an additional 12 miles and filling in critical gaps to conserve unique plant, animal and cultural resources. Significant opportunities exist to acquire and preserve key properties that will expand and buffer the greenway and protect its natural functions. Degraded areas will be restored to complement the ecological system, wildlife habitat, stormwater management, water quality, and other open space values. Geographically, the Phase 2 extension will take the greenway from the end of Phase 1 to the State Land Board Lowry Range, Aurora Reservoir and the Arapahoe County Community Park.

At the time of this application, there are six parcels of interest. Each is similar in its riparian and upland aspects. These parcels would provide permanent protection of these properties while preserving rich floodplain soils, protecting the water quality of Coal Creek, and preventing erosion and sedimentation in Coal Creek, further benefiting the entire watershed downstream, including the Sand Creek and the South Platte River.

The extension of Sand Creek Regional Greenway through the Triple Creek Greenway project Phase 2 provides important ecological and geographical connections to the Rocky Mountain Arsenal National Wildlife Refuge from a greater distance to the south than Phase 1.



**Matching funds and partners:**  
Total project cost is \$8.0 million and the NRD grant request is for \$4.0 million, 50 percent of the total project cost.  
Anticipated partners: Arapahoe County Open Space Sales Tax, Private Sources, Adams County Open Space Sales Tax, Colorado State Trails, GOCO, the City of Aurora and the Trust for Public Lands.

15 Westerly/Sand Creek Confluence, Denver				
Requested NRD Funding	Matching Funding	Total Funding	Leverage	Total Project Area (Acres)
\$2,000,000	\$6,700,000	\$8,700,000	335%	53

The City and County of Denver plans to restore and enhance wetland, riparian, and upland grassland habitat at the confluence of Westerly Creek and Sand Creek in the Stapleton neighborhood of Denver. Over the past 15 years, the City and County of Denver, in collaboration with the Sand Creek Regional Greenway and other partners, has made significant progress enhancing native habitat along Sand Creek and reestablishing the Westerly Creek corridor. The proposed project addresses a missing link in the restoration effort, and would add significant value to the overall system by establishing a broad and diverse native riparian complex at the confluence of the two streams and native grassland adjacent to Sand Creek and Westerly Creek. The project was designed in 2008 to change the single channel of the Creek to a braided wetland and to restore a former airport runway into native habitat. The site is located approximately two miles from the Rocky Mountain Arsenal National Wildlife Refuge (RMANWR).

The proposed project would result in both environmental and community benefits. Restoration of riparian communities and upland native prairie would improve habitat for wildlife. With close proximity to RMANWR, it improves regional wildlife habitat connections and provides an opportunity for nearby communities to learn about and understand wildlife habitat and stewardship.

**Matching funds and partners:**  
Total project cost is \$8.7 million and the NRD grant request is for \$2.0 million, 23 percent of the total project cost.

Anticipated partners: Park Creek Metro District, Sand Creek Regional Greenway Partnership, and Forest City.





# VII.

## INVESTING FOR THE FUTURE

The landmark settlement with the United States Army and Shell Oil Company resulted in a unique opportunity to invest the ensuing funding to produce significant natural resource protection in the vicinity of the Arsenal. The settlement created two funds: the Foundation Fund (intended for the most impacted communities to implement mitigation projects as a foundation for subsequent projects) and the Recovery Fund (for projects proposed by non-profits or local jurisdictions).

To organize a process to solicit and recommend projects for the Foundation Fund, the Colorado Natural Resource Trustees established the Northeast Greenway Corridor Advisory Committee. The Advisory Committee subsequently formed a Working Group of technical staff members to assist in soliciting, reviewing and recommending project proposals.

This Plan includes, in Chapter V, the consensus recommendation of the Working Group and the Advisory Committee for allocating just over \$10 million from the Foundation Fund. This investment is expected to leverage an additional \$31 million in matching funds (more than a 300 percent match) from local jurisdictions and other entities, to generate a total of over \$41 million in natural resource protection and enhancement projects. The proposed projects encompass over 800 acres of land and numerous stream corridors.

The Advisory Committee recommends that these eleven projects be funded by the Foundation Fund.

After a broad outreach effort to the general public, the Working Group also solicited project proposals for the Recovery Fund. In light of uncertainty about precisely when the Recovery Fund funding might be available (see Chapter VI), the Recovery Fund solicitation was presented to the public as preliminary and non-binding. Nevertheless, the Working Group received 15 initial proposals, totaling \$33 million in requested NRD funding, with proposed matching funding totaling approximately \$38 million (more than a 100 percent match). With more certainty as to the timing of fund availability it is likely that even more refined as well as additional projects, and a higher level of matching funding could be achieved.

Because of the significant level of interest, the momentum that has been established, the urgency of the need, and the favorable economic climate for contracting the work, it is recommended that the Trustees explore ways to release and invest the Recovery Fund in on-the-ground ecological projects as soon as possible.

Other benefits have been derived from this effort:

- » The collaborative process of the Working Group has greatly improved communication and planning across jurisdictions and between local and state agencies.
- » The potential and need for priority greenway and natural resource projects in the Metro region has been highlighted.
- » Numerous projects already underway, or in various stages of planning, in many Front Range jurisdictions have been brought to light, coordinated, and leveraged.

