STATE OF COLORADO

Colorado Water Conservation Board
Department of Natural Resources
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TO: Colorado Water Conservation Board Members

FROM: Chris Sturm, Stream Restoration Coordinator

SUBJECT: **Agenda Item 10, November 19-20, 2013 Board Meeting. Watershed and Flood Protection Section, Fish and Wildlife Resources Fund (FWRF) Application**

Staff Recommendation

Staff has reviewed South Suburban Park and Recreation District's FWRF application (attached) and found it in conformance with Board Policy 15 (attached). Staff recommends that the Board approve a non-reimbursable expenditure up to $100,000 from the Fish and Wildlife Resource Fund for the purpose of providing matching dollars to the South Platte Park, South Platte River Enhancement Project, Phase II. This amount represents less than 9% of the total Project cost. The remaining costs will be provided by Arapahoe County ($550,000 cash), City of Littleton ($250,000 cash), Urban Drainage & Flood Control District ($230,000 cash) and the applicant ($5,000 in-kind).

Background

The Fish and Wildlife Resources statute (attached), § 37-60-122.2, authorized the Fish and Wildlife Resources Fund in 1987. It was amended in 2002 to help mitigate the impacts of existing water facilities. The 2.4 miles of the South Platte River within South Platte Park was historically a meandering stream free to migrate laterally across the floodplain. The river has been disconnected from the floodplain (geomorphic and 100 year) in many locations due to impacts from Chatfield Reservoir/Dam and local land use practices. The CWCB and other local, state and federal agencies co-sponsored the *South Platte Park, South Platte River Enhancement Plan* in January 2012. The plan establishes a means to rehabilitate the natural function of the stream and adjacent riparian areas while maintaining the flood control characteristics of the property. Phase I construction, also funded in part by the CWCB, included 2,000 linear feet of channel re-grading, 2 riffle/pool/glide sequences, bank stabilization, and wetland creation.

Discussion

The Phase II project will restore an additional 3,700 linear feet of the South Platte River beginning at the downstream end of Phase I and continuing to the northern boundary of South Platte Park. The project is designed to re-connect incised channel areas with the floodplain, stabilize eroding banks, and increase riparian habitat. The project will also reduce channel width to depth ratios, which improves aquatic habitat and reduces stream temperatures during low flow summer months. The new channel design is based on the current flow regime, which is primarily driven by releases from Chatfield Reservoir.

FISH AND WILDLIFE RESOURCES FUND GRANT
COLORADO WATER CONSERVATION BOARD

Section 3.1: Applicant Information

Date of Submittal: November 5, 2013

Name of Project: South Platte Park, South Platter River Enhancement Project Phase II

Applicant Information
Name and Address of Applicant Responsible for Project:

Melissa Reese-Thacker, Senior Park Planner
6631 S. University Blvd. Centennial, CO 80121

Phone: 303-483-7023 FAX: 303-798-3030

Email: MelissaR@sspr.org

Name and Type of Organization: South Suburban Park and Recreation District (special district)

Applicant Federal Employer ID Number (FEIN): 84-6014400

Contact Information, if Different from Sponsor
Name and Address of Applicant Responsible for Project:

None

Submitted by Name Melissa Reese-Thacker
Date Nov. 5, 2013

Received by Name _____
Date _____

FISH AND WILDLIFE RESOURCES FUND GRANT
COLORADO WATER CONSERVATION BOARD

Section 3.2: Project Summary Form

Project Location Information:

Nearest Town or City	City of Littleton
County	Arapahoe
Township/Range/Section	S29 T55 R68W
Latitude /Longitude	105°1'45.37" W. 39°35'28.04" N.
State Senate District	26
State Representative District	36
Stream Name and Water Shed	South Platte River
Water Division	1
Water District	8

Land Ownership

On a map of scale ≥ 1"=2000', indicate all property affected by this project and evidence of ownership or easements for project work. This information should also be shown on an ownership map in the appendices. If the project has over three property owners, please attach a separate sheet with names and permission status for each.

Name of Landowner(s): City of Littleton (project sponsor)
Colorado Water Conservation Board (potential project sponsor)
South Platte River (approvals from the USACE underway)

Evidence of ownership ore easements for river restoration work:

☐ Enclosed x Will forward if requested ☐ Not yet available (explain timeline)

Grant Request (round figures to nearest $100)

Total Project Cost	$1,135,000
Grant Request	$100,000
List Funding Sources	Arapahoe County (Open Space Program) City of Littleton South Suburban Park and Recreation District Urban Drainage & Flood Control District

Brief Description of Project Request (Please limit to no more than 100 words; this will be used to inform reviewers and the public about your proposal): Arapahoe County, City of Littleton, South Suburban Park and Recreation District, and Urban Drainage and Flood Control District request funding from the CWCB's Fish and Wildlife Resources Fund Grant Program to enhance the South Platte River within South Platte Park. The river has been negatively impacted by the Chatfield Dam, land uses and water uses. 3,700 linear feet of the river will be enhanced so that it more closely mimics natural conditions and improves aquatic habitat while maintaining the flood control characteristics of the property. This request is for Phase II of the project. Phase I was completed in 2013. The final phase is scheduled for fall 2014.

Section 3.3: Technical Narrative Description

3.3.1 Project Need/Define the Problem

Historically the 2.4 miles of the South Platte River within South Platte Park[1] (Park) was a meandering stream that was free to migrate laterally across the valley. The river has been significantly impacted by the construction of the Chatfield Dam, past land use practices and water usage. The combined impacts of these stressors have degraded the stream and adjacent riparian area to the point they no longer function as a natural system. A team of local, state and federal agencies[2] co-sponsored the *South Platte Park, South Platte River Enhancement Plan* (Plan), January 2012, Ecological Resource Consulting, Inc (ERC). The plan establishes a means to rehabilitate the natural function of the steam and adjacent riparian areas while maintaining the flood control characteristics of the property.

Implementation began in spring 2013 with the construction of the Phase I improvements, including: 2,000 linear feet of channel re-grading, 2 riffle/pool/glide sequences, bank stabilization, and the creation of backwater wetlands. The $880,000 project was funded by City of Littleton (Littleton), Urban Drainage and Flood Control District (UDFCD), South Suburban Park and Recreation District (South Suburban), Colorado Water Conservation Board's Colorado Watershed Restoration Grant, and a donation from Denver Trout Unlimited. The project was completed in June 2013. *See photos in appendix.* The successful completion created a catalyst to construct Phase II improvements in winter/spring 2014, and Phase III[3] (the final phase) in fall 2014/winter 2015.

Phase II of the project will enhance 3,700 linear feet of the South Platte River beginning at the downstream end of Phase I and continuing to the northern border of the Park. The cost of the project is $1.135 million. Arapahoe County, Littleton, UDFCD, and South Suburban are partnering on this project. Without the award of $100,000 from the Colorado Water Conservation Board's Fish and Wildlife Resource Fund Grant for Phase II, both Phase II and Phase III projects may be postponed.

3.3.2 Project Goals and Objectives

The Chatfield Dam, constructed from 1967 to 1975, was built with the primary purpose of providing flood control for the Denver region. The reservoir, with a capacity of 355,000 acre-feet, reduces the outflow from the dam to a rate of 5,000 cfs or less, greatly reducing the 100-year storm inflow of 90,000 cfs[4]. With reduced flows, the channel, which was created given the natural flow regime of the undammed river system, is too wide for current flow conditions. This results in a situation where the channel has an unnaturally high width to depth ration. During low flow periods which persist below the dam, limited flow is spread out over the wide channel resulting in low flow conditions that are not conducive to aquatic habitat and reduced peak flows are not in balance with the channel size, resulting in a disturbed system.

In addition to peak flood events, operations of the reservoir as both a flood control facility and for water supply have altered historic flow hydrograph and effectively cut off the natural sediment inflow to the project area. The sediment starved stream began downcutting. To arrest the active downcutting, grade control structures we constructed previously through the project area. These grade control structures altered the profile of the channel by converting the stream from a natural bend/pool morphology to a system where a majority of the elevation is lost at distinct vertical drops. This change resulted in the loss of natural habitat variety and the drop structures create migration barriers to aquatic life.

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[1] South Platte Park is an 848-acre natural floodplain park owned by the City of Littleton and managed by South Suburban Park and Recreation District.

[2] Co-sponsors were: South Suburban Park and Recreation District, Colorado Water Conservation Board *(including funding from Colorado Watershed Restoration Fund Grant)*, City of Littleton, Urban Drainage and Flood Control District, Colorado Parks and Wildlife, Denver and Cutthroat Chapter of Trout Unlimited, and US Army Corp of Engineers

[3] Phase III is the section of the river from C-470 to Mineral Ave. To minimize impacts on Park users, this phase will occur after all work is complete from Mineral Ave. to the northern boundary of the Park (Phase I and II).

[4] Rogers, Nagel and Langhart, Conceptual Master Plan, Littleton Flood Plain Park , City of Littleton, Colorado (March 1975).

Historical land use practices (gravel mining, agricultural, etc.) within what is now the Park have significantly impacted the stream. Aerial photos of the river from the 1930's to current, show channel encroachment effectively reduced the steam sinuosity from approximately 1.4, which is considered a meandering stream, to 1.1, which is on the low end of what is considered a sinuous channel. The straightened channel has lost characteristics of a natural stream, impacting aquatic habitat and the adjacent riparian zone. *See appendix figure 1.*

The goal of the project is to improve the ecological health of 3,700 linear feet of the stream and riparian system. True restoration, which would entail returning the system to its pre-human impact state is not an option given the presences of the Chatfield Reservoir, changes in flows and land practices that now constrain the project area. Rather, the intent is to develop a riverine system that mimics a more natural condition taking into account current flow conditions, land constraints and existing infrastructure. This will be accomplished through: 1) adjusting the channel profile, 2) narrowing the stream to an appropriate width, 3) stabilizing eroded banks and 4) increasing riparian habitat.

Besides making the stream more natural in appearance, the key anticipated benefit is improved aquatic habitat. While classified as a warm water fishery, this section of the river is a transition zone between cold water mountain streams and warm water systems on the plains[5]. An USACE study[6] identified this segment as having the greatest potential for an increased fish population through restoration. The project will address the lack of variation in the flow conditions and likely improve the subsequent lack of lower food chain organisms[7]. It will provide pool-holding habitat for adult fish during low flow(winter) and high summer temperatures that will also serve as velocity shelters for fry and juvenile life stages during periods of high flow (spring). Increase riparian habitat will provide pool cover from sunlight and avian predators.

3.3.3 Technical Feasibility of the Proposed Project

The project has been designed based upon the principles established in the Plan. Phase I of the Plan was constructed in spring 2013 utilizing a design-build contract with UDFCD as the contracting agency, ERC as the design engineer, ERO Resources Corporation as the permit coordinator, and Naranjo Civil Constructors as the contractor. Given the success of that project, the same structure will be used for the proposed Phase II.

Permits required for this project are a USACE 404 permit (likely nationwide), USACE floodplain permit, City of Littleton floodplain permit, and potentially a State of Colorado Stormwater Management Plan permit. ERO is in the process of applying for the USACE permits. Naranjo will apply for the state and local permits in December. It is anticipated that all permits will be received by the end of December 2013.

In the interest of maintaining aquatic life and recreation, Littleton has acquired water rights for minimum instream flows for the South Platte River below Chatfield. Littleton filed a decree in 1994 (with the date of appropriation Aug 2, 1991) stipulating 100 cfs were required for boat chute operations; and 70 cfs from April 1 to Oct 31, plus 30 cfs from Nov 1 to Mar 1 for recreation in the form of fish habitat enhancement. Rights were declared absolute by the State of Colorado. The rights are very junior, and calls for upstream rights are unlikely. It does, however, ensure that upstream rights will not negatively impact South Platte Park, and stops the exercise of exchanges where water would bypass South Platte Park by means of a non-river transport system.

South Platte Park, a natural floodplain park, was created through the Littleton Floodplain Project; a grass roots effort preserved the natural river corridor from channelization by the US Army Corps of Engineers (USACE). Through their efforts the precedent setting Water Resources Development Act of 1972 was adopted as federal law allowing the USACE, State of Colorado, and Littleton to jointly fund the purchase of

[5] In Stream Issues Task Force, South Platte River Corridor Project Instream Issues Repot, Denver, Colorado (November 1996).
[6] Feature Design Memorandum (No. PC-45) for the South Platte River, Chatfield Lake, Colorado (February 1990)
[7] South Suburban Parks and Recreation, South Platte Park Management Plan, South Suburban Parks and Recreation (2009).

the property for flood control and the development of recreational facilities. The project will be designed with managed cuts and fills to continue to allow the park to fully contain a 100-year flood event.

The project will withstand the impacts of a 100-year flood through the continued use of the existing grade control structures and rock sizing that will be design to be stable in a 100-year event. It is not the intent of the project to "lock" the river in place, and some response to higher flow is both predicted and encouraged as the stream is intended to function as a natural system within the constraints of the site.

3.3.4 Project Implementation Plan

There project objectives are: 1) adjusting the channel profile, 2) narrowing the stream to an appropriate width, 3) stabilizing eroded banks and 4) increasing riparian habitat. These project elements have been designed based upon the criteria established in the Plan and design/build construction documents are 95% complete. These drawings will be finalized in late November. *See appendix for 95% design/build documents.* Modification of the channel profile, stream width, and eroded banks will occur concurrently as these elements require the same earth moving equipment. Riparian planting are the final stage of the project, occurring with the post construction revegetation of the site.

Adjusting the channel profile will be accomplished through regrading the channel to create a stream width that is in balance with the current flow regime and grade. The new profile creates 2 distinct riffle, pool, glide habitat sequences. Riffles are designed to maintain a minimum flow depth of 6 inches during low flow periods, defined as a flow rate of 20 cfs. This flow depth will allow fish to migrate through the riffles during the fall and winter months and mitigate the current condition where migration is not possible past existing grade control structures. The existing grade control structures will anchor the upstream end of the riffles. Pools will be located downstream of riffles. The higher flow velocity of the riffle sections will provide energy required to continually scour the pools maintaining quality pool habitat. Glides are located between pools and riffles and generally have a mild adverse slope leading up to the next riffle. Glides have a well-defined thalweg that will contain flow to a defined channel during low flow periods. Because the top of the downstream riffle acts as grade control, the flow in the upstream glide remains slower and deeper. *Please see appendix figure 2.*

Another objective is to narrow the channel so the stream width is in balance with the current post-dam flow regime. Narrowing the active channel during low and average flows will increase flow depth, improve aquatic habitat and restore some of the natural balance that typically exists between flows and channel geometry. The existing channel width can exceed 200 feet. Based on calculations performed by ERC, the bankfull flow through the project area is estimated 650 cfs. Standard regional geomorphologic curves suggest that the bankfull channel width for a natural channel with this flow should be on the order of 40 - 60 feet wide.

To increase sinuosity and reduce channel width, point bars will be constructed primarily on inside bends of the stream. They will be constructed from the native stream materials as generated through the construction of the low flow channel. Generally, the point bars will not be vegetated so that in larger peak events can exceed the narrower constructed channel and flow within the confines of the existing, larger active channel. *Please see appendix figure 3.*

There are two types of proposed bank stabilization. Type A bank stabilization maintains the existing upper portion of the eroding bank in place to provide continued cut bank habitat for such wildlife as kingfisher and protect existing large cottonwood trees. Type B involves laying back an eroding bank at a flatter, more stable slope which will provide suitable characteristics for development of native riparian habitat. Both types of stabilization consist of a toe stabilized using soil filed riprap with planting pocket located at the top of the toe at the bankfull elevation. The project will stabilize 1,650 linear feet of bank. *Please see appendix figure 4.*

Riparian planting will occur within the planting pockets on the Type A and B bank stabilization and on the laid back slopes of the Type A bank stabilization. The primary habitat type or vegetation community recommended by the Plan is the cottonwood gallery riparian planting zone. This vegetation community is intended to replicate the naturally occurring habitat commonly and historically found along the South Platte River in the local region. The primary object of the riparian planting zones is to re-establish the plains cottonwood overstory, shrub midstory and a mixed grassland understory is the primary objective of the riparian planting zones.

3.3.5 Project Time Schedule

The project schedule is:

Major Milestones	**Projected Implementation**
Field work and surveying	August 2013
Project analysis	August – October 2013
Draft design plans	October 2013
Final design plans	November 2013
USACE 404 permit submittal	November 2013
City of Littleton floodplain permit submittal	December 2013
State Stormwater Management Plan (*if needed)*	December 2013
All permits received	December 2013
Construction commences	January 2014
River work completed	April 2014
Revegetation completed	May 2014

3.3.6 Monitoring Plan

- Describe how information will be collected and analyzed to determine project results.

Upon completion of construction of the river corridor, topological surveys will be performed to mark key features such as: beginning and ends of riffles, maximum pool locations, glide locations, and 4 permanent channel cross section locations. In subsequent years, these features can be surveyed to determine stability.

Riparian vegetation will be monitored through representative plot areas that will defined as part of construction. Species composition, species health/size, percent ground cover and percent weeds species will be determined following construction and in subsequent years to evaluate the success of riparian plantings completed as part of the restoration project.

A baseline has been established for many aquatic species through sampling and inventories conducted by the South Platte Park staff, often in cooperation with the Colorado Parks and Wildlife (CPW). The South Platte River in South Platte Park is a managed fishery stocked by Colorado Parks and Wildlife (CPW). Periodically CPW and Park staff sample fish from the river for species stability. Past inventories have also included wintering waterbirds. These samplings and inventories will be continued in years following the restoration project to compare the sustainability of species.

3.3.7 Qualifications of the Applicant

The project team includes experts in floodplain management, water resource engineering, civil engineering, ecology, park and protected areas management, landscape architecture, and drainage way construction. The team includes staff from the CWCB, South Suburban, UDFCD, Littleton, ERC, ERO, and Naranjo Civil Constructors. This team developed the South Platte Park, South Platte River Enhancement Plan and Phase I improvements. Other past river restoration projects by ERC includes the Blue River, Swan River, and Eagle River. Other design-build drainage way projects successfully completed by Naranjo Civil Constructors includes Marcy Gulch at Highlands Ranch Golf Course and Normandy Gulch.

3.3.8 Coordination Plan and Public Involvement

The project partners are Colorado Water Conservation Board, South Suburban, Arapahoe County, Littleton, and UDFCD. UDFCD is leading the project as the project manager and contracting agency. South Suburban, Littleton, and UDFCD have entered into an Intergovernmental Agreement (IGA) outlining our partnership on this project and funding responsibilities. Arapahoe County will be joining the IGA in December 2013.

The project partners are members of the South Platte Working Group 2[8] that meets regularly to discuss projects that will enhance the river corridor within Arapahoe County. Not only does the South Platte Working Group support the Phase II project, they are planning another enhancement project on the South Platte River, downstream of South Platte Park, with similar objectives.

Prior to the Littleton and South Suburban adopting the South Platte Park, South Platte River Enhancement plan, a public hearing was held in December 2011. Public notification has continued through the use of media releases, project signage, and social media. The staff at the Carson Nature Center located at South Platte Park, fields general questions from the public about the project. To date there has been no known opposition to the project.

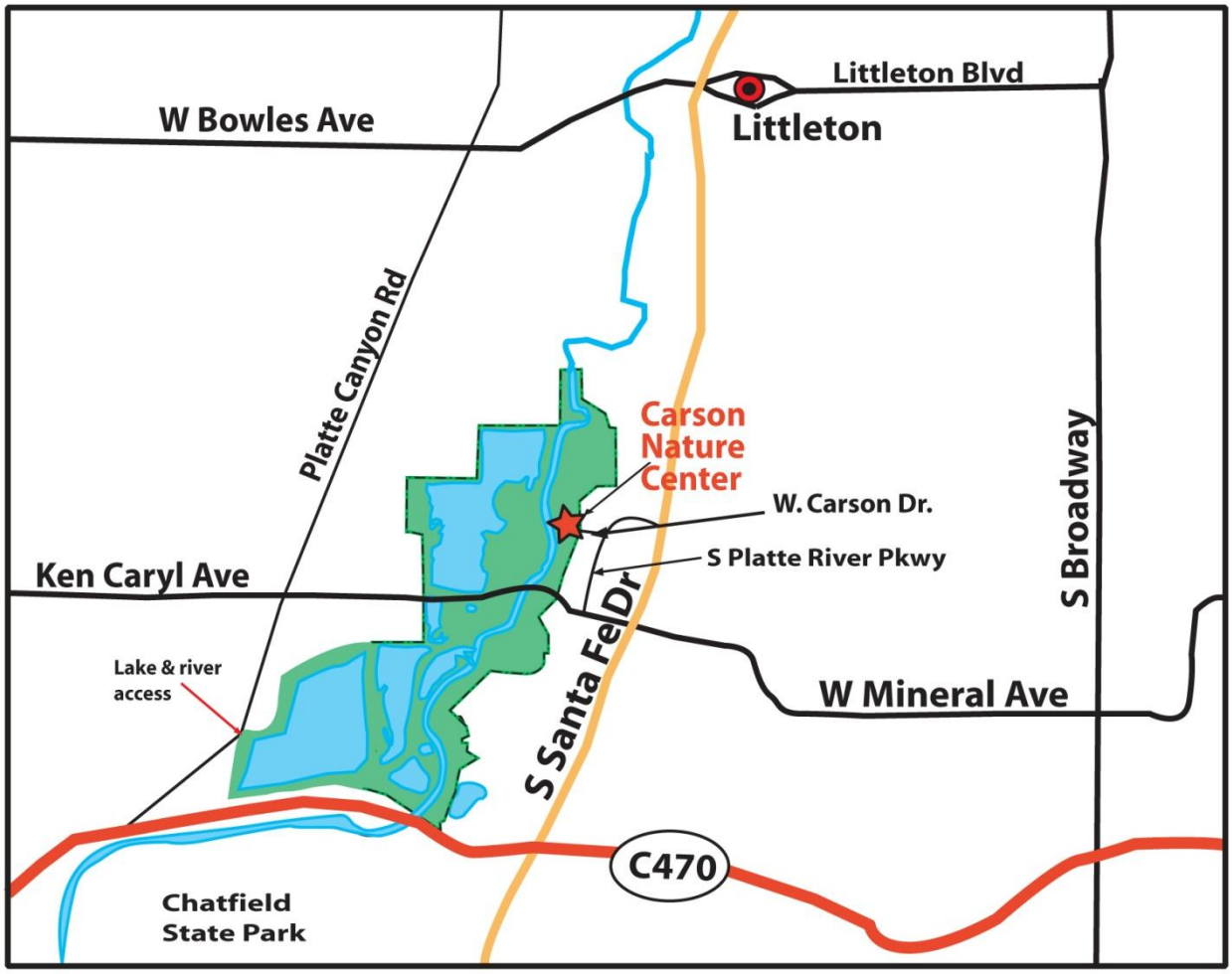
3.3.9 Appendices

- Maps
  - Project Vicinity Map
  - Project Site Map
  - Project Map with Ownership
- Legal Documents
  - None attached – ownership records to be provided if requested
- Analysis
  - Floodplain Map *(to be provided upon completion of design, estimated Nov. 2013)*
  - Engineer's Analysis *(to be provided upon completion of design, estimated Nov. 2013)*
- Other Documents
  - Figures 1-4
  - Before and After Photos, South Platte Park, South Platte River Enhancement, Phase I
  - 95% Design/Build Drawings, South Platte Park, South Platte River Proposed Enhancement Plan, Phase II, Oct. 18, 2013
  - Letter of Support South Suburban Parks and Recreation
  - Letter of Support City of Littleton
  - Letter of Support Urban Drainage and Flood Control District

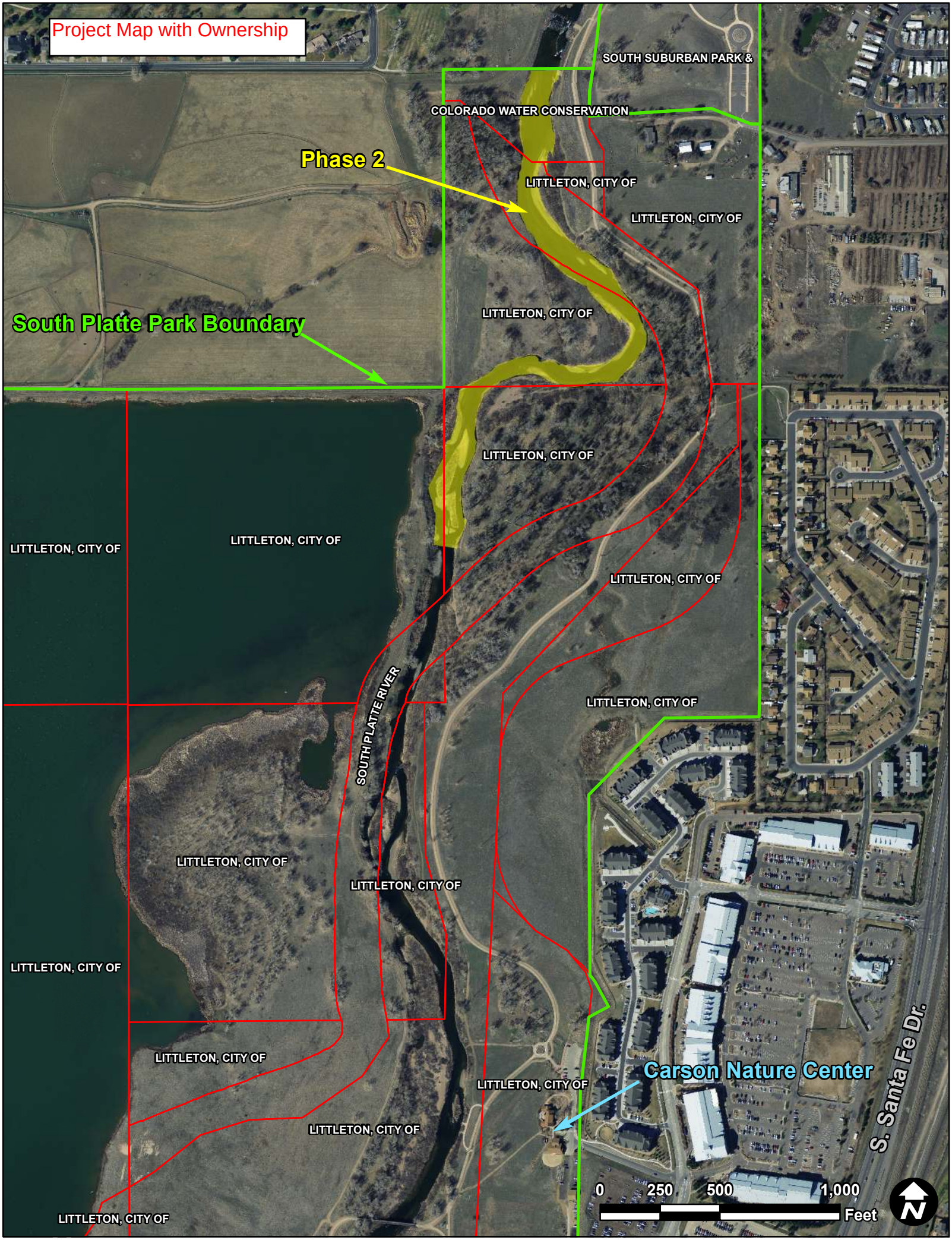
[8] Members include volunteer representatives from key municipalities, agencies and organizations including: Arapahoe County, the Cities of Littleton, Englewood, Cherry Hills Village, Sheridan, Columbine Valley, Bow Mar, Greenwood Village, South Metro Land Conservancy, South Suburban Park and Recreation District, South Suburban Park Foundation, the Arapahoe County Open Space Advisory Board and the Colorado Water Conservation Board.

Project Site Map

Vicinity Map



South Suburban
PARKS AND RECREATION


Project Map with Ownership
SOUTH SUBURBAN PARK &
COLORADO WATER CONSERVATION
Phase 2
LITTLETON, CITY OF
LITTLETON, CITY OF
South Platte Park Boundary
LITTLETON, CITY OF
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SOUTH PLATTE RIVER
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Carson Nature Center
S. Santa Fe Dr.
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1,000
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Figure 1

1937, 1955, 1993, 1999 and 2010 River Alignments

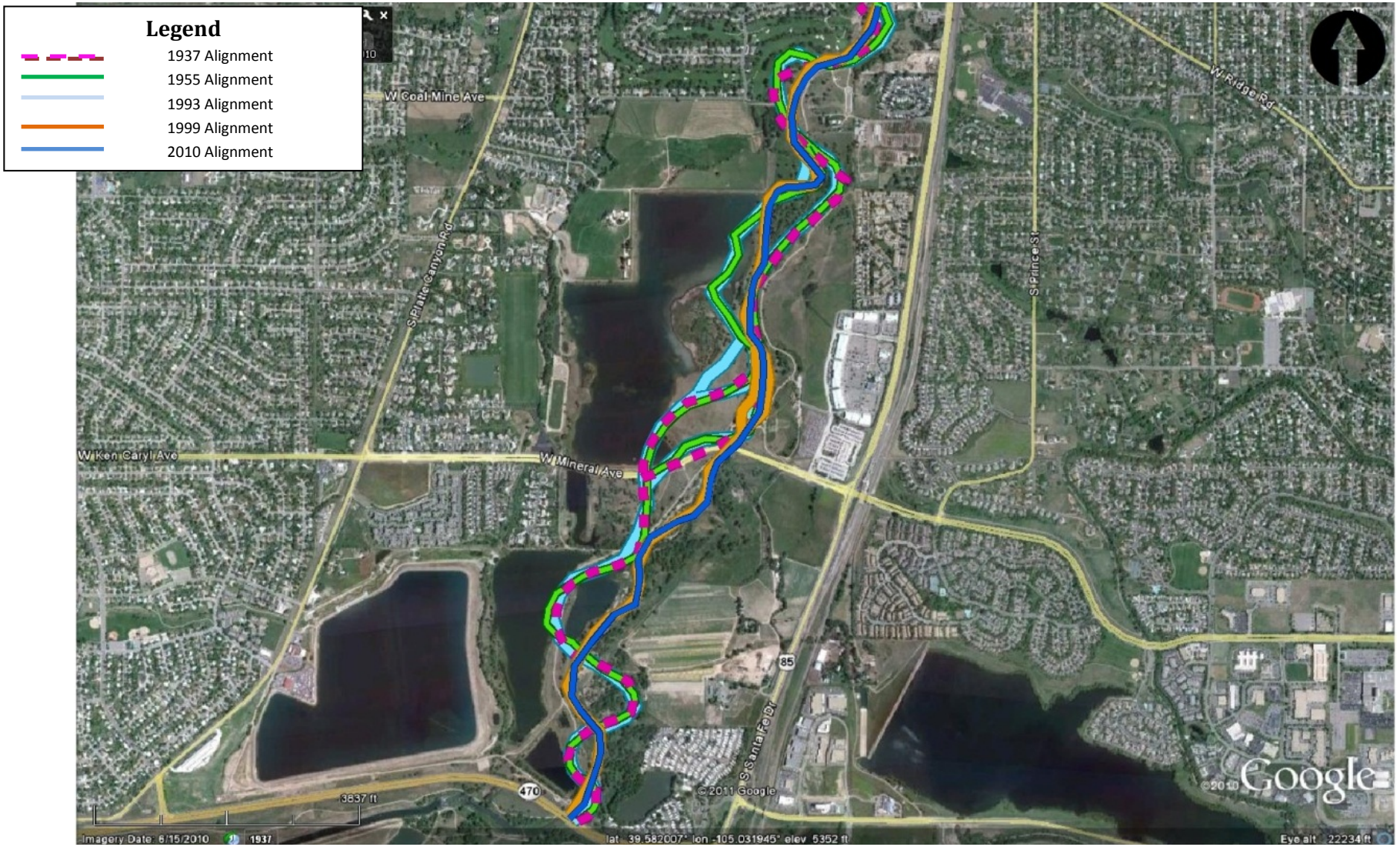
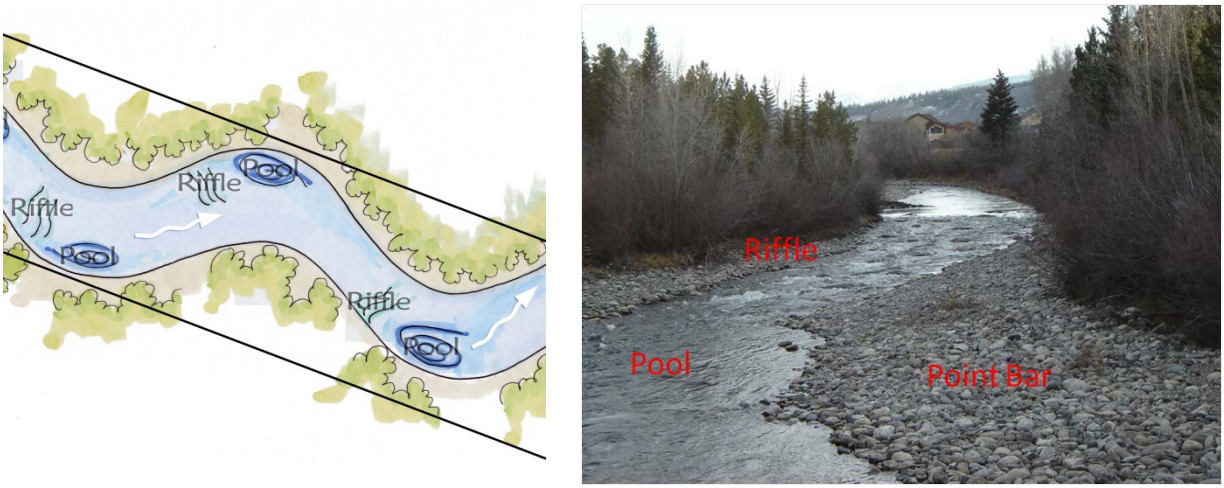


Figure 2

Riffle-Pool Sequences



Graphic example (left) shows an example of riffle-pool sequences typical found in functional stream systems. Photo example (right) shows the enhancement implementation concept of a constructed Riffle-pool sequence and point bar (Blue River, Summit County 2005).

Figure 3

Alternating Point Bars

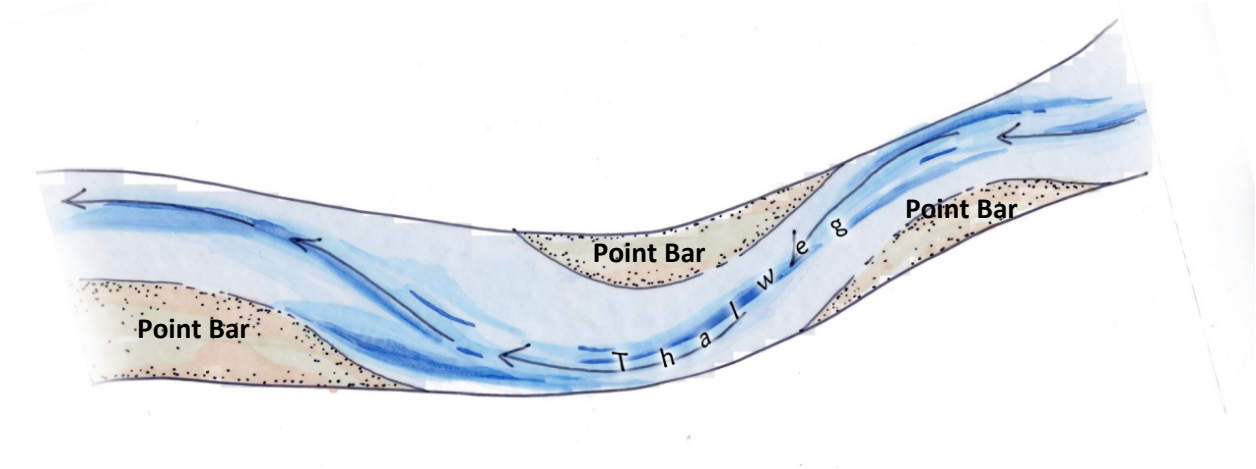
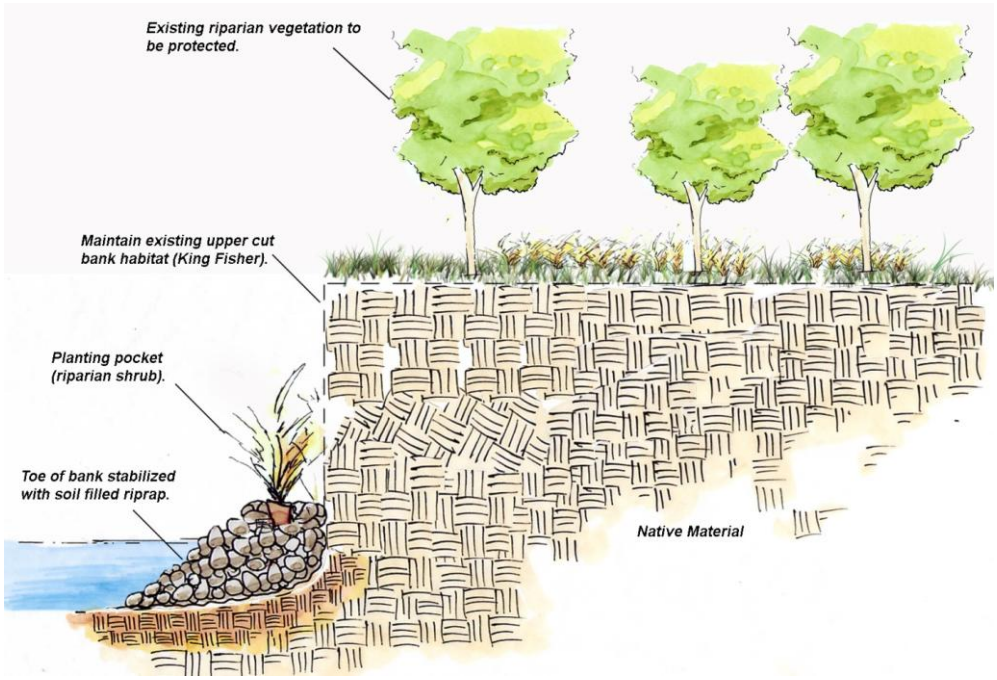


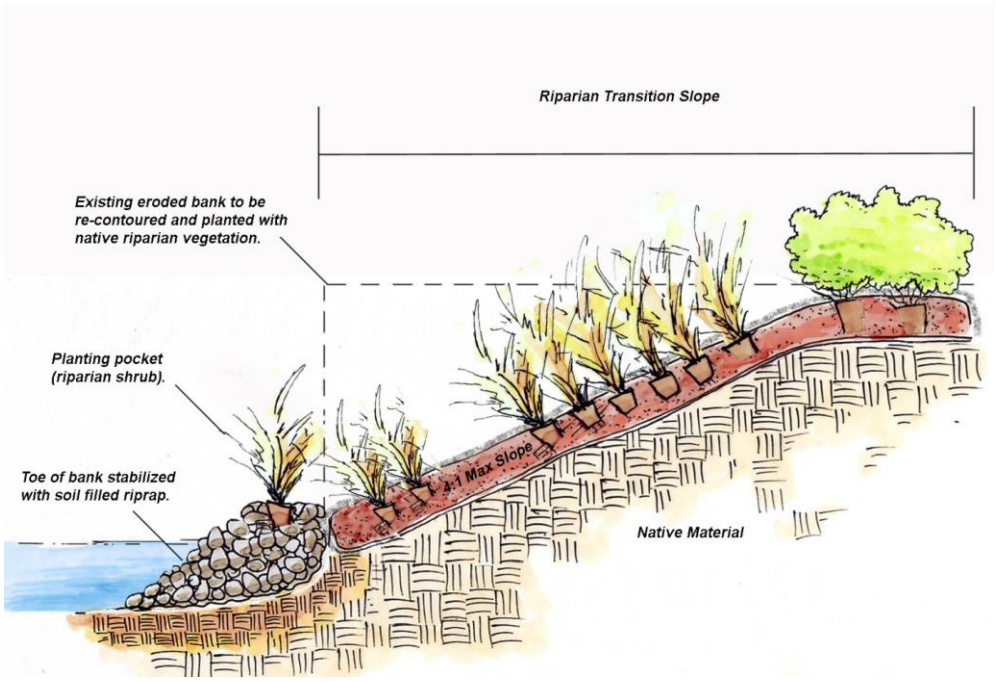
Photo example (left) shows an example below Dillon Dam where the existing Blue River channel* was too wide for the flows released from the dam resulting in shallow flow depths and minimal habitat.** ***Photo example (right) shows the enhancement implementation concept in 2003 of alternating point bars that re-establish the appropriate width depth ratio for current flow conditions.

Figure 4

Type A Bank Stabilization



Type B Bank Stabilization



Before and After Photos
South Platte Park, South Platte River Enhancement Project, Phase I
Completed June 2013

Before

After

FISH AND WILDLIFE RESOURCES FUND GRANT
COLORADO WATER CONSERVATION BOARD

Section 3.5: Grant Application Budget Form

Sources of Funds	Date	Grant Request	Cash Match	In-Kind Match	Totals
ACOS*	Dec 2013		$ 550,000		$ 550,000
COL	Oct 2013		$ 250,000		$ 250,000
UDFCD	Aug 2013		$ 230,000		$ 230,000
SSPR	Sept 2013			$ 5,000	$ 5,000
CWCB	Nov 2013	$ 100,000			$ 100,000
TOTAL FUNDS					**$ 1,135,000**
Uses of Funds	**Date**	**Grant Request**	**Cash Match**	**In-Kind Match**	**Totals**
Design and Permitting	Aug 2013 - Jan 2014		$ 75,000		$ 75,000
Survey and Const. Mgmt.	Feb-April 2014		$ 62,000		$ 62,000
Public Awareness and Project Coordinataion	Aug 2013 - May 2014			$ 5,000	$ 5,000
Mobilization, BMPs and Water Control	Feb-April 2014		$ 126,000		$ 126,000
Channel Grading & Terrace Construction	Feb-April 2014	$ 100,000	$ 342,000		$ 442,000
Convert 2 Drop Structures to Riffles	Feb-April 2014		$ 152,000		$ 152,000
Bank Stabilization	Feb-April 2014		$ 138,000		$ 138,000
Upland Planting Areas	Feb-April 2014		$ 32,000		$ 32,000
10% Contingency	April-May 2014		$ 103,000		$ 103,000
TOTAL USE OF FUNDS		**$ 100,000**	**$ 1,030,000**	**$ 5,000**	**$ 1,135,000**

Total Project Cost:

* ACOS funding to be finalized in December 2013.

Signature David A. Lorenz

David A. Lorenz, Executive Director
South Suburban Park and Recreation District

Date: Nov. 5, 2013

POLICY NUMBER: 15

SUBJECT: **CONSIDERATION AND APPROVAL OF FISH AND WILDLIFE RESOURCES FUND APPLICATIONS FOR INSTREAM FLOWS AND RIVER RESTORATION PROJECTS.**

EFFECTIVE DATE: September 12, 2002

POLICY: The Colorado Water Conservation Board (CWCB) will accept applications throughout the year for grants from the Fish and Wildlife Resources Fund for the appropriation or acquisition of instream flow water rights and river restoration construction projects to mitigate the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities.

Applications for mitigation grants from the Fish and Wildlife Resources Fund will be accepted for the following types of projects:

1. The appropriation or acquisition of water rights for the purpose of preserving or improving the natural environment to a reasonable degree to mitigate the impact of an existing water facility.
2. River restoration feasibility studies and construction projects that are designed to directly mitigate or significantly improve the environmental impacts of existing water facilities.

The CWCB may, in any year, approve grants to fund any project in the above categories that the Board deems worthy of funding through the Fish and Wildlife Resources Fund. In order to protect the long-term integrity of the Fish and Wildlife Resources Fund, instream flow and river restoration projects mitigating the impacts of existing water supply facilities will be limited to 40% of the Fish and Wildlife Resources Fund balance as of July 1, 2002.

The project applicant must have completed a fully executed funding contract with the CWCB within 2 years of the grant authorization by the CWCB, or the Board will consider de-authorization of the grant.

PURPOSE: To establish an approval process for instream flow and river restoration construction project grants from the Fish and Wildlife Resources Fund.

APPLICABILITY: This policy and procedure applies to applications for instream flow or river restoration construction project grants from the Fish and Wildlife Resources Fund.

PROCEDURE: Prior to a Board meeting, the CWCB staff will prepare for the Board's consideration a summary of the technical, financial, and institutional characteristics of each proposed instream flow water right appropriation or acquisition, river restoration feasibility study or construction project. Each application will be reviewed for conformity with the goals and

objectives of the CWCB Strategic Plan. Grant applications will be considered only in the following two categories:

1. The appropriation or acquisition of water rights for the purpose of preserving or improving the natural environment to a reasonable degree to mitigate the impact of an existing water facility.
2. River restoration feasibility studies and construction projects that are designed to directly mitigate or significantly improve the environmental impacts of existing water facilities.

The Board will consider and CWCB staff will evaluate and recommend to the Board grant applications for appropriation or acquisition of water rights to be held by the Board based on the following project types:

- Instream flow water rights that assist in the administration of compact-entitled waters, or address problems relating to compact-entitled waters,
- Instream flow water rights that facilitate the resolution of federal water rights issues, and
- Instream flow water rights that assist in the recovery of threatened or endangered wildlife species or the conservation of existing wildlife species within riparian ecosystems.

The Board will consider and CWCB staff will evaluate and recommend to the Board grant applications for river restoration feasibility studies and construction projects based on the following:

- Soundness of the project design, work plan or plan of study,
- The need for the proposed project,
- The need for financial assistance.
- Financial, technical, or administrative participation or coordination by all affected local governments.

NOTE: Recognizing that future needs and responses to those needs cannot be predicted with certainty, the Colorado Water Conservation Board reserves the right to recommend for funding any instream flow acquisition, river restoration construction project, or study that it determines would mitigate the effects of an existing water supply facility and furthers the purposes of the Fish and Wildlife Resources Fund.

Approved by the CWCB
September 12, 2002
Agenda Item #16a

37-60-122.2. Fish and wildlife resources - legislative declaration - fish and wildlife resources fund - authorization.

(1) (a) The general assembly hereby recognizes the responsibility of the state for fish and wildlife resources found in and around state waters which are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities. The general assembly hereby declares that such fish and wildlife resources are a matter of statewide concern and that impacts on such resources should be mitigated by the project applicants in a reasonable manner. It is the intent of the general assembly that fish and wildlife resources that are affected by the construction, operation, or maintenance of water diversion, delivery, or storage facilities should be mitigated to the extent, and in a manner, that is economically reasonable and maintains a balance between the development of the state's water resources and the protection of the state's fish and wildlife resources.

(b) Except as provided in this paragraph (b), the applicant for any water diversion, delivery, or storage facility which requires an application for a permit, license, or other approval from the United States shall inform the Colorado water conservation board, wildlife commission, and division of wildlife of its application and submit a mitigation proposal pursuant to this section. Exempted from such requirement are the Animas-La Plata project, the Two Forks dam and reservoir project, and the Homestake water project for which definite plan reports and final environmental impact statements have been approved or which are awaiting approval of the same, applicants for site specific dredge and fill permits for operations not requiring construction of a reservoir, and applicants for section 404 federal nationwide permits. If an applicant that is subject to the provisions of this section and the commission agree upon a mitigation plan for the facility, the commission shall forward such agreement to the Colorado water conservation board, and the board shall adopt such agreement at its next meeting as the official state position on the mitigation actions required of the applicant. In all cases the commission shall proceed expeditiously and, no later than sixty days from the applicant's notice, unless extended in writing by the applicant, make its evaluation regarding the probable impact of the proposed facility on fish and wildlife resources and their habitat and to make its recommendation regarding such reasonable mitigation actions as may be needed.

(c) The commission's evaluation and proposed mitigation recommendation shall be transmitted to the Colorado water conservation board. The board within sixty days, unless extended in writing by the applicant, shall either affirm the mitigation recommendation of the commission as the official state position or shall make modifications or additions thereto supported by a memorandum that sets out the basis for any changes made. Whenever modifications or additions are made by the board in the commission's mitigation recommendation, the governor, within sixty days, shall affirm or modify the mitigation recommendation which shall then be the official state position with respect to mitigation. The official state position, established pursuant to this subsection (1) shall be communicated to each federal, state, or other governmental agency from which the applicant must obtain a permit, license, or other approval.

(2) (a) Moneys transferred to the fish and wildlife resources fund pursuant to the provisions of section 37-60-121 (6) are hereby continuously appropriated to the Colorado water conservation board for the purpose of making grants pursuant to this subsection (2) and for offsetting the direct and indirect costs of the board for administering the grants. The interest earned from the investment of the moneys in the fund shall be credited to the fund.

(b) To the extent that the cost of implementing the mitigation recommendation made pursuant to subsection (1) of this section exceeds five percent of the costs of a water diversion, delivery, or storage facility, the board shall, upon the application of the applicant, make a mitigation grant to the applicant. The amount of the grant shall be sufficient to pay for the mitigation recommendation as determined by this section to the extent required above the applicant's five percent share. Any additional enhancement shall be at the discretion and within the means of the board. Under no circumstance shall the total amount of the grant exceed five percent of the construction costs of the project, or be disbursed in installments that exceed seventy percent of the amount of the grant during any fiscal year. Any mitigation cost in excess of ten percent of the construction costs of a project shall be borne by the applicant.

(c) An applicant may apply for an enhancement grant by submitting to the commission and the board an enhancement proposal for enhancing fish and wildlife resources over and above the levels existing without such facilities. The commission shall submit its recommendations on the proposal to the board for its consideration. The board, with the concurrence of the commission, may award a grant for fish and wildlife enhancement. Any such enhancement grant will be shared equally by the Colorado water conservation board's fish and wildlife resources fund and the division of wildlife's wildlife cash funds and other funds available to the division.

(d) For the purpose of this subsection (2), construction costs means the best estimate of the physical construction costs as fixed by the Colorado water conservation board as of the date of the grant application. Costs should be limited to design, engineering and physical construction and will not include the costs of planning, financing, and environmental documentation, mitigation costs, legal expenses, site acquisition or water rights.

(e) Species recovery grants from the fish and wildlife resources fund may be made for the purpose of responding to needs of declining native species and to those species protected under the federal "Endangered Species Act of 1973", 16 U.S.C. sec. 1531, et seq., as amended, in a manner that will carry out the state water policy.

(f) (Deleted by amendment, L. 2001, p. 692, § 28, effective May 30, 2001.)

(3) Decisions relating to the official state mitigation position made pursuant to paragraph (c) of subsection (1) of this section shall not be subject to judicial review.

(4) The board shall distribute mitigation and enhancement grants reasonably and equitably among water basins toward the end that those projects sponsored by beneficiaries east of the continental divide receive fifty percent of the money granted and those projects sponsored by beneficiaries west of the continental divide receive fifty percent of the money granted under this section.

(5) The general assembly hereby recognizes the role instream flows and river restoration projects play in mitigating the effects of the construction, operation, and maintenance of water diversion, delivery, and storage facilities. Therefore, the Colorado water conservation board and the operators of existing water diversion, delivery, or storage facilities projects are hereby authorized to apply directly to the board for moneys for projects to carry out the purposes of this section. The board is authorized to grant such moneys if it finds that such projects will further the purposes of this section.

Source: L. 87: Entire section added, p. 1297, § 5, effective July 13. **L. 97:** (1)(a) and (2)(a) amended and (2)(e) added, p. 1600, § 1, effective June 4. **L. 98:** (2)(f) added, p. 1004, § 5, effective May 27. **L. 99:** (2)(a) amended, p. 628, § 36, effective August 4. **L. 2001:** (2)(a), (2)(c), (2)(e), and (2)(f) amended, p. 692, § 28, effective May 30. **L. 2002:** (5) added, p. 456, § 28, effective May 23.