C I T Y O F B O U L D E R
INFORMATION ITEM FOR:

ENVIRONMENTAL ADVISORY BOARD – May 6, 2015
PLANNING BOARD – May 21, 2015
TRANSPORTATION ADVISORY BOARD – May 11, 2015
OPEN SPACE BOARD OF TRUSTEES – May 13, 2015
WATER RESOURCES ADVISORY BOARD – May 18, 2015
PARKS AND RECREATION ADVISORY BOARD – May 18, 2015

GREENWAYS ADVISORY COMMITTEE AGENDA ITEM
MEETING DATE: May 26, 2015

SUBJECT: 2016-2021 Greenways Capital Improvement Program
REQUESTING DEPARTMENT: Annie Noble – Flood and Greenways Engineering Coordinator
PURPOSE: The 2016-2021 Greenways Capital Improvement Program is being provided to board members as an information item. If you have any comments or concerns regarding the 2016-2021 Greenways Capital Improvement Program, please pass them along to your Greenways Advisory Committee representative. If you have questions on this material, please contact Annie Noble at 303-441-3242 or noblea@bouldercolorado.gov
GREENWAYS ADVISORY COMMITTEE ACTION REQUESTED: A recommendation from the Greenways Advisory Committee to the City's Planning Board and City Council concerning the proposed Greenways Capital Improvement Program is requested.

Attached is information concerning the proposed 2016-2021 Greenways Capital Improvement Program (CIP) for review and consideration. A recommendation by the Greenways Advisory Committee to the city's Planning Board and Council will be requested at the May 26, 2015 GAC meeting.

Attachment A: Greenways 2016-2021 Capital Improvement Program Overview
Attachment B: Greenways 2016-2021 Capital Improvement Program Summary Spreadsheet
Attachment C: Greenways Program CIP Map

Greenways

Program Overview

The City of Boulder Greenways System is comprised of a series of corridors along riparian areas including Boulder Creek and its 14 tributaries, which provide an opportunity to integrate multiple objectives, including habitat protection, water quality enhancement, storm drainage and floodplain management, alternative transportation routes for pedestrians and bicyclists, recreation and cultural resources.

The Greenways CIP follows an opportunistic approach, contributing funding toward projects that are being completed by other departments or private development in order to meet the various objectives of the Greenways Program. The Greenways CIP also looks to leverage funds with outside agencies in order to move projects forward that meet more than one objective of the Greenways Program, but may not be the highest priority when evaluating any one particular objective. Projects included in the Greenways CIP are typically called out in the Greenways Master Plan and are projects that Greenways staff can take the lead in coordinating.

Funding Overview

The total 2016 Greenways capital budget is $320,441, with $105,000 in the operating budget. Greenways projects are funded from the Transportation Fund, Stormwater and Flood Management Utility Fund, and the Lottery Fund. Annual funding distribution for the Greenways Capital Program for 2016 is as follows:

Transportation	-	$97,500
Flood Utility	-	$97,500
Lottery Fund	-	$125,441

Historically the Lottery contribution to the Greenways Program has been $150,000 per year. As a result of a projected reduction of the city's allocation of Lottery funds, starting in 2015, the Lottery contribution to Greenways is expected to be reduced to $125,441 (based on Greenways receiving 15% of the city's funding allocation, with a projection of total Lottery proceeds being $836,275). Should the city's allocation of Lottery funds exceed the projected amount, a budget adjustment will be made to reflect the increase.

Accomplishments and Highlights

Projects to be Completed in 2015:

- The Goose Creek Restoration Project includes restoration improvements along Goose Creek between Foothills Highway and 55th Street. This project was completed in 2014. However, it was determined that reinforcement of the multi-use path was necessary after several small storm events last summer. This work will be completed this summer. This project is primarily being funded through a Section 206 Restoration grant through the U.S. Army Corps of Engineers. The city's 35% funding match is being met mostly through credits from city owned real estate.
- Flood mapping studies are expected to be completed in 2015 and submitted to FEMA for Boulder Slough, and Upper Goose and Twomile Canyon Creeks and Skunk, Kings Gulch and Bluebell Canyon Creeks.
- Flood mitigation major drainageway plans are anticipated to be completed by the end of 2015 for South Boulder Creek and Gregory Canyon Creek.
- Construction of the Wonderland Creek Foothills to Winding Trail Greenways Improvement Project is anticipated to begin in 2015 and is scheduled to be completed in 2017.
- The Urban Drainage and Flood Control District (UDFCD) also completes maintenance projects along the major drainageways. In 2015 this includes a request for sediment removal along Wonderland Creek from Foothills Parkway to the confluence with Goose Creek. Selective thinning of non-native vegetation is also planned and coordinated through the UDFCD for Bear Canyon Creek. These maintenance projects will help maintain conveyance capacity in these drainageways.

Projects Expected for Completion in 2016:

- A CEAP for the Fourmile Canyon Creek stream reach upstream of Upland Avenue to west of Broadway is expected to be completed in 2016.
- Flood mitigation plans are anticipated to be completed in 2016 for Boulder Creek and Bear Canyon Creek.
- Stream bank restoration work, which is being funded by the Community Culture and Safety projects November 2014 tax increase is anticipated to be completed in 2016.

Projects Started in 2016, but Not Completed:

- Fourmile Canyon Creek at 19th Street is in preliminary design but was put on hold following the September 2013 flood event. It is anticipated that the design of this

project will be completed in 2015 and the project will be bid in 2016 and completed in 2017.

Highlights of 2016 – 2021 Projects:

The focus of the 2016-2021 Greenways CIP is on flood mitigation, bicycle and pedestrian multi-use paths and underpasses, and habitat and water quality improvements along the Fourmile and Wonderland Creek corridors. In addition to the projects along Fourmile Canyon Creek and Wonderland Creek, possible habitat restoration projects during the next few years include:

- Confluence of Bear Creek and Boulder Creek at Foothills Community Hospital
- Dry Creek habitat improvements through Flatirons Golf Course
- Goose Creek, railroad to 47th Street tree plantings
- Fish Passage enhancement projects in association with Fishing is Fun grants
- South Boulder Creek minimum stream flow
- Removal of Russian Olive trees east of 75th Street along Boulder Creek

Relationship to Guiding Principles

CIP Guiding Principles:

Greenways projects address many of the CIP guiding principles. Greenways projects are identified in multiple master plans and meet the community sustainability goals. Most of the Greenways projects leverage outside or interdepartmental funding. Greenways habitat improvements seek to be sustainable and are intended to reduce the future maintenance required.

The Greenways CIP has been developed within the context of and is consistent with the Boulder Valley Comprehensive Plan (BVCP), the Transportation Master Plan (TMP), the major drainageway flood mitigation plans, the Comprehensive Flood and Stormwater Master Plan and the Greenways Master Plan. The Greenways Master Plan was updated in 2011 to reflect improvements that had been completed, and adopted changes that have been made in other master plans, city policies and ordinances that affect the Greenways Program since the last Master Plan update in 2001.

Prioritization:

Many of the Greenways projects shown in the CIP are being designed and constructed in

coordination with major flood or transportation improvements. The Greenways funding associated with these projects focuses on habitat restoration, water quality improvements and trail connections. In addition to leveraging funding with the Transportation and Flood Utilities budgets, funding for Greenways projects is also available through the Urban Drainage and Flood Control District and Federal Transportation funds.

Projects not in Master Plans:

It should be noted that the city experienced a major flood in September 2013 that resulted in extensive flooding along most of the city's major drainageways. Following the flood, additional funds have been allocated in the Flood Utility CIP to reflect an increased interest in pursuing flood mitigation efforts along the city's major drainageways. As a result of updated mapping and the September 2013 flood, flood mitigation plans were initiated for Gregory Creek, Bear Canyon Creek and Boulder Creek to identify economically feasible improvement projects. Flood mitigation plans will be initiated in 2016 for Upper Goose Creek and Twomile Canyon Creek, and Skunk, King's Gulch and Bluebell Creeks after completion of flood mapping updates on these drainageways. Results from these flood mitigation plans will inform future capital improvements. Continued evaluation of potential improvement may result in additional changes to the Flood Utility and Greenways CIP in upcoming years.

New Projects

The 2016-2021 CIP continues to focus on Fourmile Canyon and Wonderland Creeks. As stated above, flood mitigation plans are currently being developed for several of the drainageways as a result of either flood mapping updates or deficiencies identified during the September 2013 flood. These plans will identify potential economically feasible CIP projects which may provide opportunities for future Greenways improvements.

Operation and Maintenance Impacts

$105,000 is budgeted each year for Greenways operations and maintenance. $80,000 of the operating budget is dedicated to habitat maintenance. The Greenways habitat crew works closely with Parks and Open Space maintenance staff to provide on-going maintenance, as well as on collaborative projects as part of the operations budget. Major drainageway improvements are maintained by the flood maintenance staff and multi-use paths and underpasses are maintained by either Transportation or Parks maintenance, depending upon jurisdiction.

Deferred, Eliminated, or Changed Projects

None

Unfunded Projects and Emerging Needs

Since the Greenways Program is opportunistic, taking advantage of projects that are funded through other departments, there are no unfunded needs.

Board Action

The Greenways Advisory Committee will meet on May 26, 2015 to make a recommendation on the 2016-2021 Greenways Program CIP to Planning Board and City Council.

Attachment B

CITY OF BOULDER
CAPITAL IMPROVEMENTS PROGRAM

GREENWAYS PROGRAM 2016-2021 SUMMARY SHEET with Carry Overs from 2014 to 2015

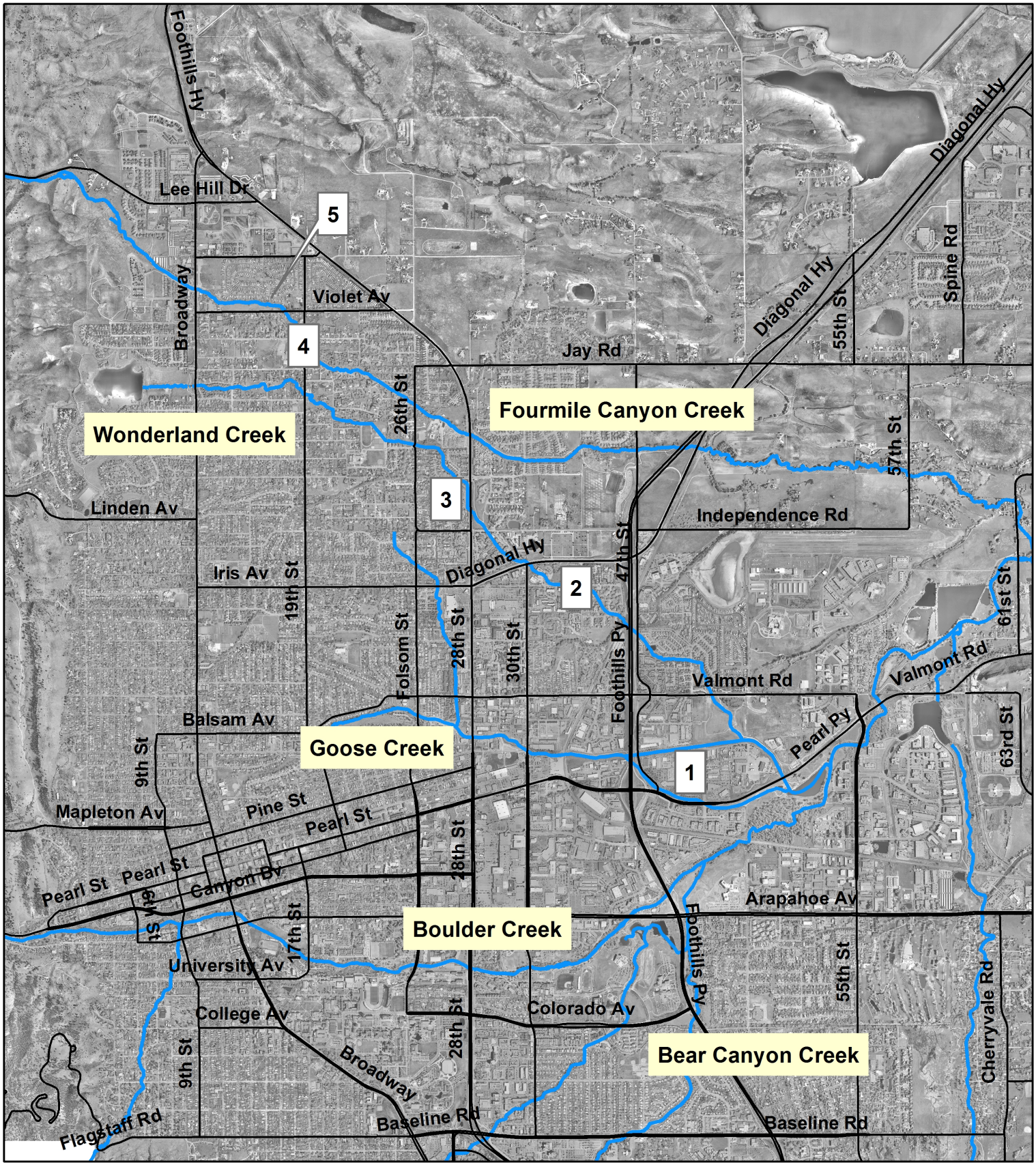
	CAPITAL IMPROVEMENTS PROGRAM	Total Greenways	Expended in Prior Years	2014 Carry Over	2015 Budget	2015 Budget + Carry Over	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
1	Goose Creek Restoration	$170,566	$170,566	$0	$0	$0						
2	Wonderland Foothills to 30th Street	$391,716	$42,689	$349,027	**$0**	$349,027						
3	Wonderland 28th Street Underpass	$565,441	$0	$295,000	$270,441	$565,441						
4	Fourmile 19th to 22nd	$747,900	$29,072	$718,828	**$0**	$718,828						
5	Fourmile Upland to Violet	$1,622,646	$0	$0	$0	$0	$270,441	$270,441	$270,441	$270,441	$270,441	$270,441
6	Restoration, Water Quality and Trail Improvements		$0	$102,439	$50,000	$152,439	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000
7	CU Bike/Ped Bridge Replacement	$200,000	$0	$200,000	$0	$200,000						
	TOTAL GREENWAYS BUDGET			**$1,665,294**	**$320,441**	**$1,985,735**	**$320,441**	**$320,441**	**$320,441**	**$320,441**	**$320,441**	**$320,441**

FLOOD FUNDING BY YEAR

CAPITAL IMPROVEMENTS PROGRAM	Expended in Prior Years	2015 Budget + Unencumbered Carry Over	2016 Projected	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected	Total
1 Goose Creek Restoration	$0	$0							$0
2 Wonderland Foothills to 30th		$23,337,000							$23,337,000
3 Wonderland 28th Street Underpass		$0							$0
4 Fourmile 19th to 22nd		$2,000,000							$2,000,000
5 Fourmile Upland to Violet	$0		$500,000	$500,000	$1,000,000	$1,500,000	$1,250,000	$500,000	$5,250,000
6 Bear Canyon Creek	$0	$100,000	$500,000						$600,000
7 Gregory Canyon Creek	$0	$100,000	$500,000						$600,000
8 Boulder Creek	$0	$600,000		$2,500,000	$2,250,000				$5,350,000
9 Boulder Slough	$788,164	$0							$788,164
10 Twomile Canyon Creek	$0			$100,000	$500,000				$600,000
11 Bluebell Canyon / Kings Gulch Creek	$0			$100,000	$500,000				$600,000
12 Skunk Creek	$0			$100,000	$500,000				$600,000

TOTAL PROJECT FUNDING

	CAPITAL IMPROVEMENTS PROGRAM	All Years Greenways	Pre-flood Funds	Flood Funds	TIP	Project Total
1	Goose Creek Restoration	$170,566		$0		$170,566
2	Wonderland Foothills to 30th Street	$391,716		$23,337,000	$2,000,000	$25,728,716
3	Wonderland 28th Street Underpass	$565,441		$0	$900,000	$1,465,441
4	Fourmile 19th to 22nd	$747,900		$2,000,000		$2,747,900
5	Fourmile Upland to Violet	$1,622,646		$5,250,000		$6,872,646



Projects
1 Goose Creek Restoration
2 Wonderland Foothills to 30th Streetl
3 Wonderland 28th Street Underpass
4 Fourmile - 19th to 22nd
5 Fourmile - Upland to Violet

2016-2021 Greenways Program CIP Attachment C

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