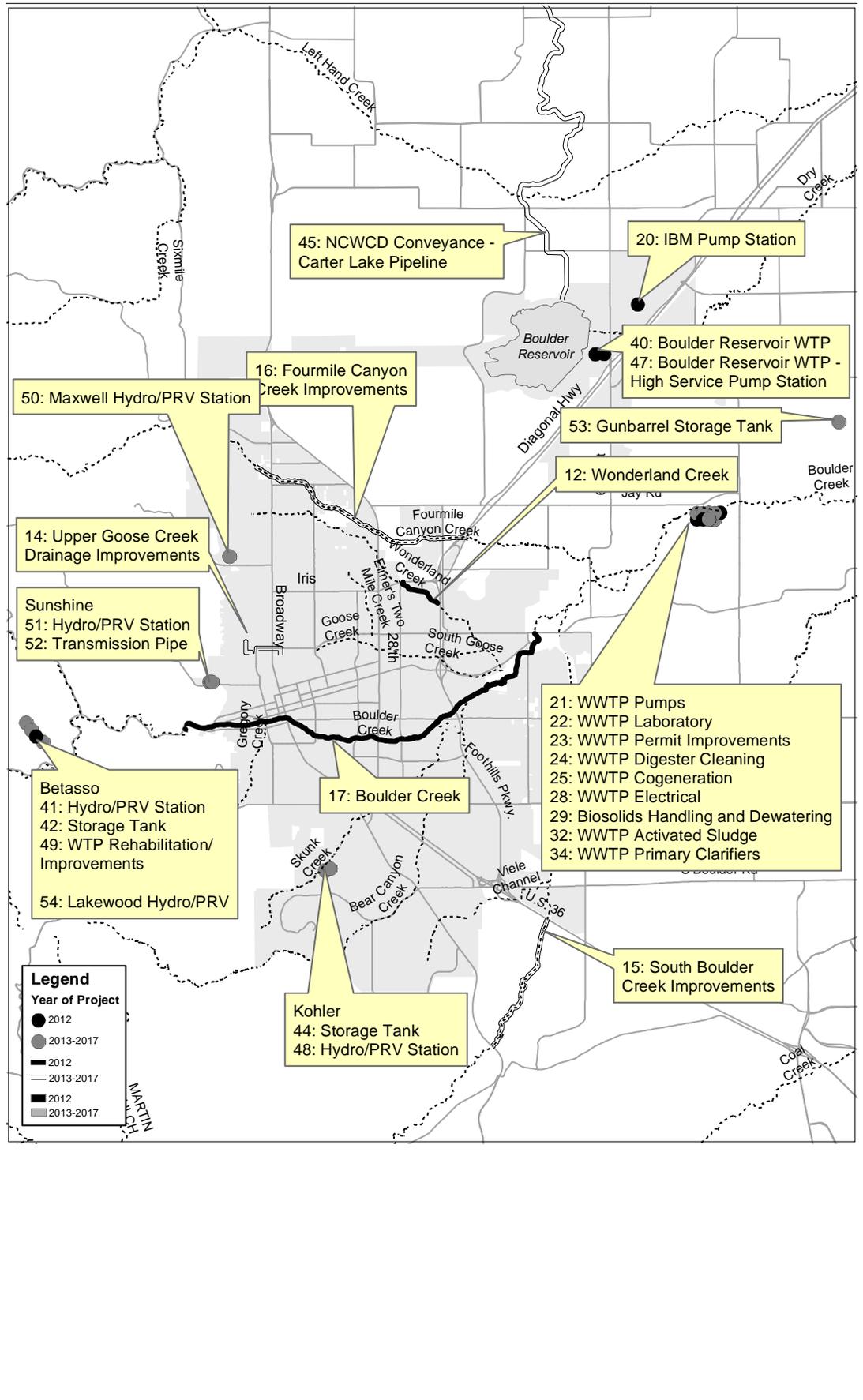


# STORMWATER/ FLOOD, WASTEWATER AND WATER UTILITIES



# City of Boulder Capital Improvement Projects, 2012 - 2017

## PW / Utilities



# Utilities Division

## FUNDING OVERVIEW

Each of the city's three utility funds is established as a separate enterprise fund designed to finance and account for each utility's facilities and services. Funding for the Utilities Division capital improvement program is derived primarily from monthly utility fees. The 2012-2017 capital improvement program (CIP) includes the following 2012 revenue increases from monthly utility fees:

- Water – 2.3%
- Wastewater – 2.4%
- Stormwater/ Flood Management – 2.1%

In addition to the monthly utility fees, significant revenue sources include Plant Investment Fees (PIFs) from new development or redevelopment and hydroelectric sales to Xcel Energy. Sales from monthly utility fees can be variable and reflect the overall growth of the service area and yearly weather fluctuations.

Other revenue sources include reimbursements from the Urban Drainage & Flood Control District (UDFCD, this is for stormwater/ flood management projects), Colorado Department of Transportation (CDOT) state and federal grants, and revolving loans from the Colorado Department of Public Health and Environment (none anticipated at this time). These revenues are project specific and are highly variable depending on the external agency's funding situation and priorities. Currently, the following projects are anticipated to qualify for such revenues:

- Pre-Flood Acquisition
- Wonderland Creek
- Fourmile Canyon Creek
- South Boulder Creek

If the above mentioned funds are insufficient, projects may be funded by issuing revenue bonds with the debt service financed by general utility charges. For the years 2012-2017, it is anticipated that new bonds will be issued for the following projects:

Water: Betasso Water Treatment Facility (WTF) Improvements (\$11.6 million in 2016) to fund improvements to the Betasso WTF to assure compliance with federal Safe Drinking Water Act regulations.

Wastewater: No bonds are anticipated in the 2012-2017 planning period.

Stormwater and Flood Management: South Boulder Creek Improvements (\$4.5 million in 2014) to fund improvements designed to mitigate flood hazards in the South Boulder Creek West Valley area.



Betasso Water Treatment Plant

## ACCOMPLISHMENTS AND HIGHLIGHTS

Recent CIP related accomplishments include:

### Water Utility

A significant improvement and capacity expansion project at the Boulder Reservoir Water Treatment Facility (WTF) was completed in 2010. This project provides 16 million gallons per day (mgd) firm capacity and 20 mgd maximum capacity, supplementing the existing treatment capacity of 40 mgd at the Betasso WTF. Additional treatment capacity at the Boulder Reservoir WTF was needed to assure that sufficient amounts of Boulder's west slope water supplies, which are delivered through Boulder Reservoir, can be treated during droughts that reduce the city's Boulder Creek water supplies. It was also necessary to increase capacity at Boulder Reservoir WTF to meet expected buildout water demands because this WTF will operate at a higher rate during most of the year in the future.

### Wastewater Utility

The city is currently engaged in a major rehabilitation/improvement project at the 75th St. Wastewater Treatment Facility (WWTF). The project will 1) replace the existing chlorine disinfection system with an ultraviolet (UV) disinfection system, 2) improve the biosolids digesters including replacing the existing gas mixing system with pump mixing and 3) upgrade the headworks including new bar screens, washer compactors and grit classifier machines. The project was financed by issuing bonds in 2010 and the construction bid has been awarded. A 22 month construction schedule is anticipated. The project is expected to be completed in April 2013.

### Stormwater and Flood Management Utility

City Council accepted a flood mitigation plan for Wonderland and Fourmile Canyon Creek in late 2009. High priority projects are defined for the following areas: 1) Wonderland Creek between Foothills Parkway and 28th St. (this includes the underpasses at the Burlington Northern & Santa Fe Railway and 28th Street and the separation of Wonderland Creek from the Boulder White Rock Ditch) and 2) Fourmile Canyon Creek in the area of Crestview Elementary school (this includes crossing upgrades at Violet Avenue, Upland Avenue and 19th Street.) The city received Transportation Improvement Project (TIP) funding for the Wonderland Creek project and the final design and construction bid package are being prepared. A Community and Environmental Assessment Process (CEAP) has been initiated for the Fourmile Canyon Creek project.

The Elmer's Two-mile Creek drainageway improvement project was completed in 2010. The project used Stormwater and Flood Management Utility CIP funds, TIP funds, and UDFCD funds. Over 50 properties were removed from the 100-year floodplain and the Letter of Map Revision has been accepted by the Federal Emergency Management Agency.



A project to replace the existing chlorine disinfection system with UV is underway at the Wastewater Treatment Plant.

Highlights of the proposed six-year CIP include:

### Water

1. Funding for annual waterline replacement continues at a rate of \$2,100,000. This should be sufficient to maintain the current service level, as defined by water main breaks, over the next decade. The replacement program is coordinated with the Transportation Division street overlay and reconstruction program.

2. Funds have been budgeted for annual, on-going repair and rehabilitation work on the Barker Gravity Pipeline. This pipeline is a critical component of the city's source water system because it conveys the Barker Reservoir/Middle Boulder Creek water to the Betasso WTF. A 10-year maintenance plan was recently developed to guide this work.



Funding for re-inspection of the Lakewood Pipeline are scheduled in 2014.

3. Funds have been budgeted in 2014 for inspection of the Lakewood Pipeline. Based on observations made during the 2009 inspection it is recommended that the frequency of inspections be reduced to once every five years. No funds have been budgeted for pipeline repair costs. Funds would be transferred from the Lakewood Pipeline Remediation Reserve to cover the costs.

4. Funding for rehabilitation and improvements to the Betasso WTF is recommended for the 2015-2016 time period. The Betasso WTF is the city's primary water treatment facility and has deteriorated during almost 50 years of operation despite on-going maintenance and rehabilitation.

5. Funding for construction of the proposed Carter Lake Pipeline has been scheduled for the 2017-2018 time period. Funding of the pipeline in the near term without federal funding assistance would have a significant impact on water rates. Staff continues to recommend the pipeline as the best long-term solution to water quality, operational and security vulnerability issues related to drawing water directly from the Boulder Feeder Canal and Boulder Reservoir. The Northern Colorado Water Conservancy District submitted a revised permit application to Boulder County. Staff will return to the WRAB late in 2011 or early 2012 with a revised CEAP depending on the County's permit decision. The pipeline will provide the opportunity to develop another hydroelectric generation facility.

### Wastewater

1. Funding for the annual Sanitary Sewer Rehabilitation projects continues at a rate of \$450,000. This should be sufficient to maintain the current service level, over the next decade.

2. In March 2011 the city received a new discharge permit for the 75th Street WWTF with an effective date of May 1, 2011. Additional or new permit requirements that require some level of investment to comply with include: 1) substantially lower daily maximum ammonia effluent limits; 2) a new daily maximum nitrate effluent limit; and 3) a substantially lower arsenic effluent limit. The city was successful in negotiating an extended compliance schedule which requires compliance with the ammonia and nitrate effluent limits by December 1, 2017. A two-year compliance schedule was provided to comply with the arsenic effluent limit.

Complying with the ammonia, nitrate and arsenic effluent limits will require a combination of regulatory negotiations, environmental studies and WWTF capital improvements. Staff has identified funding in the 2012-2017 CIP to address improvements that will be required to meet the new effluent regulations. The 2012 and 2013 funding will be used to provide new probes, instrumentation and controls at four plant locations including the headworks, centrate, aeration basins, and the plant effluent. The 2014-2016 funding will be used to evaluate and construct various plant modifications that may include carbon addition, and also to evaluate the needs of the next permit cycle.

3. A comprehensive list of WWTF rehabilitation projects has been identified based on Utility Division asset management protocols. Within the 6-year CIP, funding for rehabilitation of major electrical components is deemed most critical and is recommended in the 2016-2017 time period.

4. The Water Quality Control Division of the Colorado Department of Public Health and Environment is requiring that the city provide overflow protection at the IBM Lift Station. Staff has identified funding in 2011 and 2012 to address this issue. The 2011 funding is to hire an engineering consultant to help provide an analysis of the lift station's storage capacity, power redundancy, as well as other rehabilitation issues. The 2012 funding is for the construction of the new facilities identified in the study/design phase.

#### Stormwater and Flood Management

1. The city completed a Community and Environmental Assessment Process (CEAP) document for the Wonderland Creek Greenways Improvement Project. The project proposes to implement flood mitigation measures along Wonderland Creek from just upstream of Iris Avenue to Foothills Parkway and extend the multi-use trail from Foothills Parkway to the intersection of Iris Avenue and 30th Street. The CEAP was approved Nov. 3, 2010. The city began design of the recommended improvements in 2011 with construction anticipated through 2013. The project is anticipated to cost approximately \$5.2 million to design and construct. The city received \$2 million in federal Transportation Improvement Project (TIP) funding for the project. TIP funding is included in the Stormwater and Flood Management CIP along with \$3.1 million in funding from the city. Utilities funds will be leveraged with the federal funds and it is important that this project be completed in a timely manner so that the TIP funding is not jeopardized. This project is being coordinated by the city's Greenways Program.

2. Funding is recommended for improvements designed to mitigate South Boulder Creek flood hazards. Revised flood mapping indicates that a total of 700 structures (with a total of approximately 1,200 dwelling units) are located in the South Boulder Creek 100-year floodplain. Property damage resulting from a 100-year storm event is estimated to exceed \$215 million. The South Boulder Creek Flood Mitigation Planning Study began in early 2010 and is being funded by the city and the UDFCD. The study is focused on developing and evaluating alternatives to mitigate flood impacts to structures and areas within the current incorporated city limits, primarily within the West Valley area. The short list of five alternatives will be refined and a recommendation presented to advisory boards and City Council. The anticipated schedule for presentation of a final recommendation is 4th quarter 2011.



Water meter transponders are being replaced on over 28,000 accounts, which began in 2009 will continue through 2013.

## RELATIONSHIP TO GUIDING PRINCIPLES AND PRIORITIZATION

The Guiding Principles Utilities will use to fulfill its mission include:

- Providing reliable utility services
- Complying with all City, county, state and federal laws, taking direction from both regulatory standards and community goals
- Planning work activities and expenditures in a manner which demands fiscal responsibility and accountability
- Incorporating environmental stewardship, public health, and public safety in all aspects of our work
- Understanding that our community is dynamic, not static, and as a result, so must be plans and programs
- Treating people with respect, dignity and honesty
- Setting high standards and consistently managing performance to achieve those standards
- Promoting staff as a team and resource
- Maintaining a safe work environment
- Realizing that the quality of our work is as important as the quantity of our work
- Promoting personal responsibility, contributions and growth
- Recognizing that we are a part of a larger organization and, as such, strive to understand other needs and use resources in a collaborative manner



Flood mitigation projects are proposed for South Boulder Creek

The projects identified in the 2012-2017 CIP are intended to implement these guiding principles and are consistent with the department master plans identified below.

Several years ago, it was decided to develop an overarching master plan for each of the City's three utilities. More detailed plans have been developed for major functional areas. Recent master plans include recommendations for CIP projects over a 20-year time period. The project recommendations consider the prioritization listed below as well as information from the Utilities Division asset management system. This system includes replacement cost, useful life and condition rating which have been documented for each significant utility asset. This information informs the six-year CIP.

Current Utilities Division master plans include:

### Water

- Source Water Master Plan – 2009
- Treated Water Master Plan (TWMP) – 2011
- Water Utility Master Plan (WUMP) – 2011 (The Water Resources Advisory Board recommended acceptance of this plan at their May 2011 meeting. It is anticipated the Plan will be presented to the Planning Board at their July 21, 2011 meeting and to City Council in September 2011.)

### Wastewater

- Wastewater Collection System Master Plan - 2010
- Wastewater Utility Master Plan - 2010

### Stormwater/ Flood Management

- Stormwater Master Plan -2007
- Comprehensive Flood and Stormwater (CFS) Master Plan - 2004

**Prioritization**

The overall program and funding priorities are reflected in the timing of projects over the six-year CIP time period. In addition to master plan recommendations, the following factors were considered in determining the overall program and funding priorities:

**Water and Wastewater**

1. Reliability of water and wastewater collection, delivery and treatment
2. Water quality and other environmental regulations
3. Worker health and safety
4. Opportunity to collaborate with other city projects, such as transportation
5. Opportunity to collaborate with other utility providers to leverage funds or obtain federal or state grants.
6. Potential for operation and maintenance cost savings
7. Accommodating new growth and development

**Stormwater and Flood Management**

1. Life safety (high hazard) mitigation
2. Flood emergency response capability
3. Critical facility (vulnerable population) hazard mitigation
4. Property damage mitigation
5. Collaboration with other Greenways Program Objectives
6. Potential for operation and maintenance cost savings
7. Accommodating new growth and development

All projects proposed have sufficient funds for ongoing operations and maintenance, and 80-90 % of the Water Utility and Wastewater Utility projects are focused on maintaining or improving existing assets. Other Water and Wastewater Utility projects are intended to construct facilities required to comply with new regulations. In the Stormwater and Flood Management Utility, the majority of the project funding is focused on life safety and critical facility hazard mitigation issues.



Work on the Barker Dam outlet and hydro are scheduled from 2015-2017

**DEFERRED PROJECTS, CHANGES, AND UNFUNDED NEEDS**

Funding for several desirable projects has been deferred beyond the current six-year CIP period or reduced during the current six-year CIP period because of revenue limitations and construction costs inflation. Revenue is limited based on a number of factors including reduced water sales and slower growth. Utility rates have typically been increased in part to account for construction cost inflation, however this did not occur in 2010 and as a result some CIP projects have been delayed.

Projects that have been delayed due to budget limitations include:

**Water**

- Carter Lake Pipeline (funding delayed, begin design in 2017)
- Barker Dam Outlet (funding delayed, begin design in 2017)
- Barker Dam Hydro (funding delayed, begin design in 2017)

#### Wastewater

- Improvements in the “Goose Creek 5 Master Plan Project” basin (funding delayed, begin planning in 2017)

#### Stormwater/ Flood Management

- Upper Goose Creek Stormwater Management (funding reduced)

It should be noted that the proposed CIP assumes funding for the replacement/rehabilitation of existing Utilities assets at a level of 60-75% of the predicted rate based on a recent asset management analysis. Staff believes this will be adequate and sustainable since renewal and rehabilitation techniques and approaches can be accomplished at a lower cost than complete replacement.

The proposed CIP budget should be adequate to address all essential projects within the six-year planning time frame. The projects listed above can be deferred until a later time and not have a significant negative effect on the service level of the city’s utilities systems. Therefore there are no unfunded needs within the 6-year CIP.

However, to continue to meet capital project needs, including the recommended asset replacement goals of 60-75% and compliance with permit regulations, higher utility rate increases will be needed in the near future as indicated in the following table:

	2012	2013	2014	2015	2016	2017
Water	3%	3%	6%	6%	6%	4%
Wastewater	3%	4%	6%	6%	6%	6%
Stormwater/Flood Management	3%	3%	3%	3%	3%	3%

Staff will continue to monitor and refine the asset replacement analysis and adjust the actual replacement rate within the 60-75 percent range as part of the annual budget process. Asset replacement at 75 percent of the predicted level has been used to formulate the 2012-2017 CIP budget.

#### Construction Cost Inflation

Construction cost inflation is tracked using the Engineering News Record (ENR) Cost Index for Denver and the Colorado Department of Transportation (CDOT) Colorado Construction Cost Index. The ENR index is a composite index based on costs for: 1) local portland cement, 2) local 2x4 lumber, 3) national structural steel, and 4) local union wages plus fringes for carpenters, bricklayers and iron workers. The CDOT index is a composite index based on costs for 1) unclassified excavation, 2) hot bituminous pavement 3) concrete pavement, 4) structural steel and 5) reinforcing steel. Over the past ten years, both of these indexes have escalated at an annual rate of approximately 3.5%.

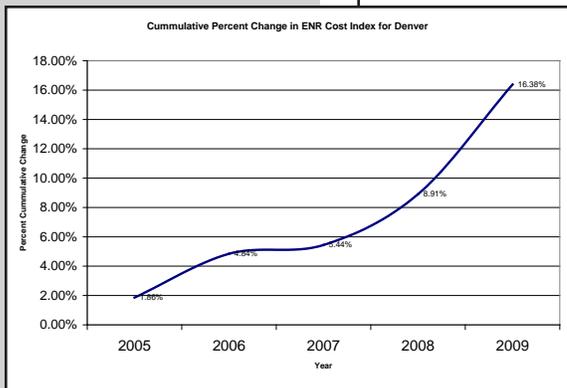


Chart of cumulative construction cost increases by Engineering News Record for the Denver region.

The ENR index is more reflective of equipment and building construction such as projects that occur at the treatment plants. The Colorado Construction Cost Index is more reflective of heavy civil construction such as roadway and major drainageway work.

## **EMERGING NEEDS**

Emerging needs have been identified as part of the recent Water Utility Master Plan. During the development of this master plan, a technical analysis was performed regarding the city's water treatment facilities and other infrastructure. The analysis indicates that this infrastructure should be adequate to meet water demand needs well into the future with little need for capacity expansion. However, a comprehensive analysis of existing assets pointed to the poor condition and aging of some mechanical and electrical equipment at the Betasso WTF. The Betasso WTF is the city's primary water treatment facility and has deteriorated during almost 50 years of continuous operation despite on-going maintenance and rehabilitation. These issues, combined with inherent deficiencies in certain treatment process, are the reasons that large capital funding (~\$16M) is recommended in 2015-2016.

Regulatory changes are another source of uncertainty and create emerging needs. For example, as explained in the Accomplishments and Highlights section of this memo, the city received a new discharge permit for the 75th Street wastewater treatment facility (WWTF) with new effluent limits. Complying with these limits will require a combination of regulatory negotiations, environmental studies and WWTF capital improvements.

## **ADVISORY BOARD ACTION**

The preliminary 2012 Utilities budget and 2012-2017 CIP were presented to the WRAB on May 16, 2011. The WRAB recommended approval of the 6-year CIP at their June 23, 2011 meeting with a 5-0 vote.

**2012-2017 Capital Improvements Program**

**PW/ Stormwater and Flood Management Utility**

12-Jul-11

Est Total Cost	2012 Recommended	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	6-year Total	Prev Alloc Funding	Unfunded Amount
<b>Existing Facility - Enhancements / Upgrades</b>									
Boulder Creek	100,000	0	0	0	0	0	100,000	74,250	0
Stormwater Quality Improvements	50,000	50,000	51,500	53,045	54,636	56,275	315,456	51,880	0
Transportation Coordination	250,000	250,000	257,500	265,225	273,182	281,377	1,577,284	338,397	0
Tributary Greenways Program - Stormwater	97,500	97,500	97,500	97,500	97,500	97,500	585,000	501,433	0
Wonderland Creek	1,050,000	1,250,000	1,950,000	1,000,000	1,000,000	1,000,000	7,250,000	1,698,203	0
South Boulder Creek	0	0	5,575,000	0	0	0	5,575,000	453,789	0
Upper Goose Creek Drainage	0	0	0	175,000	1,750,000	674,530	2,599,530	0	0
Fourmile Canyon Creek	0	0	0	0	0	1,000,000	1,000,000	1,575,859	0
Utility Billing Computer System	0	0	0	0	0	250,000	250,000	0	0
<b>Project Type Total:</b>	<b>1,547,500</b>	<b>1,647,500</b>	<b>7,931,500</b>	<b>1,590,770</b>	<b>3,175,318</b>	<b>3,359,682</b>	<b>19,252,270</b>	<b>4,693,811</b>	<b>0</b>

**Existing Facility - Rehab / Repair / Deficiency Correction**

Storm Sewer Rehabilitation	100,000	100,000	257,500	265,225	273,182	281,377	1,277,284	100,000	0
<b>Project Type Total:</b>	<b>100,000</b>	<b>100,000</b>	<b>257,500</b>	<b>265,225</b>	<b>273,182</b>	<b>281,377</b>	<b>1,277,284</b>	<b>100,000</b>	<b>0</b>

**New Construction - Not Growth Related**

Preflood Property Acquisition	500,000	500,000	500,000	500,000	500,000	562,754	3,062,754	1,750,925	0
<b>Project Type Total:</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>500,000</b>	<b>562,754</b>	<b>3,062,754</b>	<b>1,750,925</b>	<b>0</b>

**Department Total:**

	2,147,500	2,247,500	8,689,000	2,355,995	3,948,500	4,203,813	23,592,308	6,544,736	0
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**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Boulder Creek	<b>Project Number:</b> 431015	<b>Map Number:</b> 17
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> Multiple Subcommunities
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCP Area:</b> Areas I & II
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**  
This project will provide funds for on-going studies and possible flood mitigation work along Boulder Creek. This project will identify and mitigate flood hazards in the Boulder Creek floodplain.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004.

**Public Process Status, Issues:**  
The technical flood mapping study has been initiated and results are anticipated to be completed in 2011.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000

<b>Prev Alloc Funding</b> \$74,250	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Fourmile Canyon Creek	<b>Project Number:</b> 431729	<b>Map Number:</b> 16
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> North Boulder
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> Yes	<b>CEAP Completed:</b> No

**Project Description:**

This project will fund flood mitigation improvements along Fourmile Canyon Creek. The flood mitigation planning process was completed in 2009, allowing the city to move forward with the implementation of selected flood mitigation projects. The first of these projects will be in the area of Crestview Elementary School with new culverts at 19th St. and Upland Ave. Flood mitigation between Broadway and Violet is also be done in conjunction with a development of the Violet Crossing project (\$100,000 from Flood and \$50,000 from Greenways using 2010 carry over money).

The first phase of the improvements at Crestview (19th to 22nd) includes carry over money of \$815,859 from flood and \$585,000 from Greenways (2011-2013) for a total project cost of \$1,400,000 as follows:

1. Planning: \$200,000
2. Acquisition: \$200,000
3. Construction: \$1,000,000

The project is anticipated to be completed in 2013.

There is a \$1,000,000 from flood and \$195,000 from Greenways shown in the CIP in 2017 for improvements along Fourmile between Upland and 19th. A detailed cost estimate has not been developed for this project yet.

Funding for this project began with carry over money from 2010 of \$815,859

**Relationship to Guiding Principals:**

This project was recommended by the Fourmile Canyon Creek Flood Mitigation Study, the Greenways Master Plan and is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004.

**Public Process Status, Issues:**

Flood mitigation planning was completed in 2009. A CEAP will be completed for each project.

**Relationship with Other Departments:**

This project relates to the City's Greenways Program and Transportation Program.

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$1,000,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$1,575,859	\$0

**Change from Prior Year:** 2013 and 2014 funding deleted

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Preflood Property Acquisition	<b>Project Number:</b> 431622	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> New Construction - Not Growth Related	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides funds for the purchase of properties in areas prone to flooding especially the city's high hazard regulatory area. Properties have been identified and prioritized along each of the city's major drainageways. Property owners have been contacted regarding the city's interest. The majority of properties in the high hazard flood zone are along Boulder Creek, Goose Creek and Fourmile Canyon Creek.

This project is for an ongoing funding program. In 2012, \$ 500,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004.

**Public Process Status, Issues:**

Property owners have been contacted regarding the city's interest in purchasing.

**Relationship with Other Departments:**

This project relates to the city's Greenways Program and Transportation Program.

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$562,754	\$3,062,754

<b>Prev Alloc Funding</b> \$1,750,925	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

## 2012-2017 Capital Improvements Program Project Status Report

<b>Project Name:</b> South Boulder Creek	<b>Project Number:</b> 431202	<b>Map Number:</b> 15
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> Multiple Subcommunities	<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades			
<b>CEAP Required:</b> Yes		<b>CEAP Completed:</b> No	

**Project Description:**

This project will provide funds for on-going studies and possible flood mitigation work along South Boulder Creek.

On March 25, 2009, FEMA notified the city of Boulder that it intends to officially adopt (effective January 2010) the revised floodplain mapping that resulted from the South Boulder Creek flood mapping study. The new floodplain mapping will be used as the basis for the Flood Insurance Rate Map (FIRM) that establishes minimum regulatory floodplain boundaries under the National Flood Insurance Program (NFIP) and federal mandatory flood insurance purchase requirements. The adoption process for the study results will coincide with the adoption of the related Digital FIRM for Boulder County.

It is anticipated that the focus of the mitigation work will be to mitigate the impacts of flooding in the West Valley, where flood impacts were previously not identified and substantial urban development has since occurred. It is also important that flood mitigation planning be coordinated with the U.S. 36 Corridor Improvements-Environmental Impact Statement. The city is also pursuing Federal funding for this project.

Funding for flood mitigation alternatives analysis began in 2010 and continued into 2011. Design and construction of a selected alternative is shown in the CIP in 2014 in the amount of \$5,575,000. The cost of design, property acquisition and construction will be dependent upon the selected alternative.

This project began in 2010.

Costs:

1. Planning: \$ 1,504,175
2. Land Acquisition: \$ unknown
3. Construction: \$ 4,800,000

The project is anticipated to complete construction in 2015.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004.

**Public Process Status, Issues:**

Evaluation of South Boulder Creek flood issues and associated public process is on-going.

**Relationship with Other Departments:**

Planning Department, Boulder County, University of Colorado, Open Space Department

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$5,575,000	\$0	\$0	\$0	\$5,575,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$453,789	\$0

**Change from Prior Year:** 2012 reduced to 0, added funding in 2014

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Storm Sewer Rehabilitation	<b>Project Number:</b> 	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> Multiple Subcommunities
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCP Area:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

The project provides funds for the rehabilitation of existing storm sewers.  
  
This project is for an ongoing funding program. In 2012, \$ 100,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan and the Stormwater Master Plan

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

Transportation Division

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$100,000	\$100,000	\$257,500	\$265,225	\$273,182	\$281,377	\$1,277,284

<b>Prev Alloc Funding</b> \$100,000	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** \$281,377 added in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Stormwater Quality Improvements	<b>Project Number:</b> 431775	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund stormwater quality projects as identified in the Stormwater Master Plan. This project will improve water quality in Boulder Creek and it's tributaries.

This project is for an ongoing funding program. In 2012, \$ 50,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan and the Stormwater Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$50,000	\$50,000	\$51,500	\$53,045	\$54,636	\$56,275	\$315,456

<b>Prev Alloc Funding</b> \$51,880	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** \$56,275 added in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Transportation Coordination	<b>Project Number:</b> 431780	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCP Area:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund the reconstruction of existing storm sewers, the construction of new storm sewers and water quality improvements as part of on-going Transportation Division improvement projects.

This project is for an ongoing funding program. In 2012, \$ 250,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan and the Stormwater Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

Coordination with the City's Transportation Division

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$250,000	\$250,000	\$257,500	\$265,225	\$273,182	\$281,377	\$1,577,284

<b>Prev Alloc Funding</b> \$338,397	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** \$281,377 added in 2017

**Annual On-going Operating Costs** \$0

<b>Description:</b>	No increase, funded by existing operating budget
<b>Source of Funding:</b>	Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Tributary Greenways Program - Stormwater & Flood	<b>Project Number:</b> 431630	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

The program is intended to improve and protect the many riparian corridors that pass through the city. Improvements include pedestrian/bicycle paths, drainage and flood control structures, and preservation and enhancement of natural features. A portion of the capital funding for this program was shifted to needed maintenance of existing system beginning in 2002. See Greenways CIP/Budget section. Project funding is ongoing. This project represents the Utilities Division contribution to the program.

This project is for an ongoing funding program. In 2012, \$ 97,500 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

The Greenways Program is coordinated with parks, utilities, planning, OSMP

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$97,500	\$97,500	\$97,500	\$97,500	\$97,500	\$97,500	\$585,000

<b>Prev Alloc Funding</b> \$501,433	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** \_\_\_\_\_

**Annual On-going Operating Costs**

**Description:**

**Source of Funding:** \_\_\_\_\_

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Upper Goose Creek Drainage	<b>Project Number:</b> 431459	<b>Map Number:</b> 14
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> Central Boulder
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> Area I
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> Yes	<b>CEAP Completed:</b> No

**Project Description:**

This project will fund the construction of a drainage improvements in the Upper Goose Creek drainage between Broadway and 19th Street. City staff has observed localized flooding in this area. The scope and need for this project has been confirmed by the recently completed Stormwater Master Plan.

This project will begin in 2015.

Costs:

1. Planning: \$ 1,070,000
2. Land Acquisition: \$ 0
3. Construction: \$ 10,700,000

The project is anticipated to complete construction in 2032.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004 and the Stormwater Master Plan.

**Public Process Status, Issues:**

The public process will be initiated in 2012.

**Relationship with Other Departments:**

Coordination with the City's Transportation Division

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$175,000	\$1,750,000	\$674,530	\$2,599,530

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$0	\$0

**Change from Prior Year:** \$674,530 added in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Utility Billing Computer System	<b>Project Number:</b> 	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> Multiple Subcommunities
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**  
This project is for a new Wastewater Utility Fund Utility Billing System. Funding of \$250,000 has been added in year 2017 for this project.

This project will begin in 2017.

Costs:

1. Planning: \$ 25,000
2. Land Acquisition: \$ 0
3. Construction: \$ 225,000

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funds in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Wonderland Creek	<b>Project Number:</b> 421003	<b>Map Number:</b> 12
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<b>Department:</b> PW/ Stormwater and Flood Management Utility	<b>Subcommunity:</b> Multiple Subcommunities
<b>Funding Source:</b> Stormwater & Flood Management Utility Fund	<b>BVCPArea:</b> Areas I & II
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> Yes	<b>CEAP Completed:</b> No

**Project Description:**

This project will fund flood mitigation improvements along Wonderland Creek. The flood mitigation planning process was completed in 2009, allowing the city to move forward with the implementation of selected flood mitigation projects. The first of these projects will be upstream of Foothills Parkway with a new culvert at the Burlington Northern and Sante Fe Railway and Boulder White Rocks ditch crossings.

The CIP includes funding for the Wonderland Creek Foothills to 30th St project and the Wonderland at 28th St project.

The Foothills to 30th St. project funding began prior to 2011, with funding for the CEAP. Design and construction will be funded from the following sources: carry over from Greenways of \$319,000 and \$1,526,000 from flood, with additional flood funding of \$750,000 in 2011 and 2012 and \$2,000,000 in federal transportation funds (outside funding) with the distribution as follows:  
 1.Planning: \$800,000  
 2.Acquisition: \$800,000  
 3.Construction: \$3,746,000  
 The project is anticipated to be completed in 2014.

The Wonderland at 28th St (from Kalmia to Winding Trail) will begin in 2013. The total project cost is \$5,085,000, with \$585,000 from Greenways and \$4,500,000 from flood distributed as follows:  
 1 Planning: \$760,000  
 2 Acquisition: \$200,000  
 3 Construction: \$4,125,000

**Relationship to Guiding Principals:**

This project is part of the Fourmile Canyon and Wonderland Creeks Flood Mitigation Plan, the Greenways Master Plan and is consistent with the goals of the stormwater and flood management utility as articulated in the Boulder Revised Code and the Comprehensive Flood and Stormwater (CFS) Master Plan adopted in 2004.

**Public Process Status, Issues:**

Flood mitigation planning was completed in 2009. A CEAP will be completed for each project.

**Relationship with Other Departments:**

This project relates to the City's Greenways Program and Transportation Program

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$1,050,000	\$1,250,000	\$1,950,000	\$1,000,000	\$1,000,000	\$1,000,000	\$7,250,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$1,698,203	\$0

**Change from Prior Year:** \$750,000 added to Wonderland in 2013 and 2014, Federal TIP funding included

**Annual On-going Operating Costs** \$0

<b>Description:</b>	No increase, funded by existing operating budget
<b>Source of Funding:</b>	Existing operating budget

**2012-2017 Capital Improvements Program**

PW/ Wastewater Utility

12-Jul-11

Est Total Cost	2012 Recommended	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	6-year Total	Prev Alloc Funding	Unfunded Amount
<b>Existing Facility - Rehab / Repair / Deficiency Correction</b>									
Collection System Monitoring	50,000	0	0	0	0	56,275	106,275	0	0
Sanitary Sewer Manhole Rehabilitation	100,000	100,000	103,000	106,090	109,273	112,551	630,914	101,707	0
Sanitary Sewer Rehabilitation	450,000	450,000	465,000	480,450	496,364	512,754	2,854,568	450,000	0
WWTP Laboratory	50,000	0	0	0	0	0	50,000	0	0
WWTP Primary Clarifiers	300,000	0	0	0	0	0	300,000	0	0
WWTP Activated Sludge	0	60,000	0	0	0	0	60,000	0	0
WWTP Cogeneration	0	150,000	0	0	0	0	150,000	0	0
WWTP Pumps	0	150,000	0	150,000	0	0	300,000	150,000	0
Biosolids Handling and Dewatering	0	0	150,000	0	0	0	150,000	0	0
WWTP Electrical	980,000	0	100,000	0	80,000	800,000	980,000	0	0
Tier 1 Goose Creek 5 Master Plan Project	0	0	0	0	0	25,000	25,000	0	0
WWTP Digester Cleaning	0	0	0	0	0	112,551	112,551	0	0
<b>Project Type Total:</b>	<b>1,236,275</b>	<b>910,000</b>	<b>818,000</b>	<b>736,540</b>	<b>685,637</b>	<b>1,619,131</b>	<b>5,719,308</b>	<b>701,707</b>	<b>0</b>

**New Construction - Growth Related Facility / Additions**

IBM Pump Station	500,000	0	0	0	0	0	500,000	50,000	0
<b>Project Type Total:</b>	<b>500,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>500,000</b>	<b>50,000</b>	<b>0</b>

**New Construction - Not Growth Related**

WWTP Permit Improvements	200,000	200,000	100,000	106,090	1,000,000	0	1,606,090	75,068	0
<b>Project Type Total:</b>	<b>200,000</b>	<b>200,000</b>	<b>100,000</b>	<b>106,090</b>	<b>1,000,000</b>	<b>0</b>	<b>1,606,090</b>	<b>75,068</b>	<b>0</b>

**Study or Analysis**

Utility Billing Computer System Replacement	0	0	0	0	0	250,000	250,000	60,232	0
<b>Project Type Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>250,000</b>	<b>250,000</b>	<b>60,232</b>	<b>0</b>

**2012-2017 Capital Improvements Program**

PW/ Wastewater Utility

12-Jul-11

Est Total Cost	2012 Recommended	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	6-year Total	Prev Alloc Funding	Unfunded Amount
1,236,275	1,650,000	1,110,000	918,000	842,630	1,685,637	1,869,131	8,075,398	887,007	0
<b>Department Total:</b>									

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Biosolids Handling and Dewatering	<b>Project Number:</b> 421670	<b>Map Number:</b> 29
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Area III
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area III
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**

This project will provide funds for rebuilding the biosolids dewatering centrifuges.

This project will begin in 2014.

Costs:

1. Planning: \$ 15,000
2. Land Acquisition: \$ 0
3. Construction: \$ 135,000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes from 2011 Budget

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Collection System Monitoring	<b>Project Number:</b> 421450	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides funds for monitoring of the City's wastewater collection system. This will be accomplished by using temporary flow measuring devices placed in selected manholes.

This project will begin in 2012.

Costs:

1. Planning: \$ 5,000
2. Land Acquisition: \$ 0
3. Construction: \$ 45,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revise Code and the Wastewater Collection System Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$106,275	\$50,000	\$0	\$0	\$0	\$0	\$56,275	\$106,275

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Additional funding has been provided in year 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> IBM Pump Station	<b>Project Number:</b> 421521	<b>Map Number:</b> 20
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Gunbarrel
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area I
<b>Project Type:</b> New Construction - Growth Related Facility / Additions	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b>

**Project Description:**

This project involves providing overflow protection at the IBM lift station per CDPHE regulations. Design funding in 2011 and construction funding in 2012.

This project will begin in 2011.

Costs:

1. Planning: \$ 50,000
2. Land Acquisition: \$ 0
3. Construction: \$ 500,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revise Code and the Wastewater Collection System Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$500,000	\$0	\$0	\$0	\$0	\$0	\$500,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$50,000	\$0

**Change from Prior Year:** No changes from 2011 Budget

**Annual On-going Operating Costs**

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Sanitary Sewer Manhole Rehabilitation	<b>Project Number:</b> 421454	<b>Map Number:</b> 
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides for the rehabilitation and improvement to the existing wastewater manholes that are part of the city's sewer system. This project is funded at approximately \$100,00 per year.

This project is for an ongoing funding program. In 2012, \$ 100,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Collection System Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$100,000	\$100,000	\$103,000	\$106,090	\$109,273	\$112,551	\$630,914

<b>Prev Alloc Funding</b> \$101,707	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$112,551 in year 2017

**Annual On-going Operating Costs** \$0

<b>Description:</b>	No increase, funded by existing operating budget
<b>Source of Funding:</b>	Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Sanitary Sewer Rehabilitation	<b>Project Number:</b> 421002	<b>Map Number:</b> 
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides for the rehabilitation and improvement to the existing collector sewer piping of the City's wastewater collection system. This project is funded at \$450,000 to \$500,000 per year.

This project is for an ongoing funding program. In 2012, \$ 450,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Collection System Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$450,000	\$450,000	\$465,000	\$480,450	\$496,364	\$512,754	\$2,854,568

<b>Prev Alloc Funding</b> \$450,000	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$512,754 to year 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Tier 1 Goose Creek 5 Master Plan Project	<b>Project Number:</b> 421002	<b>Map Number:</b> 
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Central Boulder
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area I
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**  
This project will provide funds for rehabilitation of the wastewater collection system. This project will address the Goose Creek interceptor, which was identified as a Tier 1 rehabilitation project in the 2009 Wastewater Collection System Master Plan (WWCSMP). Funding in 2017 for evaluation only.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$25,000 to year 2017 for study to precede 2018 construction

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Utility Billing Computer System Replacement	<b>Project Number:</b> 421453	<b>Map Number:</b> 
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> 
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCP Area:</b> Area I
<b>Project Type:</b> Study or Analysis	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**  
This project is for a new Wastewater Utility Fund Utility Billing System. Funding of \$250,000 has been added in year 2017 for this project.

This project will begin in 2017.  
Costs:

1. Planning: \$ 25,000
2. Land Acquisition: \$ 0
3. Construction: \$ 225,000

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Utility Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000

<b>Prev Alloc Funding</b> \$60,232	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funding in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Activated Sludge	<b>Project Number:</b> 421357	<b>Map Number:</b> 32
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Area III
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area III
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund the rehabilitation of the existing activated sludge facilities at the 75th Street WWTP. The 2013 funding is to provide maintenance on the three Turblex blowers.

This project will begin in 2013.  
Costs:

1. Planning: \$ 6,000
2. Land Acquisition: \$ 0
3. Construction: \$ 54,000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$0	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes from 2011 Budget

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Cogeneration	<b>Project Number:</b> 421329	<b>Map Number:</b> 25
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area III
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund rehabilitation of the cogeneration (generation of electricity and heat from methane gas produced by the anaerobic digesters) facilities at the 75th Street WWTP. The 2013 funding is for a major overhaul of the co-gen engines that occurs every seven years.

This project will begin in 2013.  
Costs:

1. Planning: \$ 15,000
2. Land Acquisition: \$ 0
3. Construction: \$ 135,000

The project is anticipated to complete construction in 2015.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$150,000	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes from 2011 Budget

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Digester Cleaning	<b>Project Number:</b> 421360	<b>Map Number:</b> 24
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Area III
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area III
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides for cleaning the biosolids digesters at the 75th Street WWTP.

This project will begin in 2017.

Costs:

1. Planning: \$ 10,000
2. Land Acquisition: \$ 0
3. Construction: \$ 102,551

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$112,551	\$112,551

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$0	\$0

**Change from Prior Year:** Added funding in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Electrical	<b>Project Number:</b> 421439	<b>Map Number:</b> 28
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund the rehabilitation of the existing electrical systems at the 75th Street WWTP. This project will include the replacement of three MCC's (P1, TF1, D2), three load centers (LC-2, LC-4, LC-5), cogen switchgear, and GT air scrubbers at \$100,000 each. The 2016 funding is for design and the 2017 funding is for construction.

This project will begin in 2014.

Costs:

1. Planning: \$ 90,000
2. Land Acquisition: \$ 0
3. Construction: \$ 89,000

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revise Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$980,000	\$0	\$0	\$100,000	\$0	\$80,000	\$800,000	\$980,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Funding was removed from years 2013 and 2015 and moved to 2016 and 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Laboratory	<b>Project Number:</b> 	<b>Map Number:</b> 22
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**

This project will provide funds for the rehabilitation and improvement of the existing chemical/biological laboratory and the 75th St. WWTP.

This project will begin in 2012.  
Costs:

1. Planning: \$ 5,000
2. Land Acquisition: \$ 0
3. Construction: \$ 45,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revise Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** None

**Annual On-going Operating Costs** \$0

<b>Description:</b>	No increase, funded by existing operating budget
<b>Source of Funding:</b>	Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Permit Improvements	<b>Project Number:</b> 421617	<b>Map Number:</b> 23
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Area III
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area III
<b>Project Type:</b> New Construction - Not Growth Related	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b>

**Project Description:**

This project is intended to address additional WWTP facilities required to meet new effluent regulations identified in the 2011 CDPS Permit. 2012-2017 funding is estimated to cover various equipment upgrades, as well as studies, design, and construction costs for larger CIP improvements that will need to be in place by the permit's compliance schedule dates. These funding figures will be updated annually as studies are completed and staff has a better understanding of the funding implications of the required improvements.

This project will begin in 2012.  
Costs:

1. Planning: \$ 300,000
2. Land Acquisition: \$ 0
3. Construction: \$ 1,306,090

The project is anticipated to complete construction in 2017.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

This process will begin in 2013.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$200,000	\$200,000	\$100,000	\$106,090	\$1,000,000	\$0	\$1,606,090

<b>Prev Alloc Funding</b> \$75,068	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Funding is provided in years 2012-2017 to address the new permit regulations

**Annual On-going Operating Costs** \$0

**Description:** To be determined  
**Source of Funding:** Wastewater Utility Fund

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Primary Clarifiers	<b>Project Number:</b> 421005	<b>Map Number:</b> 34
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Area III
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCPArea:</b> Area III
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides for rehabilitation of the primary clarifiers at the 75th Street WWTP.

This project will begin in 2012.  
Costs:

1. Planning: \$ 30,000
2. Land Acquisition: \$ 0
3. Construction: \$ 270,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$0	\$300,000	\$0	\$0	\$0	\$0	\$0	\$300,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes from 2011 Budget

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> WWTP Pumps	<b>Project Number:</b> 411339	<b>Map Number:</b> 21
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<b>Department:</b> PW/ Wastewater Utility	<b>Subcommunity:</b> Area III
<b>Funding Source:</b> Wastewater Utility Fund	<b>BVCP Area:</b> Area III
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund the rehabilitation of existing pumps at the 75th Street WWTP. 2011 funding is for the PSPS replacement (4 pumps). 2013 funding is for the GT to Digester transfer pumps (3 pumps). 2015 funding is for the SPS vertical pumps.

This project will begin in 2013.

Costs:

1. Planning: \$ 30,000
2. Land Acquisition: \$ 0
3. Construction: \$ 270,000

The project is anticipated to complete construction in 2016.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the wastewater utility as articulated in the Boulder Revised Code and the Wastewater Treatment Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$150,000	\$0	\$150,000	\$0	\$0	\$300,000

<b>Prev Alloc Funding</b> \$150,000	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** No changes from 2011 Budget

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

2012-2017 Capital Improvements Program

PW/ Water Utility

12-Jul-11

Est Total Cost	2012 Recommended	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	6-year Total	Prev Alloc Funding	Unfunded Amount
<b>Existing Facility - Enhancements / Upgrades</b>									
Automated Meter Reading	562,754	579,637	0	0	0	0	1,142,391	546,364	0
Sunshine Transmission Pipe	0	800,000	0	0	0	0	800,000	0	0
<b>Project Type Total:</b>	<b>562,754</b>	<b>1,379,637</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,942,391</b>	<b>546,364</b>	<b>0</b>
<b>Existing Facility - Rehab / Repair / Deficiency Correction</b>									
Barker Gravity Pipeline Repair	350,000	350,000	360,500	371,315	382,454	589,961	2,404,230	733,639	0
Barker-Kossler Penstock Repair	175,000	0	0	0	0	112,551	287,551	0	0
Betasso WTP	149,000	200,000	100,000	1,166,352	15,278,546	0	16,892,898	325,211	0
Boulder Reservoir WTP High Service Pump	50,000	112,800	0	0	0	0	162,800	0	0
Silver Lake Hydroelectric/PRV	100,000	0	0	0	0	0	100,000	0	0
Source Water Transmission System Inspecti	80,000	0	0	0	0	0	80,000	0	0
Water System Security Upgrades	100,000	0	0	0	0	0	100,000	107,315	0
Waterline Replacement	2,100,000	2,100,000	2,163,000	2,227,890	2,294,727	2,363,569	13,249,186	2,494,457	0
Green Lake 2 Dam	0	75,000	0	0	0	0	75,000	0	0
Gunbarrel Storage Tank	0	265,798	0	0	0	0	265,798	15,950	0
Kohler Hydro/PRV Station	0	50,000	0	0	0	0	50,000	0	0
Kossler Reservoir	0	300,000	0	0	0	0	300,000	864,712	0
Maxwell Hydro/PRV Station	0	50,000	0	0	0	0	50,000	0	0
Lakewood Hydroelectric/PRV	0	0	100,000	0	0	0	100,000	0	0
Lakewood Pipeline	0	0	257,500	0	0	0	257,500	3,150,000	0
Albion Dam	0	0	0	79,568	0	0	79,568	0	0
Barker Dam and Reservoir	0	0	0	371,315	0	0	371,315	120,000	0
Kohler Storage Tank	0	0	0	100,531	1,005,309	0	1,105,840	0	0
Watershed Improvements	0	0	0	79,568	0	0	79,568	290,500	0
Barker Relicensing	0	0	0	0	253,354	0	253,354	570,000	0
Betasso Hydro/PRV Station	0	0	0	0	100,000	0	100,000	28,967	0
Barker Dam Outlet	0	0	0	0	0	736,081	736,081	0	0
Betasso Storage Tank	0	0	0	0	0	281,377	281,377	0	0
Source Water Pressure Reducing and Hydro	0	0	0	0	0	165,475	165,475	0	0
Sunshine Hydro/PRV Station	0	0	0	0	0	261,568	261,568	0	0
<b>Project Type Total:</b>	<b>3,104,000</b>	<b>3,503,598</b>	<b>2,981,000</b>	<b>4,395,539</b>	<b>19,314,390</b>	<b>4,510,582</b>	<b>37,809,109</b>	<b>8,700,751</b>	<b>0</b>

**2012-2017 Capital Improvements Program**

PW/ Water Utility

12-Jul-11

Est Total Cost	2012 Recommended	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	6-year Total	Prev Alloc Funding	Unfunded Amount
<b>New Construction - Not Growth Related</b>									
Barker Dam Hydro	0	0	0	0	0	344,304	344,304	0	0
NCWCD Conveyance - Carter Lake Pipeline	0	0	0	0	0	2,608,367	2,608,367	989,455	0
<b>Project Type Total:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,952,671</b>	<b>2,952,671</b>	<b>989,455</b>	<b>0</b>
<b>On-Going Projects</b>									
Boulder Reservoir WTP	80,000	116,000	82,000	0	164,000	0	442,000	47,678	0
Utility Billing Computer System Replaceme	0	0	0	0	0	500,000	500,000	28,771	0
<b>Project Type Total:</b>	<b>80,000</b>	<b>116,000</b>	<b>82,000</b>	<b>0</b>	<b>164,000</b>	<b>500,000</b>	<b>942,000</b>	<b>76,449</b>	<b>0</b>
<b>Department Total:</b>	<b>0</b>	<b>3,746,754</b>	<b>4,999,235</b>	<b>3,063,000</b>	<b>4,395,539</b>	<b>19,478,390</b>	<b>7,963,253</b>	<b>43,646,171</b>	<b>10,313,019</b>

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Albion Dam	<b>Project Number:</b> 	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**  
This project will provide funds for the evaluation of alternatives and design of the rehabilitation of Albion Dam, located in the City's Watershed. The downstream face of Albion Dam is in poor condition and will continue to degrade.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$79,568	\$0	\$0	\$79,568

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Changed unfunded amount to \$0

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Automated Meter Reading	<b>Project Number:</b> 411454	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Multiple Subcommunities
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides funds for the replacement of water meter transponders. Trace transponders will be replaced with Orion transponders. The Orion transponders are considered to be better technology, have a longer life and are compatible with the electronic water monitors (refrigerator magnets). The project is underway and it will take several years to complete the work associated with over 28,000 accounts. Therefore on-going funding is recommended until 2013.

This project is for an ongoing funding program. In 2012, \$ 562,754 will be spent on the work described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$562,754	\$579,637	\$0	\$0	\$0	\$0	\$1,142,391

<b>Prev Alloc Funding</b> \$546,364	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Updated 2011 Carryover Amount

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Barker Dam and Reservoir	<b>Project Number:</b> 411110	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**  
This project will provide funds for deficiency corrections at the existing Barker Dam, including security related projects identified in the Source Water Master Plan.

This project will begin in 2015.  
Costs:

1. Planning: \$ 40,000
2. Land Acquisition: \$ 0
3. Construction: \$ 331,315

The project is anticipated to complete construction in 2016.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$371,315	\$0	\$0	\$371,315

<b>Prev Alloc Funding</b> \$120,000	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Updated total cost

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Barker Dam Hydro	<b>Project Number:</b> 	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> New Construction - Not Growth Related	
<b>CEAP Required:</b> <input checked="" type="checkbox"/> Yes	<b>CEAP Completed:</b> 

**Project Description:**

Design and Construction of a new hydro plant to be integrated into the Barker Outlet Works Project.

This project will begin in 2017.

Costs:

1. Planning: \$ 344,304
2. Land Acquisition: \$ 0
3. Construction: \$ 3,443,044

The project is anticipated to complete construction in 2019.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$344,304	\$344,304

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$344K in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget (needs to be confirmed)

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Barker Dam Outlet	<b>Project Number:</b> 411109	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for repairs to the outlet works of the existing Barker Dam. The Barker Dam outlet works should be replaced within the next seven to 10 years as recommended in the SWMP to eliminate the need to empty the reservoir for gate inspection. A design for outlet works replacement was completed by GEI, and initial bids were received in 2002. The cost of the outlet works replacement could be substantially reduced by eliminating one of the proposed microtunnels.

This project will begin in 2017.

Costs:

1. Planning: \$ 736,081
2. Land Acquisition: \$ 0
3. Construction: \$ 7,360,811

The project is anticipated to complete construction in 2019.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$736,081	\$736,081

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$736K in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Barker Gravity Pipeline Repair	<b>Project Number:</b> 411106	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for repairs to the existing Barker gravity pipeline. Barker Gravity Pipeline is a critical component of the city's source water system because it conveys the city's Barker Reservoir/Middle Boulder Creek water to Betasso WTF. Stored water from Barker Reservoir and direct flows from Middle Boulder Creek are used to meet approximately 35 percent of the city's annual water needs. The city has, as part of an ongoing maintenance effort, already replaced and rehabilitated segments of the 11-mile Barker Gravity Pipeline that showed the most degradation or highest likelihood of failure. It is recommended the City continue its annual maintenance program, prioritizing based on the most critical needs, and also consider providing enough earthen cover to protect the pipeline, and anchor the pipeline in areas prone to landslides or other damaging events. Section replacement or lining are options that may each work well in different parts of the pipeline. The city should coordinate with the USFS concerning maintenance activities on federal land. The projected funds will allow for continued minor rehabilitation efforts (repair of leaks, siphons, etc, as has been done over the past several years) and an evaluation of pilot replacement/lining alternatives through 2016.

This project is for an ongoing funding program. In 2012, \$ 350,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$350,000	\$350,000	\$360,500	\$371,315	\$382,454	\$589,961	\$2,404,230

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$733,639	\$0

**Change from Prior Year:** Revised carryover amount to \$734K/Adjusted 2017 amount to \$590K

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Barker Relicensing	<b>Project Number:</b> 411112	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
This project will provide funds to support on-going Federal permitting issues associated with the Barker Water System. A request has been made to convert the current Federal Energy Regulatory Commission(FERC) licensed project to a FERC small conduit exemption from licensing. There are significant technical and legal analysis and documentation required to support this request and to obtain a separate land use authorization from the U.S. Forest Service for continued occupancy of federal land by the Barker Gravity Pipeline.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Raw Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$253,354	\$0	\$253,354

<b>Prev Alloc Funding</b> \$570,000	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funds for 2011 Carryover and 2016

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Barker-Kossler Penstock Repair	<b>Project Number:</b> 411107	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b>
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for repair of the existing Barker-Kossler Penstock.

This project will begin in 2012.

Costs:

1. Planning: \$ 18,000
2. Land Acquisition: \$ 0
3. Construction: \$ 157,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Raw Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$175,000	\$0	\$0	\$0	\$0	\$112,551	\$287,551

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funds to 2012 and 2017 (previously \$0)

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Betasso Hydro/PRV Station	<b>Project Number:</b> 411974	<b>Map Number:</b> 41
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will fund rehabilitations to the Betasso Hydro/PRV.

This project will begin in 2016.

Costs:

1. Planning: \$ 10,000
2. Land Acquisition: \$ 0
3. Construction: \$ 90,000

The project is anticipated to complete construction in 2017.

**Relationship to Guiding Principals:**

This project was recommended by the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$28,967	\$0

**Change from Prior Year:** Added 2011 Carryover Amount/added \$100K in 2016

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Betasso Storage Tank	<b>Project Number:</b> 	<b>Map Number:</b> 42
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for the rehabilitation of the Betasso Storage Tank. The facility is an elevated steel tank that has deteriorated due to weather and other environmental factors that primarily affect the protective paint coating.

This project will begin in 2017.

Costs:

1. Planning: \$ 30,000
2. Land Acquisition: \$ 0
3. Construction: \$ 251,377

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$281,377	\$281,377

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$281K in 2017

**Annual On-going Operating Costs** \$0

<b>Description:</b>	No increase, funded by existing operating budget
<b>Source of Funding:</b>	Existing operating budget.

## 2012-2017 Capital Improvements Program Project Status Report

<b>Project Name:</b> Betasso WTP	<b>Project Number:</b> 411947	<b>Map Number:</b> 49
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area	
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area	
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction		
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA	

**Project Description:**

This project will provides funds for rehabilitations and improvements to the Betasso WTP. The Betasso WTP is the city's primary water treatment facility and has deteriorated during its operation of over 40 years. Large capital funding is required to retrofit the existing coagulation/sedimentation unit process with newer technology that will allow the plant to meet current drinking water regulations at it's original design capacity. Currently, the WTP is unable to treat water at this capacity due to this limiting unit process. Funding for the next phase of improvements to the Betasso Water Treatment Facility (WTF) has been delayed until the 2015-2016 time period. Water demands have not increased significantly and the existing treatment processes should be adequate to meet water demands in compliance with federal Safe Drinking Water Act regulations until that time.

This project is for an ongoing funding program. In 2012, \$ 149,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$0	\$149,000	\$200,000	\$100,000	\$1,165,352	\$15,278,546	\$0	\$16,892,898

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$325,211	\$0

**Change from Prior Year:** Updated 2012-2017 values - updated carryover (includes bond proceeds and costs)

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget.

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Boulder Reservoir WTP	<b>Project Number:</b> 411652	<b>Map Number:</b> 40
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Gunbarrel
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Area I
<b>Project Type:</b> On-Going Projects	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
On-going maintenance as identified in the Treated Water Master Plan.

This project is for an ongoing funding program. In 2012, \$ 80,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$0	\$80,000	\$116,000	\$82,000	\$0	\$164,000	\$0	\$442,000

<b>Prev Alloc Funding</b> \$47,678	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Update dollar values for 2012 - 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

## 2012-2017 Capital Improvements Program Project Status Report

<b>Project Name:</b> Boulder Reservoir WTP High Service Pump Station	<b>Project Number:</b> 	<b>Map Number:</b> 47
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide	
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide	
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction		
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 	

**Project Description:**

On-going maintenance as identified in the Treated Water Master Plan.

This project will begin in 2012.

Costs:

1. Planning: \$ 50,000
2. Land Acquisition: \$ 0
3. Construction: \$ 112,8000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$50,000	\$112,800	\$0	\$0	\$0	\$0	\$162,800

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funding in 2012-2013

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Green Lake 2 Dam	<b>Project Number:</b> 411627	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
This project will provide funds for the evaluation of alternatives and design of the rehabilitation of Green Lake 2 Dam, located in the City's Watershed. Green Lake 2 Dam is in need of extensive rehabilitation to allow continued storage of water. Project alternatives and cost opinions were developed by ECI (2001a). They found that the two lowest cost alternatives could be completed in one construction season.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Eliminated 2016 funds

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Gunbarrel Storage Tank	<b>Project Number:</b> 411670	<b>Map Number:</b> 53
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Multiple Subcommunities
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Area I
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for the rehabilitation of the interior paint of the Gunbarrel Storage Tank.

This project will begin in 2013.

Costs:

1. Planning: \$ 30,000
2. Land Acquisition: \$ 0
3. Construction: \$ 235,798

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$265,798	\$0	\$0	\$0	\$0	\$265,798

<b>Prev Alloc Funding</b> \$15,950	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Changed 2013 value from \$250K to \$266K

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget.

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Kohler Hydro/PRV Station	<b>Project Number:</b> 411376	<b>Map Number:</b> 48
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for the rehabilitation of the Kohler Hydro/PRV Station. Rehabilitate interior pipe lining inside hydro station.

This project will begin in 2013.

Costs:

1. Planning: \$ 5,000
2. Land Acquisition: \$ 0
3. Construction: \$ 45,000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revise Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$50,000 in 2013.

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating funds.

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Kohler Storage Tank	<b>Project Number:</b> 411671	<b>Map Number:</b> 44
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> South Boulder
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Area I
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
This project will provide funds for the rehabilitation of the Kohler Storage Tank including design for the replacement of the existing roof.

This project will begin in 2015.  
Costs:

1. Planning: \$ 100,531
2. Land Acquisition: \$ 0
3. Construction: \$ 1,005,309

The project is anticipated to complete construction in 2017.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$100,531	\$1,005,309	\$0	\$1,105,840

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funds in 2015 and 2016 - deleted \$50K in 2013

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget.

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Kossler Reservoir	<b>Project Number:</b> 411119	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project will provide funds for dam repairs, outlet repairs, bypass improvements and security improvements at Kossler Reservoir.

There are several improvements at Kossler Reservoir that need to be completed based on recommendations in the FERC Part 12D Inspection Report (GEI 2007a). Several of the recommendations are related to the cracked concrete at the reservoir outlet and the seepage that occurs along the low-head section of the penstock. A bypass pipeline, connecting the Barker Gravity Line to the Boulder Canyon Hydro Penstock could meet several objectives:

- \* Allow operation of the Barker System during times when Kossler Reservoir is out of operation for repair or other reasons.
- \* If connected downstream of Road 77, the bypass could reduce the seepage in the upper part of the penstock.
- \* Halt erosion at the current Barker Gravity Line outlet to Kossler Reservoir.

If the bypass structure is constructed, the cracked outlet structure should still be repaired and upgrades should be made to the gate house in order to have multiple methods of operating Kossler Reservoir. In addition, the Barker Gravity Line outlet to Kossler Reservoir should be armored to prevent further erosion and undercutting of the structure.

GEI (2007b) prepared construction cost estimates for Kossler Reservoir main dam concrete panel replacement. This estimate recommended replacing panels below elevation 7717 with localized repairs above that elevation by 2009.

The FERC Part 12D report also recommended additional maintenance on the main dam seepage weir (by 2009) and piezometers (by 2010) and installation of additional hydraulic monitoring equipment (by 2010) (GEI 2007a). These efforts could be combined with replacement of the concrete plates on the main dam. The integrity of the rock walls at the dam abutments should also be evaluated.

This project will begin in 2013.  
Costs:

1. Planning: \$ 30,000
2. Land Acquisition: \$ 0
3. Construction: \$ 270,000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$300,000	\$0	\$0	\$0	\$0	\$300,000

<b>Prev Alloc Funding</b> \$864,712	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added 2011 Carryover

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Lakewood Hydroelectric/PRV	<b>Project Number:</b> 411801	<b>Map Number:</b> 54
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b>

**Project Description:**

This project provides funds for the rehabilitation of the Lakewood pressure reducing valve.

This project will begin in 2014.

Costs:

1. Planning: \$ 10,000
2. Land Acquisition: \$ 0
3. Construction: \$ 90,000

The project is anticipated to complete construction in 2015.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Deleted 2016 funds/added \$100K in 2014

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Lakewood Pipeline	<b>Project Number:</b> 411780	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> <input type="checkbox"/> Yes	<b>CEAP Completed:</b> <input type="checkbox"/> Yes

**Project Description:**  
Funds have been budgeted in 2014 for re-inspection of the Lakewood Pipeline. Based on observations made during the 2009 inspection it is recommended that the frequency of inspections be reduced to one every five years. No funds have been budgeted for pipeline repair costs. Funds would be transferred from the Lakewood Pipeline Remediation Reserve to cover the costs.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$257,500	\$0	\$0	\$0	\$257,500

<b>Prev Alloc Funding</b> \$3,150,000	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Changed unfunded amount to \$0

**Annual On-going Operating Costs**

**Description:** No increase, funded by existing operating budget

**Source of Funding:**

## 2012-2017 Capital Improvements Program Project Status Report

<b>Project Name:</b> Maxwell Hydro/PRV Station	<b>Project Number:</b> 411342	<b>Map Number:</b> 50
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide	
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b>	System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction		
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA	

**Project Description:**

This project will provide funds for the rehabilitation of the Maxwell hydro/PRV Station.

This project will begin in 2013.

Costs:

1. Planning: \$ 5,000
2. Land Acquisition: \$ 0
3. Construction: \$ 45,000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revise Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$0	\$0

**Change from Prior Year:** Added \$50,000 in 2013

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget.

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> NCWCD Conveyance - Carter Lake Pipeline	<b>Project Number:</b> 411547	<b>Map Number:</b> 45
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> New Construction - Not Growth Related	
<b>CEAP Required:</b> <input type="checkbox"/> Yes	<b>CEAP Completed:</b> <input type="checkbox"/> No

**Project Description:**

This project will provide funds for the design and construction of a pipeline from Carter Lake to the Boulder Reservoir Water Treatment Plant (BRWTP).

Funding for construction of the proposed Carter Lake Pipeline has been delayed until the 2017-2018 time period. Funding of the pipeline in the nearer term without Federal funding assistance would have a significant impact on water rates. Staff continues to recommend the pipeline as the best long-term solution to water quality, operational and security vulnerability issues related to drawing water directly from the Boulder Feeder Canal and Boulder Reservoir.

This project will begin in 2017.

Costs:

- 1. Planning: \$ 2,608,367
- 2. Land Acquisition: \$ 0
- 3. Construction: \$ 26,083,667

The project is anticipated to complete construction in 2019.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code the Source Water Master Plan and the Treated Water Master Plan.

**Public Process Status, Issues:**

The NCWCD has applied for a Boulder County permit to construct the pipeline as part of the Matters of State Interest (1041) review process and the permit process is on-going. The County has requested analysis of additional alignment alternatives and this information has been developed and submitted. A final alignment alternative will be selected in the near future and a CEAP will be completed using the information from the County permit process. It is anticipated the CEAP will be submitted to the WRAB in late 2010.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$2,608,367	\$2,608,367

<b>Prev Alloc Funding</b> \$989,455	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funds in 2017

**Annual On-going Operating Costs**

<b>Description:</b>	TBD
<b>Source of Funding:</b>	TBD

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Silver Lake Hydroelectric/PRV	<b>Project Number:</b> 411970	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> 

**Project Description:**

This project provides funds for the rehabilitation of the Lakewood pressure reducing valve.

This project will begin in 2012.

Costs:

1. Planning: \$ 10,000
2. Land Acquisition: \$ 0
3. Construction: \$ 90,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$100K in 2012

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Source Water Pressure Reducing and Hydroelectric Facility Rehabilitati	<b>Project Number:</b> <input type="text"/>	<b>Map Number:</b> <input type="text" value="0"/>
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> <input type="text" value="No"/>	<b>CEAP Completed:</b> <input type="text"/>

**Project Description:**

This project provides funds for on-going repair and rehabilitation of the city's source water pressure reducing and hydroelectric facilities.

This project is for an ongoing funding program. In 2012, \$ 0 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$165,475	\$165,475

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:**

**Annual On-going Operating Costs**

**Description:**   
**Source of Funding:**

## 2012-2017 Capital Improvements Program Project Status Report

<b>Project Name:</b> Source Water Transmission System Inspections	<b>Project Number:</b> 411775	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide	
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b>	Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction		
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA	

**Project Description:**  
This project provide funding for on-going inspection of source water transmission pipes.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$80,000	\$0	\$0	\$0	\$0	\$0	\$80,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$0	\$0

**Change from Prior Year:** Changed 2011 carryover amount to \$0

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Sunshine Hydro/PRV Station	<b>Project Number:</b> 	<b>Map Number:</b> 51
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> No

**Project Description:**

This project will provide funds for the rehabilitation of the Sunshine Hydro/PRV Station.

This project will begin in 2017.

Costs:

1. Planning: \$ 30,000
2. Land Acquisition: \$ 0
3. Construction: \$ 231,568

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revise Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$261,568	\$261,568

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added \$261,568 in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Sunshine Transmission Pipe	<b>Project Number:</b> 411006	<b>Map Number:</b> 52
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Enhancements / Upgrades	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
This project will provide funds for the rehabilitation of the Sunshine Transmission Pipe. The pipe is a cement mortar lined steel pipeline that has deteriorated during its operation over a period of several decades. Initial funding in 2009 provides funds for pipe inspection, minor repair work and installation of access manholes. Funding allocated in 2013 will provide for a more complete rehabilitation or replacement of the existing cement mortar lining.

This project will begin in 2013.  
Costs:

- 1. Planning: \$ 80,000
- 2. Land Acquisition: \$ 0
- 3. Construction: \$ 720,000

The project is anticipated to complete construction in 2014.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$800,000	\$0	\$0	\$0	\$0	\$800,000

<b>Prev Alloc Funding</b> \$0	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Deleted 2017 funds, added \$800K in 2013

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:**

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Utility Billing Computer System Replacement	<b>Project Number:</b> 411453	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b>
<b>Project Type:</b> On-Going Projects	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b>

**Project Description:**

Utility Billing Computer System Replacement

This project will begin in 2017.

Costs:

1. Planning: \$ 50,000
2. Land Acquisition: \$ 0
3. Construction: \$ 45,000

The project is anticipated to complete construction in 2018.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Water Utility Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000

<b>Prev Alloc Funding</b>	<b>Unfunded Amount</b>
\$28,771	\$0

**Change from Prior Year:** Added this as a new project/added carryover and 2017 amounts

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Water System Security Upgrades	<b>Project Number:</b> 411440	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
This project will provide funds for water system security upgrades. New Federal guidelines call for increased protection of drinking water systems from terrorist and other threats. City staff recently updated the water system security vulnerability assessment. Numerous recommendations for security vulnerability improvements have been made.

This project will begin in 2012.  
Costs:

1. Planning: \$ 10,000
2. Land Acquisition: \$ 0
3. Construction: \$ 90,000

The project is anticipated to complete construction in 2013.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source and Treated Water Master Plans.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000

<b>Prev Alloc Funding</b> \$107,315	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Updated 2011 Carryover Amount/deleted estimated total cost

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Waterline Replacement	<b>Project Number:</b> 411389	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> System-wide
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> System-wide
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**

This project provides funds for the reconstruction of waterlines that are part of the city's water distribution system. Many of the city's existing waterlines are corroded or otherwise deteriorated and must be replaced. The city currently experiences approximately 60-80 main breaks per year and these cause unplanned outages in water service as well as disruption to vehicle travel and damage to public and private property. Although the number of main breaks is not considered excessive, the average age of the city's distribution system is over 40 years and it is anticipated that substantial funds will be required to maintain a functioning water distribution system over time. In some cases deficiencies in this system have been identified due to fire flow requirements of the Insurance Services Office (ISO).

Funding for waterline replacement has been reduced. A recent staff analysis indicates that a funding level of \$2,100,000 (2008 dollars) should be sufficient to maintain the current service level, as defined by water main breaks, over the next decade. Funding has been adjusted to reflect anticipated construction costs inflation of 3 percent each year after 2013. The replacement program is coordinated with the Transportation Division street overlay and reconstruction program.

This project is for an ongoing funding program. In 2012, \$ 2,100,000 will be spent on the project as described above.

**Relationship to Guiding Principals:**

This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Treated Water Master Plan.

**Public Process Status, Issues:**

No additional public process is anticipated.

**Relationship with Other Departments:**

Transportation

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$2,100,000	\$2,100,000	\$2,163,000	\$2,227,890	\$2,294,727	\$2,363,569	\$13,249,186

<b>Prev Alloc Funding</b> \$2,494,457	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Added funding in 2017

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget

**Source of Funding:** Existing operating budget.

**2012-2017 Capital Improvements Program  
Project Status Report**

<b>Project Name:</b> Watershed Improvements	<b>Project Number:</b> 	<b>Map Number:</b> 0
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<b>Department:</b> PW/ Water Utility	<b>Subcommunity:</b> Outside Planning Area
<b>Funding Source:</b> Water Utility Fund	<b>BVCPArea:</b> Outside Planning Area
<b>Project Type:</b> Existing Facility - Rehab / Repair / Deficiency Correction	
<b>CEAP Required:</b> No	<b>CEAP Completed:</b> NA

**Project Description:**  
This project will provide funding for miscellaneous improvements in the city's Silver Lake watershed including valve replacement.

This project will begin in 2015.  
Costs:

1. Planning: \$ 8,000
2. Land Acquisition: \$ 0
3. Construction: \$ 71,568

The project is anticipated to complete construction in 2016.

**Relationship to Guiding Principals:**  
This project is consistent with the goals of the water utility as articulated in the Boulder Revised Code and the Source Water Master Plan.

**Public Process Status, Issues:**  
No additional public process is anticipated.

**Relationship with Other Departments:**  
None

Capital Funding Plan							
Est Total Cost	2012	2013	2014	2015	2016	2017	6-year Total
	\$0	\$0	\$0	\$79,568	\$0	\$0	\$79,568

<b>Prev Alloc Funding</b> \$290,500	<b>Unfunded Amount</b> \$0
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**Change from Prior Year:** Chan ged unfunded amount to \$0

**Annual On-going Operating Costs** \$0

**Description:** No increase, funded by existing operating budget  
**Source of Funding:** Existing operating budget