

**CITY OF BOULDER**

**WATER RESOURCES ADVISORY BOARD  
AGENDA ITEM**

**MEETING DATE: March 28, 2016**

**AGENDA TITLE:** Update on 2017 Utilities Budget Process including updated six-year Utility Fund Financials and current CIP

**PRESENTERS:**

Jeff Arthur, Director of Public Works for Utilities  
Annie Noble, Acting Principal Engineer for Flood and Greenways  
Douglas Sullivan, Acting Principal Engineer for Water, Wastewater and Stormwater  
Ken Baird, Financial Manager

**EXECUTIVE SUMMARY:**

As part of the city’s annual budget process, Utilities develops a six-year planning budget, this year for the time period of 2017 through 2022. Within this process, funds are appropriated for the first year, 2017. The Water Resources Advisory Board (WRAB) role in this process is defined in the Boulder Revised Code; “. . . to review all environmental assessments and capital improvements conducted or proposed by the utilities division.” This agenda item is intended to initiate this process by providing:

- ❖ Background information
- ❖ Anticipated CIP highlights
- ❖ Schedule of key milestones

For reference, this packet includes materials from the adopted 2016 Utilities Budget and the 2016-2021 Utilities Capital Improvement Program (CIP) which was approved by City Council last fall. This information can be found in **Attachment A** – Water Utility, **Attachment B** – Wastewater Utility and **Attachment C** -Stormwater / Flood Management Utility. In addition, the citywide CIP document (2016 Annual Budget Vol. II) and other budget documents can be found in a links on the following webpage: <https://bouldercolorado.gov/budget>.

No formal action by the WRAB is requested at this time. WRAB recommendation on the CIP will be scheduled for the June 20 meeting. A public hearing will be scheduled for both the May 16 and June 20 budget discussions.

**BACKGROUND:**

The Utilities Division’s primary focus is to provide quality water services, as desired by the community, in a manner which emphasizes efficient management of fiscal and natural resources, and protects human and environmental health. Each of the city’s three utilities (water, wastewater and stormwater/flood management) is a separate enterprise fund established to finance and account for the acquisition, operation and maintenance of each utility’s facilities and services while

maintaining designated reserves and meeting debt service requirements. As enterprise funds, each utility is self-supporting and receives no subsidies from other city funds and all utility revenues remain within their respective funds.

Revenues generated from monthly utility bills are the largest source of revenue for each utility. Other significant sources of funds include development fees (plant investment fees) related to new construction, hydroelectric revenues, funding from the Urban Drainage and Flood Control District (UDFCD) and interest earnings.

The CIP development process identifies large capital projects (over \$50,000) in each of the three utilities and creates a funding plan. Generally, the projects are identified through various utilities master plans, asset management practices, regulatory requirements, and community priorities. In the budget process, WRAB reviews the proposed CIP and provides a recommendation for Planning Board and City Council approval. Since the CIP has a significant impact on utility rates, staff also seeks recommendation regarding the proposed rate increases.

### **2017-2022 CIP HIGHLIGHTS**

In the April WRAB CIP agenda item, staff will provide a draft 2017-2022 CIP that will include a detailed funding plan by year, and also draft fund financials showing the overall revenue and expenditure picture for each fund, including anticipated rate increases. The following are some of the important projects that will be highlighted through this process, and discussed at the CIP open house.

#### **Water Fund**

##### **Treated Water**

The Betasso Water Treatment Facility improvements project construction phase will begin in late 2016 with completion anticipated in early 2019. There were originally Betasso related improvements scheduled for 2021 and 2026, but these projects have been consolidated into a single larger project to be bid this year. Consolidating these projects takes advantage of the economies of scale, meets various Colorado Department of Public Health and Environment (CDPHE) requirements, and also utilizes the favorable bond rates available at this time.

A Boulder Reservoir Water Treatment Facility project is identified in the 2020 CIP budget to address filter valves, filter media, residuals handling, backup power and various site improvements. The estimated project cost is \$2,000,000. There is also a resiliency project underway at Boulder Reservoir to improve plant backup power along with lowering the carbon footprint and energy bills through the electrical improvements, the addition of batteries, backup generation and solar panels. The project is currently in the proposal solicitation stage and partially funded by federal grant money. The decision and scope of the 2016 and 2017 resiliency project may further reduce the 2020 project. Clarity should be achieved and detailed in next year's CIP budget process.

Funding for treated water transmission infrastructure includes both assessment and replacement of critical large diameter pipes. A project to replace and rehabilitate 12,500 feet of 18-inch diameter steel water line in pressure zone 3 is currently in design. The project will begin late this year with construction occurring over two consecutive winter periods, ending in spring 2018. Additional

funds for the inspection and prioritization of other large mains in the City's water transmission are included in the CIP. These transmission pipes are 14" in diameter and greater and they constitute around 65 of the 460 miles of treated water pipe that delineate our system.

The annual distribution main replacement program has been in place for over 15 years and has focused on the 460 miles of treated water pipe 12-inch diameter and smaller that make up the majority of the system (approx. 395 miles). At current levels, Utilities will be able to replace the remaining ductile iron pipe (DIP) in 100 years. Work is done in collaboration with other departments and prioritized through analysis and assessment of the distribution system.

#### Source Water

Final right-of-way purchasing and council approval for the Carter Lake Pipeline is slated for the 2016/2017 time period with final design in 2017 and construction scheduled for early 2018.

The Barker Dam Outlet System Rehabilitation Project is scheduled for design and construction in 2017 and 2018 respectively. The Barker Gravity Pipeline is scheduled for rehabilitation on an annual basis beginning in 2017 for the next 15 years. Current CIP funding for this project is \$1,125,000 per year. City staff will be analyzing the potential to rehabilitate segments of the pipeline on an accelerated basis based on present condition assessments and trenchless rehabilitation technologies.

Green Lake No. 2 Dam, which is located in the upper watershed, is scheduled for a rehabilitation project with design and construction in 2021 and 2022 respectively.

#### **Wastewater Fund**

The wastewater collection system condition assessment and rehabilitation funding was significantly increased as part of the 2015 rate increases. The additional funding has allowed staff to implement large-scale improvement projects with the goal of cleaning and inspecting the sanitary sewer system within two years - 2016 and 2017. The increased funding will also allow the rehabilitation of the remaining non-PVC pipe within the next 20 years. In 2015 74,000 ft of sanitary sewer were lined using cured-in-place-pipe and utilities staff anticipates lining another 80,000 ft in 2016. This is approximately in line with the anticipated 20 year cycle and utilities staff anticipates continuing at this rate throughout the 2017-2022 CIP. The Wastewater Collection System Master Plan (WWCSMP) Update is being finalized at this time and will be presented to the WRAB at the April 2016 meeting.

The Wastewater Treatment Facility (WWTF) has two new projects in the six year CIP. The first is necessary to address more stringent CDPHE effluent discharge regulations specific to phosphorus. This project is identified in the CIP in year 2020 with an estimated construction cost of \$18,500,000. The second project involves modifications to the facility's secondary digester. The secondary digester floating cover has tipped on several occasions over the last decade requiring rehabilitation projects and the digester taken offline. This project will replace the existing cover with a more reliable alternative with design and construction projected in 2019 and 2020 respectively.

## **Stormwater & Flood Management Fund**

The city has a comprehensive flood management program designed to identify flood risks along the major drainageways, reduce those risks, minimize loss of life and property damage, and support recovery following major flood events. The overall process for meeting these objectives includes: updating the Flood Insurance Rate Maps (FIRMs), developing mitigation plans to identify feasible opportunities to reduce the risk of flooding and programming flood mitigation projects into the CIP.

Flood mitigation projects in the 2016-2021 CIP focused on Fourmile Canyon Creek, based on recommendations of the 2011 mitigation plan and South Boulder Creek, in anticipation of completing a plan in 2015. Additional funding was also shown for projects along several of the other major drainageways with the expectation of completing mapping studies and mitigation master plans for these floodplains.

Since last year's CIP was reviewed by WRAB, flood mitigation plans have been approved by WRAB and Council for South Boulder Creek, Gregory Creek and Boulder Creek. In addition to projects along Fourmile Canyon Creek, funding for projects along these three drainageways will continue to be considered as part of the 2017-2022 CIP process. A flood mitigation plan is anticipated to be completed this year for Bear Canyon Creek and next year for Upper Goose, Twomile, Skunk, King's Gulch and Bluebell Creeks, at which time specific projects will be programmed into the CIP.

Utilities staff is in the process of completing a comprehensive storm sewer system condition assessment program which is anticipated to be completed in 2019. The condition assessment program has focused on the University Hill and downtown areas in 2015 and 2016. Early results indicate there will be a need for significant storm sewer rehabilitation and replacement. Utilities staff anticipates increased expenditures in the storm sewer rehabilitation program during the 2017-2022 CIP to address this need. The Stormwater Master Plan (SMP) Update is being finalized at this time and will be presented to the WRAB at the April 2016 meeting.

### **CIP OPEN HOUSE:**

The Utilities CIP Open House is scheduled for Monday, March 28 from 7- 8 p.m. and will provide the public and the WRAB an opportunity to learn more about the CIP process and projects included on the 6-year CIP planning horizon. Each station will display maps, graphics, financial highlights and explanations of how projects are prioritized. The Open House will be followed by the WRAB meeting, which will include a verbal summary of open house discussions and an information item presentation on the proposed Carter Lake Pipeline.

### **BUDGET SCHEDULE:**

The current schedule of major budget milestones is provided below. Elements involving the WRAB are highlighted in bold italics.

Milestone	Date
<b><i>CIP Open House</i></b>	<b><i>March 28, 2016</i></b>
<b><i>Draft CIP WRAB Discussion</i></b>	<b><i>April 15, 2016</i></b>
Budget Guidelines to Departments	April 18, 2016
<b><i>WRAB meeting – review updated CIP</i></b>	<b><i>May 16, 2016</i></b>
Proposed Budget Submittal to City Manager	May 31, 2016
<b><i>WRAB Recommendation on CIP/Budget</i></b>	<b><i>June 20, 2016</i></b>
Planning Board CIP Hearing	July 28, 2016
City Council Study Session on Budget (CIP)	Aug. 9, 2016
City Council Study Session on Budget	Sept. 13, 2016
City Council Study Session on Budget (if needed)	Sept. 27, 2016
City Council Consideration/Adoption of Budget	Oct. 4 and Oct. 18, 2016

**NEXT STEPS:**

Staff will return to the WRAB’s April meeting for draft CIP review and discussion. At the June 17 WRAB meeting, staff will request that the WRAB provide a final recommendation concerning the proposed 2014-2019 CIP to Planning Board and City Council.

**Attachments:**

- A:** Water – 2016 Budget Fund Financial and Capital Improvement Program
- B:** Wastewater - 2016 Budget Fund Financial and Capital Improvement Program
- C:** Stormwater/ Flood Management - 2016 Budget Fund Financial and Capital Improvement Program

## Attachment A

**CITY OF BOULDER  
2016 FUND FINANCIAL**

**WATER UTILITY**

	2014 Actual	2015 Revised	2016 Approved	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
<b>Beginning of Year Fund Balance</b>	\$ 34,394,472	\$ 37,283,402	\$ 33,680,656	\$ 30,225,313	\$ 30,198,798	\$ 35,916,673	\$ 35,583,298	\$ 38,282,899
<b>Sources of Funds</b>								
Operating-								
Sale of Water to General Cust	\$ 20,232,876	\$ 22,363,662	\$ 23,528,592	\$ 25,461,486	\$ 27,553,185	\$ 29,816,739	\$ 31,071,211	\$ 32,378,472
Projected Rate Increase	-	1,118,183	1,882,287	2,036,919	2,204,255	1,192,670	1,242,848	1,295,139
Bulk/Irrigation Water Sales	233,116	143,050	143,050	143,050	143,050	143,050	143,050	143,050
Hydroelectric Revenue	2,395,835	2,217,600	2,226,600	2,177,730	2,313,000	2,313,000	2,313,000	2,313,000
Miscellaneous Operating Revenues	52,006	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Non-Operating--								
Plant Investment Fees	6,733,984	3,500,000	2,800,000	2,800,000	2,500,000	2,500,000	2,500,000	2,500,000
Connection Charges	235,060	130,000	130,000	130,000	130,000	130,000	130,000	130,000
Special Assessments	(24,892)	2,505,000	5,000	5,000	5,000	5,000	5,000	5,000
Federal, State, County Grants	1,286,716	-	-	-	-	-	-	-
Interest on Investments	188,574	186,417	252,605	528,943	754,970	897,917	889,582	957,072
Rent, assessments and other misc revenues	92,128	20,500	20,500	20,500	20,500	20,500	20,500	20,500
Sale of Real Estate	-	1,014,750	-	-	-	-	-	-
Transfer from General Fund - Fire Training Center	92,785	92,785	92,811	92,827	92,843	92,859	92,875	92,891
Projected Bond Proceeds	-	-	24,240,000	-	37,915,263	-	10,455,509	-
<b>Total Sources of Funds</b>	<b>\$ 31,518,187</b>	<b>\$33,316,947</b>	<b>\$55,346,446</b>	<b>\$ 33,421,454</b>	<b>\$ 73,657,065</b>	<b>\$ 37,136,734</b>	<b>\$ 48,888,576</b>	<b>\$ 39,860,124</b>
<b>Uses of Funds</b>								
Operating-								
Administration	\$ 914,078	\$ 930,877	\$ 1,003,052	\$ 1,033,144	\$ 1,064,138	\$ 1,096,062	\$ 1,128,944	\$ 1,162,812
Planning and Project Management	640,957	615,356	611,220	629,557	648,443	667,897	687,933	708,571
Water Resources and Hydroelectric Operations	2,254,874	2,622,787	2,754,443	2,928,076	3,065,919	3,214,896	3,375,343	3,547,603
Water Treatment	4,406,801	4,655,178	4,766,150	4,909,135	5,056,409	5,208,101	5,364,344	5,525,274
Water Quality and Environmental Svcs	948,877	1,042,902	1,003,455	1,033,559	1,064,565	1,096,502	1,129,397	1,163,279
Water Conservation	328,578	414,185	412,058	424,420	437,152	450,267	463,775	477,688
System Maintenance	3,025,098	3,134,469	3,227,533	3,324,359	3,424,090	3,526,812	3,632,617	3,741,595
Windy Gap Payment	2,093,254	2,634,004	2,618,958	2,314,181	251,200	258,736	266,498	274,493
Sick and Vacation Accrual	91,600	100,000	100,000	103,000	106,090	109,273	112,551	115,927
<b>TOTAL OPERATING USES OF FUNDS</b>	<b>\$ 14,704,118</b>	<b>\$ 16,149,758</b>	<b>\$ 16,496,869</b>	<b>\$16,699,429</b>	<b>\$15,118,006</b>	<b>\$15,628,546</b>	<b>\$16,161,402</b>	<b>\$16,717,244</b>

## Attachment A

**CITY OF BOULDER  
2016 FUND FINANCIAL**

**WATER UTILITY**

	2014 Actual	2015 Revised	2016 Approved	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
<b>Debt-</b>								
BRWTP 1996 Revenue Bond; Refunding in 2006	858,469	857,708	858,531	-	-	-	-	-
Refunding of the 1999 and 2000 Revenue Bonds	2,523,521	2,522,054	2,517,388	2,524,233	2,524,650	1,375,102	-	-
Lakewood 2001 Rev Bond; Refunded in 2012	2,057,000	2,065,733	2,065,950	2,065,333	2,072,083	2,080,817	2,081,367	2,088,883
Projected Bond-Betasso WTP Improvements	-	-	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000	2,040,000
Projected Bond-NCWCD Conveyance Line	-	-	-	-	3,568,700	3,568,700	3,568,700	3,568,700
Projected Bond - Barker Dam	-	-	-	-	-	-	983,773	983,773
<b>TOTAL DEBT SERVICE</b>	<b>\$5,438,990</b>	<b>\$5,445,495</b>	<b>7,481,869</b>	<b>6,629,566</b>	<b>10,205,433</b>	<b>9,064,619</b>	<b>8,673,840</b>	<b>\$8,681,356</b>
<b>Transfers -</b>								
Cost Allocation	1,255,221	1,020,728	1,189,353	1,248,821	1,311,262	1,376,825	1,445,666	1,517,949
Planning & Development Services	212,564	218,941	225,509	232,275	239,243	246,420	253,813	261,427
General Fund - City Attorney	52,888	59,665	58,937	61,294	63,746	66,296	68,285	70,334
<b>TOTAL TRANSFERS OUT</b>	<b>\$1,520,673</b>	<b>\$1,299,334</b>	<b>\$1,473,799</b>	<b>\$1,542,390</b>	<b>\$1,614,251</b>	<b>\$1,689,541</b>	<b>\$1,767,764</b>	<b>\$1,849,710</b>
<b>Capital</b>								
Projected Bond - Betasso WTP IMP	-	-	\$24,000,000	-	-	-	-	-
Projected Bond - NCWCD Conveyance	-	-	-	-	\$37,565,263	-	-	-
Projected Bond - Barker Dam/Boulder Reservoir WTP	-	-	-	-	-	-	\$10,355,509	-
Projected Bond Issuance Costs	-	-	\$240,000	-	\$350,000	-	\$100,000	-
Encumbrances, Carryover and Adjustments to Base	-	4,345,099	-	-	-	-	-	-
<b>Total Uses of Funds</b>	<b>\$ 28,720,857</b>	<b>\$ 37,019,693</b>	<b>\$58,901,788</b>	<b>\$33,550,970</b>	<b>\$68,045,280</b>	<b>\$ 37,579,381</b>	<b>\$46,301,526</b>	<b>\$ 39,566,455</b>
Sick/Vacation Accrual Adjustment	\$ 91,600	\$ 100,000	\$ 100,000	\$ 103,000	\$ 106,090	\$ 109,273	\$ 112,551	\$ 115,927
<b>Ending Fund Balance Before Reserves</b>	<b>\$ 37,283,402</b>	<b>\$ 33,680,656</b>	<b>\$ 30,225,313</b>	<b>\$ 30,198,798</b>	<b>\$ 35,916,673</b>	<b>\$ 35,583,298</b>	<b>\$ 38,282,899</b>	<b>\$ 38,692,495</b>
<b>Reserves</b>								
Bond Reserve	\$ 3,034,796	\$ 3,034,796	\$ 5,074,796	\$ 4,221,429	\$ 7,790,129	\$ 7,790,129	\$ 7,398,800	\$ 7,398,800
Lakewood Pipeline Remediation Reserve	15,852,739	16,262,501	17,223,131	18,212,981	19,232,937	19,962,812	21,035,991	22,141,813
FEMA Deobligation Reserve	87,951	87,951	87,951	87,951	87,951	87,951	87,951	87,951
Sick/Vacation/Bonus Reserve	592,681	610,461	628,775	647,639	667,068	687,080	707,692	728,923
Pay Period 27 Reserve	163,400	214,400	265,400	316,400	367,400	418,400	469,400	520,400
Operating Reserve	4,056,198	4,362,273	4,492,667	4,560,455	4,183,064	4,329,522	4,482,291	4,641,739
Capital Reserve	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
<b>Total Reserves</b>	<b>\$ 25,787,765</b>	<b>\$ 26,572,382</b>	<b>\$ 29,772,721</b>	<b>\$ 30,046,854</b>	<b>\$ 34,328,549</b>	<b>\$ 35,275,894</b>	<b>\$ 36,182,126</b>	<b>\$ 37,519,625</b>
<b>Ending Fund Balance After Reserves</b>	<b>\$ 11,495,637</b>	<b>\$ 7,108,274</b>	<b>\$ 452,592</b>	<b>\$ 151,944</b>	<b>\$ 1,588,124</b>	<b>\$ 307,405</b>	<b>\$ 2,100,773</b>	<b>\$ 1,172,870</b>

**Note:**  
Operating reserve levels are based on industry standards and are maintained for revenue bonds, revenue fluctuations (weather and water usage impacts) and the capital intensive nature of the utility.

**Attachment A**

Attachment A: Water – 2016 Budget Fund Financial and Capital Improvement Program

	A	K	L	M	N	O	P
1				<b>CITY OF BOULDER</b>			
2				<b>2016-2021 CAPITAL IMPROVEMENT PROGRAM</b>			
3				<b>WATER UTILITY FUND</b>			
4							
5							
6	<b>Assumed Inflation Rate</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
7	<b>PROJECT NAME</b>	<b>APPROVED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>
8	<b>F</b>						
9	<b>Treated Water Pressure Reducing and Hydroelectric Facilities</b>						
12	Orodell Hydro/PRV Facility	\$75,000	\$0	\$0	\$0	\$0	\$0
13	Sunshine Hydro/PRV Facility	\$0	\$271,875	\$0	\$0	\$0	\$0
14	Pearl Street Hydro/PRV Facility	\$0	\$0	\$24,333	\$243,331	\$0	\$0
15	<b>Subtotal - Treated Water PRV and Hydro</b>	<b>\$75,000</b>	<b>\$271,875</b>	<b>\$24,333</b>	<b>\$243,331</b>	<b>\$0</b>	<b>\$0</b>
16							
17	<b>Water Treatment Facilities</b>						
18	Betasso WTF	\$900,000	\$0	\$0	\$0	\$0	0
19	Betasso WTF - Bond Proceeds	\$24,000,000	\$0	\$0	\$0	\$0	\$0
20	Bond Issuance Costs	\$240,000	\$0	\$350,000	\$0	\$100,000	\$0
21	Boulder Reservoir WTF	\$314,000	\$0	\$0	\$0	\$2,000,000	\$0
22	Boulder Res WTF - Bond Proceeds	\$0	\$0	\$0	\$0	\$0	\$0
23	<b>Subtotal - Water Treatment Facilities</b>	<b>\$25,454,000</b>	<b>\$0</b>	<b>\$350,000</b>	<b>\$0</b>	<b>\$2,100,000</b>	<b>\$0</b>
24							
25							
31	<b>Treated Water Storage Tanks</b>						
36	Kohler Storage Tank	\$799,875	\$0	\$0	\$0	\$0	\$0
37	Chautauqua Storage Tank	\$0	\$0	\$0	\$0	\$0	\$0
38	Betasso Storage Tank	\$0	\$292,465	\$0	\$0	\$0	\$0
40	<b>Subtotal - Treated Water Storage Tanks</b>	<b>\$799,875</b>	<b>\$292,465</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
41							
42	<b>Treated Water Distribution System</b>						
45	Waterline Replacement	\$3,352,960	\$3,487,078	(\$0)	\$3,771,624	\$3,922,489	\$4,079,389
46	<b>Subtotal - Treated Water Distribution System</b>	<b>\$3,352,960</b>	<b>\$3,487,078</b>	<b>(\$0)</b>	<b>\$3,771,624</b>	<b>\$3,922,489</b>	<b>\$4,079,389</b>
47							
48	<b>Treated Water Transmission System</b>						
52	Zone 1 Transmission Pipes	\$0	\$0	\$250,000	\$0	\$0	\$250,000
53	Zone 2 Transmission Pipes	\$0	\$250,000	\$0	\$0	\$250,000	\$0
54	Zone 3 Transmission Pipes	\$1,200,000	\$0	\$0	\$250,000	\$0	\$0
55	<b>Subtotal - Treated Water Transmission System</b>	<b>\$1,200,000</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$250,000</b>
56							
57	<b>Source Water Transmission System</b>						
58	Lakewood Pipeline	\$0	\$0	\$0	\$316,330	\$0	\$0
61	<b>Subtotal - Source Water Transmission System</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$316,330</b>	<b>\$0</b>	<b>\$0</b>
62							
63	<b>Barker Water System</b>						
64	Barker Gravity Pipeline Repair	\$667,416	\$1,169,859	\$1,216,653	\$1,265,319	\$1,315,932	\$1,368,569
65	Barker-Kossler Penstock Repair	\$0	\$116,986	\$0	\$0	\$0	\$0
66	Barker Dam Outlet	\$100,000	\$175,000	\$0	\$835,551	\$0	\$0
67	Barker Dam Outlet - Bond Proceeds	\$0	\$0	\$0	\$0	\$8,355,509	\$0
68	Barker Dam and Reservoir	\$65,000	\$50,000	\$0	\$0	\$0	\$0
74	Kossler Dam	\$75,000	\$0	\$0	\$0	\$0	\$0
75	<b>Subtotal - Barker Water System</b>	<b>\$907,416</b>	<b>\$1,511,844</b>	<b>\$1,216,653</b>	<b>\$2,100,870</b>	<b>\$9,671,441</b>	<b>\$1,368,569</b>
76							
77	<b>Raw Water Storage Reservoirs</b>						
78	Albion Dam	\$125,000	\$0	\$341,636	\$3,416,361	\$0	\$0
79	Silver Lake Dam	\$0	\$0	\$100,000	\$0	\$0	\$0
80	Island Lake Dam	\$0	\$0	\$50,000	\$0	\$0	\$0
82	Green Lake 2 Dam - Bond Proceeds	\$0	\$0	\$0	\$0	\$0	\$0
83	Green Lake 2 Dam	\$0	\$0	\$0	\$0	\$75,000	\$486,773
85	Goose Lake Dam	\$0	\$0	\$75,000	\$0	\$0	\$0
86	Boulder Reservoir	\$50,000	\$0	\$0	\$0	\$118,434	\$0
87	Lakewood Dam	\$0	\$0	\$124,707	\$0	\$0	\$0
88	Skyscraper Dam	\$0	\$0	\$0	\$0	\$0	\$171,071
89	Wittemyer Ponds	\$0	\$0	\$0	\$100,000	\$492,685	\$4,926,849
90	<b>Subtotal - Raw Water Storage Reservoirs</b>	<b>\$175,000</b>	<b>\$0</b>	<b>\$691,343</b>	<b>\$3,516,361</b>	<b>\$686,119</b>	<b>\$5,584,692</b>
91							
92	<b>Other Raw Water Facilities</b>						
93	Farmer's Ditch	\$0	\$0	\$0	\$108,160	\$0	\$0
95	Source Water Facilities Rehab Program	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
96	Watershed Improvements	\$80,000	\$0	\$0	\$0	\$100,000	\$0
103	NCWCD Conveyance - Carter Lake Pipeline	\$850,000	\$2,036,322	\$0	\$0	\$0	\$0
104	NCWCD Conveyance/Waterline replacement	\$0	\$0	\$37,565,263	\$0	\$0	\$0
105	<b>Subtotal - Other Raw Water Facilities</b>	<b>\$1,080,000</b>	<b>\$2,186,322</b>	<b>\$37,715,263</b>	<b>\$258,160</b>	<b>\$250,000</b>	<b>\$150,000</b>
106							
107	<b>Source Water Pressure Reducing, Pumping and Hydroelectric</b>						
108	Lakewood Hydroelectric/PRV	\$130,000	\$0	\$0	\$300,000	\$0	\$0

**Attachment A**

Attachment A: Water – 2016 Budget Fund Financial and Capital Improvement Program

	A	K	L	M	N	O	P
1				<b>CITY OF BOULDER</b>			
2				<b>2016-2021 CAPITAL IMPROVEMENT PROGRAM</b>			
3				<b>WATER UTILITY FUND</b>			
4							
5							
6	<b>Assumed Inflation Rate</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
7	<b>PROJECT NAME</b>	<b>APPROVED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>
8	<b>F</b>						
109	Silver Lake Hydroelectric/PRV	\$25,000	\$50,000	\$80,000	\$0	\$0	\$0
110	Boulder Reservoir Intake and Pumping	\$0	\$0	\$0	\$0	\$0	\$0
111	Betasso Hydroelectric / Pressure Reducing	\$0	\$380,000	\$480,000	\$0	\$0	\$0
112	Barker Dam Hydroelectric	0	\$0	\$0	\$0	\$0	\$0
113	Barker Dam Hydro	\$0	\$0	\$0	\$0	\$0	\$0
117	Carter Lake Hydroelectric	\$0	\$0	\$50,000	\$250,000	\$0	\$0
118	Carter Lake Hydro	\$0	\$0	\$0	\$0	\$2,500,000	\$0
119	Source Water Pressure Reducing, Pumping	\$0	\$0	\$0	\$0	\$193,472	\$201,210
120	<b>Subtotal - Source Water PRV, Pumping and</b>	<b>\$155,000</b>	<b>\$430,000</b>	<b>\$610,000</b>	<b>\$550,000</b>	<b>\$2,693,472</b>	<b>\$201,210</b>
121							
126	<b>Water System Monitoring and Metering</b>						
127	Automated Meter Reading	\$0	\$0	\$0	\$0	\$0	\$684,285
128	Water System Security/Quality Improvement	\$150,000	\$150,000	\$150,000	\$90,000	\$0	\$0
129	Source Water Monitoring and Protection	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$0
134	Utility Billing Computer System	\$0	\$0	\$0	\$0	\$125,000	\$0
135	<b>Subtotal - Water System Monitoring and Metering</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$250,000</b>	<b>\$190,000</b>	<b>\$125,000</b>	<b>\$684,285</b>
136							
137	<b>TOTAL CAPITAL USES OF FUNDS</b>	<b>\$33,449,251</b>	<b>\$8,679,585</b>	<b>\$41,107,591</b>	<b>\$11,196,676</b>	<b>\$19,698,520</b>	<b>\$12,318,145</b>

## Attachment B

**CITY OF BOULDER  
2016 FUND FINANCIAL**

**WASTEWATER UTILITY**

	2014 Actual	2015 Revised	2016 Approved	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
<b>Beginning Fund Balance</b>	\$ 12,481,148	\$ 13,596,397	\$ 7,635,286	\$ 8,463,020	\$ 8,421,341	\$ 9,578,794	\$ 9,777,196	\$ 10,390,604
<b>Sources of Funds</b>								
Operating-								
Sewer Charges to General Customers	\$ 13,850,189	\$ 14,126,140	\$ 18,400,711	\$ 19,359,388	\$ 20,368,012	\$ 21,429,186	\$ 22,545,646	\$ 24,849,811
Projected Rate Increase		4,237,842	920,036	967,969	1,018,401	1,071,459	2,254,565	1,242,491
Surcharge/ Pretreatment Fees	127,274	118,000	118,000	118,000	118,000	118,000	118,000	118,000
Plant Investment Fees	2,221,937	700,000	700,000	700,000	700,000	700,000	700,000	700,000
Connection Charges	11,263	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Special Assessments	(9,795)	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Federal & State Grants	681,482	1,486,018	-	-	-	-	-	-
Interest on Investments	73,622	193,754	152,706	211,576	252,640	287,364	293,316	311,718
Rent and other miscellaneous revenue	5,423	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Sale of Real Estate - Yards Masterplan	-	357,375	-	-	-	-	-	-
Bond Proceeds	-	10,125,000	-	-	-	-	20,625,000	-
<b>Total Sources of Funds</b>	<b>\$ 16,961,395</b>	<b>\$ 31,360,629</b>	<b>\$ 20,307,952</b>	<b>\$ 21,373,433</b>	<b>\$ 22,473,553</b>	<b>\$ 23,622,509</b>	<b>\$ 46,553,027</b>	<b>\$ 27,238,520</b>
<b>Uses of Funds</b>								
Operating-								
Administration	\$ 581,235	\$ 585,713	\$ 632,454	\$ 651,428	\$ 670,970	\$ 691,100	\$ 711,833	\$ 733,188
Planning and Project Management	268,324	386,778	404,733	416,875	429,381	442,263	455,531	469,196
Wastewater Quality & Environmental Svcs	1,127,229	1,392,332	1,393,904	1,435,721	1,478,793	1,523,157	1,568,851	1,615,917
System Maintenance	1,640,118	1,923,718	1,681,345	1,731,785	1,783,739	1,837,251	1,892,369	1,949,140
Wastewater Treatment	4,872,877	5,166,106	5,113,656	5,267,066	5,425,078	5,587,830	5,755,465	5,928,129
Sick/Vacation Accrual	(71,987)	75,000	75,000	77,250	79,568	81,955	84,413	86,946
<b>TOTAL OPERATING USES OF FUNDS</b>	<b>8,417,797</b>	<b>9,529,647</b>	<b>9,301,092</b>	<b>9,580,125</b>	<b>9,867,529</b>	<b>10,163,554</b>	<b>10,468,461</b>	<b>10,782,515</b>
Debt-								
2012 Refunding of the WWTP 2005 Revenue Bond	3,463,046	3,439,462	3,199,450	3,177,125	3,153,292	3,145,375	3,132,458	3,124,750
WWTP UV, Digester, Headworks Imp 2010 Rev Bond	673,529	672,638	673,863	670,938	672,700	674,013	669,888	671,688
WWTP Nutrient Compliance Bond 2020							1,947,500	1,947,500
Sanitary Sewer Rehabilitation Bond 2015		900,000	900,000	900,000	900,000	900,000	900,000	900,000
<b>TOTAL DEBT SERVICE</b>	<b>4,136,575</b>	<b>5,012,100</b>	<b>4,773,313</b>	<b>4,748,063</b>	<b>4,725,992</b>	<b>4,719,388</b>	<b>6,649,846</b>	<b>6,643,938</b>

## Attachment B

**CITY OF BOULDER  
2016 FUND FINANCIAL**

**WASTEWATER UTILITY**

	<b>2014 Actual</b>	<b>2015 Revised</b>	<b>2016 Approved</b>	<b>2017 Projected</b>	<b>2018 Projected</b>	<b>2019 Projected</b>	<b>2020 Projected</b>	<b>2021 Projected</b>
Transfers-								
Cost Allocation	900,430	756,671	879,372	923,341	969,508	1,017,983	1,068,882	1,122,326
Planning & Development Services	213,210	219,607	226,195	232,981	239,970	247,169	254,584	262,222
General Fund - Utilities Attorney	17,629	19,888	19,646	20,432	21,249	22,099	22,983	23,673
TOTAL TRANSFERS OUT	1,131,269	996,166	1,125,213	1,176,754	1,230,727	1,287,251	1,346,449	1,408,221
Capital Improvement Program	\$2,073,371	6,768,978	4,355,600	5,987,421	5,571,420	7,335,867	6,934,277	7,242,543
2011 Bond-UV, Digester, Headworks IMP	\$15,148	1,198	-	-	-	-	-	-
Projected Bond-WWTP Improvements	-	-	-	-	-	-	\$20,500,000	-
Projected Bond-Sanitary Sewer Rehab	-	\$10,000,000	-	-	-	-	-	-
Bond Issuance Costs	-	125,000	-	-	-	-	125,000	-
Carryover, Encumbrances and Adjustments to Base	-	4,963,651	-	-	-	-	-	-
<b>Total Uses of Funds</b>	<b>\$ 15,774,160</b>	<b>\$ 37,396,740</b>	<b>\$ 19,555,218</b>	<b>\$ 21,492,363</b>	<b>\$ 21,395,668</b>	<b>\$ 23,506,061</b>	<b>\$ 46,024,033</b>	<b>\$ 26,077,216</b>
Sick/Vacation Accrual Adjustment	\$ (71,987)	\$ 75,000	\$ 75,000	\$ 77,250	\$ 79,568	\$ 81,955	\$ 84,413	\$ 86,946
<b>Ending Fund Balance Before Reserves</b>	<b>\$ 13,596,397</b>	<b>\$ 7,635,286</b>	<b>\$ 8,463,020</b>	<b>\$ 8,421,341</b>	<b>\$ 9,578,794</b>	<b>\$ 9,777,196</b>	<b>\$ 10,390,604</b>	<b>\$ 11,638,853</b>
<b>Reserves</b>								
Bond Reserves	\$ 670,139	\$ 1,570,139	\$ 1,570,139	\$ 1,570,139	\$ 1,570,139	\$ 1,570,139	\$ 3,517,139	\$ 3,517,139
FEMA Deobligation Reserve	\$ 36,445	\$ 36,445	\$ 36,445	\$ 36,445	\$ 36,445	\$ 36,445	\$ 36,445	\$ 36,445
Sick/Vacation/Bonus Reserve	602,059	620,120	638,724	657,886	677,622	697,951	718,890	740,456
Pay Period 27 Reserve	142,480	181,480	220,480	259,480	298,480	337,480	376,480	415,480
Operating Reserve	2,387,266	2,631,453	2,606,576	2,689,220	2,774,564	2,862,701	2,953,728	3,047,684
Capital Reserve	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
<b>Total Reserves</b>	<b>\$ 4,301,944</b>	<b>\$ 5,503,193</b>	<b>\$ 5,535,919</b>	<b>\$ 5,676,724</b>	<b>\$ 5,820,805</b>	<b>\$ 5,968,271</b>	<b>\$ 8,066,236</b>	<b>\$ 8,220,759</b>
<b>Ending Fund Balance After Reserves</b>	<b>\$ 9,294,453</b>	<b>\$ 2,132,093</b>	<b>\$ 2,927,101</b>	<b>\$ 2,744,616</b>	<b>\$ 3,757,988</b>	<b>\$ 3,808,925</b>	<b>\$ 2,324,367</b>	<b>\$ 3,418,093</b>

	A	K	L	M	N	O	P
1	<b>CITY OF BOULDER</b>						
2	<b>2016 - 2021 CAPITAL IMPROVEMENT PROGRAM</b>						
3	<b>WASTEWATER UTILITY FUND</b>						
4							
5							
6	<b>Assumed Inflation Rate</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
7	<b>PROJECT NAME</b>	<b>APPROVED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>
8							
9	<b>Wastewater Treatment</b>						
10	WWTF Pumps	\$150,000	\$0	\$0	\$0	\$0	\$0
11	WWTF Permit Improvements	\$150,000	\$0	\$750,000	\$1,500,000	\$0	\$136,857
13	WWTF Permit Improvements - Proj. Bond	\$0	\$0	\$0	\$0	\$18,500,000	\$0
14	WWTF Laboratory	\$50,000	\$0	\$0	\$0	\$0	\$0
18	WWTF Instrumentation/Control	\$0	\$674,918	\$701,915	\$729,992	\$759,191	\$0
19	WWTF Electrical	\$120,000	\$1,200,000	\$0	\$0	\$0	\$0
20	WWTF Activated Sludge	\$0	\$175,479	\$0	\$0	\$0	\$0
26	WWTF Rehabilitation	\$0	\$0	\$0	\$0	\$150,000	\$375,000
31	WWTF Cogeneration	\$0	\$0	\$0	\$0	\$184,481	\$0
32	WWTF Digester Complex	\$0	\$0	\$0	\$200,000	\$2,000,000	\$0
34	WWTF Digester Cleaning	\$0	\$0	\$0	\$0	\$0	\$0
35	Bond Issuance Costs	\$0	\$0	\$0	\$0	\$125,000	\$0
36	<b>Subtotal - Wastewater Treatment Plant</b>	<b>\$470,000</b>	<b>\$2,050,397</b>	<b>\$1,451,915</b>	<b>\$2,429,992</b>	<b>\$21,718,672</b>	<b>\$511,857</b>
37							
38	<b>Marshall Landfill</b>						
39	Marshall Landfill	\$100,000	\$0	\$0	\$0	\$0	\$0
40	<b>Subtotal - Marshall Landfill</b>	<b>\$100,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
41							
42	<b>Wastewater System Monitoring and Metering</b>						
45	Utility Billing Computer System	\$0	\$0	\$0	\$0	\$65,000	\$0
46	<b>Subtotal - Monitoring and Metering</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$65,000</b>	<b>\$0</b>
47							
48	<b>Collection and Conveyance System Rehabilitation</b>						
50	Condition Assessment Program	\$811,200	\$843,648	\$877,394	\$912,490	\$948,989	\$986,949
51	Sanitary Sewer Rehabilitation	\$2,758,080	\$2,868,403	\$2,983,139	\$3,102,465	\$3,226,563	\$3,355,626
53	Sanitary Sewer Manhole Rehabilitation	\$216,320	\$224,973	\$233,972	\$243,331	\$253,064	\$657,966
56	Tier 1 Goose Creek 1/1A Master Plan Project	\$0	\$0	\$0	\$0	\$0	\$329,278
58	Tier 1 Goose Creek 5 Master Plan Project	\$0	\$0	\$25,000	\$647,590	\$1,346,988	\$1,400,867
66	<b>Subtotal - Sewer System Rehabilitation</b>	<b>\$3,785,600</b>	<b>\$3,937,024</b>	<b>\$4,119,505</b>	<b>\$4,905,875</b>	<b>\$5,775,604</b>	<b>\$6,730,686</b>
67							
71							
72	<b>TOTAL CAPITAL USES OF FUNDS</b>	<b>\$4,355,600</b>	<b>\$5,987,421</b>	<b>\$5,571,420</b>	<b>\$7,335,867</b>	<b>\$27,559,277</b>	<b>\$7,242,543</b>

## Attachment C

**CITY OF BOULDER**  
**2016 FUND FINANCIAL**

**STORMWATER/FLOOD MANAGEMENT UTILITY**

	2014 Actual	2015 Revised	2016 Recommended	2017 Projected	2018 Projected	2019 Projected	2020 Projected	2021 Projected
<b>Beginning Fund Balance</b>	\$ 16,195,856	\$ 15,450,198	\$ 12,962,605	\$ 12,745,927	\$ 11,478,354	\$ 8,036,481	\$ 7,971,514	\$ 7,633,207
<b>Sources of Funds</b>								
Operating-								
Service Charge Fees	\$ 5,592,683	\$ 5,482,012	\$ 9,612,708	\$ 10,017,210	\$ 10,840,224	\$ 11,730,857	\$ 12,577,121	\$ 13,106,367
Projected Rate Increases		4,111,509	384,508	801,377	867,218	821,160	503,085	524,255
Non-Operating--								
Plant Investment Fees	818,369	600,000	300,000	350,000	350,000	350,000	350,000	350,000
Urban Drainage District Funds	50,000	800,785	882,835	957,835	930,000	400,000	400,000	400,000
State and Federal Grants	4,794,503	2,655,468	-	-	-	-	-	-
Interest on Investments	71,936	97,318	129,626	191,189	229,567	160,730	159,430	152,664
Intergovernmental Transfers (KICP Program)	2,000	144,200	148,526	152,982	157,571	162,298	167,167	172,182
Rent and other miscellaneous revenue	44,561	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Miscellaneous nonrecurring revenue	-	-	-	-	-	-	-	-
Sale of Real Estate - Yards Masterplan	-	357,375	-	-	-	-	-	-
Projected Bonds	-	23,075,000	-	-	25,325,000	-	-	-
<b>Total Sources of Funds</b>	<b>\$ 11,374,052</b>	<b>\$ 37,363,666</b>	<b>\$ 11,498,203</b>	<b>\$ 12,510,593</b>	<b>\$ 38,739,581</b>	<b>\$ 13,665,045</b>	<b>\$ 14,196,804</b>	<b>\$ 14,745,468</b>
<b>Uses of Funds</b>								
Operating-								
Administration	\$ 439,228	\$ 433,414	\$ 475,855	\$ 490,131	\$ 504,835	\$ 519,980	\$ 535,579	\$ 551,646
Planning and Project Management	1,066,947	1,253,577	1,289,877	1,328,573	1,368,431	1,409,483	1,451,768	1,495,321
Stormwater Contract Management	61,111	49,442	49,442	50,925	52,453	54,027	55,647	57,317
Stormwater Quality and Education	782,766	943,360	1,060,346	1,092,156	1,124,921	1,158,669	1,193,429	1,229,232
System Maintenance	1,035,053	1,618,165	1,343,771	1,384,084	1,425,607	1,468,375	1,512,426	1,557,799
Sick/Vacation Accrual	4,326	50,000	50,000	51,500	53,045	54,636	56,275	57,964
Debt--								
Refunding of the Goose Creek 1998 Revenue Bond	385,117	387,038	381,675	386,138	380,175	-	-	-
Projected Bond - South Boulder Creek	-	-	-	-	2,125,000	2,125,000	2,125,000	2,125,000
Projected Bond - Wonderland Creek	-	862,500	1,589,188	1,592,338	1,589,588	1,591,088	1,591,688	1,591,388
Transfers-								
Cost Allocation	219,451	246,288	284,264	298,477	313,401	329,071	345,525	362,801
Planning & Development Services	128,511	132,367	136,338	140,428	144,641	148,980	153,450	158,053
General Fund - Utilities Attorney	17,629	19,986	19,646	20,432	21,249	22,099	22,762	23,445

## Attachment C

**CITY OF BOULDER  
2016 FUND FINANCIAL**

**STORMWATER/FLOOD MANAGEMENT UTILITY**

	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
	<b>Actual</b>	<b>Revised</b>	<b>Recommended</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>	<b>Projected</b>
Capital	7,983,897	3,212,900	5,084,480	6,994,483	7,806,155	4,903,241	5,547,837	5,003,924
Projected Bond - South Boulder Creek	-	-	-	-	25,000,000	-	-	-
Projected Bond - Wonderland Creek/4-Mile	-	23,000,000	-	-	-	-	-	-
Projected Bond Issuance Costs	-	75,000	-	-	325,000	-	-	-
Encumbrances, Carryover and Adj. to Base	-	7,617,222	-	-	-	-	-	-
<b>Total Uses of Funds</b>	<b>\$ 12,124,036</b>	<b>\$ 39,901,259</b>	<b>\$ 11,764,882</b>	<b>\$ 13,829,666</b>	<b>\$ 42,234,499</b>	<b>\$ 13,784,648</b>	<b>\$ 14,591,386</b>	<b>\$ 14,213,889</b>
Sick and Vacation Accrual Adjustment	\$ 4,326	\$ 50,000	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636	\$ 56,275	\$ 57,964
<b>Ending Fund Balance Before Reserves</b>	<b>\$ 15,450,198</b>	<b>\$ 12,962,605</b>	<b>\$ 12,745,927</b>	<b>\$ 11,478,354</b>	<b>\$ 8,036,481</b>	<b>\$ 7,971,514</b>	<b>\$ 7,633,207</b>	<b>\$ 8,222,750</b>
<b>Reserves</b>								
Bond Reserves	\$ 324,984	\$ 2,312,552	\$ 2,312,552	\$ 2,312,552	\$ 4,362,568	\$ 4,362,568	\$ 4,362,568	\$ 4,362,568
Post Flood Property Acquisition	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000
FEMA Deobligation Reserve	295,923	295,923	295,923	295,923	295,923	295,923	295,923	295,923
Sick/Vacation/Bonus Reserve	57,671	59,401	61,183	63,019	64,909	66,856	68,862	70,928
Pay Period 27 Reserve	34,480	48,480	62,480	76,480	90,480	104,480	118,480	132,480
Operating Reserve	938,756	1,186,650	1,177,385	1,214,177	1,252,145	1,291,330	1,331,715	1,373,394
Capital Reserve	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
<b>Total Reserves</b>	<b>\$ 2,901,814</b>	<b>\$ 5,153,006</b>	<b>\$ 5,159,523</b>	<b>\$ 5,212,150</b>	<b>\$ 7,316,026</b>	<b>\$ 7,371,157</b>	<b>\$ 7,427,548</b>	<b>\$ 7,485,293</b>
<b>Ending Fund Balance After Reserves</b>	<b>\$ 12,548,385</b>	<b>\$ 7,809,599</b>	<b>\$ 7,586,404</b>	<b>\$ 6,266,204</b>	<b>\$ 720,455</b>	<b>\$ 600,357</b>	<b>\$ 205,659</b>	<b>\$ 737,457</b>

**Note:**

Operating reserve levels are based on industry standards and are maintained for revenue bonds, revenue fluctuations (weather and water usage impacts) and the capital intensive nature of the utility.

	A	I	J	K	L	M	N
1				<b>CITY OF BOULDER</b>			
2				<b>2016-2021 CAPITAL IMPROVEMENT PROGRAM</b>			
3							
4							
5							
6		<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
7	<b>PROJECT NAME</b>	<b>PROPOSED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>	<b>PROJECTED</b>
8							
9	<b>Major Drainageways</b>						
12	South Boulder Creek	\$750,000	\$750,000	\$0	\$0	\$0	\$0
13	South Boulder Creek - Bond Proceeds	\$0	\$0	\$25,000,000	\$0	\$0	\$0
14	Bond Issuance Costs	\$0	\$0	\$325,000	\$0	\$0	\$0
15	Skunk Canyon Creek	\$0	\$100,000	\$500,000	\$0	\$0	\$0
17	Twomile Canyon Creek	\$0	\$100,000	\$500,000	\$0	\$0	\$0
18	Bluebell Canyon Creek - King's Gulch	\$0	\$100,000	\$500,000	\$0	\$0	\$0
20	Four Mile Canyon Creek	\$0	\$0	\$500,000	\$1,250,000	\$1,250,000	\$500,000
21	Four Mile Canyon Creek - Upland to Violet	\$500,000	\$500,000	\$500,000	\$250,000	\$0	\$0
23	Bear Canyon Creek	\$500,000	\$0	\$0	\$0	\$0	\$0
24	Gregory Canyon Creek	\$500,000	\$0	\$0	\$0	\$0	\$0
25	Boulder Creek	\$0	\$2,500,000	\$2,250,000	\$0	\$0	\$0
32	Preflood Acquisition	\$500,000	\$550,000	\$600,000	\$633,000	\$660,000	\$684,285
33	Greenways Program Transfer	\$97,500	\$97,500	\$97,500	\$97,500	97,500	97,500
34	<b>Subtotal - Major Drainageway Improvements</b>	<b>\$2,847,500</b>	<b>\$4,697,500</b>	<b>\$30,772,500</b>	<b>\$2,230,500</b>	<b>\$2,007,500</b>	<b>\$1,281,785</b>
35							
36	<b>Miscellaneous</b>						
40	Utility Billing Computer System	\$0	\$0	\$0	\$0	\$65,000	\$0
41	<b>Subtotal - Miscellaneous Drainage Improvements</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$65,000</b>	<b>\$0</b>
42							
43	<b>Stormwater Management</b>						
44	Upper Goose Creek	\$750,000	\$750,000	\$750,000	\$1,000,000	\$1,165,547	\$1,221,869
45	Local Drainage Improvements	\$730,080	\$759,283	\$789,655	\$821,241	\$854,090	\$986,949
46	Stormwater Quality Improvements	\$162,000	\$169,000	\$175,500	\$182,500	\$190,000	\$197,390
47	Storm Sewer Rehabilitation	\$270,400	\$281,200	\$292,500	\$304,000	\$632,700	\$657,966
48	Transportation Coordination	\$324,500	\$337,500	\$351,000	\$365,000	\$633,000	\$657,966
49	<b>Subtotal - Localized Drainage Improvements</b>	<b>\$2,236,980</b>	<b>\$2,296,983</b>	<b>\$2,358,655</b>	<b>\$2,672,741</b>	<b>\$3,475,337</b>	<b>\$3,722,139</b>
50							
51	<b>TOTAL CAPITAL USES OF FUNDS</b>	<b>\$5,084,480</b>	<b>\$6,994,483</b>	<b>\$33,131,155</b>	<b>\$4,903,241</b>	<b>\$5,547,837</b>	<b>\$5,003,924</b>