

**CITY OF BOULDER, COLORADO  
BOARDS AND COMMISSIONS MEETING MINUTES**

<b>Name of Board / Commission:</b> Water Resources Advisory Board	
<b>Date of Meeting:</b> 19 May 2014	
<b>Contact Information of Person Preparing Minutes:</b> Kaaren Davis 303.441.3203	
<b>Board Members Present:</b> Vicki Scharnhorst, Dan Johnson, Mark Squillace, Lesley Smith <b>Board Members Absent:</b> Ed Clancy	
<b>Staff Present:</b> Jeff Arthur, Director of Public Works for Utilities Bob Harberg, Principal Engineer - Utilities Kurt Bauer, Engineering Project Manager Douglas Sullivan, Engineering Project Manager Pieter Beyer, Civil Engineer II Annie Noble, Flood and Greenways Engineering Coordinator Joe Taddeucci, Water Resources Manager Ken Baird, Utilities Financial Manager Jody Jacobson, Board Secretary	
<b>Meeting Type:</b> Regular	
<b>Agenda Item 1 – Call to Order</b>	<b>[7:00 p.m.]</b>
<b>Agenda Item 2 – Approval of the 24 February, 17 March and 21 April 2014 Meeting Minutes:</b>	
<b>[7:01 pm]</b>	
<b>24 February minutes:</b> Motion to approve minutes from February 24, March 17 and April 21 as presented. Moved by: Scharnhorst Seconded by: Squillace <b>Vote: 4:0</b>	
<b>Agenda Item 3 – Public Participation and Comment</b>	<b>[7:05 p.m.]</b>
<b>Public Comment:</b>	
<b>Pete Palmer and Crif Crawford pooled time:</b> Mr. Palmer presented on flood impacts to South Boulder Creek and how it differed from flood predictions. Video played showed flood waters at Apache and Mohawk during the September 2013 flood, which were about five feet deep, over the street markers. An overview of rainfall amounts was given. Slope wash in Shanahan Ridge joined Dowdy Draw flash flood on Sept. 12 to combine with South Boulder Creek, around CU berm, via Viele Channel, down US 36 and pooled. These real-time lessons should be understood for future flood planning. Two separate flows, not just South Boulder Creek.	
<b>Angela Gould:</b> Lives in the Brookfield neighborhood and discussed the sewer back-up near 55 <sup>th</sup> and Arapahoe during the flood. Managed to get through first day of the flood, but then the toilet in their basement was spouting out uncontrollably. They were able to use sandbags and pumps, but couldn't get professional help. They experienced a couple of feet of sewage water in their basement. Neighbors experienced similar problems. The sewer system at 55 <sup>th</sup> and Arapahoe needs repair. Please repair the system to avoid the same situation in the future.	
<b>Debbie Welsh:</b> Discussed the effects of flood in two neighborhoods. Manhattan West condos at Foothills and Baseline. Garden level condos dealt with four-foot surge of water. All units were destroyed. Residents were displaced until February. It was the water that Palmer and Crawford referenced. Don't think it's the 100-year flood. Also had sewage backup in her own home's basement. Had to replace carpet, drywall, etc. Reiterates pipes at 55 <sup>th</sup> and Arapahoe need fixing. Sewage backflow device installed just deflects problems onto neighbors.	
<b>Board follow up:</b> Board asked staff about Palmer/Crawford presentation. Staff responded that South Boulder Creek mitigation items will be coming before the WRAB later this year and the issues brought up by Palmer and Crawford can be discussed further at that time.	

**Agenda Item 4 – Information Item – Preliminary draft September 2013 Boulder Rainfall Analysis Results [7:25 p.m.]**

Consultant Andrew Earles with Wright Water Engineers covered storm results from September 2013 flood. Bob Harberg and Utilities staff presented the item to the board which included a PowerPoint presentation.

**Executive Summary from the Packet Materials:**

There has been much discussion regarding the magnitude of the September 2013 flood disaster. The city recently commissioned an analysis of the rainfall recurrence interval by Wright Water Engineers (WWE) and the preliminary draft results are attached.

Alert gauges and gridded radar data was used to determine rainfall characteristics for durations ranging from 5 minutes to 24 hours for the watersheds in Boulder. In addition, the rainfall characteristics are compared with the Colorado Urban Hydrograph Procedure (CUHP) to compare 5-, 10-, 15-, 30-, and 60-minute intensities which is the basis of the design storm for flood analysis and mapping. This comparison provides an understanding of how the actual event differed from the design storm in terms of short-duration rainfall depths and intensities.

Prior to finalizing this analysis WWE will submit the preliminary draft analysis to the Colorado Division of Water Resources for review.

Representatives of Wright Water Engineers made a presentation to the WRAB were available for questions and answers.

**WRAB Discussion Included:**

- The importance of short duration storms to flood studies as the outer boundaries of flooding possibilities. Longer duration storms are not useful for studying peak flow rates.
- Perspective on the size of the 2013 event. Rainfall amounts for the 2013 flood were not anywhere near what happened during the Big Thompson flood.

**This is an information item only. No board action is requested at this time.**

**Agenda Item 5 – Information Item – Preliminary draft Flood Survey Results [7:50p.m.]**

Bob Harberg and Utilities staff presented the item to the board which included a PowerPoint presentation.

**Executive Summary from the Packet Materials:**

The attached preliminary draft report summarizes the results of the City of Boulder property owner survey regarding the September 2013 flood disaster.

September 2013 brought unprecedented rainfall to the region, causing significant flooding and extensive damage to both private property and public infrastructure.

In response to this event, the city decided to review its flood management program and mitigation priorities and requested assistance identifying neighborhoods and areas in Boulder that were impacted by the recent flooding. An online survey was developed and requested information about the cause, location and magnitude of flood impacts to private property owners.

**WRAB Discussion Included:**

- Which entities and neighborhoods responded to the survey, the range of reported damage amounts and the method of calculating the data to reach the numbers presented.
- The methodology which produced the results discussed. The results are not a statistical analysis but hopefully will provide some useful information as study progresses.
- Discussion of the very limited reimbursements available for personal damages from the flood and why this limitation necessitated the City doing its own survey to get a better idea of the scope of the event and its impacts on the community.

This is an information item only. No board action is requested at this time.

**Agenda Item 6 – Public Hearing and WRAB discussion of the 2015-2020 Capital Improvement Program** [8:02 p.m.]

Jeff Arthur, Bob Harberg, Douglas Sullivan, and Ken Baird presented the item to the board which included a PowerPoint presentation.

**Executive Summary from the Packet Materials:**

As part of the city’s annual budget process, Utilities develops a six-year planning budget, this year for the time period of 2015 through 2020. 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.” Utilities staff has formulated initial revenue and expenditure projections for each of the three utility funds through the year 2020. Within the budget process, City Council approves and appropriates funds only for the first year, 2015.

The September 2013 flood highlighted the vulnerability of the community and utility infrastructure to natural disasters, including flooding. In order to better integrate data and public feedback related to the flood into the 2015-2020 CIP discussion, staff presented “previews” of the Water, Wastewater, and Stormwater/Flood Management Utility Capital Improvement Programs at the January, February, and March WRAB meetings. The April meeting provided an opportunity for the WRAB to discuss a “preliminary draft” of the CIP. At the April meeting, the majority of questions and discussions concerned the preliminary Wastewater Utility CIP. Following this meeting, staff presented preliminary information regarding utility rates at a City Council study session related to the 2015 budget. Staff focused on a scenario that included a 10% rate increase in the Wastewater Fund rather than 7% to be more conservative based on initial WRAB feedback and pending results of the condition assessment on the wastewater inceptor, a project which is discussed below.

WRAB will be asked to make a recommendation to City Council regarding the 2015-2020 CIP at its June meeting. The Planning Board will review the complete city CIP, including utilities, in August. City Council generally plans for two study sessions regarding the CIP in September, prior to adopting the 2015 budget.

This packet contains the draft proposed 2015 Utilities Budget and 2015-2020 Utilities CIP. The fund financials (**Attachment A**) have been updated to reflect actual revenues and expenditures for 2013, and the revised budget for 2014. These fund financials incorporate recommended changes to the CIP. There will be other likely less significant changes in the operating budget as the guidelines recently provided by the budget office are incorporated into each fund.

More detailed information regarding the draft proposed 2015-2020 Utilities CIP is presented in **Attachment B**. This document is being developed to support city wide CIP recommendations and captures information that has been developed to date.

**Public Comment:**

- **Jean Nelson – pooled time with Scott Nelson and Emelia Welber, all from the Brookfield neighborhood:** Happy that we’re looking at the inflow and infiltration (I & I) problem. Processing rainwater at the Wastewater Treatment Facility is not free. Came to talk about 900 homeowners that experienced Wastewater backups during the flood. That number may be low because many think it was just stormwater. Would like a map for the sanitary sewer backups. Her home is not in the flood zone. No one mentioned sanitary sewer issues when they purchased their home. Supports raising bills even higher than recommended. Started a petition and will take it to City Council. Money from the 2008 Wastewater Collection System Master Plan was not put towards the projects in the plan. Sanitary sewer overflow risk was high and nothing was done about it. Not impressed and unhappy that the 2008 study wasn’t implemented. One of the homes in the neighborhood was flooded with sewage before 2013 (as heard by others). Doesn’t cost city money to flood basements. Don’t ignore studies.
- **Carl Norby: Frasier Meadows:** We’ve said what we can say. Utilities engineers have done great work. Funds concerns us. Where is the money going to come from? As more is being discovered, the numbers are going up. Going in the right direction, but waiting years for fixes is

challenging. Five years, maybe. Longmont spending \$65 – \$80 million on repairs. June vote expected to be approved. What happened to the Wastewater master plan? We're concerned the money isn't going to come. Worried we're not proposing enough.

- **Bob Coleman:** Reiterating what others have said. We know the problem and we see that Stormwater needs serious money. Utilities know what needs to happen. Money is available. Looked at his own bill and it was low and doubling it doesn't amount to much to individuals. Question isn't funding, but whether the board will stand up and do what needs to be done. This is a Public health issue. But fostering property issue and health issue is being pushed onto residents/property owners. Board should be pushing for this. Five to seven or seven to ten percent increase isn't enough. Require Council to respond.
- **Debra Welsh:** Agree with what others have said. City has been negligent over time and now we are having to make up for that all at once. Request 100 percent increase, not 10. Rainwater studies seem to minimize what happened. We could have catastrophic event on top of saturated groundwater and the system's lack of capacity/integrity will hit us hard. Stand up for residents/property owners by asking for more.

**WRAB Discussion Included:**

- Discussion on what the board wants staff to bring back in terms of a recommendation. Desire rate increases and staff recommendation on what to do and what rate increases should come with that. Include Level of Service as well, even qualitatively. It's difficult to get at that when talking about extreme storm events.
- Clarification on which projects are funded by which rate increases.
- The I & I Study and lining assessment including technology, cost, cost/benefit relationships, time frame, needs analysis and potential impacts to traffic related to the sewer pipe lining system and whether the lining program should proceed more aggressively in light of the 2013 flood.
- Discussion of the groundwater infiltration problem, whether it can be significantly mitigated, and whether flow meters can help track infiltration issues.
- How information from flow meters is gathered and used to prioritize projects.
- The pros and cons of wastewater backflow prevention devices.
- The board has spent a lot of time over the past several months to go over these issues and is under the impression that the proper amounts are being requested.
- The board would like clarification on what has been done from former master plans.
- Projects identified tonight in the collection system are prioritized in the CIP that board will be voting on.
- Discussion of what is needed at a minimum to make the system secure (and not taking on additional risks). What the cost of lining improvements/repairs in the hardest hit neighborhoods would be. What can we tolerate and what can we afford?
- Discussion of whether the suggested rate increases are large enough given that it appears that maintenance and upgrades of the existing infrastructure have been underfunded in the past and are therefore behind schedule.
- The desire for a balance between neighborhood and resident perspectives. Not everyone may want their rates to go up or may not want them to go up as much.
- The board expressed the opinion that staff is in the right ballpark for Water, Stormwater /Flood rate increases. There is an interest in looking at more aggressively addressing the WW collection system, but keep away from being at the top of the range with other communities.

**Agenda Item 7 – Matters**

**[10:21 p.m.]**

**From the Board:**

Board member Scharnhorst brought up the below matter(s):

- Soliciting WRAB input on the Greenways CIP and Pennsylvania Avenue/Gregory Creek project as representative to Greenways Advisory Committee.

Board member Squillace brought up the below matter(s):

- List of projects for Greenways CIP – leveraging flood projects and adding Greenways objectives to projects. Currently looking at where we should be leveraging funds.

Board member Johnson brought up:

- Resiliency Report was good.
- Douglas Sullivan and Jeff Arthur helped lead a meeting with the public in Frasier Meadows. Not many people showed up to discuss. Sense from those that showed up was that they felt that city was moving in the right direction and addressing what needed to be addressed.

Board member Smith brought up:

- Resiliency report – tap into BVSD for flood outreach.
- Children’s water festival was great – thanks to past and current staff.

**From Staff:**

[10:32 p.m.]

- Board member orientation wasn’t taped for those who missed it.
- CAO happy to assist answering questions.
- Could ask the City Attorney to come and discuss issues with board.

**Agenda Item 6 – Discussion on Future Schedule**

[10:33 p.m.]

June will have more discussion about CIP and rates.

Board retreat.

**Agenda Item 9 – Adjournment**

[10:35 p.m.]

There being no further business to come before the Board at this time, by motion regularly adopted, the meeting was adjourned at 10:36 p.m.

**Motion to adjourn by: Squillace; Seconded by: Scharnhorst**

**Motion Passes 4:0**

**Date, Time, and Location of Next Meeting:**

The next WRAB meeting will be Monday, 16 June 2014 at 7:00 p.m., in the Municipal Service Center Conference Room; 5050 E. Pearl unless directed by staff or the board.

APPROVED BY:

ATTESTED BY:

\_\_\_\_\_  
Board Chair

\_\_\_\_\_  
Board Secretary

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

---

An audio recording of the full meeting for which these minutes are a summary, is available on the Water Resources Advisory Board web page.