

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

Name of Board / Commission: Water Resources Advisory Board	
Date of Meeting: 19 August 2013	
Contact Information of Person Preparing Minutes: Laurel Olsen-Horen; 303-441-3203	
Board Members Present: Chuck Howe, Dan Johnson, Ed Clancy, Mark Squillace Board Members Absent: Vicki Scharnhorst	
Staff Present: Jeff Arthur, Director of Public Works for Utilities Bret Linenfelter, Water Quality and Environmental Services Manager Chris Douville, Wastewater Treatment Manager Russ Sands, Water Conservation Coordinator Laurel Olsen-Horen, Board Secretary Consultants Present: Larry Barber: US Geological Survey Alan Vajda: University of Colorado	
Meeting Type: Regular/ Early Start Time	
Agenda Item 1 – Call to Order	[6:19 p.m.]
This meeting was called to order at 6:19 p.m.	
Agenda Item 2 – Facility Overview and Tour of the Wastewater Treatment Facility	[6:19 p.m.]
Chris Douville presented item to the board. Power point presented for this item.	
The board received a brief overview of the wastewater treatment facility, including the recent upgrades made which the board members will view on their tour.	
The board asked some clarifying questions during the staff presentation to better understand the function of the facility.	
Agenda Item 3 – Approval of the 15 July 2013 Meeting Minutes:	[7:32 p.m.]
Motion to approve the 15 July minutes as amended by: Johnson; Seconded by: Howe Motion Passes; 3:0 – Board member Squillace was not present at the July meeting	
Agenda Item 4 – Public Participation and Comment	[7:36 p.m.]
Public Comment: None	
Agenda Item 5 – Information Item – WWTF Activated Sludge Upgrades and Removal of Emerging Contaminants	[7:36 p.m.]
Chris Douville, Larry Barber, and Alan Vajda presented the item. Power point presented for this item	
Executive Summary from the Packet Materials: Emerging Contaminants and Endocrine Disrupting Compounds (EDCs) in particular, are a growing concern within water quality and wastewater treatment. Some of these compounds, such as steroid hormones and pharmaceuticals, have been discovered in various water environments including treated wastewater effluent, and have been shown to cause negative impacts to the reproductive systems of aquatic life. A significant amount of water quality research has been performed on Boulder Creek, with attempts to understand the implications of the wastewater effluent which makes up the majority of the creek flow during most of the year. A long-standing collaboration between the City of Boulder (city), United States Geologic Survey (USGS), and the University of Colorado (CU) has resulted in significant findings related to the impacts of wastewater effluent from the city's 75 th Street Wastewater Treatment Facility (WWTF). Summarized in a 2012 publication from Environmental Science and Technology, research has shown that the endocrine-disrupting effects of the wastewater effluent have been significantly reduced following the WWTF upgrade to activated sludge treatment in 2008. Prior to the upgrades, the WWTF utilized a process technology called trickling filter/solids contact and the documented estrogenic effects to fish in Boulder Creek were very pronounced. After the upgrades went online, repeat studies were conducted where fish were exposed to various amounts of Boulder Creek water and wastewater effluent. Physiological fish data, as well as chemical data from laboratory analysis, confirm that the activated sludge upgrades have	

significantly reduced the endocrine-disrupting effects of the final effluent.

The city has learned additional information about EDCs in wastewater effluent from participation in other research studies. The purpose of this information item is to highlight the important work with USGS and CU. Highlights from participation in other research efforts will be discussed during the August 19 WRAB Meeting.

This item is being presented as an information item to provide the WRAB with context for future recommendations on capital projects at the WWTF. No formal action by the WRAB is requested at this time.

WRAB Discussion Included:

[8:32 p.m.]

Board member Squillace left at 8:07 p.m.

- Are there any recommendations to get these types of contaminants out of the source water?
- The findings other communities/municipalities have discovered from doing studies similar to this.
- Source control and should the city prioritize source removal in the near future.
- Whether or not increased amounts of residential composting has had a measureable difference in the treated load at the facility.
- Will the six other discharge facilities be looked into in regards to their permits?

Agenda Item 6 – Matters

[9:01 p.m.]

From the Board:

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

- Would like to hear about the six industrial sites and how they deal with contaminants.
- Has the legalization of marijuana made any differences in the ability to treat water? Staff response: not really. Only hydroponics facilities have run-off. It's not really a focus right now, but may be in the future.

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

- Jane Munson wrote a letter about the Twomile flood remapping. NFIP grandfathering of her flood insurance rates could potentially increase her rates. Staff response: FEMA has directed the NFIP to become financially sound. Currently the NFIP pays out more money than it takes in.
- Will the city revisit fluoridation? Staff response: If WRAB would like the city to we can bring it back. Ultimately, it would be a ballot issue to have it removed.

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

- Water Congress meeting is this week. How does Boulder participate? Staff response: our outside legal counsel and some select staff are involved.
- Is the city always actively looking for grant opportunities? Staff response: there generally aren't too many available, especially in the wastewater realm. We have a couple of great grants that the city is utilizing.

From Staff:

[8:23 p.m.]

- **New runoff values in Four Mile** – the city has dialed back the flood watch warning levels for the area.
- **New watershed repeaters** – were installed. Now we have fairly complete radio monitoring of the entire watershed.
- **Water Supply Status/Revenue** – The city is coming in low on wastewater revenues. We're a little off on the water side. Staff is keeping an eye on revenues. Likely be off by a couple of percent. In spite of the late spring snow storms, the city has not come into priority as much as we thought we would. The city has had to use its CBT water on exchange on a larger degree than was anticipated necessary.

Agenda Item 8 – Discussion on Future Schedule

[9:30 p.m.]

Agenda Item 9 – Adjournment

[9:30 p.m.]

There being no further business to come before the Board at this time, by motion regularly adopted, the meeting was adjourned at 9:30 p.m.

Motion to adjourn by: Clancy; Seconded by: Johnson

Motion Passes 3:0

Date, Time, and Location of Next Meeting:

The next WRAB meeting will be a Regularly Scheduled meeting on 16 September at 7:00 p.m., in the 1777 West Conference Room located in the Municipal Building

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.