Draft Meeting Minutes
Big Dry Creek Watershed Association

Date/Time: March 19, 2008, 1:00 to 2:30 p.m.

Location: Broomfield Water Treatment Plant, 4395 W. 144th Avenue

Topic: Annual Water Quality Analysis

1. Highlights of 2007 Water Quality Analysis

Tables and figures from the draft water quality analysis report prepared by Wright Water Engineers were provided as a handout to accompany presentation of the results by Jane Clary. The discussion focused on the following areas:

- With the exception of *E. coli* and selenium, the stream met stream standards during 2007.
    - With regard to *E. coli*, exceedances occurred primarily during the summer months at three locations in the open space in the urban area and at one location in the agricultural area in the lower watershed. Geometric mean values during 2007 were within the historic ranges of values at each monitoring location. Dry weather sampling was completed during 2007 between 112th and 128th. This sampling program will continue downstream from 128th to I-25 during 2008. This plan will cover the locations along the stream with elevated *E. coli* in the urbanized portion of the watershed. Wastewater Treatment Plant (WWTP) discharges continue to have the lowest *E. coli* concentrations on the stream. Big Dry Creek is on the 2008 303(d) list for *E. coli*.
    - With regard to selenium, a new standard is in place as a result of the December 2007 temporary modification hearing. During 2007, no exceedances of the acute stream standard occurred and no exceedances of the chronic standard for the non-irrigation season occurred, but the chronic standard for the irrigation season was

slightly exceeded. A five-year data set for dissolved selenium will be complete in August 2008, at which time it would be appropriate to re-assess attainment of the standard. The current irrigation season data set is unevenly weighted toward months that have historically tended to have higher selenium concentrations**. In order to develop an evenly weighted data set, dissolved selenium should be analyzed on a monthly basis through August 2008.** At that time, quarterly sampling, consistent with monitoring frequency for other metals, can be resumed. Big Dry Creek remains on the 303(d) list for selenium primarily due to administrative timing related to development of the new site-specific ambient-based standard and development of the 303(d) list. In the fall 2008, once the five-year data set is complete, it would be appropriate to write a letter to Dan Beley at the Division requesting removal of Big Dry Creek's listing for selenium prior to the draft list being developed for 2010 and to ensure that Big Dry Creek is not slated for development of a selenium TMDL.

- Results for the Quality Assurance program associated with the monitoring plan were discussed. Relative percent difference values for iron were higher than normal, as a result, the importance of representative sampling techniques were discussed. Total recoverable iron is particularly susceptible to discrepancies in field replicates due to settling of particulates. This is a potential issue at the bridge sampling location at bdc5.0, where a bucket is used to collect the samples and then split into analysis bottles. Hallie Mahan noted that some of the replicate sample data appeared erroneous and warranted verification. *(Follow up after the meeting showed that there was an error in the original draft data set for one sample pair, which has been corrected. The RPD values are still somewhat high, even after correction of the error; thus, the factors discussed at the meeting remain valid.)*

- Several changes to the monitoring program were identified such as deleting dissolved analyses for arsenic and iron, decreasing sample frequency for total recoverable iron to quarterly, and the previously mentioned changes related to selenium sampling.

- Flow data for 2007 were discussed in the context of high flows during April 2007, as well as in the context of the highly managed nature of the stream and its impact on properly assessing water quality conditions.

    - With regard to high flows experienced during April 2007, review of rainfall and flow data indicate that rainfall of up to approximately 2.5 inches fell in a widespread area throughout the watershed during April 24-25, leading to elevated flow conditions. The flows measured at both the Westminster and Fort Lupton gages were in the top ten highest average daily flows since 1991. Landowner

Paul Dill brought photos of these high flows to the last BDCWA meeting.

- With regard to the stream hydrology, several graphs were provided showing releases from Standley Lake and diversions from Bull Canal. In some areas during some time periods, nearly all of the flow in the stream is diverted during the irrigation season. Similarly, although releases from Standley Lake increase stream flows upstream of the Bull Canal, most of this flow is subsequently diverted at the Bull Canal.

2. Next Meetings

a. A BDCWA Board meeting will be held in May 2008 for budget planning for 2009.

b. The next General Membership meeting will be held in September 2008. Date to be announced.

Feel free to contact Jane Clary, Watershed Coordinator, with questions or comments regarding these meeting minutes (303-480-1700 or clary@wrightwater.com).

Attendance at March 19, 2008 BDCWA Meeting

Last Name	First Name	Organization Name
Carter	David	City of Westminster
Clary	Jane	Wright Water Engineers, Inc.
Fabisiak	Mary	City of Westminster
Hargadin	Kelly	Adams County
Herbolsheimer	Carrie	Ayres Associates (and Citizen)
Hubbard	Laura	City and County of Broomfield-Environmental Lab
Julian	Lesa	City and County of Broomfield
Mahan	Hallie	Citizen (Board Member Emeritus)
Malone	Matthew	Denver Regional Council of Governments
Meyer	Dave	City of Westminster
Stanley	Shelley	City of Northglenn

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