

NFRWQPA 2007 WATER QUALITY PLAN UPDATE  
Major Point Source Inventory Data

Operating Agency: *City and County of Broomfield*

Utility Plan: Approved 6/1999

NPDES Permit #: CO-0026409

Permit Expires: 7/31/2007 Administrative Extension

Description of Treatment Facilities: Preliminary treatment, primary and secondary settling, anoxic and anaerobic basins, integrated fixed film activated sludge, secondary and biological nutrient removal treatment, U.V. disinfection, anaerobic digestion, solids dewatering, land application of biosolids, reuse water filtration and pumping.

Treatment Facility Location: NW ¼, SE ¼, Section 32, T1S, R68W; 2985 W. 124th Avenue, Broomfield, CO 80020.

Discharge Location: Big Dry Creek Segment 1 and Great Western Reservoir Segment 3 in Broomfield County.

Stream Segment Classification: Big Dry Creek: Warm Water Aquatic Life Class 2, Recreation Class 1b, and Agriculture. Great Western Reservoir: Warm Water Aquatic Life Class 2, Recreation Class 2, Agriculture, and Water Supply (no standards).

Service Area Population:

Existing (Dec. 31, 2006)	2010	2015	2020	2025
51,957	60,102	73,124	83,000	83,000

Capacities:

	Design Capacity	Existing Load	2010 Projection	2015 Projection	2020 Projection	Year at 80% Design	Year at 95% Design
Flow (mgd)	8.0 current 12.0 phase 2	5.25	7.62	8.30	8.66	2009 2013	2010 2015
Organic (lbs./day BOD <sub>5</sub> )	13,760 current 20,640 phase 2	8,193	11,324	13,129	13,680	2009 2015	2010 2018

Biosolids treatment and disposal: The city's biosolids management program consists of beneficial recycling methods. The current process consists of anaerobic digestion, on-site storage, solids dewatering, and subsurface application of the dried digested biosolids on agricultural property. A secondary process utilized by the facility incorporates a dissolved air flotation process for thickening followed by dewatering and surface application.

Effluent limits required beyond secondary to meet stream standards: Inorganic limits include ammonia and cyanide. Metals include: arsenic, beryllium, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver and zinc.

Estimated 5-year construction needs: The construction of phase 1 of the facility expansion was completed in 2005. Construction of the phase 2 expansion is projected to begin in 2007.