

NFRWQPA 2011 WATER QUALITY PLAN UPDATE  
Major Point Source Inventory Data

Operating Agency: *City and County of Broomfield*

Utility Plan: Approved 6/1999

CDPS 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: (Outside NFRWQPA Planning Area) NW ¼, SE ¼, Section 32, T1S, R68W; 2985 W. 124th Avenue, Broomfield, CO 80020.

Discharge Location: (Outside NFRWQPA Planning Area) COSPBD01 and 03, Big Dry Creek Segment 1 and Great Western Reservoir Segment 3 in Broomfield County.

Stream Segment Classification: Big Dry Creek: Use Protected, Class 2 Warm Water Aquatic Life, Recreation Class P, and Agriculture. Great Western Reservoir: Use Protected, Class 2 Warm Water Aquatic Life, Recreation Class N, Agriculture, and Water Supply.

Service Area Population:

Existing Dec. 31, 2010	2015	2020	2025	2030
55,889	67,200	78,800	83,000	83,000

Capacities:

	Design Capacity	Existing Load	2015	2020	2025	2030	Year at 80% Design	Year at 95% Design
Flow (mgd)	12 mgd	5.924	7.12	8.36	8.80	8.80	2030	>2030
Organic (lbs./day BOD <sub>5</sub> )	23,018	13,831	16,128	18,912	19,920	19,920	2020	>2030

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 subsurface application. During emergency conditions, the City has contracted with a local composting facility to handle biosolids disposal.

Treatment level: The degree of treatment required and effluent limitations are outlined in Permit #CO-0026409.

Estimated 5-year construction needs: Expansion of biosolids dewatering capacity.