

NFRWQPA 2007 WATER QUALITY PLAN UPDATE
Major Point Source Inventory Data

Operating Agency: *Resource Colorado Water and Sanitation Metropolitan District*

Utility Plan: Conditional Approval 4/2007

NPDES Permit #: NA

Permit Expires: NA

Description of Treatment Facilities: The utility plan proposed the construction of a 0.30 mgd membrane bioreactor (MBR), including reuse storage and distribution.

Treatment Facility Location: The proposed facility will be located in the NW ¼, NW ¼, Section 32, T3N, R64W.

Discharge Location: The proposed discharge location is Box Elder Creek, Segment 3a of the Middle South Platte River Basin, in the NW ¼, NE ¼, Section 31, T3N, R64W.

Stream Segment Classification: Box Elder Creek Segment 3a of the Middle South Platte River Basin. The stream is designated as Use Protected and classified as Warm Water Aquatic Life Class 2, Recreation Class 1a, and Agriculture.

Service Area Population:

Existing	2010	2015	2020	2025
0	1,195	7,098	17,462	29,062

Capacities:

	Design Capacity	Existing Load	2010	2015	2020	2025	Year at 80% Design	Year at 95% Design
Flow (mgd)	0.03	0	0.11	0.63	1.56	2.58	2011	2012
Organic (lbs/day BOD ₅)	751	0	275	1,576	3,903	6,435	2011	2012

Biosolids treatment and disposal: The first phase (0.30) facility will not dewater biosolids. Wet solids will be hauled off-site by a biosolids hauler/applicator for beneficial reuse at a permitted facility/site. As the treatment plant expands, the waste biosolids will be thickened and dewatered and then hauled off-site for beneficial reuse.

Effluent limits required beyond secondary to meet stream standards: RCWSMD has only received Preliminary Effluent Limits (BOD, TSS, Fecal, E. coli, and Total Ammonia) from the CDPHE. Reuse will be used for irrigation of residential lawns and must meet Class 3 standards as listed in Regulation 84.

Estimated 5-year construction needs: Phase I-A construction will create a 0.30 mgd membrane bioreactor starting late 2008. More specifically, plans include building a 0.60 mgd superstructure (concrete and piping) but only equipping the facility with 0.30 mgd of membrane equipment. In 2011, Phase I-B construction will double the membrane capacity of the plant to 0.60 mgd.