

NFRWQPA 2007 WATER QUALITY PLAN UPDATE  
Major Point Source Inventory Data

Operating Agency: *City of Loveland*

NPDES Permit #: CO-0026701

Permit Expires: 7/31/2007 Administrative Extension

Description of Treatment Facilities: Screening, grit removal, primary clarification, activated sludge, secondary clarification, ultraviolet disinfection, and anaerobic sludge digestion.

Treatment Facility Location: SE ¼, Section 19, T5N, R68W

Discharge Location: Big Thompson River Segment 4c

Stream Segment Classification: Warm Water Aquatic Life Class 2, Recreation Class 2 (10/16 – 4/30) Class 1a (5/1 – 10/15), and Agriculture.

Service Area Population:

Existing	2010	2015	2020	2025
64,736	68,941	77,711	87,854	99,904

Note: Data based on the City's Population Projection from Annual Data & Assumptions Report 4/1/05.

Capacities:

	Design Capacity	Existing Load	2010	2015	2020	2025	Year at 80% Design	Year at 95% Design
Flow (mgd) peak monthly	10	6.8	7.2	8.1	9.3	10.5	2015	2023
Organic (lbs/day BOD <sub>5</sub> )	20,236	16,140	17,188	19,375	21,904	24,908	2008	2014

Note: Based on the 2008 City's Capital Improvement Program

Biosolids treatment and disposal: The biosolids treatment and disposal consists of dissolved air flotation thickening of the waste activated sludge (WAS), anaerobic digestion of primary and secondary sludges and contracted liquid sludge disposal on agricultural lands. The City disposed of the following amounts of sludge over the last 3 years:

- 2004 – 939.41 dry tons
- 2005 – 956.05 dry tons
- 2006 – 1,001.38 dry tons

Effluent limits required beyond secondary to meet stream standards: Ammonia limits

Estimated 5-year construction needs: Based on the 2008 10-year capital improvement plan for the WWTF, the City will concentrate its next series of improvements on headworks improvements, odor control, nutrient removal, and solids treatment / handling facilities. It is estimated that the City will spend approximately \$23 million over the next 10 years (2007 to 2017) on said improvements.