

NFRWQPA 2011 WATER QUALITY PLAN UPDATE
Major Point Source Inventory Data

Operating Agency: *South Ft. Collins Sanitation District* Utility Plan: Approved 4/2001

NPDES Permit #: CO-0020737

Permit Expires: 12/31/2011

Description of Treatment Facilities: Headworks, pump station, Orbal oxidation ditch, secondary clarifiers, effluent filters, UV disinfection, and Cannibal Process for solids reduction.

Treatment Facility Location: SW ¼, Section 17, T6N, R68W

Discharge Location: COSPCP22, Fossil Creek Reservoir in the SE ¼, Section 17, T6N, R68W.

Stream Segment Classification: Use Protected, Class 2 Warm Water Aquatic Life, Recreation Class E, and Agriculture.

Service Area Population:

Existing	2016	2021	2026	2031
35,808	40,608	44,608	48,608	53,000

Capacities:

	Design Capacity	Existing Load	2016	2021	2026	2031	Year at 80% Design	Year at 95% Design
Flow (mgd)	4.5	2.7	3.40	4.39	5.37	5.75	2018	2022
Organic (lbs/day BOD ₅)	12,800	5,821	7,321	8,641	10,051	11,461	2028	>2031

Biosolids treatment and disposal: Wasted solids are dewatered using a centrifuge and disposed of in a landfill where it is used as top soil amendment.

Treatment level: The degree of treatment required and effluent limitations are outlined in Permit #CO-0020737.

Estimated 5-year construction needs: The District has completed Phase I of a new 4.5 mgd hybrid activated sludge “Cannibal Process” facility. The project included the construction of new aeration, settling, solids handling, filtration, disinfection, and RAS and scum pumping facilities. This project will be the first of a 2 phase facility that will ultimately result in a 9.0 mgd plant. The District will design a new treatment plant headworks to be constructed in 2012. There are also plans to upgrade the dewatering process beginning in 2012 with a new centrifuge to be installed in the expanded dewatering facility.