

NFRWQPA 2011 WATER QUALITY PLAN UPDATE
Major Point Source Inventory Data

Operating Agency: *City of Northglenn*

Utility Plan: Approved 07/2003

CDPS Permit #: CO-0036757

Permit Expires: 03/31/2015

Description of Treatment Facilities: Aerated lagoon system operating in series with a BNR activated sludge treatment facility, secondary clarification, UV disinfection, and an effluent holding reservoir.

Treatment Facility Location: W ½, Section 36, T1N, R68W

Discharge Location(s): Bull Canal, Thompson Ditch, or Big Dry Creek – COSPBD01.

Stream Segment Classification: Big Dry Creek Segment 1, Use Protected, Class 2 Warm Water Aquatic Life, Recreation Class P, and Agriculture.

Service Area Population:

Existing	2015	2020	2025	2030	2035
36,324	39,359	42,029	44,212	46,638	48,959

Note: Total projections within the WUSA based on IGA constrained scenario.

Capacities:

	Permitted Capacity	Existing Load	2015	2020	2025	2030	2035	Year at 80% Design	Year at 95% Design
Ave. Flow (mgd)	6.5	3.82	4.09	4.35	4.61	4.88	5.14	>2020	>2035
Organic (lbs./day BOD ₅)	12,650	7,644	8,234	8,849	9,298	9,830	10,308	>2020	>2035

Note: Projections based on IGA constrained scenario.

Biosolids treatment and disposal: Biosolids are pumped to the east Sludge Storage lagoon for storage and stabilization. They are removed from the lagoon once or twice a year and applied on agricultural land.

Treatment level: The degree of treatment required and effluent limitations are outlined in Permit #CO-0036757.

Estimated 5-year construction needs: The following capital improvements are identified for the next 5 years:

- Installation of standby power.
- Improvements to the BNR treatment system to increase the capacity to treat organic and ammonia loading due to the decommissioning of Aerated Lagoon Treatment System.
- Construction of new Headworks facility.
- Construction of third Secondary Clarifier.
- Decommissioning of existing Aerated Lagoon Treatment System (cells 1 and 2).
- Lift station A improvements.