

NFRWQPA 2011 WATER QUALITY PLAN UPDATE
Major Point Source Inventory Data

Operating Agency: **Town of Severance**

Utility Plan Approved: December 2010

Severance lagoon facility CDPS Permit#: COG-0589009

Permit Expires: 10/31/2010

Saddler Ridge Metro Dist. (SRMD) facility CDPS Permit#: COG-589107

Permit Expires: 10/31/2010

Description of Treatment Facilities: Severance lagoon facility: Aerated ponds followed by a stabilization pond followed by chlorination. SRMD facility: Equalization basin, anoxic basin, aerobic basin, Membrane bioreactor (MBR), and UV disinfection.

Treatment Facility Location: Severance lagoon facility: SE ¼, Section 2, T6N, R67W. SRMD facility: NE ¼, SE ¼, Section 9, T7N, R67W.

Discharge Location: Severance lagoon facility: John Law Ditch, SE ¼, Section 2, R6N, R67W. SRMD facility: Tributary to the Black Hollow Slough, SE ¼, Section 9, T7N, R67W.

Stream Segment Classification: Both facilities discharge to COSPCP13a (tributaries to the Cache la Poudre River) classified as Use Protected, Class 2 Warm Water Aquatic Life, Recreation Class E, Water Supply, and Agriculture.

Service Area Population:

Existing	2015	2020	2025	2030
3,033	3,894	5,061	6,621	8,706

Capacities:

	Design Capacity Lagoon	Design Capacity SRMD	Existing Load	2015	2020	2025	2030	Year at 80% Design	Year at 95% Design
Flow (mgd)	0.155	0.05	0.121	0.343	0.548	0.796	1.117	See note	See note
Organic (lbs./day BOD ₅)	388	100	320	973	1,402	1,918	2,587	See note	See note

Note: An additional 1 mgd of capacity is available to the town through the Windsor East Side Trunk Sewer.

Biosolids treatment and disposal: The town does not have biosolid treatment facilities. Removal of biosolids, when necessary from the lagoon facility, will be done by a licensed hauler. The SRMD facility will also utilize a licensed hauler for removal and land application.

Treatment level: The degree of treatment required and effluent limitations are outlined in Permit #COG-0589009 for the lagoon facility and Permit #COG-589107 for the SRMD facility.

Estimated 5-year construction needs: The Town has signed an agreement with the Town of Windsor to treat wastewater from Severance in the future. As the Severance lagoon facility nears capacity, the Town will begin diverting flow into the trunk sewer which will be treated at the Windsor wastewater treatment facility. Once the SRMD facility reaches 80% capacity, planning will begin for an onsite expansion to Phase II with a design capacity of 0.1 mgd. As development warrants, a sewer collection pipeline will eventually be constructed from the existing Town lagoon system northward and ultimately to the SRMD. The length and timing of this pipeline will be development driven.