

CITY OF ANACORTES 2010 CSO REPORT

GENERAL INFORMATION

The NPDES permit number WA-002025-7 is issued to the City of Anacortes. The permit identifies CSO's by discharge number. This report will refer to the CSO's as they are identified in the permit. The CSO's are located as identified in the following table:

Discharge No.	Location		Receiving Water
002	Northernmost end of B Avenue	Latitude: 48 30'55" Longitude: 122 38'03"	Guemes Channel
003	Northernmost end of M Avenue	Latitude: 48 31'14" Longitude: 122 36'56"	Guemes Channel
004	Northernmost end of Q Avenue	Latitude: 48 31'18" Longitude: 122 36'34"	Guemes Channel

Discharge number 002 was monitored with a Marsh-McBirney Model 256A flow meter. The Model 256A flow meter measures level and velocity and reports flows to the treatment plant via a radio telemetry system. When the meter is active the plant control system is programmed to activate an alarm that indicates overflow at this CSO. The plant data acquisition system computes daily flow totals. The following information applies to the Marsh-McBirney flow meter systems at Discharge #002:

1. The flow meter level and velocity-sensing device is located directly in the outfall pipe.
2. The flow meter will detect a level in excess of 0.4 inches. Any flow that does not reach or exceed 0.4 inches will not be measured.
3. The flow meter is capable of detecting velocity only when the level in the pipe is in excess of one inch. Total flow is computed from the velocity and level measurements, therefore the flow cannot be totaled unless the level in the pipe exceeds one inch.
4. The flow meter is set to record the level and velocity for 60 seconds, once every fifteen minutes.
5. Flow information is reported from 12:00 p. m. (midnight) to 11:59:59 p. m. (midnight) on the indicated day.

Discharge number 003 – As reported in the 2010 COS Reduction Plan Update discharge number three has been decommissioned. Improvements over the years have eliminated overflow events from this location. The outfall pipe has been plugged.

Discharge number 004 was monitored with a Krohne Magmeter, type IFS-4000/PF. The rate of flow measured by this meter is reported to the wastewater treatment plant via a radio telemetry system. The plant data acquisition system totals the flow data and includes the information on plant reports. A float switch also monitors this CSO. When the level in the sewer system approaches the height of the overflow weir the float is activated. This float switch activates an alarm at the wastewater treatment. Plant personnel are alerted of the impending CSO activity.

Rainfall reported is recorded at the Anacortes Wastewater Treatment Plant by a tipping bucket rain gauge. Rainfall totals are reported from 7:00 a. m. on the indicated day to 6:59:59 a. m. on the following day.

Daily flow totals for Discharge #002 and #004 are included in appendix A.

CSO #003 has been decommissioned and is no longer in service.

Rainfall data is included in appendix B.

Appendix C contains a copy of the public notice advertised in the Anacortes American, the City of Anacortes official newspaper of record, announcing the availability of the annual CSO report.

**DETAIL OF FREQUENCY, VOLUME AND COMPARISON TO BASELINE
CONDITION, DISCHARGE NO. 002, "B" AVE. CSO**

FREQUENCY and VOLUME

As stated previously, discharge number 002 is monitored with a Marsh-McBirney Model 256A flow meter. Flow information from this meter is transmitted to the treatment plant via a radio telemetry system. Reports containing this flow information are generated on a daily and monthly basis.

There are no overflow events at this CSO site to report for 2010.

Total rainfall measured at the Anacortes Wastewater Treatment Plant in 2010 was 27.74".

COMPARISON TO BASELINE

There has not been an overflow event at this CSO since 1997. A chart comparing current data to a baseline for this site is not included in this report as there is no data to put into the chart.

**DETAIL OF FREQUENCY, VOLUME AND COMPARISON TO BASELINE
CONDITION, DISCHARGE NO. 003, "M" AVE. CSO**

The CSO has been decommissioned and is no longer in service.

There were no overflow events at this CSO site during 2010.

Total rainfall measured in 2010 was 27.74"

COMPARISON TO BASELINE

There has not been an overflow event at this CSO since 1997. A chart comparing current data to a baseline for this site is not included in this report as there is no data put into the chart.

DETAIL OF FREQUENCY, VOLUME AND COMPARISON TO BASELINE CONDITION, DISCHARGE NO. 004, "Q" AVE. CSO

This CSO site is monitored with a Krohne Magmeter, type IFS-4000/PF. The rate of flow measured by this meter is reported to the wastewater treatment plant via a radio telemetry system. The plant data acquisition system totals the flow data and includes the information on plant reports. Impending over flow events are detected via a float switch which provides an alarm at the treatment plant.

There was one overflow event at this site that was caused by precipitation during 2010. On December 12th 1.02" of rainfall was recorded; on the 11th of December 1.78". The total rain fall recorded during this rainfall event was 2.80" of rain. The CSO was active for 3.42 hours and discharged a total of 128,887 gallons.

Total rainfall measured in 2010 was 27.74"

COMPARISON TO BASELINE

Flow monitoring was installed on this CSO in January of 1998. In the eleven year time period that flow has been monitored at this it has overflowed a total of five times, once in 2003, and twice in back to back storm events during the first week of January 2007, once in 2009, and in the event detailed above in December of 2010. A chart detailing overflow events and rainfall information for this CSO site is included at the end of this section.

CSO REDUCTION ACCOMPLISHMENTS

1. Financial constraints prevented the completion of the 3rd phase of the repairs to the “L” drainage basin. No other I&I reduction work was completed in 2010.
2. The combined sewer overflow plan was updated during 2010, the update was submitted to the Department of Ecology.

PLANNED IMPROVEMENTS

The improvements planned for 2010 are as follows:

1. The City is seeking grant funds to continue with repairs to the “L” drainage basin.
2. A scum baffle will be installed on CSO #4 to prevent floatable solids from being discharged.
3. A study will be performed on the Q Avenue Basin to determine the appropriate height of the overflow weir. If the study will identify the maximum amount of storage capacity on the Q Avenue Basin. The elevation of the weir at CSO #4 will be adjusted based on the results of this study.