CSO File

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City of Burlington
A Great Place to Live, Work and Play

Deborah Quade
Field Office #6 Supervisor
Iowa Department of Natural Resources
1023 W. Madison St.
Washington, Iowa 52353

DOCUMENT INFORMATION

Reference Documents: NPDES Permit# 8156001
Consent Order No. 2007-WW-22-A4 Specifically item #10
Document Name: 2018 CSO Elimination Progress Report
Document Date: 29 June 2018

Dear Ms. Quade,

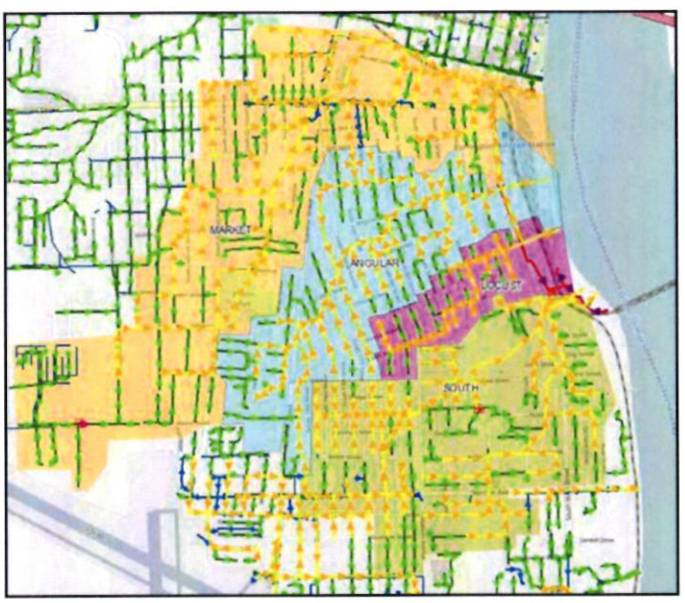
I am writing to provide the 2018 progress report regarding the City of Burlington's efforts to eliminate Combined Sewer Overflows (CSOs). This report is being submitted in accordance with item 10 of our consent order.

Consent Order Status

The existing consent order has been in place for nearly a decade. Improvements made to date have required a considerable amount of time, effort, and resources to accomplish. The City has completed items 1 through 9 of the 12 items outlined in our current consent order agreement. The final 3 items relate to the CSO separation effort in the Market, Angular, South, and Locust (MASL) Basins. The MASL area makeup is generally residential, with some light industrial and commercial properties throughout.

MASL Separation Status

To meet the compliance schedule outlined in our consent order the City has hired HR Green to design the sewer separation effort in the MASL area. The first basin to start will be the Locust basin. The approach for the Locust Basin involves replacing the sanitary sewer lines, while repairing the existing combined lines as needed, so they can adequately function as the new storm system. The current engineer's estimate for separation in the Locust basin is $5.3 Million, which was substantially higher than originally budgeted ($3M). As a result, obtaining a CBDG grant funding is paramount to moving forward with this project. The City was recently informed that we were awarded $600,000 worth of CBDG funding in the June application cycle. Those funds will be formally accepted through City Council on July 2nd. The city is currently working with HR Green to finalize the correct bid specification language, advertise the project, and obtain an SRF construction loan. We plan to start construction on the Locust Basin in spring of 2019 with work completing in calendar year 2019.



The remaining basins of Market, Angular and South (MAS) have been analyzed using the same separation approach used in the Locust Basin, and a draft facility plan has been prepared. The projected cost of the remaining work in MAS is $78.7M. Due to the high projected cost of these repairs, the city would prefer to analyze the final cost and overall effectiveness the current approach has on the Locust Basin. Once data can be gathered and analyzed against previous separation efforts a final facility plan will be submitted for the remaining Market, Angular and South basins.

Other Related Efforts

Former CSO Location Updates

The Cascade Basin was fully separated in spring of last year. An equalization tank or lift station needs to be designed and built to mitigate wet weather-related overflows. The city is in the process of procuring a dedicated flow meter for the sanitary side of the discharge to help quantify the impacts of wet weather on the Cascade sanitary system.

Another former CSO location within the Cascade system (CSO 005) is located at the end of Harrison Street. This outfall was separated in the initial stages of Cascade separation, but both storm and sanitary flows are discharged into a common collection system that is ultimately handled by the Mississippi interceptor. The storm component is scheduled to be completely removed from this system this fall. When the storm portion is removed, provisions for sanitary overflows will be put into place and meters will be installed to track the presence and volume of Sanitary Sewer Overflows (SSO's).



Integrated Planning

The City is in the process of developing framework for an integrated plan. Over the past year the city has received technical assistance from the Environmental Protection Agency (EPA). More information about the nature of the technical assistance program can be found here https://www.epa.gov/npdes/integrated-planning-municipal-stormwater-and-wastewater. Expected outcomes from this effort include:

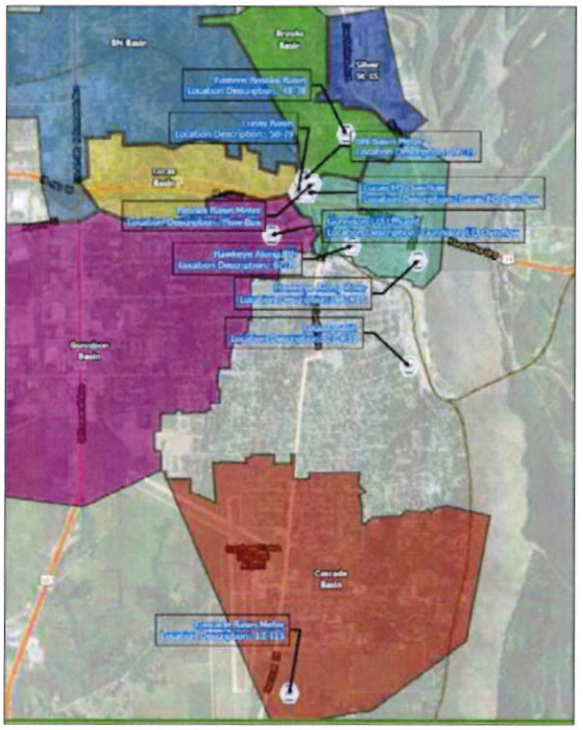
- Development of strategies and goals for implementing, tracking, and maintaining storm water/green practices.
- A draft integrated plan with guidance on how to complete and implement a finalized integrated plan, tailored to the City of Burlington's needs.

Greening America's Communities

Greening America's Communities is a program of Environmental Protection Agency's Office of Sustainable Communities to help communities develop an innovative and implementable vision of distinctive, environmentally friendly neighborhoods that incorporate innovative green infrastructure systems. As part of the program, the City has hosted several public information sessions presenting various green design concepts. As a result the City plans to implement several green infrastructure elements in future infrastructure repairs in the near future.

Flow Monitoring

To better understand the effectiveness of our separation efforts the city has purchased 10 non-contact flow meters. These meters have been placed in various locations in town to better understand our system as well as the effectiveness of past and future separation efforts. Initially, meters have been placed at locations shown in the image below. These meters will be relocated once a sufficient amount of data has been gathered so other key elements of our collection system can be analyzed.



If you would like additional detail on any of the information provided in this letter, please let me know and I would be happy to provide it. I will continue to send updates as specified in the consent order, along with status updates during major milestones within the separation overall effort.

Sincerely,

Jesse Howe, P.E.
City Engineer

cc: Jim Ferneau – City Manager
Nick MacGregor - Public Works Director
Terry Jones
Jeff Thomann
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