

EXECUTIVE SUMMARY

On behalf of the City of Bowling Green, we have prepared this updated Combined Sewer System Long-Term Control Plan (LTCP). This LTCP addresses state and federal regulations, and the City's NPDES permit requirements. The objective was to evaluate and justify efficient and cost-effective alternatives for complying with Ohio EPA's CSO Strategy. An extension of this plan submittal was granted until January 5, 2007.

The Bowling Green Wastewater Treatment Plant (WWTP) was built in 1982. And, has since, undergone several expansions. The most recent upgrade and expansion was completed in May 2005. These improvements resulted in increased discharge allowance of the NPDES Permit and re-rating of the City design capacity to treat an average daily flow of 10.0 MGD, and an expansion in 2005 that increased rated peak hydraulic capacity to more than 20.0 MGD. The objective of these expansions is to maximize flows through the WWTP to limit CSO discharge events, and thereby improve water quality. The City currently operates its system to fully utilize its capabilities.

Seven (7) sewer collection alternatives were developed and analyzed for the LTCP. Alternative 1 and 1A considered the construction of new separated sanitary sewer systems. The next two alternatives were options required by Ohio EPA: Alternative 2 utilizes the existing Storm Water Overflow Holding Basin (SWOHB) for primary settling followed by disinfection, and Alternative No. 3 utilizes the SWOHB for primary settling followed by a physical-chemical treatment with disinfection. Alternative 4 and 4A considered the construction of an additional retention basin to be used in conjunction with the SWOHB. And, Alternative 5, suggested by the Ohio EPA, evaluates an option that would allow for 7 to 10 overflows. This option already exists with the utilization of the current SWOHB and WWTP capabilities.

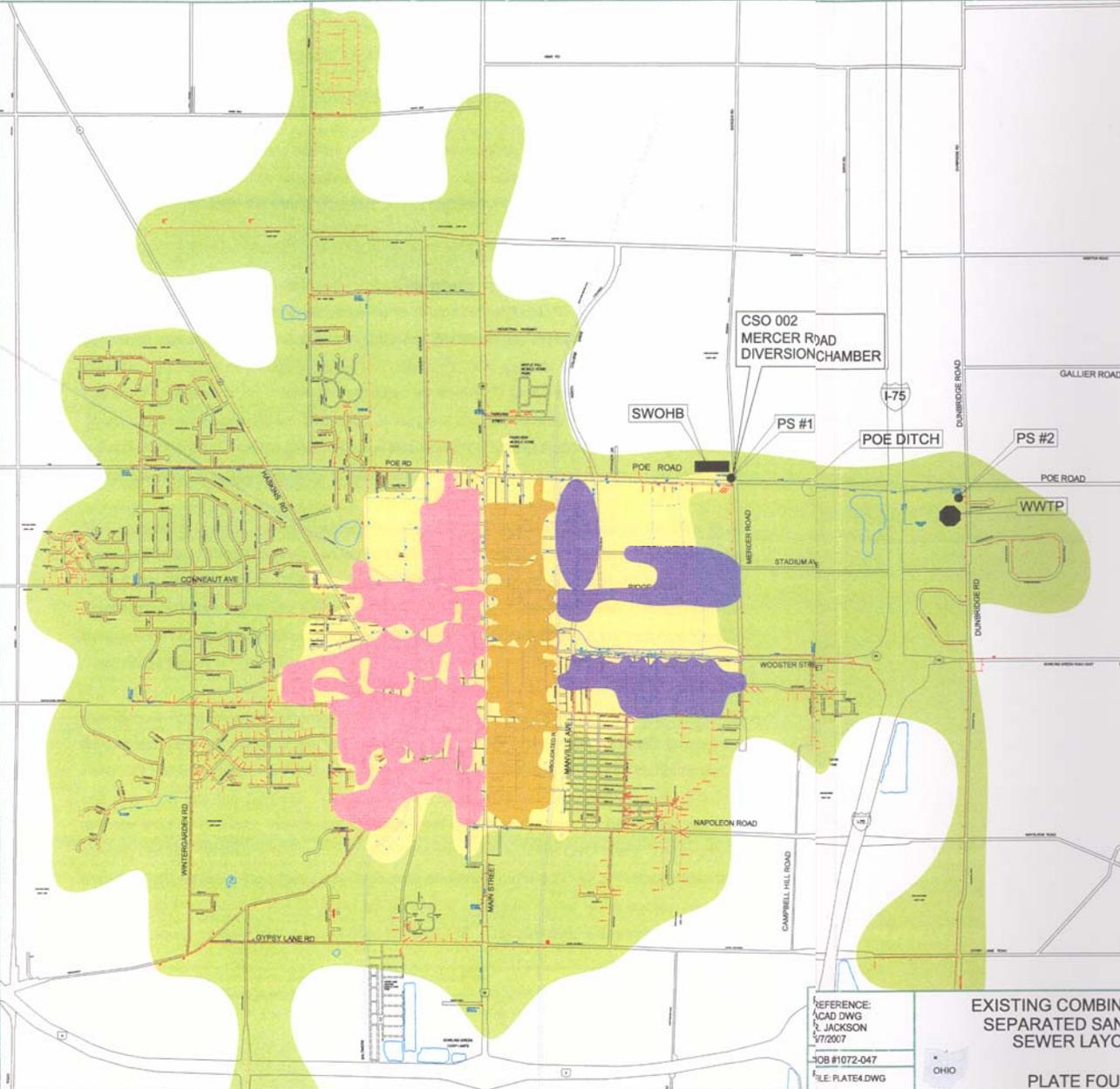
Bowling Green's Combined Sewer System presently captures more than 85% of the annual average wet weather flows while approaching a second control plan criteria of less than four (4) overflow events per year. The City believes that if additional reduction is required from its present 7-10 events per year, then the most effective, recommended alternative is Alternative No. 4A.

Because the City has only one CSO and it stores the first flush volume of any event prior to any discharge, which results in only 7 to 10 discharges per year (all of which are at high stream flow), the resulting impact of the CSO discharge to the stream has a minimal impact on water quality.

Alternative 4A, which is the treatment option of using the existing SWOHB as a retention basin followed by two (2) additional 5 MG aboveground steel storage tanks at the WWTP, is the recommended alternative and could be completed in five (5) years once the LTCP is approved.. This alternative also includes a new 20 MGD pumping station and a parallel 30" force main to convey storm event volumes to the WWTP storage tanks.

TABLE 15
 PROPOSED SCHEDULE OF EVENTS
 ALTERNATIVE NO. 2

No.	Task	No. of Months After Approval of Long-Term Control Plan by Ohio EPA
1	Prepare and submit appropriate funding applications to complete the project	6
2	Upon receiving affordable planning and construction funding, begin design of the proposed improvements	12
3	Complete funding applications along with engineering design and submit to funding agencies and to Ohio EPA for review and approval	24
4	Receive funding agency's and Ohio EPA's approval for construction	30
5	Start construction of Alternative No. 2	36
6	Complete construction of Alternative No. 2	60



- SEPARATED SANITARY SEWERS
- COMBINED SEWERS

**COMBINED SEWER SYSTEM
SUBDISTRICTS**

- UNIVERSITY DISTRICT
- ENTERPRISE/SUMMIT DISTRICT
- GROVE STREET DISTRICT

- PS #1 = MAIN PUMP STATION POE/
MERCER RD LIFT STATION
- PS #2 = DUNBRIDGE ROAD LIFT STATION
- SWOHB = STORM WATER OVERFLOW
HOLDING BASIN
- WWTP = WASTEWATER TREATMENT PLANT

REFERENCE:
ACAD DWG
R. JACKSON
3/17/2007
JOB #1072-047
FILE: PLATE4.DWG

**EXISTING COMBINED AND
SEPARATED SANITARY
SEWER LAYOUT**

OHIO

PLATE FOUR

**CITY OF BOWLING GREEN
LONG-TERM CONTROL PLAN**

