

EXECUTIVE SUMMARY

The CSO Long Term Control Plan (LTCP) has been developed to assist the Ohio Environmental protection Agency (OEPA) to understand the approach used to capture over 85% of the annual CSO pollutant loading while meeting the future Wastewater needs of the approved Newton Falls 201 Facility Planning Area.

The recommended Long Term Control Plan has undergone several modifications in response to requirements by the Ohio Environmental Protection Agency (Ohio EPA). The original recommended plan, identified as Alternative A and as described in Section 4 is no longer current. Requirements identified by the Ohio EPA to limit CSO discharges to six per year resulted in updating the 2002 plan to add CSO storage of combined sewer overflows at three locations. The are: 225,000 gallons of storage at Pump Station #4, 250,000 gallons of storage at the Wastewater Treatment Plant; and, 150,000 gallons of storage at CSO #3 located near the intersection of West River Road and Church Street. The recommended plan in section 7 reflects these new requirements and should be considered as an amendment to the previously submitted plan.

A four-phase approach is recommended to achieve compliance with the USEPA Long Term Control regulations and OEPA Strategy. This two step solution to the problem is recommended; the first step is to reduce surface runoff entering into the combined sewer system by diverting this flow into the Mahoning River via the 17 identified projects in Phase 1 and 3. The affected basins are indicated in Figure ES-1.

Phase 2 outlines a plan to increase peak treatment capacity at the WWTP from 2.3 to 4.5 mgd and to construct a CSO storage facility in the system at Pump Station #4. Figure ES-2 and ES-3 illustrate a schematic view and a site plan view of the recommended improvements at the wastewater treatment plant. Figure ES-4 illustrates a plan view for CSO storage at the Pump Station #4 Site.

Phase 4 outlines a plan for the construction of another CSO storage facility located at CSO#3. Figure ES-5 illustrates a plan view for CSO storage at this site.

The expanded WWTP will also be designed to provide an increased level of treatment as compared to the existing plant. The completion of the LTCP will achieve the Presumptive Approach requirement of 85% capture of the combined sewer system overflows. The total investment by Newton Falls for all four phases is \$9,600,000 in 2003 dollars. All phases will be completed within 15 years of LTCP approval.

This report evaluates alternatives for rehabilitation/expansion of the existing facilities at the Newton Falls WWTP to satisfy the service area needs over a 20-year design period for its designated 201 planning area. Specifically, this report:

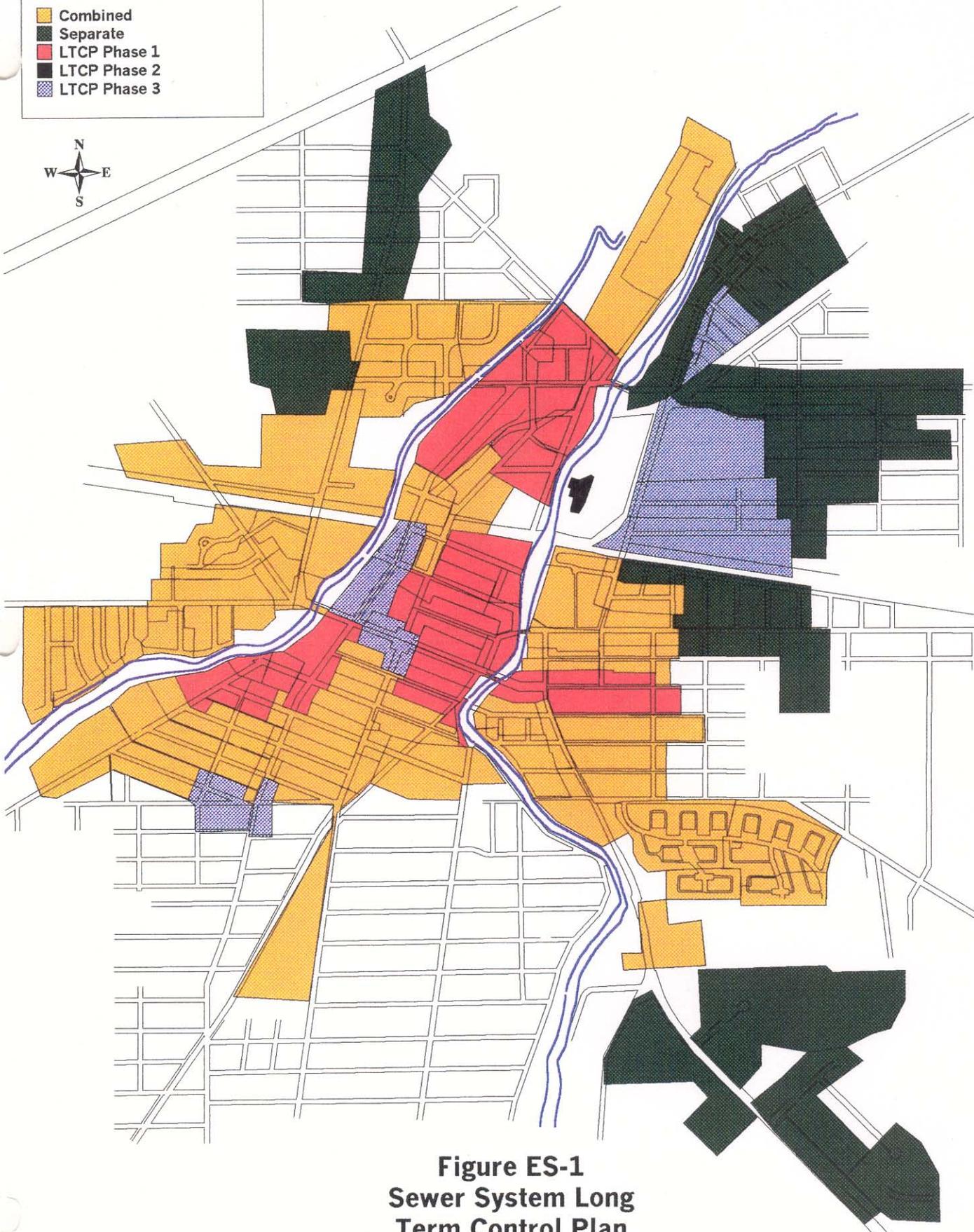
- Evaluates the existing facilities and current performance of the Newton Falls WWTP to identify process and hydraulic limitations.

- Develops and recommends an alternative for the expansion/upgrade of the WWTP. (See Figure ES-2)
- Determines the schedule, selects the funding mechanism and proposes sewer rate increases.
- Determines the collection system performance after completion of the sewer separation projects.

The quality of the treated effluent is expected to improve dramatically, combined sewer overflows will be reduced or eliminated, protecting and improving the quality of the receiving waters, improving the value of the East and West Branches of the Mahoning River as a resource, and minimizing or eliminating fines by the regulatory authorities.

Legend

-  Combined
-  Separate
-  LTCP Phase 1
-  LTCP Phase 2
-  LTCP Phase 3



**Figure ES-1
Sewer System Long
Term Control Plan**