

SECTION 3

RECOMMENDATIONS AND PRELIMINARY COST ESTIMATE

A preliminary cost estimate was developed for the various options presented in the preceding sections. Cost information was obtained from equipment manufacturers, as well as Wright-Pierce's experience on construction projects for municipally bid projects where applicable. The City's operations staff may be able to implement some of the modifications themselves through scheduled maintenance or routine capital improvements, which could result in some cost savings.

The most critical limitation of the existing CSO system is the inability to optimize the operation of the influent pumps. Fortunately, the costs to correct these limitations are relatively low, and accordingly are considered to be the highest priority for upgrading the CSO system. Similarly, the removal of the restriction caused by the Parshall flume would also be relatively low cost and may reduce the frequency of upstream CSO discharges. Both of these improvements are expected to offer the highest benefit/cost ratio, and are recommended for immediate implementation. All of these recommendations should be more fully developed in concept and scope by the City and Wright-Pierce before proceeding. Estimated construction costs associated with the implementation of each of the recommendations are shown below. Total project costs are shown in Table 3-1.

Recommended Modifications - Completion Date December 2011

... Install automatic sluice gate operators and level control system	\$25,000
... Remove existing Parshall flume	\$5,000
... Add level indicator at Rolling Dam Brook with auto CSO pump start	\$25,000
... Upgrade influent pump sheaves and motors and add VFDs	\$50,000
... Perform State Point Analysis	\$2,500
... Install locking covers on two manholes along Kennebec Interceptor	\$2,500
... Conduct flow monitoring program	<u>\$15,000</u>
Estimated Construction Total	\$125,000

Table 3-1

