

8.1 SELECTED ALTERNATIVE(S)

There is sufficient documentation available to justify the provision of public sewer service to the Refton Study Area and the Creekview Study Area. As detailed in Chapter 5, the most cost effective and environmentally sound structural alternative for the Refton Study Area is Alternative 1A. This alternative provides public sewers to the Refton Study Area. Wastewater from the Refton Study Area is proposed to be collected via low-pressure sewers and conveyed to the proposed recirculating sand filter (RSF) type treatment facility and drainage beds. The RSF type treatment facility utilizes a fixed-film process in series to achieve biological treatment of wastewater to meet nutrient discharge requirements. The effluent water from the treatment facility is discharged to in-ground drainage beds for final treatment and disposal. It is anticipated that approximately 95 properties would require a grinder pump and low pressure sewer lateral to connect to the proposed sanitary sewers. This alternative is environmentally sound, resulting in the abandonment of malfunctioning OLDS with secondary treatment and nutrient removal provided at the proposed treatment facility.

The implementation of the structural alternative serving the Refton Study Area shall be completed in accordance with the projected implementation schedule, assuming adequate public funding is secured, and will require an administrative organization that has the legal authority to incur indebtedness on behalf of the project, can guide the project to completion, and provide the necessary operation and maintenance to the project. If the Township deems it beneficial, an authority could be formed to administer, finance, and operate the municipal sewage facilities.

The structural alternative for the Creekview Study Area is contingent upon the inspection and evaluation of the existing sewer facilities prior to connection. This alternative is also environmentally sound, resulting in the abandonment of malfunctioning OLDS in the area.

The implementation of the structural alternative serving the Creekview Study Area shall be completed in accordance with the projected implementation schedule assuming that a favorable inter-municipal agreement with SBA can be negotiated. Without the favorable inter-municipal agreement this alternative is not feasible and will not be implemented.

The sanitary survey and well water sampling conducted as part of this Plan indicated the existence of OLDS and the presence of *E-coli* bacteria in well water samples taken throughout the Township; however, the greatest areas of concern is the Refton Study Area and the Creekview Study Area due to not only malfunctioning OLDS and contaminated wells, but also by small lot sizes located in dense residential areas. Structural alternatives for the provision of public sewer service to the Refton Study Area and the Creekview Study Area were presented in Chapter 5 of this Plan. The structural alternatives for the S.R. 896 DGA are to be considered as needed for correcting malfunctioning OLDS and/or for accommodating projected commercial and residential development in conformity with the Strasburg Region Comprehensive Plan.

The Township shall continue to enforce its existing On-lot Management Ordinance as a method to prevent malfunction of on-lot systems and degradation of drinking water supplies in the remaining unsewered portions of the Township. For continued implementation of the Township's On-lot Management Ordinance, it is recommended that the Township consider amending the ordinance to include OLDS maintenance districts to establish a pumping and inspection schedule to assure the long-term operation of the existing and proposed on-lot disposal systems in the Township and to preserve the water quality of the private wells. It is suggested that the Township be divided into three (3) districts, designated as OLDS Management District 1, 2, and 3 as presented in Chapter 5 of this Plan. By dividing the Township into districts, the Township's certified SEO will have a more manageable number of systems to inspect on an annual rotating basis. The Township may

consider amending the current On-lot Management Ordinance after adoption of this Plan.

8.2 CAPITAL FINANCING PLAN FOR SELECTED STRUCTURAL ALTERNATIVE(S)

The estimated project cost of the recommended structural alternative for the Refton Study Area (Alternative 1A) is approximately \$2,827,600.00. The estimated project cost for the Creekview Study Area is to be determined based on the inspection and evaluation of the existing sewer facilities, as previously discussed. To implement these structural alternatives while maintaining a reasonable user rate, a financing plan consisting of the payment of tapping fees from new connections, grant money, and a low interest (PENNVEST, R.U.S., etc.) loan or any combination is necessary. Prior to preliminary design a detailed financial and funding analysis should be undertaken that examines all funding and financing options available. Funding scenarios studied should include (1) the use of grant monies to offset the capital costs of the project; (2) the ability to combine debt service and operation and maintenance costs into a reasonable rate structure, and (3) combinations of funding options.

8.3 PROJECT IMPLEMENTATION SCHEDULE

Strasburg Township does not currently have sufficient staffing and resources to implement the selected structural alternatives. The Township will need to explore options for future operation of sewer facilities such as forming a sewer authority, pursue the formation of a joint sewer authority with SBA, or hiring additional staff or contracting operators, prior to implementing any structural alternative.

The implementation of the selected structural alternative for the Refton Study Area shall be within 5 years from the date of DEP approval of this Plan. The Creekview Study Area warrants designation as a future (10 year) sewer service area. Therefore, implementation of the selected alternative for the Creekview Study Area shall be within 10 years from the date of DEP approval of this Plan. The structural alternatives for the S.R. 896 DGA are to be considered as needed for correcting malfunctioning OLDS and/or for accommodating projected commercial and residential development.

The following activities shall be undertaken to ensure successful implementation of the selected alternatives within the specified timeframes:

Recommendation 1 – On-Lot Sewage Management Ordinance Amendment Schedule	
Year(s)	Activity
0 – 1	Amend On-Lot Sewage Management Ordinance to include three (3) OLDS Management Districts to establish a rotating pumping and inspection schedule.
1 to Date of Connection to Public Sewer	Continue to implement On-lot Sewage Management Ordinance

Recommendation 2 - Construction of Public Sewers for Selected Alternative – Refton Study Area	
Year(s)	Activity
0 – 2 ⁽¹⁾	Design, Permit, and Pursue Funding Opportunities for the Recommended Structural Alternative
2 – 4 ⁽¹⁾	Construct Refton Sewer System (Alternative 1A)
5 ⁽¹⁾	Refton Sewer System Fully Operational

Note 1: Only feasible if favorable funding can be secured. Without favorable funding, this alternative will not be implemented.

Recommendation 3 - Construction of Public Sewers for Selected Alternative – Creekview Study Area	
Year(s)	Activity
0 – 5 ⁽¹⁾	Inspection and Evaluation of the Existing Sewer Facilities; Negotiate Inter-municipal agreement with SBA
5 – 7 ^{(1),(2)}	Design, Permit, and Pursue Funding Opportunities for Construction of Facilities (as necessary)
7 – 9 ^{(1),(2)}	Connect Creekview Sewer System to SBA System
10 ^{(1),(2)}	Creekview Sewer System Fully Operational

Note 1: Only feasible if favorable inter-municipal agreement with SBA can be negotiated.

Note 2: The structural alternative for the Creekview Study Area is contingent upon the inspection and evaluation of the existing sewer facilities prior to connection.

Recommendation 4 – Mandatory Connection Ordinance Schedule	
Years (s)	Activity
0-1	Adopt Mandatory Connection Ordinance