Section 8
Summary of Recommendations

8.1 *Recommended Strategy*

This project was delayed initially due to the lack of suitable disposal sites that would meet the Town's goals and the Vermont Rules for Indirect Discharges. With recent changes in the Rules, it appears a project is now feasible. The project scope is now well defined in this study, summarized as follows:

- The need for water and sewer infrastructure is well documented. Independent studies have identified the lack of municipal sewer and water as the "greatest limiting factor to developing Irasville. These public utilities are necessary to develop the density needed for a viable Growth Center."

- The Town has prepared a detailed wastewater inventory of existing systems and determined that the existing permitted capacity per the Environmental Protection Rule Guidelines is approximately 100,000 gallons per day.

- An extensive search for disposal sites have been conducted over the previous five years. Due to the many limitations encountered with potential sites, whether related to engineering or hydrogeology, environmental concerns, or landowner unwillingness, the only practical disposal site with an area suitable for the Town's needs in the Munn site. The land is owned by the Town, hydrogeological work has been completed to initiate the permitting process for a discharge permit,

- There has been much debate over the past five years regarding the ultimate wastewater design capacity for the Town. The two community forums conducted in the spring of 2004 brought the Town decision-makers together to achieve consensus on a number of issues, including design capacity. Information distributed at the Forums is included in Appendix Q. A consensus was reached that the highest capacity available should be planned for, and the design documents should provide some flexibility to accommodate a lower design flow if the project costs are much higher than expected. In this respect, certain design components (such as the building) will be designed for the full buildout (70,000 or 87,000 gpd), while other components (such as the membrane package treatment units, septic tanks, disposal fields) will be designed so a portion of these items could be add or deduct alternates to accommodate the project budget; the overall design will accommodate these units at full buildout.

- Based on the recommended design capacity, the water quality concerns of nearby residents, and the reliability and sustainability of the treatment process, the membrane bioreactor process is the best practical alternative to the Town. The system is compact, effluent water quality of similar facilities is consistently well below the required discharge limitations that will be imposed on the Town, landowners in the immediate vicinity of the Munn site have embraced the project on

the condition of selecting this process, and the Town believes the added costs for the membrane system is worth the investment due to superior performance and reliability.

As this project enters the design phase, a number of additional tasks need to be completed:

1. The Town should perform a follow-up survey to all properties within the Service Area to identify the interest in connecting to the system and to help with the development of a connection policy. Written commitments should be obtained.

2. The Town should actively engage the property owners along the proposed easement routes for the collection system Alternative No. 3.

3. The Town should initiate the permitting process for the Indirect Discharge Permit for the Munn site. Phelps Engineering and Pioneer Environmental Associates will assist and engage the Agency of Natural Resources Wastewater Management Division in a discussion about the separation to groundwater at Munn, to potentially increase the design capacity to 87,000 gpd.

4. The Town should continue to search for additional grant funds to decrease the burden on connected users.

5. The Town should continue to develop the management program for the proposed wastewater system.

8.2 *Project Implementation Schedule*

Projects of this nature are very complex and can take many years to plan and implement. An implementation schedule depicting targeted completion dates for project milestones is presented in Table 8-1.

Table 8-1
Town of Waitsfield
Wastewater Facilities Plan
Implementation Schedule

Item	Targeted Completion Date
Begin Final Design Phase/Surveys	August 2004
Conduct Survey to Identify Landowners Interest in Connecting	September 2004
Basis of Design	September 2004
30% Complete with Final Design	November 2004
Public Informational Meeting	November 2004
Resolve Likely Project Funding	January 2005
Public Informational Meeting	February 2005
Bond Vote for Construction (60% complete with Final Design)	March 2005
Complete Final Design Phase	May 2005
Permit Approvals	August 2005
Bid Phase	September 2005
Construction Phase	October 2005 - November 2006