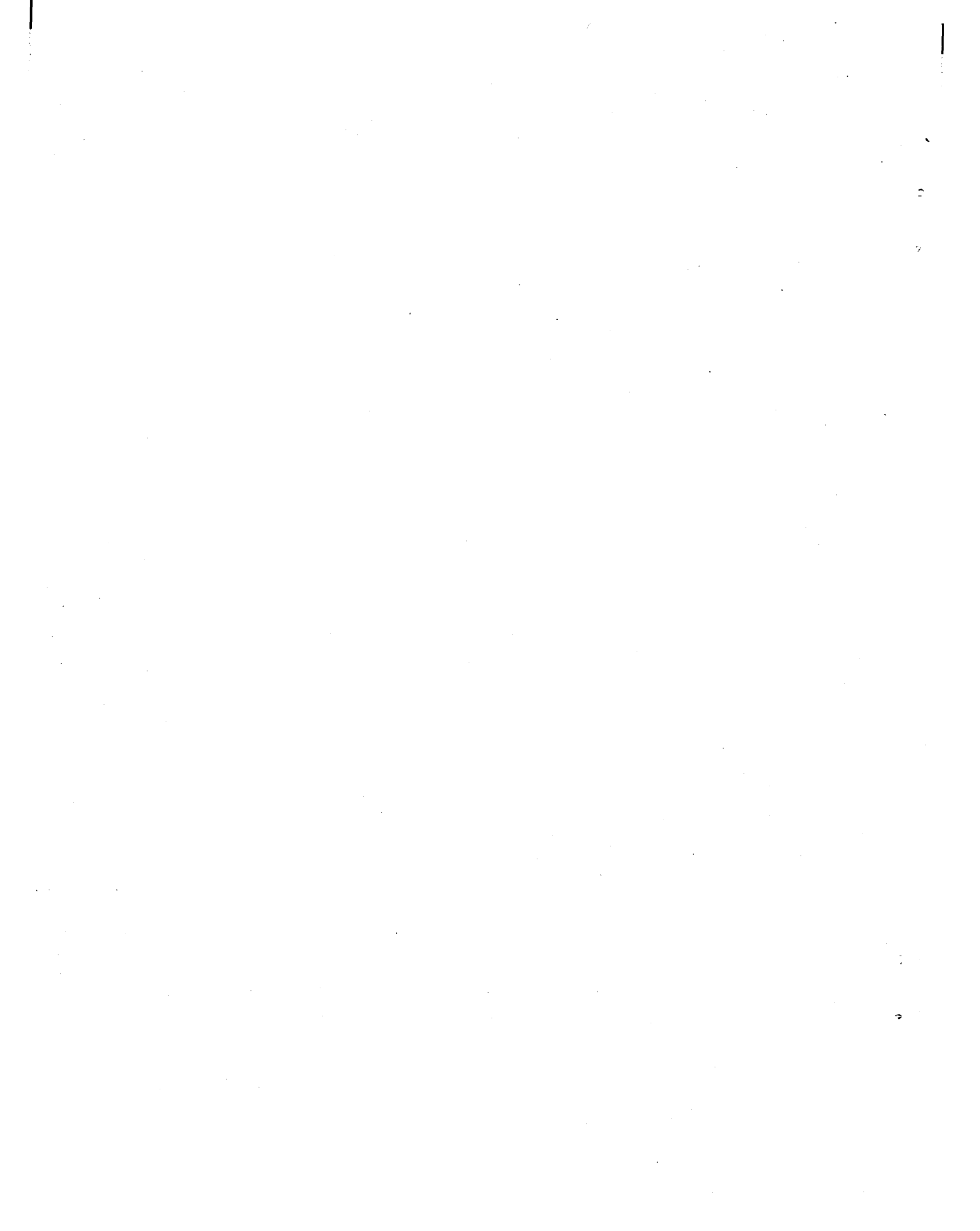


Appendix F

**The Role of Rural Electric Cooperatives
in Upgrading Facilities**



THE ROLE OF RURAL ELECTRIC COOPERATIVES IN UPGRADING FACILITIES

BACKGROUND

Rural electric cooperatives are private entities that build and manage extensive rural utility systems. These cooperatives have the capability to address a full range of technical, financial, administrative, and regulatory issues related to the supply and management of electrical power. A report titled, "COMMUNITY INVOLVEMENT - Opportunities in Water-Wastewater Services, The Final Report of the NRECA/CFC Joint Member Task Force on Rural Water and Wastewater Infrastructure, February 1995" (CI Report), produced jointly by the National Rural Electric Cooperative Association and the National Rural Utilities Cooperative Finance Corporation, sets forth a "blueprint for rural electric cooperatives which decide to enter the water-wastewater business voluntarily." In the Fiscal Year 1997 House Appropriations Committee report, the Committee acknowledged the significant interest of the cooperatives "to expand their current role of delivering electricity to the delivery to rural communities of clean water and safe drinking water improvement technologies as well." The Committee "is uncertain whether expansion into this new field is an appropriate means of upgrading rural drinking and wastewater facilities to meet federal requirements." EPA was asked to review this matter and report on its findings prior to the Committee's fiscal year 1998 budget hearings for EPA. This response examines whether cooperatives are an appropriate vehicle to manage, operate, maintain and upgrade drinking water and wastewater systems. It is included as an appendix to an overall response to Congress on decentralized wastewater treatment systems.

There are approximately 900 rural electric cooperatives in the United States. An estimated 80 to 90 of these cooperatives are involved in some aspect of drinking water or wastewater management with the overwhelming majority dealing with drinking water management. Only a few of the cooperatives own wastewater treatment facilities or are currently involved in wastewater management.

KEY ISSUES

To determine whether cooperatives are appropriate management entities for managing drinking water and wastewater systems, there are several key issues to consider:

1. Authority for ownership/management,
2. Managerial and technical ability,
3. Ability to obtain capital, and
4. Ability to ensure continued management and operation and maintenance (O&M).

These issues are examined below for the purpose of determining whether cooperatives are appropriate for upgrading drinking water and wastewater facilities to meet federal requirements.

1. Authority for Ownership/Management. The CI Report notes that most states - all but 13 - have laws that authorize cooperatives to own and operate drinking water and wastewater facilities. The CI Report notes "...some cooperatives have used innovative methods to gain entry to the drinking water and wastewater business. Cooperatives. . . may be eligible through other methods of organization."

In addition to state and local authority, in the wastewater area, cooperatives must have each individual owners' agreement to upgrade and/or operate and maintain their onsite wastewater systems. This generally happens when a large percentage of homeowners have failing onsite systems and have a need for upgraded treatment which they cannot meet themselves, and for which local government is incapable or unwilling to meet. The owners retain the services of a cooperative which would seek the capital needed for the system upgrade. The cooperative would be charged with the responsibility for operation and maintenance of the system and charge a monthly utility rate for this service and the cost of needed upgrades.

In cases where centralized wastewater collection and treatment systems or water distribution systems already exist, but fail to meet the federal statutory or regulatory requirements, the same situation occurs. If the facilities are inadequate, the system owner must invest in improvements. An organization, such as a cooperative or other private entity, may take ownership of the system and provide operation and maintenance. Issues associated with privatization of wastewater are discussed in a companion document entitled, "Response to Congress on Privatization of Wastewater Facilities".

One area related to wastewater where cooperatives are having success is where state or local health officials have ruled that conventional onsite wastewater systems will not work due to soil conditions. In these cases, developers are usually not familiar with alternative systems and welcome cooperatives to take ownership and/or manage the new upgraded systems that they are required to install. There are two driving forces that are bringing this about: 1) the need for some form of wastewater treatment other than conventional septic systems, and 2) the revenue generated by each new homeowner (customer) for electric power (estimated at about \$1,000 / yr / household).

A second area of success has been assistance and contract management to drinking water authorities, both public and private. The CI Report indicates that types of services currently provided include organizing, feasibility, bylaws, mapping, accounting and billing.

2. Managerial and Technical Ability. Cooperatives do not generally have the technical ability "in house" to conduct drinking water and wastewater feasibility studies and facility designs (with the exception of those which currently own or operate drinking water and/or wastewater facilities). However, they are well equipped with managerial capabilities and can

contract for these technical services. In addition, cooperative associations have contracted with several drinking water and wastewater research-oriented professionals who provide technical assistance, including demonstrations of technology, thus giving them access to technically competent people. At least one state cooperative association is already performing demonstrations of alternative technologies (in Pennsylvania, five onsite system projects will be demonstrated).

Rural electric cooperatives have historically dealt with issues relating to the use of electricity to enhance the lives of inhabitants of rural areas in the context of economic development. Conventional onsite systems (septic tank and leach field) typically do not involve the use of electricity, while centralized systems and alternative types of onsite systems generally rely upon electricity for pumping, power, lighting and other activities. Therefore, there could be a possible concern that rural electric cooperatives might be more comfortable with constructing or managing facilities which rely on electric power versus those that do not. This concern would need to be addressed if rural electric cooperatives are to play a more prominent role in the construction and/or management of decentralized treatment systems. It should be noted that the Federal Agriculture Improvement and Reform Act of 1996 (the Farm Bill) prohibits cooperatives from requiring those receiving drinking water and wastewater services to receive electric services.

3. Ability to Obtain Capital. In the CI Report (chapter 9), there is considerable discussion of the various possible funding scenarios. Federal funding, including loans, grants, and guarantee programs, for drinking water and wastewater programs is provided by the following federal departments and agencies:

- o USDA's Rural Utilities Service (RUS)
- o USDA's Rural Business and Cooperative Development Service (RBCDS)
- o USDA's Rural Housing and Community Development Service (RHCDS)
- o U.S. Department of Commerce's Economic Development Administration (EDA)
- o U.S. Department of Housing and Urban Development (HUD)
- o U.S. EPA

There are many opportunities for funding other than federal programs, including loans from local financial institutions. In addition, two other sources of funding are the National Rural Utilities Cooperative Finance Corporation (CFC), and National Bank for Cooperatives (CoBank). The cooperatives' managerial skills and equity provide support that other private or governmental organizations may not provide in rural areas. However, issues related to ownership and management of the facilities may limit where funds can be obtained. The CI Report provides six recommendations to Congress to strengthen the ability of cooperatives to obtain funding. These recommendations include: authorization for a re-lending program for system upgrades; funding for the Water-Wastewater Disposal Loan Guarantee program; removal

of the "no-credit-elsewhere" condition in the loan program; financing for feasibility studies; eligibility for cooperatives to receive funds under all federal programs; and support for rural electric infrastructure activities.

4. Ability to Ensure Continued Management and O&M. Chapter 8 of the CI Report provides a strong basis for the ways that cooperatives can assist in management and O&M. Cooperatives are more likely to provide better management and O&M than small public (town) or private entities (e.g. homeowners' associations) which cannot afford to staff up appropriately and typically run into political and financial conflicts. The ability to provide management, including O&M, could be the strongest and most valuable asset the cooperatives offer. The real problem in the wastewater area involves convincing the homeowners there is a need for management services, including O&M, of the onsite wastewater system starting from its initial installation.

CONCLUSIONS

In summary, drinking water and wastewater treatment facilities can be upgraded and managed by rural electric cooperatives, although 13 states would require enabling legislation for them to own and/or operate these facilities. Upgrades of drinking water and wastewater facilities by cooperatives could be a good solution in rural areas because cooperatives are non-political, known entities to the homeowners, that bring experienced management and staff to solve the O&M challenge, as well as options for obtaining capital. Also, the ability to provide management services, including O&M, can be the cooperatives' most valuable asset.

From the drinking water perspective, cooperatives offer great promise as management entities for small water systems which lack institutional strength. However, for many reasons, some stated above, it is unlikely that more cooperatives will make significant movements into the drinking water and wastewater business quickly. These reasons involve interest on the part of individual owners to pay for onsite system management, the technical ability of the cooperative to manage drinking water and wastewater facilities, limited experience with low energy onsite technologies, and the ability to obtain capital. Once these issues are resolved, the communities and cooperatives may be able to work together to efficiently provide the needed improvements and services.