

Case Study 4: Providing Water and/or Wastewater Services for Small Communities

Regional Water System B and Community 004

Issue: An Iowa community with a population of less than 100. The community qualifies as a low income community. There are 44 homes in the community which is unsewered. Several of the homes were tied into a central tile line that directly discharged into a creek. Regulatory authorities forced the city council to address this issue or face fines.

Solution: The community considered several options including installing onsite systems at each of the homes. This option was not considered feasible because of the constraints of the lot sizes. Other treatment options would require the city to hire a wastewater professional to manage the system. The low-income nature of the residents of the community presented specific challenges to do this.

Regional Water System B already provided water service to the community's residents through a 28E agreement. In addition, USDA-Rural Development indicated that a significant amount of grant money would be available if the community could come up with an environmentally acceptable solution for wastewater services.

The community agreed to enter into a 28E agreement with Regional Water System B to provide wastewater services. The system will be owned and managed by Regional Water System B. The system installed includes a septic tank at each home with an effluent gravity pipe that goes to a pump station. The pump station pumps the effluent to an aerated constructed wetland for treatment before discharging to the creek.

Benefits: The community was able to partner with Regional Water System B to create an environmentally sustainable, low cost option for providing wastewater services. The community has no responsibility for the cost of development or maintenance of the system. This partnership was able to provide sewer service to a low income community for about \$25 per month.