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WATER RESOURCES RESEARCH GRANT PROPOSAL

Synopsis

1. <u>Title</u>: Disseminating Information to Individual Water System Managers in Pennsylvania via Satellite

2. <u>Focus categories</u>: GW, WQL, WS

3. <u>Keywords</u>: Information Dissemination, Individual Water System Management, Water

Quality, Water Quality Management

4. <u>Duration</u>: 1 September 1998 - 30 August 1999

5. <u>Federal funds requested</u>: $15,800

6. <u>Non-Federal (matching) funds pledged</u>: $31,600

7. <u>Principal investigator</u>: William E. Sharpe, The Pennsylvania State University

8. <u>Congressional district</u>: 5

9. <u>Statement of critical regional or state water problems</u>:

Millions of rural homeowners rely on individual rather than community water systems for their drinking water. Surveys of individual water supplies in Pennsylvania and throughout the United States have repeatedly shown that these wells, springs, ponds, and cisterns often deliver unsafe or aesthetically unappealing water (Francis et al., 1982; Sharpe et al., 1985; 1993; Swistock et al., 1993). The high incidence of water quality problems in individual water systems is likely because they are not subject to the same construction and water quality standards that regulate community water systems. As a result, many individual water wells have never been tested and their owners are generally uninformed about necessary water tests or locations of water testing laboratories (Francis et al., 1982). These uninformed water system owners may eventually fall prey to scare tactics and gimmicks used by unethical vendors of water treatment equipment, water testing laboratories, or well drillers.

Information dissemination programs are needed to educate individual water system owners about the proper management of their water supplies. Traditional speaker-based programs have been used successfully in Pennsylvania over the past 13 years to educate individual water system owners. However, due to the size and fragmented nature of the target audience and funding limitations, these programs have been limited in their ability to reach a large proportion of the individual water system owners in Pennsylvania.

10. <u>Statement of results or benefits</u>:

The proposed satellite information dissemination program would educate individual water system owners throughout Pennsylvania on the proper management of their water supplies. Satellite broadcast of the traditional Safe Drinking Water Clinic program will allow the program to be delivered to a down-link site in each Pennsylvania county in one evening. Attendees will still be able to have personal interaction with the speakers using email or toll-free phone and fax connections to the Penn State broadcast location. All counties will also be able to tape the broadcast for subsequent distribution to clients with individual water supply questions. If the program response and evaluations in Pennsylvania are positive, a proposal will be submitted next year to expand the satellite broadcast to other states in the Northeast.

The overall benefit of the program will be to improve the quality of drinking water from individual water systems in Pennsylvania by educating the owners/managers of these systems on proper maintenance techniques. Individual water system owners will first learn the contaminants that are most likely to be present in their specific water supply based upon local land-use, symptoms of their water, and past survey results from their local area. They will also learn where and how often to get their water tested for these contaminants and how to determine if their well, spring, or cistern is properly constructed. If problems are revealed as a consequence of water testing, individual water system owners will know all of their options for correcting the problem, including pollution control, system maintenance, development of a new water source or water treatment. An emphasis will be placed on good water system record keeping so that water quality data, well construction logs, and water treatment equipment manuals are organized and stored in a safe and accessible location.