

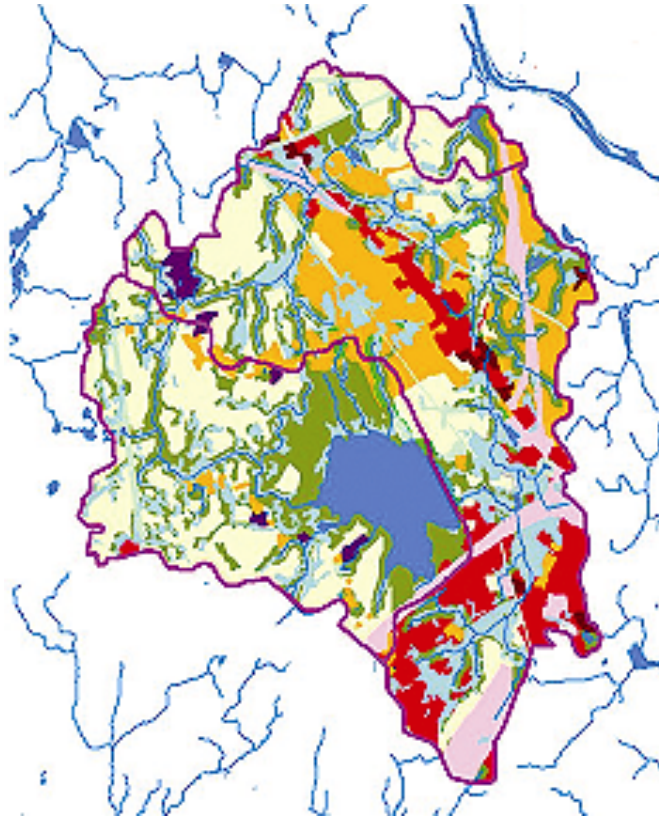


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# National Decentralized Water Resources Capacity Development Project

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## Executive Summary



## Wastewater Planning Handbook Mapping Onsite Treatment Needs, Pollution Risks, and Management Options Using GIS

University of Rhode Island Cooperative Extension  
Kingston, Rhode Island

February 2004

# **Wastewater Planning Handbook**

## **Mapping Onsite Treatment Needs, Pollution Risks, and Management Options Using GIS**

**Submitted by the  
University of Rhode Island  
Cooperative Extension  
Kingston, RI**

NDWRCDP Project Number: WU-HT-01-17

National Decentralized Water Resources Capacity Development Project  
(NDWRCDP) Research Project

Final Report, February 2004

## **DISCLAIMER**

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## CITATIONS

This report was prepared by

Lorraine Joubert, Patricia Hickey, Dorothy Q. Kellogg, and Art Gold  
University of Rhode Island Cooperative Extension  
Coastal Institute in Kingston  
Kingston, RI 02881

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***Principal Investigator***

Jay R. Turner, D.Sc., Washington University

***Project Coordinator***

Andrea L. Shephard, Ph.D.

***NDWRCDP Project Steering Committee:***

***Coalition for Alternative Wastewater Treatment***

Valerie I. Nelson, Ph.D.

***Consortium of Institutes for Decentralized Wastewater Treatment***

Ted L. Loudon, Ph.D., P.E.

***Electric Power Research Institute***

Raymond A. Ehrhard, P.E.

Tom E. Yeager, P.E.

***National Onsite Wastewater Recycling Association***

Jean Caudill, R.S.

***National Rural Electric Cooperative Association***

Steven P. Lindenberg

Scott Drake, P.E.

***Water Environment Research Foundation***

Jeff C. Moeller, P.E.

***Members-At-Large:***

James F. Kreissl

Richard J. Otis, Ph.D., P.E.


Jerry Stonebridge



## **ABSTRACT**

This handbook is designed as a guide to wastewater management planning for small communities using geographic information systems (GIS). The intent of this handbook is to present methods that will provide the tools needed to foster tangible outcomes, which will enable communities to take action to meet wastewater treatment needs while protecting local water resources. The methods are designed as screening level approaches that use tools and techniques such as water quality risk indicators, hot spot mapping, and water resources vulnerability assessment. Local planning objectives, public participation, and available data on local resources provide the basis for conducting a wastewater needs assessment and successfully implementing a community wastewater management program. These methods are based on a decade of experience working with local communities through the University of Rhode Island Cooperative Extension Water Quality Program. Case studies of how communities in Rhode Island have used this needs assessment method to overcome onsite wastewater treatment problems are included.

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