OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Special Report

Congressional Request Regarding EPA Grants to the National Rural Water Association

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At a Glance

Catalyst for Improving the Environment

Why We Did This Review

In response to a congressional request, the Office of Inspector General examined the execution of Environmental Protection Agency (EPA) grants awarded to the National Rural Water Association (NRWA). To address the request, we sought to answer four specific questions.

Background

The NRWA is a non-profit organization that provides technical assistance, training, and legislative representation to water providers serving rural communities. NRWA is a federation consisting of 48 State associations representing 49 States. Since October 2000, NRWA has received over \$70 million from EPA to provide training and technical assistance to rural water systems.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link: www.epa.gov/oig/reports/2006/20060530-2006-S-00003.pdf

Congressional Request Regarding EPA Grants to the National Rural Water Association

What We Found

We found the following regarding the four questions we sought to answer:

What environmental benefits result from the EPA grants to NRWA?

Under its grants, NRWA is not required to measure the environmental outcomes of the technical assistance activities it provides. As a result, the environmental benefits could not be determined. EPA grants awarded to NRWA, after January 1, 2005, include outputs but do not link the outputs to environmental outcomes and measures.

What improvements can be made in NRWA's administration of the program?

NRWA's administration of the grants can be improved to more effectively meet the needs of rural water systems. The number of organizations eligible to perform work for NRWA can be expanded to include non-member organizations. Rather than distributing funds equally to all States, NRWA could take into consideration the individual needs of rural water systems in each State in determining funding and the required activities and outputs.

Are there other options for awarding some rural water assistance funds?

Rather than earmarking funds for NRWA, Congress has other options for ensuring rural water systems receive needed assistance. Congress could require EPA to award the grants through a competitive process. Congress could incorporate into the appropriation language requiring NRWA to award funds to technical assistance providers based on State needs. Another option would be to consolidate grants awarded to NRWA.

How does NRWA develop white papers and policy positions?

NRWA prepares white papers to address the challenges facing rural water systems. NRWA and its contractor determine the topics for the white papers. The State associations' participation is limited to the development of white paper and policy positions through their representatives on NRWA's board of directors. According to NRWA officials, non-Federal revenue (e.g., investments, member services, and other revenues) is used to finance the white papers.

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Introduction

Purpose

In response to a congressional request, the Office of Inspector General (OIG) examined the execution of grants the Environmental Protection Agency (EPA) awarded to the National Rural Water Association (NRWA). To address the request, we answered the following questions:

- What environmental benefits result from the EPA grants to NRWA?
- What improvements can be made in NRWA's administration of the program?
- Are there other options for awarding some rural water assistance funds?
- How does NRWA develop white papers and policy positions?

Background

Approximately 272 million people receive their drinking water from nearly 53,000 community water systems. These systems range from very small, serving populations of 500 or less, to very large, serving over 100,000. A prior EPA OIG report noted that although these systems share "...problems of aging infrastructure, underfunding, and meeting regulations, small systems have had great difficulty keeping up with the Safe Drinking Water Act regulations."

NRWA is a non-profit organization that provides technical assistance, training, and legislative representation to water providers serving rural communities. NRWA defines rural communities as water systems serving populations less than 10,000 people.² NRWA receives the majority of its funding from EPA and the United States Department of Agriculture (USDA). During the fiscal year ending February 28, 2005, \$37 million of NRWA's total revenues of \$43 million came from EPA (\$13.5 million) and USDA (\$23.5 million).

EPA awarded grants to NRWA based on Congressional earmarks. The Office of Management and Budget defines earmarks as funds for projects, activities, or institutions not requested by the executive branch, or add-ons to requested funds which Congress directs for specific activities. Congress specifically identified NRWA as the recipient for earmarks relating to the water security, technical assistance, and groundwater protection grants. The earmark for the source water protection grant did not specify NRWA as the recipient. NRWA, using EPA grant funding, issues subawards to State rural water associations to carry out the activities approved in

¹ EPA OIG Report No. 2003-P-00018, *Impact of EPA and State Drinking Water Capacity Development Efforts Uncertain*, issued September 30, 2003.

² EPA defines a water system serving a population of 3,300 to 10,000 as a medium system; 501 to 3,300 as a small system; and less than 500 as a very small system. For purposes of this report, rural systems refer to medium, small, and very small systems.

the grant work plans. During the period of October 1, 2000, through March 7, 2006, NRWA was awarded \$70 million in EPA earmarked grants. Currently, NRWA has three active EPA grants, with awards totaling \$20 million. NRWA also receives funds from USDA for technical assistance and rural water circuit rider technical assistance.

See Appendix A for further details on NRWA and the grants it receives.

Scope and Methodology

This assignment was not an audit in accordance with generally accepted government auditing standards. We did not complete this assignment with the intent of providing an independent assessment of the performance of a government organization or activity, as required by *Government Auditing Standards*, issued by the Comptroller General of the United States. We performed our field work between December 29, 2005, and March 7, 2006. We limited our assignment to EPA grants and amendments awarded after January 1, 2005. The report incorporates comments received from EPA Office of Water officials. See Appendix B for details on scope and methodology.

Results

What environmental benefits result from the EPA grants to NRWA?

Under its EPA grants, NRWA is not required to measure the environmental outcome of the technical assistance activities it provides. As a result, the environmental benefits could not be determined. EPA has developed a model of how technical assistance activities, such as those that NRWA performs, contribute to the long-term outcome of protecting human health. Although we believe State associations provide valuable services, without outcome measures, EPA is unable to measure the specific benefits of the more than \$7.6 million in grants awarded to NRWA since January 1, 2005.

As a result, We were unable to determine the environmental benefits of the grants to NRWA

It is EPA policy to ensure, to the maximum extent practicable, that outputs and outcomes are appropriately addressed in grant competitive funding announcements, work plans, and performance reports.³ The policy provides the following definitions for outcomes and outputs:

The term "outcome" means the result, effect or consequence that will occur from carrying out an environmental program or activity that is related to an environmental or programmatic goal or objective. Outcomes may be environmental, behavioral, health-related or programmatic in nature, must be quantitative, and may not necessarily be achievable within an assistance agreement funding period.

The term "output" means an environmental activity, effort, and/or associated work products related to an environmental goal or objective, that will be produced or provided over a period of time or by a specified date.... Outputs reflect the products and services provided by the recipient, but do not, by themselves, measure the programmatic or environmental results of an assistance agreement.

For the grants issued or amended since January 1, 2005, the work plans contained outputs, but NRWA did not state how the outputs would result in obtaining environmental outcomes. The proposed environmental outcomes and outputs for the grants are presented in Table 1. In the case of the wellhead and source water protection grants, the stated outcomes are similar, and are not quantitative.

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³ EPA Order 5700.7, Environmental Results under EPA Assistance Agreements, effective January 1, 2005.

Table 1: Environmental Outcomes and Outputs In Grant Proposals

Grant No.	Environmental Outcome	Outputs	
X683236101 Wellhead Protection	During the course of this program the State associations will assist local communities in the development of wellhead protection plans that will include, but will not be not limited to, identification of possible sources of contaminants, improving water quality, and safeguarding water infrastructure.	Local contamination prevention activities will be implemented in 1,833 systems enhancing the level of public health through contamination prevention, greater public awareness, and environmental protection ownership at the local community level.	
X82384401 Source Water Protection	During the course of this program the NRWA will assist local communities in the development and implementation of source water protection plans that will include, at minimum, delineated protection areas, identification of possible sources of contaminants, initial implementation of management measures in each plan, and contingency planning to safeguard water infrastructure. As time and resources permit, the plans will supplement the State source water assessments and provide information that was unavailable to the State and provide followup implementation upon request.	Source Water Specialists will provide a minimum of 3,900 hours of on-site assistance nation-wide during 2006 in the facilitation of planning teams and development and implementation of plans, including followup assistance on plans completed during previous years.	

EPA Office of Water developed a logic model to link inputs to long-term environmental outcomes for the Public Water System Supervision (PWSS) Program. According to Office of Water, NRWA is a partner organization within the PWSS Program. The logic model is a way of graphically displaying a program's resources, activities, outputs, and outcomes. The logic model spells out in reasonable detail all the things a program does and what can be accomplished, and tells the story in a linear, graphic way. Figure 1 is a portion of the logic model that shows how NRWA's activities contribute to the goal of protecting human health through safe drinking water.

Short- and Long-Term Activities Inputs Outputs Medium-Term Outcomes Outcomes 02. A2. Primacy agencies Technical PWS improves and PWS trained assistance for knowledge of and assisted in primacy agencies managerial and building and Public Water financial capacity managerial and Partner System (PWS) building financial capacity Organizations (NRWA) A3 03 Primacy agency Training for Primacy agencies and PWS improve primacy agencies and PWS trained knowledge of and PWS and assisted in PWSS program learning PWSS requirements program (includes technical requirements capacity) (includes technical capacity) PWS remains in compliance, or takes corrective action to return to compliance with, rule requirements (includes monitoring/ reporting and public notification) PWS maintains adequate 1.2 Human health protected via safe technical, financial water from PWS and managerial capacity to provide safe drinking water

Figure 1: Logic Model for NRWA Activities

In a prior report, we noted that EPA's current drinking water program performance measures focus on program activities rather than long-term outcomes. ⁴ In response to the report, the Office of Water issued final guidance on source water protection measures, and is developing measures for capacity development activities. The capacity development measures are expected to be completed in December 2006. In addition, Office of Water officials stated that outcome measures would be addressed in the new strategic plan scheduled for final issuance in the fall of 2006. The Office of Water will develop methods to measure outputs and outcomes at a nationwide, programmatic level and not for individual grantees. However, to comply with EPA

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⁴ EPA OIG Report No. 2005-P-00021, *Progress Report on Drinking Water Protection Efforts*, issued August 22, 2005.

policy, the Office of Water will need to describe the linkage between the intended outputs under the grants to environmental outcomes and measures.

Even though EPA has not developed measures, States are making progress in measuring the impact of capacity development activities. For example, the Pennsylvania Department of Environmental Protection is using both quantitative and qualitative methods to track changes in water system capacity over time.

While the impact of the NRWA grants have not been measured, we believe that State rural water associations play an important role in helping rural water systems comply with drinking water standards, and thus there are positive outcomes. An OIG evaluation of challenges facing small drinking water systems found that third party organizations, such as State rural water associations, play a key role in assisting these systems.⁵ Discussions with State primacy agencies also highlighted the benefits of the rural water associations. For example:

- The Florida Department of Environmental Protection considers the Florida Rural Water Association a part of its training program, and indicated that the association has contributed to an increase in compliance rates.
- The Indiana Department of Environmental Management believes that the Alliance of Indiana Rural Water is a key to the success of communities developing protection plans.
- The Georgia Department of Natural Resources uses the Georgia Rural Water Association as a tool to help bring non-complying systems back into compliance.

What improvements can be made in NRWA's administration of the program?

NRWA's administration of the grants can be improved to more effectively meet the needs of rural water systems. The number of organizations eligible to perform work for NRWA can be expanded to include non-member organizations. Rather than distributing funds equally to all States, NRWA could take into consideration the individual needs of rural water systems in each State in determining funding and the required activities and outputs.

Expand Number of Eligible Subrecipients. NRWA could expand the number of organizations that are eligible to be subrecipients under the grants. Currently, NRWA only provides Federal funding to rural water associations that are dues paying members of NRWA. The membership fee structure consists of two parts – a base fee of \$2,300, and an additional \$300 fee per each Federal grant. A State association conducting activities under all three grants would have \$900 added to the base membership fee. However, other organizations provide training and technical assistance to small and rural water associations that are not members of NRWA. For example, two rural water associations in Indiana – one a member of NRWA and the other not – both provide training to rural water systems. State primacy agencies have used other non-profit

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⁵ EPA OIG Report No. 2005-P-00021, *Progress Report on Drinking Water Protection Efforts*, issued August 22, 2005.

organizations, along with State rural water associations, to provide technical assistance to rural water systems.

Change Funding Method. Even though the number and needs of rural water systems in each State vary, NRWA distributes funds equally to all States. The State association distribution process begins with NRWA determining its expenses to manage the grant program for the year. The remaining available grant funds are divided equally among the State associations conducting activities under the grant, with the exception of Alaska (which receives extra funds due to the additional costs of operating in Alaska). For example, all 48 State associations participate in the technical assistance and training grant program, and each association in the continental United States receives \$96,332. NRWA officials said the equal distribution of funds is due to their inability to determine a distribution method that its board of directors will approve. Nonetheless, NRWA's equal distribution method does not consider the differences among its 48 State associations. We believe NRWA can distribute funds to State associations based on need, such as by the number of rural water systems. Officials for seven associations reviewed noted significant variations in the number of water systems for which they provide training and technical assistance, yet they received the same amount of funding (see Figure 2).

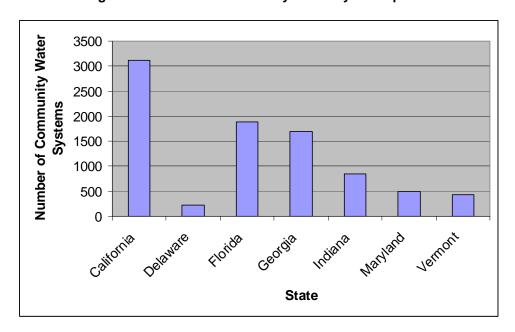


Figure 2: Number of Community Water Systems per State

The equal distribution of funds limits the effectiveness of the State associations in meeting the needs of the local water systems, particularly the States with a large number of associations. For example, California Rural Water Association officials, with 3,123 systems, said that they could double the amount of training and still have room for growth, while the Delaware Rural Water Association, with only 226 systems, is able to annually visit a majority of its systems.

Allow Workplan Flexibility. NRWA could consider the needs of individual States when developing the activity requirements for State associations. NRWA specifies the terms of the subawards without negotiation or input from the State associations on the activities to be

conducted under each EPA program; if a State association wants to receive Federal funding, it must accept NRWA's terms. All of the participating State associations have the same terms and activity requirements. The *NRWA Performance Procedures Manual* details the activities to be conducted and how to conduct them; there are three manuals, one for each EPA-funded program. For example, the manual for the technical assistance and training program states each association is required to complete an annual assistance plan with 280 hours of training and technical assistance (a minimum of 80 hours of formal classroom training with the balance being a combination of classroom training or technical on-site assistance). The manual states the assistance plan is to be "...developed to address the state's unique on-site technical assistance and training needs for rural and small water systems." However, the uniform terms and activity requirements do not take the State's unique needs into consideration.

NRWA also limits who within the State rural association can work on the EPA program. The manual for both the wellhead and source water protection programs states "...staff paid with Federal funds cannot perform work under other grants." Both the wellhead and source water protection plans include wellhead sources of water and refer to the same EPA wellhead protection publication as a source for activities to be conducted. Specialists for both programs appear to need the same skills related to wellhead water issues. Since skills and activities overlap between the grants, limiting staff to working on only one grant limits the State associations' flexibility and effective use of resources.

Are there other options for awarding some rural water assistance funds?

Other organizations besides NRWA and its State associations could provide assistance to rural water systems. All of the State primacy agencies contacted have provided technical services (e.g., training and operator certifications) to rural water systems through various funding mechanisms. EPA also awards funds to other non-profit organizations to provide technical assistance. Rather than earmark funds for NRWA, there are other options to provide needed assistance to rural water systems. EPA could award the grants through a competitive process, require NRWA to award funds based on need of States, or consolidate grants to NRWA.

Use Competitive Award Process. Rather than using earmarks, Congress could allow EPA to award funds through a competitive process. Grants to NRWA currently are not competed because the funds are Congressional earmarks. NRWA is identified as the recipient for all grants except for the source water grants. Further, although NRWA is not specifically mentioned for the source water grant, the recipient is described in an appropriation bill as "...an organization now engaged in ground water and wellhead protection programs," and based on that description EPA awarded the source water grant to NRWA without competition. A competitive process would enable EPA to award grants to other entities, including State primacy agencies, State rural water associations, or other organizations that have the ability to provide technical assistance to rural water programs. Awarding grants directly to these organizations would allow more flexibility and input to meet the needs of the local rural communities.

Award Based on Need. Another option would be to award funds based on specific needs of each individual State. Congress could incorporate into the appropriation language a requirement that NRWA distribute funds based on methods used on various other Office of Water grant programs. One of the methods consists of a base and scale amount, with each State receiving a base amount (usually 1 percent of the grant amount). The remaining funds are distributed using a variety of factors, including needs surveys, number of water systems, and number of operators.

Consolidate Programs. A final option would be to consolidate the wellhead and source protection programs, since the activities for the two programs may overlap. The main purpose of both programs is to provide technical assistance to rural and small communities in the formation of protection plans. The wellhead program focuses on groundwater sources of water while the source water program focuses on ground and surface sources. Both the wellhead and source water procedures manual refer to EPA's *Wellhead Protection: A Guide for Small Communities* as a source of activities that may be conducted. Specialists for both programs appear to need the same skills related to wellhead water issues.

How does NRWA develop white papers and policy positions?

To address the challenges facing small and rural water systems, NRWA prepares concepts, or white papers, to examine issues of affordability, balancing benefits and costs, conservation in regulations, and a variety of other standards and concerns. NRWA, along with its contractor, determine the topics for the white papers. When necessary, the contractor finds the experts to conduct the actual research and writing. The State associations' participation is limited to the development of the white papers and policy positions through its representatives on NRWA's board of directors. It is up to the State association's representative on NRWA's board to involve its respective State associations in the white paper and policy position process. NRWA and State association officials have said the State associations have no direct role in the topic selection, research, and writing of white papers. NRWA officials stated non-Federal revenue (e.g., investments, asset management program, member services, and other revenues) finances the white papers.

Additional Details on NRWA

NRWA began as a group of eight States in 1976 to "...improve the quality of life in rural areas and in small communities." NRWA has evolved into a non-profit federation consisting of 48 State associations representing 49 States. The State associations have water and wastewater system members in excess of 24,550. NRWA also has programs in developing countries. NRWA is the sponsoring organization for the International Rural Water Association, which shares the same location and phone number with NRWA in Duncan, Oklahoma.

NRWA has a board of directors that meets twice a year for the purpose of "...determining direction and positions of the associations." The board is made up of elected representatives from each of the member State associations. The State association representatives come from local rural systems. Idaho is currently the only State association that does not have representation on the NRWA board of directors.

As of March 7, 2006, NRWA had three active EPA grants, as detailed in Table 2. The purpose of these grants is for wellhead protection, source water protection, and technical assistance and training.

Table 2: Summary of Active EPA Grants

Grant No.	Project Period	Total Grant Budget	Total Amount Awarded	Purpose of Grant
X683236101	7/1/2005 to 6/30/2008	\$15,591,428	\$6,115,938	Facilitate the development and implementation of wellhead protection plans at the local community level.
X82384401	1/1/2006 to 12/31/2006	1,487,570	1,487,570	Facilitate the development and initial implementation of source water protection plans at the local community level.
T83169601	5/1/2004 to 4/30/2007	16,134,800	12,548,145	Nationwide technical assistance training program to assist rural water system personnel increase their knowledge and skills in the primary areas of drinking water implementation, capacity development and contamination prevention.
Totals		\$33,213,798	\$20,151,653	

The budgets for the current grants show the following breakdown (Table 3) of planned costs between NRWA internal costs and the amounts given to State rural water associations:

Table 3: Budget Breakdowns for NRWA Costs

Cost Element	Grant No. X683236101	Grant No. X83284401	Grant No. T83169601
NRWA Direct Costs	\$215,029	\$112,941	\$424,792
State Association Costs	\$5,568,427	\$1,290,427	\$11,515,823
NRWA Indirect Costs	\$331,482	\$84,202	\$607,530
Total Grant Amount	\$6,115,938	\$1,487,570	\$12,548,145
Percentage of State Association Costs to the Total Grant Amount	91.05%	86.75%	91.77%

NRWA also receives funding from the USDA-Rural Utilities Service. For the fiscal year ending February 28, 2005, NRWA received over \$23 million from the USDA-Rural Utilities Service. NRWA receives funding from the USDA-Rural Utilities Service for:

- Waste Water Technician: Technical assistance and training in the 48 contiguous States and a full-time water technician in Puerto Rico for wastewater systems serving populations less than 10,000.
- **Circuit Rider:** Technical assistance to rural development eligible systems in the areas of operation and maintenance, treatment compliance, construction, financial management, general management, and board training.
- **Source Water Protection:** Assistance in implementing source water protection plans within selected States.

Details on Scope and Methodology

As part of the assignment, we obtained an understanding of EPA's process for awarding and managing earmark grants awarded to NRWA. The understanding was obtained through an analysis of the laws, regulations, and guidance pertaining to grants awarded to the NRWA and an evaluation of internal controls over the grants. Internal controls include the processes for planning, organizing, directing, and controlling program operations. Internal controls also include the systems for measuring, reporting, and monitoring program performance. Our understanding of the internal controls was gained through the performance of the procedures outlined below.

The assignment scope was EPA grants and amendments awarded after January 1, 2005, with site visits to EPA Headquarters in Washington DC, and NRWA's office in Duncan, Oklahoma, and included the following steps:

- Review EPA OIG reports to obtain background on whether the Office of Water has developed program measures for small water systems.
- Review EPA grant and project files for grants awarded to NRWA after January 1, 2005, and determine what environmental outcomes are listed in the grant award.
- Interview EPA grant and program personnel to determine what the environmental outcomes or measures the grants to NRWA were intended to meet.
- Verify the process by which NRWA allocates funds to State Rural Water Associations.
- Interview EPA program officials, State primacy agencies, and State Rural Water Associations about how assistance is provided to rural water utilities.
- Interview NRWA officials and review NRWA documents.
- Interview water associations, such as the Association of Safe Drinking Water Administrators, to determine whether any studies of the problems facing small and rural water systems have been conducted and whether recommendations have been made as to how Federal, State, or local governments can alleviate the problems.

The assignment did not include a review of the USDA grants or verification of any financial data.