



U.S. ENVIRONMENTAL PROTECTION AGENCY

OFFICE OF INSPECTOR GENERAL



Protecting America's Waters

EPA's Voluntary WaterSense Program Demonstrated Success

Report No. 17-P-0352

August 1, 2017



Report Contributors:

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Abbreviations

EPA U.S. Environmental Protection Agency
GAO U.S. Government Accountability Office
OIG Office of Inspector General
PMIAA Program Management Improvement Accountability Act

Cover figure: Gallons of water that consumers saved over time through use of WaterSense-labeled products. (EPA OIG-created figure)

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At a Glance

Why We Did This Review

The Office of Inspector General of the U.S. Environmental Protection Agency (EPA) examined whether the accomplishments reported by the EPA's WaterSense program reflected actual results. We evaluated EPA controls to assess the accuracy of WaterSense product label claims of water and energy savings, verify industry data used to estimate program accomplishments, and test the veracity of the program's annual accomplishment estimates.

WaterSense partners manufacture, distribute and sell WaterSense-labeled products and promote water efficiency. These products include faucets, showerheads, toilets, urinals, pre-rinse spray valves, and irrigation controllers.

This report addresses the following EPA goals or cross-agency strategies:

- *Protecting America's waters.*
- *Working toward a sustainable future.*

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EPA's Voluntary WaterSense Program Demonstrated Success

What We Found

The EPA's WaterSense program demonstrated adequate controls for ensuring that its estimated water and energy savings were reasonable. The program established goals, measured performance, and established controls for reducing program risk.

However, the program lacked effective control over one performance measure: the number of partners working to improve water efficiency. The EPA can improve its tracking of this measure. The EPA also can improve program accountability by adopting its tracked water savings as an agency outcome measure.

The EPA launched WaterSense in 2006, in part, to ensure the performance of water-efficient products. The EPA estimated that through 2015, the use of WaterSense-labeled products saved 1.5 trillion gallons of water and reduced the amount of energy needed to heat, pump and treat water by 212 billion kilowatt hours. As a result, consumers saved an estimated \$32.6 billion. The EPA reported that more than 1,738 partners had joined the WaterSense program through 2015.

The EPA's voluntary WaterSense program adhered to good practices in program management, achieved significant returns on investment, documented its controls on water savings and product performance, and obtained broad partner and consumer support. The EPA could identify and disseminate the good management practices of the WaterSense program to support the 2016 Performance Management Improvement Accountability Act's requirement to enhance program management across the agency. In our opinion, the WaterSense program is a sound model for voluntary programs. With adjustments, the program will strengthen its potential for producing beneficial results.

The EPA estimated that consumers saved over 1.5 trillion gallons of water through use of WaterSense-labeled products. Consumers saved an estimated \$1,100 for every federal dollar spent on the program.

Recommendations and Planned Agency Actions

We recommend that the Assistant Administrator for Water share WaterSense program management practices, evaluate the appropriateness of adopting water savings as a program measure, implement controls for partners to periodically reconfirm their commitment to the program, and revise annual partner reporting. The agency agreed with all recommendations and provided acceptable corrective actions and completion dates. All recommendations are resolved.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

August 1, 2017

MEMORANDUM

SUBJECT: EPA's Voluntary WaterSense Program Demonstrated Success
Report No. 17-P-0352

FROM: Arthur A. Elkins Jr.

A handwritten signature in black ink, appearing to read "Arthur A. Elkins Jr.", is written over the printed name.

TO: Michael H. Shapiro, Acting Assistant Administrator
Office of Water

This is our report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). The project number for this evaluation was OPE-FY17-0001. This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with established audit resolution procedures.

In your response to our draft report, you agreed to all recommendations and provided acceptable corrective actions and completion dates. No response to this report is required. If you choose to respond, your response will be posted on the OIG's public website, along with our memorandum commenting on your response. Your response should be provided as an Adobe PDF file that complies with the accessibility requirements of Section 508 of the Rehabilitation Act of 1973, as amended. The final response should not contain data that you do not want to be released to the public; if your response contains such data, you should identify the data for redaction or removal along with corresponding justification.

We will post this report to our website at www.epa.gov/oig.

Table of Contents

Purpose	1
Background	1
EPA's WaterSense Program	1
Components of Internal Control	5
Federal Program Management	5
Responsible Office	5
Scope and Methodology	5
Results of Review	6
Program Accomplishments	6
Controls on Water and Energy Savings Are in Place	7
Control Over the Number of Program Partners Is Needed	10
WaterSense Program Is Well Designed and Managed	11
Conclusion	12
Recommendations	13
Agency Response and OIG Evaluation	13
Status of Recommendations and Potential Monetary Benefits	15

Appendices

A Agency Response to Draft Report and OIG Evaluation	16
B Distribution	21

Purpose

The Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA) examined whether the accomplishments reported by the EPA's WaterSense program reflected actual results. We evaluated EPA controls to assess the accuracy of WaterSense product label claims of water and energy savings, verify industry data used to estimate program accomplishments, and test the veracity of the program's annual accomplishment estimates.

Background

EPA's WaterSense Program

The EPA launched its WaterSense program in 2006 to raise awareness about water efficiency, ensure the performance of water-efficient products, and provide good consumer information. WaterSense is a partnership program designed to protect the nation's future water supply by, among other actions, promoting and enhancing the market for water-efficient products. WaterSense aims to help consumers and businesses use water resources more efficiently, and, in doing so, preserve water resources for future generations and reduce water and wastewater infrastructure costs by decreasing unnecessary water consumption.

Over the next decade, 80 percent of states are expected to suffer some type of water shortage under average water conditions, according to the information state water managers reported to the U.S. Government Accountability Office (GAO) in 2013.

Program Structure

Over the WaterSense program's first 10 years, the Office of Wastewater Management within the EPA's Office of Water operated the program. The program averaged seven full-time EPA employees, who worked to provide program direction and oversight, consumer outreach, partner support, maintenance of the WaterSense website, and development of specifications for WaterSense-labeled products. In addition, each EPA region had a part-time WaterSense coordinator, who provided public outreach and education, recruited partners, and worked with partners to promote the WaterSense program and water efficiency.

WaterSense Strategic Goals

- *Raise awareness about the importance of water efficiency.*
- *Develop product specifications for water-using products that improve their water efficiency and ensure product performance.*
- *Promote practices and services to reduce outdoor and commercial water use.*
- *Help consumers to differentiate among products and services that use less water.*
- *Support state and local water efficiency efforts.*



Examples of WaterSense program promotional material. (EPA photos)

The WaterSense program provided financial information that showed the EPA spent about \$33 million on the program since its launch in 2006.¹ As part of that total, the Office of Water provided approximately \$2 million a year for (1) a contract to provide program support, and (2) an interagency agreement with the U.S. Department of Energy’s Lawrence Berkeley National Laboratory to develop and maintain the water-savings model the EPA uses to estimate its accomplishments.

WaterSense-labeled products include faucets, showerheads, toilets, urinals, pre-rinse spray valves, and irrigation controllers. The program relies on partners to manufacture, distribute and sell products, and to promote WaterSense and water efficiency. Partner categories include manufacturers, retailers and builders, as well as promotional partners. Promotional partners include water utilities, governments and advocacy groups. Partners promote WaterSense products and water efficiency by coordinating activities like toilet-rebate programs, the “Shower Better” campaign, and educating consumers on fixing water leaks.

Third-Party Certification of WaterSense-Labeled Products

The WaterSense program labels products that generally use 20 percent less water and perform as well as, or better than, conventional product models. Third-party certification demonstrates that products with the label meet the WaterSense criteria. A manufacturer cannot put the WaterSense label on a product without a third-party certification. During the certification process, a manufacturer and the third-party certifying body test the product in accordance with specifications established by the EPA. The third party then certifies that the product and manufacturing processes meet the specifications and authorizes the manufacturer to use the WaterSense label on the certified product.

¹ The President’s fiscal year 2018 budget, released in May 2017, proposed to eliminate the WaterSense program. As of July 31, 2017, Congress had not passed appropriations for fiscal year 2018, and the continuity of the program remained uncertain.

Annual Reporting

The WaterSense program describes its results through three annual reporting mechanisms:

- (1) Partners report to the WaterSense program on product and promotional efforts for the year. Manufacturer partners report the quantities of WaterSense-labeled products and total products shipped, retailer and distributor partners report quantities sold, and all partners report on their water efficiency activities. The EPA depends on partner information to assess annually the impact of the WaterSense program.
- (2) The WaterSense program's annual report describes the program's accomplishments to the public. The program voluntarily issues this report that, among other accomplishments, estimates water and energy savings attributed to the WaterSense program.
- (3) The EPA annually reports to Congress and the public on its performance achievements. Since fiscal year 2016, the EPA has included the number of WaterSense partners as a performance measure.

Water-Savings Models

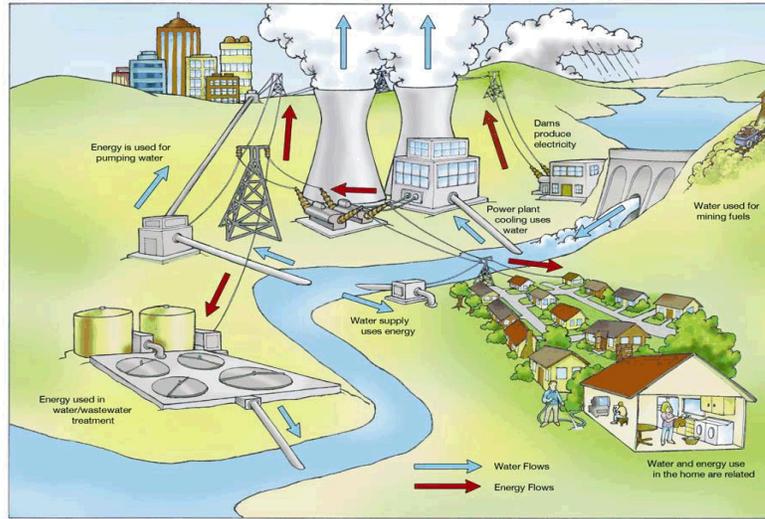
The EPA developed a set of models to estimate water savings attributable to the use of WaterSense-labeled products. These models examine water use for various sectors, including residential, commercial, institutional and outdoor uses. To determine the amount of water saved, the models compare two scenarios: (1) water used in the absence of the WaterSense program; and (2) water used with the program in place.

Each model includes various factors in calculating the total water used for each product type. For example, the residential model incorporates the marginal price of water, household size, household income, and product efficiency in the calculations of water consumption for household fixtures such as toilets. The EPA uses product shipping data reported by manufacturer partners as annual input into the model.

Energy and Monetary Savings

The EPA also estimates energy and monetary savings resulting from use of WaterSense products. Water and energy uses are interrelated (Figure 1). Pumping, treating and heating water for use, as well as treating wastewater for disposal, consume energy. As such, saving water results in saving energy. Saving water also saves money for consumers through reduced water, sewer, and energy bills. While WaterSense reports the energy savings associated with

Figure 1: Examples of interrelationships between water and energy uses



Source: U.S. Department of Energy.

all phases of water delivery, use and disposal, only the cost savings associated with the heating of water are included in the program’s monetary savings.

Authority for Program

The WaterSense program addresses the EPA’s strategic goal to protect America’s waters and the EPA’s cross-agency strategy to work toward a sustainable future. The EPA operates the program voluntarily using broad authorities provided by the Clean Water Act, and the Safe Drinking Water Act.² The Clean Water Act allows the EPA to conduct water-efficiency activities related to reducing pollution and decreasing the flow of sewage. The Safe Drinking Water Act allows the EPA to conduct water-efficiency activities related to providing a dependably safe supply of drinking water.

As recently as 2016, congressional proposals to provide the EPA with direct authority for the WaterSense program have been unsuccessful. In May 2017, a bipartisan group of U.S. Senators introduced legislation to authorize the program. As of July 31, 2017, this legislation remains pending and the agency continues to operate its WaterSense program voluntarily.

² Sections 104(a), (b), and (o) of the Clean Water Act; Sections 1442(a)(1) and (2) of the Safe Drinking Water Act. In particular, Section 104(o) of the Clean Water Act states that the EPA Administrator “shall conduct research and investigations on . . . methods of reducing the total flow of sewage, including, but not limited to, unnecessary water consumption in order to reduce the requirements for, and the costs of, sewage and waste treatment services.”

Components of Internal Control

Internal controls help federal managers achieve their program objectives by improving program efficiency and effectiveness, enhancing information and reporting, and ensuring compliance with applicable laws and regulations. An effective internal control system helps a program adapt to shifting environments, evolving demands, changing risks, and new priorities. The GAO's *Standards for Internal Controls in the Federal Government* specifies guidance for designing internal controls and putting those controls in place. The GAO guidance identifies five components of internal controls. These components apply to staff at all organizational levels and to each of the program's objectives.

GAO's Components of Internal Control

- Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring

Federal Program Management

Congress recognized the need for improved program management in federal agencies when it enacted the Program Management Improvement Accountability Act (PMIAA) in December 2016. The PMIAA requires that by December 2017, the federal Office of Management and Budget must establish standards and policies for executive agencies, consistent with widely accepted standards for program and project management planning and delivery.³

Under the PMIAA, each agency must designate a Program Management Improvement Officer to implement agency program management policies, and develop a strategy for enhancing the role of program managers within the agency. The role of the Program Management Improvement Officer, among other things, is to develop improved means for collecting and disseminating best practices and lessons learned to enhance program management across the agency.

Responsible Office

The responsible office for this report is the EPA's Office of Water. The Office of Wastewater Management within the Office of Water implements the WaterSense program.

Scope and Methodology

We conducted our work from October 2016 to May 2017. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain

³ The Project Management Institute's *The Standard for Program Management* (2013) is an example of widely used standards.

sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We reviewed applicable laws, policies, procedures and guidance. We collected and analyzed program documents. We interviewed the WaterSense program director and program staff at EPA headquarters, as well as in EPA Regions 1, 3 and 8. We also interviewed staff in the EPA's ENERGY STAR program, 14 WaterSense program partners, and another program stakeholder. We surveyed WaterSense coordinators in all 10 EPA regions.

We used GAO's standards of internal control in our assessment of the EPA's reporting of WaterSense program results. However, the scope of our evaluation did not include assessing the effectiveness of EPA controls.

Because the Office of Management and Budget has not yet issued the federal standards that the PMIAA required by December 2017, we used the private industry standards for program management found in the Project Management Institute's *The Standard for Program Management* in our assessment of the EPA's management of the WaterSense program.

Results of Review

The EPA's voluntary WaterSense program demonstrated success. Over the past 10 years, the program estimated substantial water and energy savings, and returns on investment. The program established adequate controls for ensuring that its saving estimates were reasonable. However, the program lacked effective control over one performance measure: the number of partners working to improve water efficiency. Therefore, the program may not accurately report the number of partners actively working to improve water use efficiency.

The program also displayed elements of a well-designed and managed program. In our opinion, the EPA's adherence to good practices resulted in consumer and industry confidence in WaterSense-labeled products, broad stakeholder support, and returns on investment. The EPA's WaterSense program demonstrated a sound model for voluntary programs. With adjustments, the program will strengthen its potential for producing beneficial results.

Program Accomplishments

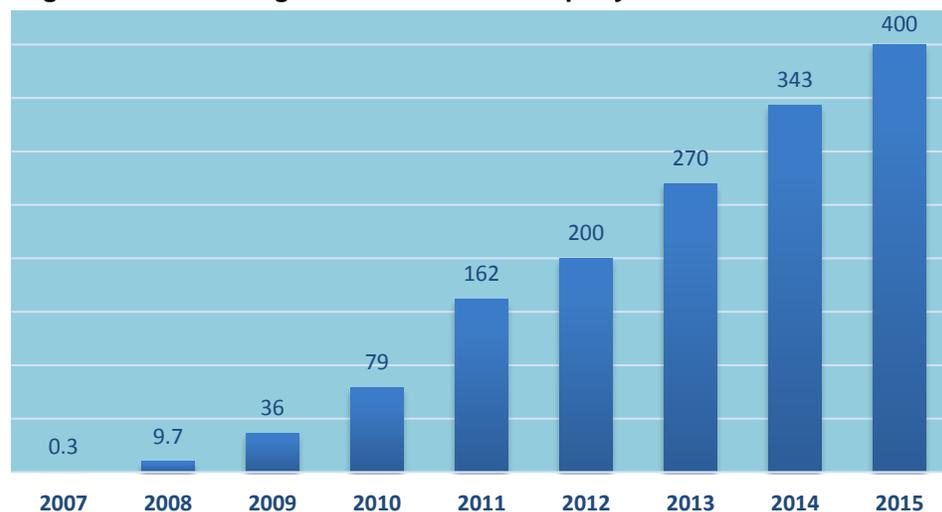
The program stated in its voluntary annual report that through 2015, use of WaterSense-labeled products had saved 1.5 trillion gallons of water (Figure 2) and reduced the amount of energy needed to heat, pump and treat water by 212 billion kilowatt hours. This resulted in consumers saving \$32.6 billion.

Independent third parties certified over 16,000 WaterSense-labeled products. The program also reported that 1,738 organizational partners joined through 2015.⁴

The EPA’s WaterSense program estimated significant returns on investment over its first 10 years (2006–2015). For example, the program calculated the following:

- An estimated \$1,100 saved by consumers on their energy and water bills for every \$1 spent by the federal government on the WaterSense program.
- An estimated 51,000 gallons of water saved for every \$1 spent by the federal government on the WaterSense program.

Figure 2: Billions of gallons of water saved per year



Source: OIG analysis of EPA data.

These returns on investment are based on the savings and costs reported by the program, and capture some of the water and energy savings resulting from WaterSense-labeled products. The program also contributed value to the plumbing industry by providing a unified labeling system that consumers could understand, and by providing product specifications that focused not only on water efficiency but performance. The calculated benefits also do not capture savings from additional WaterSense efforts, such as labeling homes, certifying irrigation professionals and providing educational materials.

Controls on Water and Energy Savings Are in Place

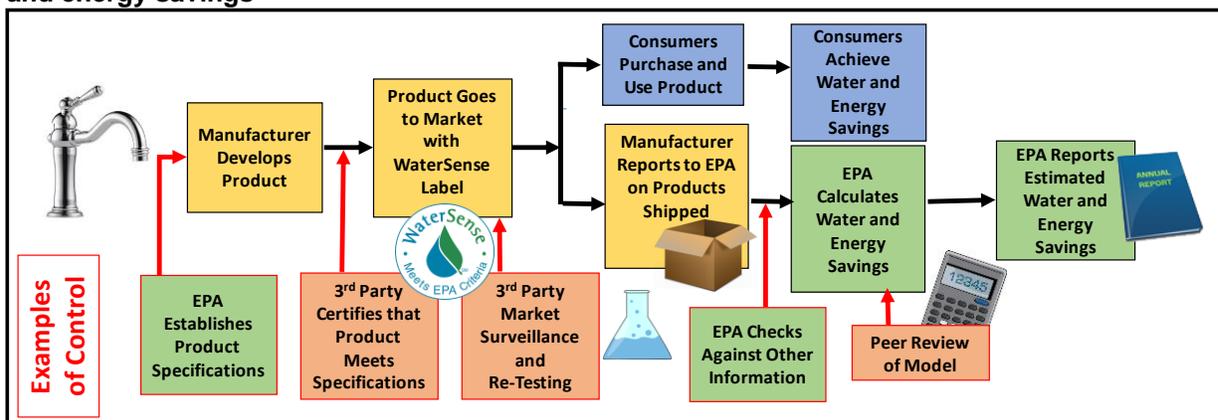
The EPA’s WaterSense program had controls in place to ensure that the water and energy savings it calculated were reasonable. The program’s controls conformed to GAO’s five components of internal control. The EPA’s implementation of these controls provided assurance that its reported water and energy saving

⁴ The EPA publicly released the WaterSense program’s 2016 Accomplishments [Report](#) on June 27, 2017. The agency included some of these most-recent accomplishments in its response to our draft report (Appendix A).

estimates were generally accurate and reflected actual results. In addition, the program used a transparent and sufficiently documented control process, which provides assurance that the program will continue its good practices.

The EPA had controls in place to assess WaterSense product claims, manufacturer shipping data, and the methodology used to calculate water and energy saving estimates (Figure 3). For example, the annual shipping data reported by manufacturer partners serve as the foundation for the savings calculations. Program staff told us that they identified the significant manufacturer partners, and estimated they receive information on 90 percent of product shipments each year. Program staff also told us that they did not estimate energy and water savings for the missing 10 percent. As a result, the program underreported energy and water savings to the public.

Figure 3: WaterSense product shipments provide information for estimating water and energy savings



Source: OIG figure created from EPA information.

Overall, the partners agreed that the program effectively saved water and energy. The promotional partners we interviewed provided several examples illustrating how the WaterSense program effectively reached the consumer, supported the partners, and saved water and energy. In one example, a partner stated that the WaterSense program informed consumer choices, brought the water efficiency community together, and improved the reputation of the program.

Table 1 presents other examples that illustrate how the EPA’s WaterSense program conformed to GAO’s components of internal control.

Table 1. Examples of the WaterSense program’s conformance to the five components of internal controls identified in GAO’s *Standards for Internal Controls in the Federal Government*

Component of internal control	Examples of internal controls
Control Environment	<p>Program documents outlined the program’s objectives and vision, and identified program requirements.</p> <p>The EPA entered into partnership agreements with program participants, and the partners agreed to meet program requirements.</p> <p>Product certification guidelines described activities that must be performed to ensure that products meet specifications.</p> <p>The EPA established the WaterSense trademark to be used only on products certified to meet WaterSense performance and water-savings specifications.</p>
Risk Assessment	<p>Certifying bodies followed specific guidelines in certifying that products meet WaterSense specifications.</p> <p>Certifying bodies audited manufacturers’ product testing and manufacturing processes.</p> <p>Certifying bodies required re-tests for product testing and changes in manufacturing processes to meet product specifications.</p>
Control Activities	<p>EPA contractor conducted quality assurance review of product data supplied by certifying body.</p> <p>Certifying bodies audited laboratory procedures, witnessed product testing and production, and oversaw product re-testing.</p> <p>Accreditation bodies performed annual assessments of certifying bodies.</p>
Information and Communication	<p>Partnership agreements required manufacturing partners to report shipping data used to estimate water and energy savings.</p> <p>The EPA used a peer-reviewed model and reported shipping data to calculate estimated water and energy savings.</p> <p>The EPA validated manufacturer data using other sources.</p> <p>The EPA took steps to ensure that the largest manufacturers supplied their annual shipping data for inclusion in the EPA’s estimate of water savings.</p>
Monitoring	<p>Accreditation bodies conducted annual surveillance of certifying bodies for compliance with certification standards.</p> <p>Certifying bodies performed ongoing market and product labeling surveillance.</p> <p>Certifying bodies may suspend or withdraw a label due to a manufacturer’s nonconformance with guidelines.</p>

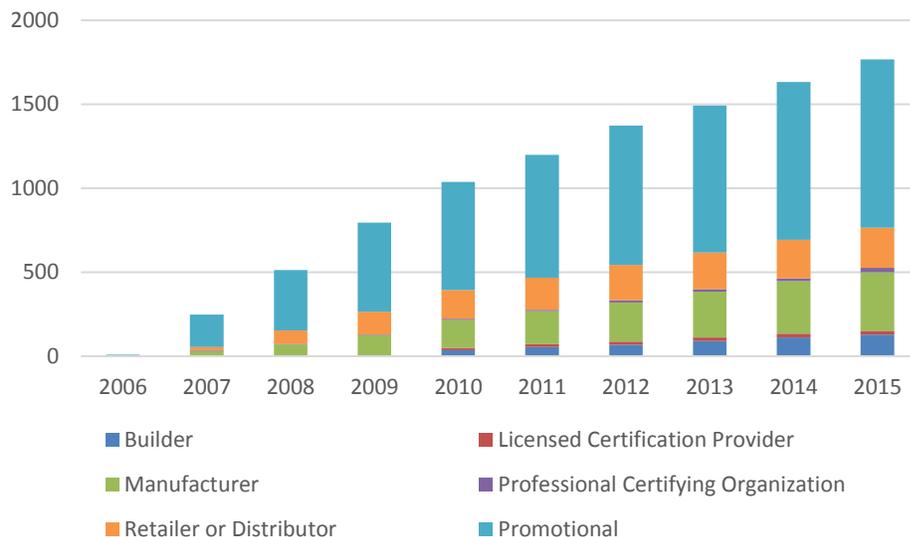
Source: OIG analysis of EPA information.

Control Over the Number of Program Partners Is Needed

The EPA lacked control over the number of WaterSense program partners identified in its annual accomplishment report and included in the EPA’s annual performance report as a performance measure. The program used partners’ annual reports to gather information on water-efficiency activities. Because the partner reporting rate was low, the program could not determine whether all partners were working actively to improve water use efficiency and should be included in the performance measure.

The EPA’s data shows that the number of partners participating in the program has grown steadily (Figure 4). The EPA reported more than 1,738 partners at the end of 2015. The EPA elevated the importance of this accomplishment when it added “the number of WaterSense partners working to improve water use efficiency” as a national performance measure for fiscal year 2016.

Figure 4: Cumulative number of WaterSense partners over time

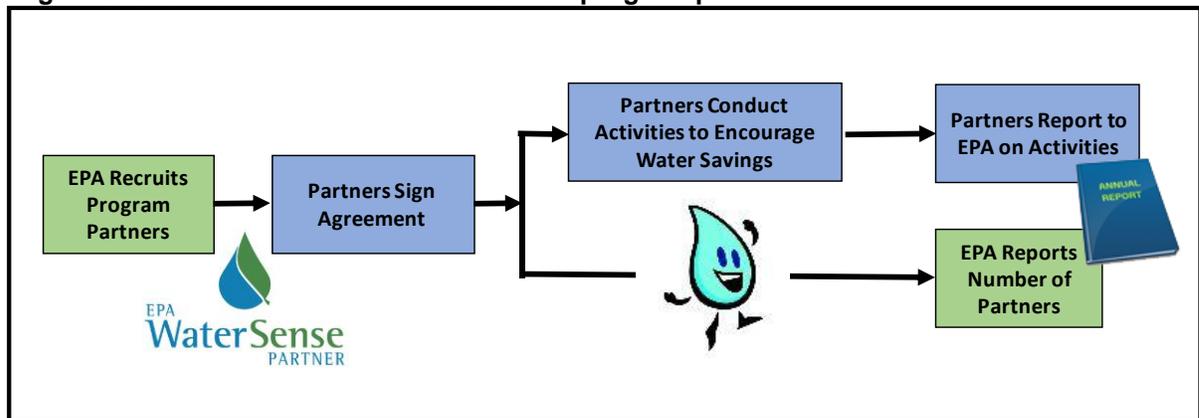


Source: OIG analysis of EPA data.

Potential WaterSense partners sign agreements that commit most partners to report annually on their water-efficiency activities and accomplishments. An exception is the promotional partnership agreement that limits the annual reporting requirement to utilities and governments. The agreement does not include this requirement for other promotional partners, such as trade associations and nongovernmental organizations. As such, about 12 percent of partners were not required to report.

In addition, not all partners that were required to submit reports complied. The program used its annual partner reporting process to gather information on the water-efficiency activities of its partners (Figure 5). Because the partner reporting rate was low—only about 20 percent in 2015—the program could not determine whether all partners were working actively to improve water use efficiency and should be included in the EPA’s performance measure. The EPA included all partners with signed agreements, regardless of whether they reported.

Figure 5. Overview of the EPA’s WaterSense program partners



The EPA included partners in its performance measure, “the number of WaterSense partners working to improve water use efficiency,” regardless of whether partners reported on their activities.

Source: OIG figure created from EPA information.

Over its 10-year existence, the WaterSense program had not asked partners to renew their agreements. The EPA should have a control in place for ensuring the accuracy of its performance measure. Without a control in place to periodically assess that partners continue to work to improve water use efficiency, as they pledged to do when signing their agreement, the number of partners the EPA reports may be overestimated and the program’s understanding of whether all partners still work actively to improve water use efficiency will remain limited.

WaterSense Program Is Well Designed and Managed

The WaterSense program displayed elements of a well-designed and managed program. In our opinion, the EPA’s adherence to these good practices resulted in consumer and industry confidence in WaterSense-labeled products, broad stakeholder support, and demonstrated returns on investment. Examples of good program management practices⁵ used by the EPA’s WaterSense program include the following:

- **Program Strategy Alignment.** The EPA identified the need for a program on water efficiency similar to its ENERGY STAR program to

⁵ These examples of good practices are arranged by the five performance domains described in the Project Management Institute’s *The Standard for Program Management* (2013).

address the growing need to conserve water. In 2006, the EPA launched the WaterSense program to meet this need.

- **Program Benefits Management.** The WaterSense program required its manufacturing and retail partners to annually report product shipping and sales data. This provided the information needed to estimate and report water savings attributed to the program. The program clearly communicated these accomplishments to stakeholders in its annual reports.
- **Program Stakeholder Engagement.** The WaterSense program developed partnerships and relied on its partners to manufacture, distribute and sell WaterSense labeled products, and to promote the program and water efficiency. The program established expectations in agreements signed by partners. The program engaged stakeholders in the development of product specifications.
- **Program Governance.** The WaterSense program presented its vision, mission, strategic goals and portfolio plans in its business plan. The program has a well-developed set of control documents that address program risk at the appropriate level.
- **Program Life Cycle Management.** The WaterSense program is in its benefits delivery phase, as evidenced by its demonstrated returns on investment. The director and staff have managed and expanded the program over time to include not only certifying products, but also promoting other water-efficiency practices and certifying homes. In addition, the program director and some partners have discussed how the program may look in the future and how water-efficiency gains could continue if the EPA chooses to close the program.

Congress recognized the need for improved program management in federal agencies when it passed the PMIAA in 2016. But the act did not require the government to identify federal standards until December 2017. The good practices of WaterSense could be identified and disseminated as part of meeting the requirements of the PMIAA to develop improved means of collecting and disseminating best practices and lessons learned to enhance program management across the agency.

Conclusion

Well-designed and managed government programs can achieve significant outcomes. The EPA's voluntary WaterSense program demonstrated success in its estimates of returns on investment, controls on water savings and product performance, and partner support. Over its first 10 years, WaterSense achieved substantial estimated water savings of 1.5 trillion gallons. This water savings

contributed to the EPA's strategic goal of protecting America's waters by reducing the amounts of drinking water that consumers used in homes and businesses, and of wastewater that would be treated. In addition, the program used transparent and documented controls, providing assurance that the program will continue its good practices.

The WaterSense program is a sound model for voluntary programs. With adjustments, the program will strengthen its potential for producing beneficial results. To improve performance accountability for WaterSense, the EPA should adopt water savings as an outcome measure, develop a control for identifying the number of partners, and take steps to improve partner reporting. The EPA also has an opportunity to inform good practices for program management and accountability in other EPA programs by sharing successful WaterSense practices more broadly.

Recommendations

We recommend that the Assistant Administrator for Water:

1. Share WaterSense program practices in program design, implementation and reporting with the agency's Program Management Improvement Officer.
2. Evaluate the appropriateness of adopting water savings as a program measure for WaterSense in the EPA's fiscal year 2019 National Program Guidance for the Office of Water.
3. Develop and implement controls for WaterSense partners to periodically reconfirm their commitment to the program.
4. Revise annual WaterSense program partner reporting to incorporate the following:
 - a. Require all promotional partners to report.
 - b. If the program continues, improve the rate of reporting for all partners.

Agency Response and OIG Evaluation

The acting Assistant Administrator for Water agreed with our recommendations and provided acceptable, planned corrective actions, and projected or actual completion dates. During a June 29, 2017, meeting, and in two follow-up emails, the program director provided additional clarification on the agency's planned corrective actions. Specifically, the director committed to sharing the WaterSense program design, implementation and reporting with the agency's Program Management Improvement Officer by the end of fiscal year 2018. In the event the

agency has not designated an officer, the program will share this information with an appropriate alternate official. The agency also agreed that if Congress maintains funding for the WaterSense program, the Office of Water will consider a new program indicator measure for water savings and will document its evaluation of the appropriateness of adding the measure to the National Water Program Guidance for the Office of Water.

All recommendations are resolved. Appendix A contains the Office of Water's response to the draft report and our evaluation.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS

Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Potential Monetary Benefits (in \$000s)
1	13	Share WaterSense program practices in program design, implementation and reporting with the agency's Program Management Improvement Officer.	R	Assistant Administrator for Water	9/30/18	
2	13	Evaluate the appropriateness of adopting water savings as a program measure for WaterSense in the EPA's fiscal year 2019 National Program Guidance for the Office of Water.	R	Assistant Administrator for Water	9/30/17	
3	13	Develop and implement controls for WaterSense partners to periodically reconfirm their commitment to the program.	R	Assistant Administrator for Water	9/30/17	
4	13	Revise annual WaterSense program partner reporting to incorporate the following:		Assistant Administrator for Water		
		a. Require all promotional partners to report.	C		6/27/17	
		b. If the program continues, improve the rate of reporting for all partners.	R		3/31/18	

¹ C = Corrective action completed.

R = Recommendation resolved with corrective action pending.

U = Recommendation unresolved with resolution efforts in progress.

Agency Response to Draft Report and OIG Evaluation



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

June 27, 2017

OFFICE OF WATER

MEMORANDUM

SUBJECT: Response to Office of Inspector General Draft Report No. OPE-FY17-0001—*EPA's Voluntary WaterSense Program Demonstrated Success*, dated May 30, 2017

FROM: Michael H. Shapiro /s/
Acting Assistant Administrator

TO: Carolyn Copper
Assistant Inspector General
Office of Program Evaluation

Thank you for the opportunity to respond to the issues and recommendations in the subject audit report. Following is a summary of the agency's overall position, along with its position on each of the report recommendations. For the report recommendations, we have provided high-level intended corrective actions and estimated completion dates. For your consideration, we have included a Technical Comments Attachment to supplement this response.

AGENCY'S OVERALL POSITION

The EPA appreciates being provided with the opportunity to respond to the OIG evaluation of the WaterSense program. The conclusion of the report confirms our position that the program represents an effective public-private partnership that demonstrates results and provides benefits to business, consumers, and water utilities. WaterSense management and staff have worked diligently to develop appropriate controls to ensure the credibility of the program and it is satisfying to see the OIG recognize their work.

WaterSense recently updated its program savings through 2016, which was the 10th year of the program. We provide the values here as an update to the figures included in your report. Since 2006, the program has helped save 2.1 trillion gallons of water and \$46.3 billion in consumer water and energy bills. This reflects the efforts of more than 1,850 organizations that have entered into partnership agreements with the program.

As described below, we accept the recommendations made by the OIG and agree that their implementation can help to strengthen the program. We have also provided technical comments as an attachment to this memorandum. We appreciate the productive and positive interactions we had with OIG evaluators during the investigation, as well as the cooperation of the EPA staff and WaterSense partners who responded to OIG inquiries.

We request that you include the entirety of this response as an appendix to the OIG final report.

AGENCY'S RESPONSE TO REPORT RECOMMENDATIONS

Recommendation 1: Share WaterSense program practices in program design, implementation and reporting with the agency's Program Management Improvement Officer.

Response: The EPA concurs with the goal of the recommendation. Over the past several years, program staff have met with staff in other parts of the agency to share how a third party certification program works. WaterSense has worked hard to develop both a program strategy and procedures that will ensure the credibility of the program. Staff will continue to share best practices with other interested parts of the agency and the new Program Management Improvement Officer when that person is appointed to the position.

Recommendation 2: Adopt water savings as a program measure for WaterSense in the EPA's National Program Guidance for the Office of Water.

Response: Since 2007, WaterSense has prepared an annual accomplishments report which includes the cumulative water, energy, and consumer bill savings associated with reported shipments of WaterSense labeled products. The report also highlights the number of WaterSense partners and our progress in carrying out program activities. This report is posted on the WaterSense website and its content is shared through WaterSense social media outlets as well as through agency outlets. We believe this approach has allowed us to communicate the program's success with a wide audience within and external to the agency beyond that reached by national program guidances.

The Office of Water did not have a formal program measure for WaterSense until 2016, when it added a measure that reported on the "number of WaterSense partners working to improve water use efficiency". This measure had previously been associated with the Office of Water climate strategy and associated workplans as a means to encourage regional staff to help the national program extend WaterSense program opportunities to a greater number of partners. We agree that the partner measure is an output measure and that it may be more appropriate to include an outcome-focused measure of gallons of water saved through the use of shipped products as an indicator of program success. As it considers changes to the national program guidance to respond to agency budget deliberations and the next agency Strategic Plan, the Office of Water will take the recommendation of the OIG into consideration. The next available opportunity to have this added as a measure would be during the FY 2019 addendum period of the FY 2018-2019 National Program Guidance process. Given the direction in the agency to reduce the

number of measures, the Office may choose to replace the current measure with a new measure rather than add an additional measure.

Recommendation 3: Develop and implement controls for WaterSense partners to periodically reconfirm their commitment to the program.

Response: In order to become a WaterSense partner, eligible organizations must complete a partnership agreement. WaterSense has frequent communications with program partners during the year and annually requests information on what they have done to further their partnership. In 2016, as the program approached its 10th anniversary, WaterSense implemented a practice of sending partners an “anniversary” email – to commemorate milestones in their partnership. At 1-year, 5-year, and 10-year anniversaries, WaterSense sends an email to the partner to highlight the milestone, thank them for their engagement, and encourage them to share their outreach activities so WaterSense can help to promote and share them with other partners.

We agree with the OIG that it would be wise to periodically ask partners if they still wish to be engaged with the program. Because we have already implemented the “anniversary” email, our plan is to add a recommitment request as part of that communication. We have already started work to determine the best approach for executing the recommendation and plan to complete it during the 4th quarter of FY 2017.

Recommendation 4: Revise annual WaterSense program partner reporting to incorporate the following:

- a) Require all promotional partners to report
- b) Improve the rate of reporting for all partners.

Response:

(a) As described above, WaterSense asks all partners to complete an agreement to become a partner. A section of this agreement describes the partnership pledge. The promotional partner category is broad and can include utilities (water, wastewater, energy), water districts, trade associations, nonprofit organizations, and government agencies (federal, state, local). As noted in the report, the agreement for promotional partners only includes a pledge for organizations classified as a utility, government, or trade association to annually report to WaterSense.

In practice, when carrying out the annual reporting process WaterSense has asked all promotional partners, irrespective of their organizational type, to report using a consistent form and we have received annual reports from every type of organization. That said, we agree that the information in the agreement can be clarified to note that all types of organizations are asked to report annually on activities they have undertaken to promote labeled products and carry out WaterSense-related programming. We have modified our partnership agreement terms to clarify that all partners are asked to annually report on their promotional activities and incentive programs. The new document is available at <https://www.epa.gov/watersense/join-watersense>.

(b) Although partners have different reasons for non-reporting which may not be linked to their level of engagement with the program, WaterSense concurs with the OIG that it would be beneficial to the program to improve the rate of annual reporting. As noted in the report, we believe we have sufficient reporting from our product manufacturers to ensure the quality of our savings estimates. Other reporting results provide us with insight into how partners view the program, how they are engaging with campaigns, how they are using materials, and what program changes they would like to see in the future. We have used the results of reporting to help us determine the course of the program. As such, we would welcome additional voices to inform our actions and will look to identify new strategies to improve reporting.

As we work to do so, however, we need to balance breadth with depth. For example, we may be able to increase the rate of reporting by simplifying forms and reducing the number of questions. However, this could have the unintended effect of reducing the value of the input we receive. For some types of feedback, it may be better to have deeper, more thoughtful input than could be availed by a shorter reporting form. It has been a standard WaterSense practice to review and revise our process after each annual reporting season. We are in the process of doing that now as we complete our 2016 accomplishments report and will continue the process through this fall as we prepare for 2017 annual reporting which commences in January 2018.

Summary of Agreements

No.	Recommendation	EPA Office	High-Level Intended Corrective Action(s)	Estimated Completion by Quarter and FY
1	Share WaterSense program practices in program design, implementation and reporting with the agency's Program Management Improvement Officer.	OW	Share program practices upon request.	N/A, ongoing commitment
2	Adopt water savings as a program measure for WaterSense in the EPA's National Program Guidance for the Office of Water.	OW	Consider addition of new program measure as part of new EPA strategic plan and associated national program guidance.	4 th quarter, FY 2017. Measure would be added during the FY 2019 addendum period of the FY 2018-2019 NPM Guidance process
3	Develop and implement controls for WaterSense partners to periodically	OWM	Develop communication mechanism to seek	4 th quarter, FY 2017

	reconfirm their commitment to the program.		partnership recommitment.	
4	Revise annual WaterSense program partner reporting to incorporate the following: <ul style="list-style-type: none"> • Require all promotional partners to report. • Improve the rate of reporting for all partners. 	OWM	(a) Modify partnership agreement to clarify reporting requirement. (b) implement strategies to improve partner reporting rate.	(a) Completed (b) 2 nd quarter, FY 2018

CONTACT INFORMATION

If you have any questions regarding this response, please contact Steven Moore, Audit Follow-up Coordinator of the Office of Water at 202-564-0992 or moore.steven@epa.gov.

Attachment

Technical Comments

CC: Benita Best-Wong, OW
 Andrew Sawyers, OWM
 Raffael Stein, OWM
 Tim Fontaine, OW
 Steven Moore, OW
 Kathleen Butler, OIG
 Kathryn Hess, OIG

OIG Evaluation: The acting Assistant Administrator for Water agreed with our recommendations and provided acceptable, planned corrective actions, and projected or actual completion dates. During a June 29, 2017, meeting, and in two follow-up emails, the program director provided additional clarification on the agency’s planned corrective actions. Specifically, the director committed to sharing the WaterSense program design, implementation and reporting with the agency’s Program Management Improvement Officer by the end of fiscal year 2018. In the event the agency has not designated an officer, the program will share this information with an appropriate alternate official. The agency agreed that if Congress maintains funding for the WaterSense program, the Office of Water will consider a new program indicator measure for water savings and will document its evaluation of the appropriateness of adding the measure to the National Water Program Guidance for the Office of Water. All recommendations are resolved.

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