CORPORATE RESPONSIBILITY REPORT

Our Values

Our core values are the principles by which we work and live. They help us in the decisions we make every day. They also help us educate stakeholders about what the company is about and what it represents. Every day the employees of American Water live by this set of values, which are the cornerstones of our business culture.

20%

In 2014, more than 20% of American Water's sourceable spend was with small businesses whose owners are women or disabled veterans, or from a minority or disadvantaged groups.

Safety

Our first core value is **Safety**. Safety isn't just a priority, strategy, or goal at American Water; those things can change over time. Our values don't change, and neither will our commitment to safety.

Trust

You know what it feels like to **Trust** someone. Our customers put their trust in us every day, and each of us trusts that the person working with us will do his or her job in the right way and be there when needed.

Teamwork

We see **Teamwork** exemplified across our business. We promote and support a diverse culture, which works together to meet common goals. We hold each other accountable and challenge each other to reach the best decisions, in order to ensure we meet our commitments to the communities we serve and deliver the high-quality service that our customers have come to expect.

Environmental Leadership

Environmental Leadership: What we do makes a difference in people's lives; we provide a life-sustaining product and service. Being responsible for water and water services means that we have to ensure the sustainability of these critical services. Going back to our vision, clean water does not happen without environmental leadership. From those in the field who help ensure water quality to those in our offices who committed to using less paper or using less energy, each of us plays a role.

High Performance

We know what **High Performance** looks like too. A great example is the quality of the water we provide. When it comes to complying with strict federal regulations for delivering clean, quality drinking water, we've consistently scored among the highest of all water providers, public or private. Also, we know that we are the best water and wastewater utility in the country and that we deliver clean, safe, reliable, and affordable water and water services.

Our Vision

American Water believes the only way to do business is responsibly: delivering value to our customers, building strong communities, leveraging innovation to develop our industry, and supporting the expertise and dedication of our people.

Building on a firm foundation…

American Water's vision is Clean Water for Life. Our vision is a simple but powerful message that describes "why" we do what we do every day. Water is necessary for our customers' health and wellbeing. "For Life" also means we are there day after day, providing this essential and critical service for a lifetime. American Water works hard in many ways to deliver clean water for life that is also safe, reliable, and affordable, because our customers, our employees, and those who invest in us deserve nothing less.

"We understand the vital role of water in the lives of our customers. It matters to every one of them, every day. We also recognize the level of trust they place in us and we're proud to serve their needs."

Susan Story, President and CEO, American Water

Our Strategy

Our vision and values drive our company strategy. We have developed our "strategy wheel" that illustrates "what" we must do to reach our vision and be successful. It features five key focus areas for our business. Each area has associated performance aspirations and goals, designed to deliver continuous improvement over the coming years.

$1 billion

In 2014, we made capital investments of $1 billion to improve our country's critical water infrastructure.

These strategy areas when successfully executed will enable us to truly provide **"Clean Water for Life"**.

Safety

The Safety of our employees and our customers is the number one focus for American Water. We want every employee to choose safety on every job, every day, and for our customers to feel safe in the knowledge that their water supply is of the highest quality.

People

Maintaining an environment where our People feel valued, included and accountable is critical to our ability to serve our customers every day. We are working together to create an environment where every employee can live up to their fullest potential and feel confident that what they do directly contributes to helping the company stay strong and grow.

Growth

We believe that when companies grow, they can invest more in creating stable jobs, training, benefits, and infrastructure. It also ensures the owners of our company, our shareholders, continue to invest in American Water. The fact is, companies are either growing or they are declining; there is no third option.

Technology and Operational Efficiency

Our Technology and Operational Efficiency strategy helps to ensure we are continually finding better ways to do business and providing the best services at affordable costs for our customers.

Customers

Our Customers are at the center of everything we do. The water, wastewater, and recycled water services we provide are critical to their daily lives. From optimizing our systems and retaining the highest levels of water quality, to measuring customer satisfaction with water pressure, clarity, taste, and odor, our teams work around the clock to meet their needs.

Acting on Our Corporate Responsibilities

> “Since 2012, the benefits achieved by our Process Excellence program include over $40 million in efficiencies and expense reduction.”

> “We are piloting an intelligent water metering program in water-scarce Monterey, California, enabling our customers to monitor daily water use.”

> “We have earned more awards from the EPA’s Partnership for Safe Water than any other water utility company.”

We are placing customers at the center of everything we do

- We maintain a regular dialogue with our customers via our Customer Service Center, satisfaction and service quality surveys, social media, focus groups, open houses, events, and plant tours
- We deliver customer engagement programs to encourage water conservation and efficiency

We are responding to climate variability

- We have developed a Climate Resiliency Strategic Action Plan
- We have carried out a Critical Asset Study with climate mitigation plans
- We are helping our stakeholders to reduce the risks of climate variability

We are optimizing our systems, services, and solutions for the long term

- We pilot technology advances that can help maintain reliable supply, including in-flow and pressure monitors, intelligent meters, and supervisory control and data acquisition (SCADA) devices
- We have formed a Wastewater Center of Expertise to share knowledge

We are embedding safety measures in all areas of our business

- We have established a corporate-level Safety Council to set and implement strategy
- We are implementing 16 key recommendations from our new Safety Strategic Action Group
- We have enhanced our safety programs with 60,000 hours of safety training annually

We are supporting the professional and personal growth of our people

- We have established an Operational Training Department, linking skills and safety
- Over 78% participation in our employee survey
- We conducted 127 listening tour events, involving around 1,100 employees

We see ourselves as stewards for the communities in which we operate

- Our charitable foundation is contributing $2.5 million to the National Recreation and Park Association over five years in support of the *Building Better Communities* program
- Our people have donated more than 12,000 hours of time for philanthropy since 2012

We are promoting opportunities to conserve water, save energy, and protect biodiversity

- We are continuing to reduce our carbon footprint
- We are producing reuse water at more than 80 facilities
- We have launched our EcoZone behavioral program with employees

Performance Highlights 2013–2014

Customer satisfaction:

89%

satisfied in 2014

We score greater than

99%

for **drinking water compliance** and are 15 times better on water quality and 20 times better on water quality monitoring than the industry average

In addition to recognizing **savings of over half-a-million dollars** from 2013 to 2014, our move to internet-based reporting and customer notification by postcard has saved or eliminated 113 tons of wood, almost 75,000 pounds of solid waste, over 800,000 gallons of wastewater, and 225,000 pounds of CO_2 equivalents of GHG emissions

Reduced waste sent to landfill from direct operations by

12%

Achieved more than **25 awards**, including GWI – Water Technology Company of the Year at the Global Water Awards

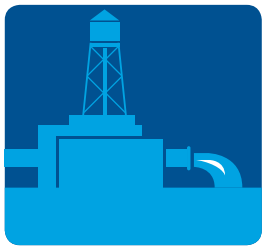
We have partnered with local environmental groups on **96 stewardship projects** in **12 states**

8
tons

Our Paperless Billing program enabled us to **save more than eight tons of paper in 2013–2014**, and it is reducing postage costs for our customers and our business

$9.5 million

More than **$9.5 million in savings** realized through more than 180 completed process excellence initiatives



$1 billion capital investment

in **total infrastructure** in 2014, up from $950 million in 2013

60,000 hours

On average more than **60,000 hours of safety training are given** annually to American Water employees

About AMERICAN WATER

Clean, safe, reliable, and affordable water is our business.

Founded in 1886, American Water (New York Stock Exchange: AWK) is the largest and most geographically diverse, publicly traded U.S. water and wastewater utility company. With headquarters in Voorhees, New Jersey, we employ 6,800 dedicated professionals who provide regulated and market-based drinking water, wastewater services and other related services to an estimated 15 million people in 47 states and in Ontario, Canada.

Together, we are American Water.

In this section:

48,000
miles of pipeline.

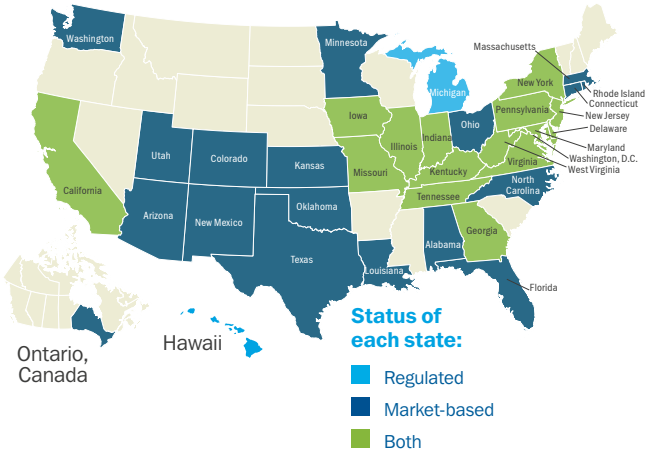
1,600
communities.

3.1 million
regulated customer connections.

Pennsylvania.

Our Operations

States in Which We Operate



About This Report

This is American Water's third biennial Corporate Responsibility Report.

It was published in August 2015, and covers our corporate responsibility performance for the 2013 and 2014 fiscal years, which ran from January 1 to December 31. The data in this report covers all of our regulated operations and, where relevant, we also include data from our market-based businesses.

We have used the Global Reporting Initiative (GRI) Reporting Principles of materiality, sustainability context, stakeholder inclusiveness, and completeness in selecting the content for the report.

American Water did not use an external agency to audit the content of this report; however, the data contained was generated using systems audited by our internal audit staff.

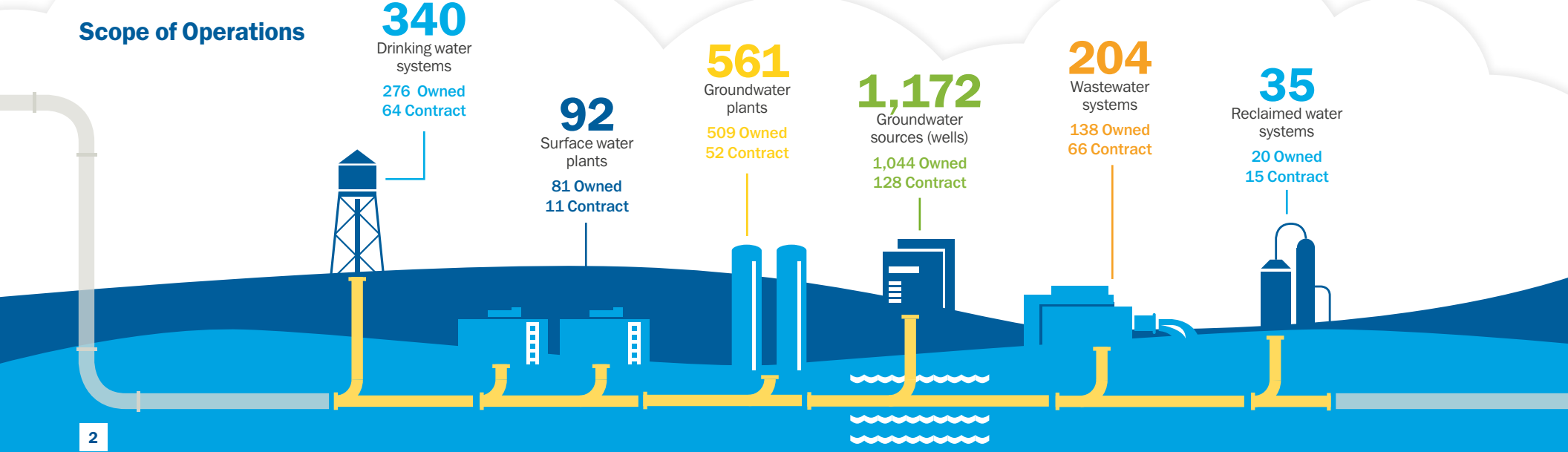
Preparing this report is a valuable opportunity for us to assess and improve upon our corporate responsibility progress and performance. To continue to do so, we welcome your feedback.

Write:
Debra Vernon, Manager of Corporate Responsibility, American Water, 1025 Laurel Oak Road, Voorhees, New Jersey 08043, U.S.

Email:
Debra.Vernon@amwater.com

GRI Index:
To view the GRI Index in its entirety, see page 81

Scope of Operations



CEO Message

It is with great pleasure that I invite you to read American Water's biennial Corporate Responsibility Report for 2013–2014.

It provides a detailed account of our performance, outlining the ways in which we are driving corporate responsibility across the business from delivering value to our customers, to developing our people, to leveraging technology, and to demonstrating respect for the communities in which we operate.

As a leading provider of such a critical and limited resource, we understand the absolute importance of using water supplies wisely and seeking performance improvements every year. We continue to manage our economic, environmental and social impacts, while investing in key relationships throughout our value chain.

The importance of our role as a responsible business has never been clearer. People across the globe consume water at different rates, but all countries tap into the 1 percent of the world's eligible drinking water. We must work together to protect and safeguard these supplies, acting as stewards when water is under our care. American Water is collaborating with state utility commissions to encourage water efficiency and, during the past 12 years, we have seen savings on indoor residential water consumption in the range of 10 to 17 percent.

The two greatest challenges our industry faces are water supply and an aging infrastructure. To address water supply, we have undertaken a comprehensive Climate Resiliency Strategic Action Plan and a Critical Asset Study to further assess climate variability impacts on our operations and reduce risk. To ensure the quality of our water services, we plan to invest about $5.2 billion over the next five years, with the majority to be invested in critical water and wastewater infrastructure such as pipe renewals. An additional approximately $800 million will be for acquisitions and strategic investment.

> "We understand the absolute importance of using water supplies wisely."

American Water President and CEO Susan Story (in truck) visits with Virginia American Water employees.

Our Core Values

- Safety
- Trust
- Environmental Leadership
- Teamwork
- High Performance

> “We must work together to protect and safeguard these supplies, acting as stewards when water is under our care.”

All our investment to ensure excellent service must be balanced with what our customers can afford to pay. Our focus on operational efficiency is key to enabling this to happen. Our five-year Technologies Roadmap is helping us achieve this balance; it is already improving our software solutions, field team technology and service infrastructure, and enhancing mobility and efficiency. As part of our R&D and innovation efforts, we are working with research institutions and partners to develop and pilot new technology advances. These include natural biofiltration to reduce water treatment costs, sonic waves to reduce algae, acoustic monitoring to detect leaks, and intelligent metering to provide customers with real-time water consumption data in water-scarce regions.

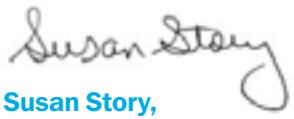
We are also delivering on our commitments to safety and environmental excellence. American Water made a public commitment to achieve a 16 percent reduction in greenhouse gas (GHG) emissions by 2017 from our 2007 baseline. In 2014, our total GHG emissions were 17.1 percent lower than in 2007.

During 2014, we undertook a comprehensive look at employee safety, gaining feedback from our people through surveys, meetings and interviews for continuous improvement. It has resulted in new internal policies and goals, better “near-miss” reporting, and regular safety walks conducted by managers at all levels, including myself. We will continue to invest resources in this important area.

In addition, we engaged with union representatives at our first Labor Management Conference as part of our focus on our employees and on strengthening labor relations.

All that we do – in our plants, in our offices, and in the field – is all about our customers. We serve over 15 million people across America and we never forget that, at the end of every pipeline, there’s a human being depending on us to provide life’s most essential ingredient. Our customers are at the center of all we do, and that extends well beyond providing clean, reliable water. It also means giving back to the communities we serve. Our employees are actively engaged in almost every major charitable and educational event and initiative, making the communities they live in stronger and more successful.

As always, we thank you for your interest and support, and we invite you to share your feedback with us.



Susan Story,
President and CEO, American Water

Our VALUES

American Water believes the only way to do business is responsibly: delivering value to our customers, building strong communities, leveraging innovation to develop our industry, and supporting the expertise and dedication of our people.

Our business is built upon a foundation of good business ethics, social responsibility, and strong governance. We commit to holding ourselves to high standards of integrity, delivering the highest-quality products and services, and utilizing the resources of our business to serve the public good.

We understand that finding solutions to sustainability challenges is essential for our business and our stakeholders. Our approach continues to deliver strong results for our customers, shareholders, and employees.

In this section:

100% We encourage total engagement in corporate responsibility activities.

People across the globe consume water at different rates, but all countries tap into the 1 percent of the world's eligible drinking water.

California Water Aqueduct.

Company Strategy

Our vision is "Clean Water for Life"; it means delivering safe, clean, reliable, affordable water for generations to come. Our strategy wheel outlines "what" we must do to achieve our vision and be successful.

Our Customers are at the center of everything we do. The water, wastewater, and recycled water services we provide are critical to their daily lives. From optimizing our systems and retaining the highest levels of water quality, to measuring customer satisfaction with water pressure, clarity, taste and odor, our teams work around the clock to meet our customers' needs.

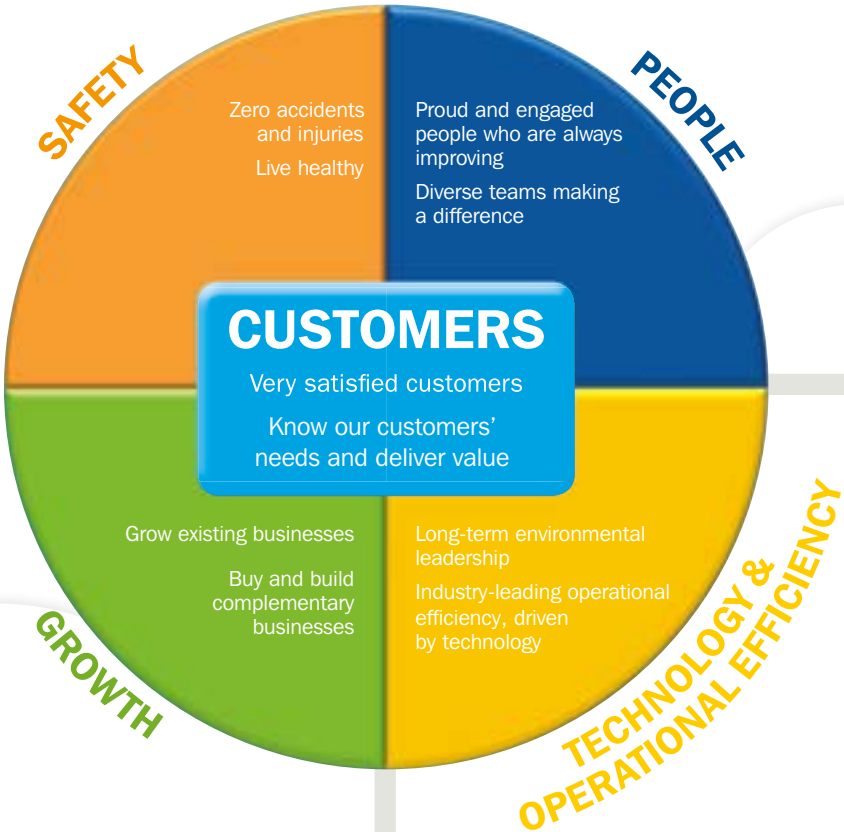
At the top of our strategy wheel are Safety and People. The safety of our employees and our customers is the number one focus for American Water. We want every employee to choose safety on every job, every day, and for our customers to feel safe in the knowledge that their water supply is of the highest quality. Maintaining an environment where our employees feel valued, included, and accountable is critical to our ability to serve our customers every day.

We are working together to create an environment where every employee can live up to his or her fullest potential and feel confident that what they do directly contributes to helping the company stay strong and continue to grow.

Growth continues to be a critical area for our company. We believe that when companies grow, they can invest more in creating stable jobs, training, benefits, and infrastructure. Growth also ensures the owners of our company, our shareholders, continue to invest in American Water.

Finally, our Technology & Operational Efficiency strategy helps to ensure we are continually finding better ways to do business and providing the best services at affordable costs for our customers.

American Water Strategy Wheel



Company Goals

We have defined and shared aspirational goals and targets that are driving our efforts to deliver clean, safe, reliable, and affordable water to our customers.

They cover the areas of Customers, Safety, People, Growth, and Technology & Operational Efficiency, as set out in the company strategy wheel (see below), with targets to direct continuous improvement. These targets act as a foundation for our divisional, function, and individual performance targets.

Stakeholder Engagement

Our teams engage with a wide variety of stakeholders to listen and respond to stakeholder views or concerns. American Water's stakeholders fall into the following broad categories:

- Communities
- Community advocates
- Customers
- Employees
- Environmental non-governmental organizations (NGOs)
- Government leaders
- Media
- Regulators
- Socially responsible investors (SRIs)
- State authorities
- Suppliers

Through the engagement process, we monitor and assess key issues or concerns that may impact our business. It offers a listening post to help identify and minimize potential risks, and discover new opportunities. The outputs are reviewed during the company's annual business strategy development and to determine content for our reporting.

Participation in External Groups

American Water is a member of numerous organizations at the local, state, and national level, including the National Association of Water Companies, American Water Works Association, Water Research Foundation, WateReuse Research Foundation, Business for Social Responsibility, Bipartisan Policy Center, Boston College Center for Corporate Citizenship, Water Innovations Alliance Foundation, Water Environment Research Foundation, the Value of Water Coalition, and the Mayors Water Council.

In some cases, such as large capital projects or in areas of water scarcity, we develop formal plans for engagement and communication with customers, regulators, NGOs, state environmental commissions, and other external groups.

Stakeholder engagement is helping American Water to:

- Innovate and develop new operational approaches
- Identify emerging issues that will influence organizational performance
- Improve our understanding of societal perspectives on sustainability issues
- Seek solutions and reconcile issues
- Establish credibility and reaffirm our role as a partner in solutions
- Access outside expertise and advice, thereby promoting organizational learning
- Improve community relations and promote a positive public image
- Avoid conflict and maintain societal license (to operate, expand, and innovate)

We regularly provide educational facility tours for public officials, customers, and media.

Our Materiality Process

External stakeholder views: customers, communities, industry, academia, government, regulators, NGOs, thought leaders.

Internal guidance and expertise: CR Steering Committee.

Research into external megatrends and horizon scanning for emerging issues.

Assessment and prioritization of risks and opportunities.

Materiality matrix mapping degree of stakeholder concern and business impact.

Definition of relevant content for reporting.

Bi-annual materiality analysis

How We Engage with Our Stakeholders

Communities
Community members, leaders, and public officials; public meetings and open houses, local events, volunteering, and speaker opportunities

Customers
Customer Service Center, customer satisfaction and service quality surveys, social media, focus groups, open houses, and plant tours

Employees
Staff meetings, global employee survey, internal communications, and face-to-face meetings with leadership teams

Environmental NGOs
Comprehensive Planning Study program, issue engagement, and partnerships

Government leaders
U.S. Environmental Protection Agency, facility tours, meetings, and office visits

Media
Open houses, facility tours, editorial meetings, and press releases and conferences

Regulators
Meetings, association conferences, and plant and facility tours

Socially responsible investors (SRIs)
Investor tours, office visits, presentations, surveys and calls

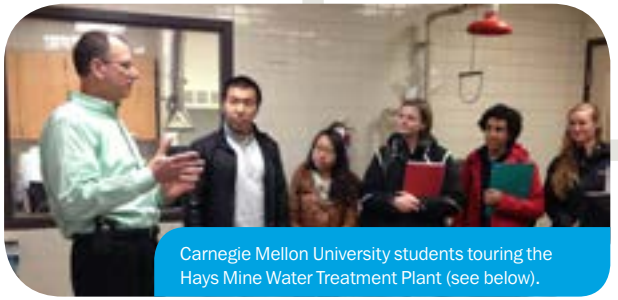
State authorities
Meetings, conferences, community events, office visits, open houses, and facility tours

Suppliers
Strategic sourcing program and pre-qualification questionnaires, and knowledge sharing through trade bodies and councils

Case Study: Tank Dedication with Community Members

During 2014, local and state leaders joined Pennsylvania American Water to unveil a new water storage tank in Kane, Pennsylvania, which more than doubled the system's storage capacity. The new 600,000 gallon tank gives the borough 1 million gallons of water storage. The event was especially important to attendees, who remembered a major fire in the town that occurred in 1997. Firefighters used nearly 1 million gallons of water to extinguish the blaze that consumed several buildings and nearly drained the system dry. The new infrastructure will aid in fire suppression and maintain water pressure in a crisis.

Pennsylvania American Water has announced plans to rehabilitate 15 existing water storage tanks across its service area.



Carnegie Mellon University students touring the Hays Mine Water Treatment Plant (see below).

Case Study: Carnegie Mellon University Graduate Student Tour

In March 2015, Pennsylvania American Water provided a group of graduate students from Carnegie Mellon University with a tour of the Hays Mine Water Treatment Plant. The students were working on a project that will highlight the impact climate change has had on water treatment, and they were shown some of the ways we can address these issues at our plants and in our distribution systems.

Case Study: Supplier Engagement to Knowledge Share

American Water provides regular feedback to our meter suppliers on failure rates, failure modes, and field performance issues as part of a collaborative process to improve quality and operating efficiency. We also work with our suppliers to develop new products to address unmet business needs. A recent example was the development of a blow-off valve that automatically releases water based on temperature (to prevent lines from freezing). The resulting product saved tens of millions of gallons of water in a test last winter, and will be deployed more broadly.

Case Study: Facility Tour for Members of the West Virginia Legislature

West Virginia American Water hosted nearly two dozen legislators, legislative staff members, and the media for a tour of how water goes from the Elk River to the faucets at the Charleston water purification facility. Plans and safeguards were shared with the legislators in the wake of the **Freedom Industries Chemical Spill**.

Case Study: Outreach to our Industrial Customers in Virginia

In Hopewell, 80 percent of the water we supply is used by our industrial customers, who require a non-stop flow of water 24 hours per day, 365 days of the year.

As many of the products they use and manufacture would be harmful if they were to get into the water supply, immediate two-way communication is required any time things go wrong. We noticed over the past few years that we did not always hear about issues in a timely fashion. To remedy this Virginia American Water developed a voluntary two-way Source Water Pledge and asked industrial customers to participate.

Virginia American Water made a pledge to contact customers straightaway in case of an emergency (after we contact regulators) and asked for the same pledge back. All of our industrial customers signed on. The process of developing the pledge and explaining the need was very impactful in raising awareness of the importance of protecting source water, and the fact that it is a community-wide responsibility.

At our Pennsylvania American Water treatment plant High Performance Liquid Chromatography technology is used to identify compounds in trace concentrations as low as parts per trillion.

Case Study: Engaging with Residential Customers in California

During its six-month Monterey Cares campaign in 2014, California American Water conducted extensive customer engagement activities to promote water conservation, including:

American Water employees preparing for community outreach activities.

Water Wise House Calls

To reach customers throughout the Monterey Peninsula, Water Wise "street teams" were deployed to visit approximately 4,000 homes over a two-week period to schedule home water audits and distribute water-saving devices. They collected 510 water audit appointment cards for the California American Water conservation team.

Fix a Leak Week

In recognition of the Environmental Protection Agency's Fix a Leak Week in March, California American Water distributed outreach materials that encouraged customers to repair leaks to save money and water. They included a leak detection guide that was mailed to around 34,000 residential water customers, a bill insert, an email blast, social media, and a print advertisement that ran 11 times in five publications with a combined circulation of more than 82,000.

Water Bottle Refilling Stations

California American Water sponsored the purchase and installation of seven branded eco-friendly water bottle refilling stations for the Monterey Regional Airport, Pacific Grove High School, and the Boys & Girls Club. The stations' automated trackers determined during the first week of operation that approximately 200 disposable water bottles were saved every day per filling station, a total of around 1,400 water bottles.

School Rain Barrels and Watering Cans

California American Water donated seven branded rain barrels, ranging in size from 550 to 2,600 gallons, and the required plumbing services and landscaping to six local schools' gardens to reduce their potable water needs. Eight schools received 250 company-branded watering cans for volunteers to use in the gardens, and for Earth Day in April, California American Water hosted conservation booths at two of the schools.

Case Study: Public Policy Engagement

According to the U.S. Department of the Treasury, the American government's investment in infrastructure as a percentage of our nation's economic output has fallen by 50 percent in the last 50 years. As the U.S. contends with the growing need to build and maintain critical infrastructure and the lack of government funding to do it, there is a role for private capital to play in helping to address this challenge. The Bipartisan Policy Center (BPC) has brought together top executives from some of the nation's leading companies to explore ways to bridge that gap via the establishment of a new **Executive Council on Infrastructure**. Co-chaired by American Water President and CEO, Susan Story, the Council aims to identify the barriers holding back this much-needed funding, explore ways to overcome them, develop strategies to encourage additional private investment in infrastructure, and promote economic growth. **Read more here**.

▼50% The American government's investment in infrastructure as a percentage of our nation's economic output has fallen by 50 percent in the last 50 years.

Case Study: Engineering Outreach with New Jersey Authorities

The Oak Glen Water Treatment Plant's expansion program will add to New Jersey American Water's maximum day capacity portfolio through to the year 2030, addressing long-term supply problems in the Coastal North service area. The program has utilized our Integrated Water Resource Management Principles and Stakeholder Outreach process, which recommends forums for internal and external stakeholders. This process is designed to create a 360-degree view of how our operations impact a particular community and watershed, and whether capital investment is required to improve our energy efficiency or infrastructure integrity.

We developed several presentations for the New Jersey Department of Environmental Protection (NJDEP) and the New Jersey Water Supply Authority (NJWSA), to demonstrate a new approach to operating two of the major reservoirs in the system, and we worked with the NJDEP in evaluating the safe yield. In December 2014, final approval was given to the program, and one portion of the program is currently under preliminary design.

Retention basin near New Cumberland, PA.

Material Issues

American Water conducted a full materiality assessment in 2010, which confirmed the strategic objectives for the corporate responsibility (CR) program.

In 2014, we commissioned a third-party strategic review of "priority issues" for our stakeholders and our business. It was designed to gain a deeper level of understanding to assist the work of our CR Steering Committee and the larger organization during coming years.

The review process took place over a six-month period and involved engagement activities with 15 stakeholder organizations and 20 people from varying departments and levels in our business.

The results of our analysis are shown in a materiality matrix, which compares the level of importance of each issue to our stakeholders, relative to its impact upon our business.

We recognize that as our business and operating environment evolves, the issues and their prioritization may also change. We continue to respond through our strategy, targets, and the provision of appropriate resources. To assist best practice, our performance and the challenges faced by our business are included in this report.

American Water Materiality Matrix

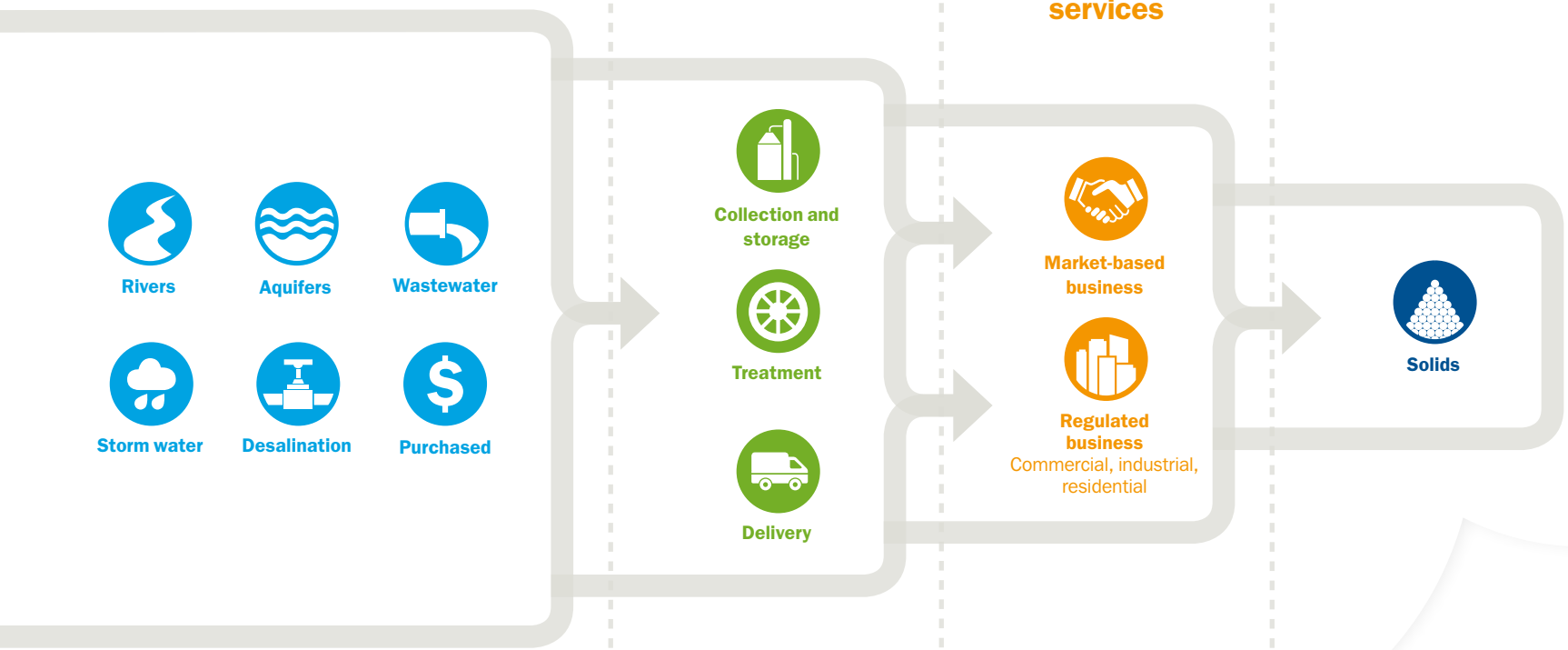
Our Value Chain

Source

Process

Product and services

Residuals



Governance

REGULATION & COMPLIANCE

Our customers, regulators, and shareholders trust us to provide clean water for life, and we have been doing so for well over a century. Our governance structure ensures we have the values, principles, and management strategy needed to maintain that trust.

It is supported by a combination of communications, training, and internal awareness-raising, designed to drive our policies and procedures home every day. We work hard to protect and enhance our corporate reputation, because it matters to us, and the quality of American Water's internal auditing program has been recognized with a top rating from The Institute of Internal Auditors. Our policies outline the principles by which we conduct our business. They help us to meet regulatory requirements and guide day-to-day operating decisions.

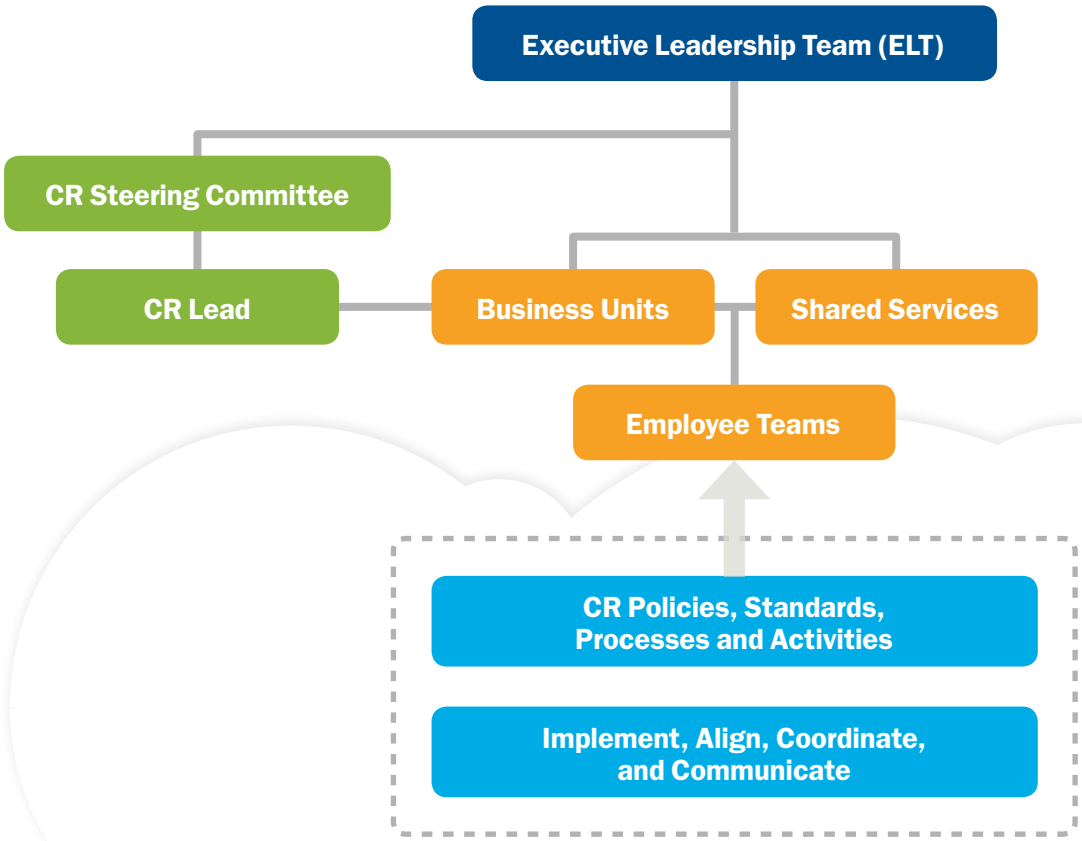
In this section:

Corporate Responsibility Oversight

We believe corporate responsibility must be driven by business and our Corporate Responsibility (CR) Steering Committee plays an important role in that effort.

It is made up of internal senior level representatives from American Water's business units and functional areas. Through their participation, we engage many points of view to enrich the discussion around our corporate responsibility strategy. With support from the corporate responsibility lead, this group also helps to integrate our programs throughout the business.

The Committee annually reviews corporate responsibility progress and recommends actions to facilitate continuous improvement. It also supports consistent implementation of the strategy and enables resolution of corporate responsibility issues that may need to be addressed.



Risk Management

We approach risk management in a comprehensive way by identifying, prioritizing, managing, and monitoring the risks affecting our organization.

Over time we have developed policies, competencies, and technology to execute this approach successfully. Our risk management goals are ambitious and include:

1. Reducing unacceptable performance variability by identifying and evaluating the likelihood of major events and developing responses to mitigate the impact of potential events
2. Aligning our business strategy and corporate culture in a way that strengthens our risk management systems
3. Enhancing our overall corporate governance and strengthening our Board and management oversight
4. Investing in state-of-the-art research and testing facilities

In 2015, the American Water Board of Directors Finance Committee updated its charter to reflect the inclusion of risk and is now the "Finance and Risk Committee." This committee reviews and discusses the top risks to American Water, each of which has Executive Leadership Team-level ownership. We perform an in-depth analysis of each of these risks, our mitigation plans, key risk factors and current issues related to the risks at Enterprise Risk Management meetings, and then review each risk with the Finance and Risk Committee of the Board of Directors. Our heat map of the top risks is updated quarterly and also reviewed with the Enterprise Risk Management Committee and the Finance and Risk Committee. American Water's Audit Committee is also responsible for discussing policies with respect to risk and risk management.

In 2015, the full Board of Directors participated in a cyber-security exercise, following a series of cyber exercises internal to the company, which included the Executive Leadership Team.

As part of assuring adequate, reliable water supplies for our customers, we assess water availability and associated issues and scenarios using our **Comprehensive Planning Study (CPS) program**.

Each year, American Water's Nominating/Corporate Governance Committee coordinates an evaluation of each director, the Chairman, the Board as a whole, and its committees to determine whether they are functioning effectively. The process considers the extent to which Board members are meeting objectives and goals, including specific objectives related to corporate responsibility and business ethics. American Water's Compensation Committee establishes policies, principles, and procedures for the evaluation of our CEO.

Further information on American Water's corporate risks is contained in our **Annual Report**.

Operator in our Pittsburgh, PA, plant.

Regulation and Compliance Programs

We operate as regulated utilities in 16 U.S. states, following environmental and health and safety regulations set by local authorities and federal standards.

Our systems are required to comply with federal and state regulations developed under the Safe Drinking Water Act, the Clean Water Act, the Clean Air Act, and other federal and state statutes. To ensure compliance with applicable regulations and track our environmental stewardship efforts, American Water employs an Environmental Management Plan system in tandem with an internal audit program.

Under the system, each facility has an Environmental Management Plan, with specific requirements and designated employees responsible for its implementation. Plans are reviewed by site management quarterly and updated with new requirements and changes in responsibility. In addition, American Water's internal environmental audit program reviews plans, procedures, and physical facilities. It proactively assesses our drinking water and wastewater services, seeking to identify potential vulnerabilities, thereby enabling us to address them.

Today, nearly all of our operations have been audited at least once during the past five years. We are continuing to increase this level of activity, with a target of auditing all of our operations at least once every five years (or more frequently, if possible). In order to meet this increased pace, we have developed a custom-designed audit tool that utilizes a risk-based list of questions. It takes advantage of mobile technology, which results in accelerated development of final audit reports.

As part of good governance, we regularly review our ethics and compliance programs. Our policies and procedures are designed to combat corruption and anti-competition, promote transparency in lobbying, and ensure integrity in all our activities. We adhere to the principles laid out in the International Labour Organization's Declaration of Fundamental Rights at Work, including non-discrimination, freedom of association, and freedom from forced and child labor.

These commitments are supported by our corporate Code of Ethics and our policies on equal employment opportunity, non-discrimination, non-retaliation, harassment-free workplace, and health and safety. We encourage compliance with these policies through ongoing training and annual certification. Our employees also have the opportunity and responsibility to report grievances through our Ethics Hotline (see Ethical Behavior).

1 million

Nearly 1 million water tests per year for 100+ regulated parameters.

Ethical Behavior

We promote open and direct communication and require our people to treat each other with fairness and respect.

In addition to observing all applicable laws, regulations, and American Water's policies and practices, we expect our people and business partners to comply with our **Code of Ethics**. It was introduced to ensure our people and business partners embrace and reflect company values.

Our Code of Ethics is a set of guidelines for ethical behavior and it covers a number of areas, including:

- Avoiding conflicts of interest
- Fair dealing
- Handling sensitive information
- Safeguarding financial information and controls
- Government relations
- Conduct in the workplace

Compliance with this Code of Ethics is a condition of employment at American Water. Failure to abide by it or to report a known violation can lead to disciplinary action, up to and including termination of employment. We provide annual training to employees on the Code of Ethics and in December 2014 refresher training with a specific focus on integrity was launched, featuring video and interactive segments. It has been completed by 78 percent of employees company-wide.

A confidential Ethics Hotline is available for employees, and calls are reviewed by members of the Ethics Committee, which reports to the Audit Committee. Employees raised 124 cases in 2013 and 110 cases in 2014 through the Ethics Hotline. Of these, 37 percent and 32 percent, respectively, resulted in some form of corrective action, including additional training, counseling, discipline, suspension, or termination of employment.

Using a variety of communications, we also share statistics and information with our employees, highlighting topics such as confidentiality, the use of company property, non-retaliation, and conflicts of interest. A key priority is to keep front-line managers informed so they know how best to handle conversations about ethical issues with their teams. The Ethics Team produces video scenarios that help managers and employees put ethics guidelines into context in a way that resonates with events they may encounter during the workday. Sample topics include "Financial Impropriety," "Confidential Information," "Gifts, Favors, and Entertainment," "Insider Trading," "Workplace Harassment," "Conflicts of Interest," "Use of Organizational Property," and "Reporting Unethical Behavior."

Human Rights

We are committed to respecting all human rights as outlined by the Universal Declaration of Human Rights and its two corresponding covenants, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social, and Cultural Rights.

While respecting human rights is the responsibility of every employee at American Water, we recognize that our ability to uphold them requires strong oversight and governance. Executive oversight of human rights at American Water lies with the Chief Ethics Officer.

We work to promote human rights wherever possible across our operations. Regular engagement in our communities and with our stakeholders has helped us better understand our human rights impacts. With most of our operations situated in the U.S. working within a strong regulatory framework, human rights does not constitute a material issue for our business.

We rely on a large network of suppliers and business partners to provide us with the products and services that help us achieve our business objectives. We expect them to demonstrate similar commitments to human rights. We are committed to using our strong supplier relationships to raise human rights standards in every link of the water and wastewater utility supply chain. We ensure these commitments are followed through our **Supplier Guidelines**, **Purchasing Policies** and our **Supplier Diversity Program**.

The Human Right to Clean Water and Sanitation

We supply our customers with something they cannot live without: clean water. We believe that fulfilling this responsibility in a sustainable manner is critical to the overall health and wellness of our world. American Water supports the United Nation's declaration of access to clean water and sanitation as a human right. We strive to ensure a sustainable supply of clean water by focusing on three key areas:

1 Infrastructure investments

The water supply and treatment infrastructure in our markets is aging. We continually invest in infrastructure improvements to ensure sustainable access to clean water for our customers

2 Water efficiency

We seek to eliminate water waste, getting the most productivity from every unit of water utilized and using advanced technologies to provide better quality water services with less water

3 Affordability

Rising costs associated with treating and supplying clean water represent a critical challenge to keeping water affordable for all. While governments set the rates for our customers, we have a critical role to play in ensuring affordability

> "Access to clean water has emerged as one of the most important challenges of the 21st century. At American Water, we are in a position to leverage significant resources and expertise to transform how water and wastewater are treated and delivered. Water is a finite resource, and we never take it for granted."
>
> **Dr. Mark W. LeChevallier,** Director, Innovation & Environmental Stewardship

Case Study: Water for People

In the developing world, American Water supports **Water for People (WFP)**, an international non-governmental organization that uses water as a catalyst for change in communities that lack access to safe drinking water, basic sanitation, and hygiene education, including in Rwanda, Bolivia, India, Uganda, Malawi, Peru, Guatemala, Honduras, and Nicaragua.

Our employees have donated their time, efforts and expertise to this critical cause. Through payroll deductions, cash, and contributions made during many campaign fundraising events, including a basketball game, bake sales, cookouts, penny wars, dress-down days, pizza parties, basket sales, and more, we are proud that our employees raised more than $139,000 in 2014. With a company match, American Water donated more than $189,000 to WFP, a 6 percent increase from the previous year.

Our Reputation

We are pleased to report that during the past two years, American Water's work has been recognized by many organizations. We have received the following awards for our performance:

2015

Awards	Awarding organizations
Industry Leadership	*Environmental Business Journal*
Directors Awards	EPA's Partnership for Safe Water
Fit Friendly Worksite	American Heart Association

2014

Awards	Awarding organizations
Business Achievement Award in the category of Industry Leadership	*Environmental Business Journal*
Technology Merit Award	*Climate Change Business Journal*
Top CFO	*South Jersey Biz*
100 Healthiest Workplaces in America	Healthiest Workplaces
U.S. Water Prize	U.S. Water Alliance
Legal Counsel Award	*NJBIZ*
Healthiest Employers	*Philadelphia Business Journal*
Directors Awards	EPA's Partnership for Safe Water
Legends in Law	Burton Foundation
Fit Friendly Worksite	American Heart Association
Corporate Counsel	*Philadelphia Business Journal*
Customer Excellence Award	Professional Association for Customer Engagement
Federal Energy and Water Management Award	Department of Energy, in conjunction with the Federal Interagency Energy Policy Committee
100 Best Corporate Citizens	*CR Magazine*

2013

Awards	Awarding organizations
GWI – Water Technology Company of the Year	Global Water Awards
Computerworld's Premier 100 IT Leaders for 2013	*Computerworld Magazine*
Women To Watch	*South Jersey Biz*
The Safety Award	MWEA
Greater Philadelphia Healthiest Employers Awards	*Philadelphia Business Journal*
Environmental Leader	2013 Insider Knowledge Report
Fit Friendly Worksite	American Heart Association
Directors Awards	EPA's Partnership for Safe Water
Research Innovation Award	Water Research Foundation

Water
SECURITY & POLICY

As the U.S. population is expected to grow 44 percent by 2050, perhaps the biggest challenge for our government and regulators will be managing fresh water resources for all. They must ensure the long-term viability of this precious resource for food production, energy generation, and residential use, while also meeting the water needs of business and industry.

Trends in U.S. water consumption show that overall consumption of public water supply for municipal, commercial, and industrial purposes has increased, while residential use has declined.

Improving the security and resilience of our nation's drinking water and wastewater infrastructure remain critical for everyone, and collaboration is key.

In this section:

San Clemente Dam, California.

Critical Resource Sectors

The water sectors in the U.S. and Canada have many levels of interdependency, and collaboration is essential to deliver a rapid response for water security issues.

The U.S. Department of Homeland Security (DHS) has designated 18 critical infrastructure/key resource sectors that have interdependencies with drinking water and/or wastewater services. They include many community services, whose operations could be affected severely by a disruption in water services (see top right).

The broad consequences of such a disruption to water or wastewater services are outlined by the U.S. Environmental Protection Agency (EPA) (see bottom right).

The expertise demonstrated by American Water in protecting the water we supply led us to work with the EPA as well as the DHS, to help determine risk and develop security recommendations and solutions for our industry. Since 2001, we have participated on the Water Sector Coordinating Council and in the development of multiple national preparedness and security documents.

Read more about our approach to **Risk Management** and **Safety**.

Critical Resource Sectors

Agriculture and food	Dams	Information technology
Banking and finance	Defense industrial base	National monuments and icons
Chemical	Emergency services	Nuclear reactors, materials, and waste
Commercial facilities	Energy	Postal and shipping
Communications	Government facilities	Transportation systems
Critical manufacturing	Healthcare and public health	Water

Potential Drinking Water and Wastewater Service Disruption Consequences

Drinking water	Wastewater
Lack of water for consumption, cooking, bathing, flushing, fire suppression, etc.	Sewage or storm water discharges (causing damage to buildings, institutions, and landmarks)
Loss of water for commercial irrigation, food supply, production of consumer needs	Release of hazardous chemicals into wastewater, negatively affecting public health and the environment
Decreased public confidence in water supply	Need to pre-treat wastewater before it enters wastewater treatment plant, need to properly dispose of wastewater residual
Need to access alternate water supplies and/or issue a public notice to boil water	Lack of wastewater services, posing public health and sanitation issues
Adverse economic effects as industry and local governments experience water service interruption	Sewage or storm water discharges (causing damage to plants, animals, and aquatic life)
Loss of water for cooling (disabling electrical and telecommunications equipment)	Adverse economic impacts, loss of property, and damaged service provider reputation

$1.3 trillion The American Society of Civil Engineers reports that up to $1.3 trillion in investment could be required for water and wastewater infrastructure in the U.S. before 2035.

Public Policy Engagement

Government policy, legislation, and regulation are having an increasing impact on the water industry in the U.S. and Canada.

Inadequate funding continues to be a primary complaint by water companies, many of which struggle to update aging infrastructure and meet EPA regulations. When costs become too much to handle, some systems look to consolidate or form public–private partnerships with private water providers to relieve the pressure.[1] Other systems choose to access government loans to finance projects and upgrade water systems.

As the largest publicly traded water and wastewater utility company in the U.S., it is essential that American Water continues to play a lead role in providing expert knowledge to assist the development of the public policy that affects our industry, our business, and our stakeholders, as well as continually educating key elected and administrative stakeholders on the value of the private water industry. As many levels of government struggle with growing debt and declining revenues, the private water industry offers valuable solutions to assist these communities.

In particular, we support many laws and regulations that promote four key interwoven and common themes:

1. Investment in water and wastewater infrastructure
2. Effective partnership with municipalities
3. Sustainable use of natural resources
4. Clean, safe, reliable, and affordable water for life

American Water's Political Action Committee

American Water's Political Action Committee (PAC) has a dual mission: to educate congressional candidates and lawmakers about the private water industry and our unique concerns and interests, and to provide financial support to the campaigns of congressional candidates who share the views of the private water industry. Each American Water state PAC provides contributions to state and local elected officials, pursuant to the relevant state law on state PACs.

American Water also supports individual participation in the political process in our communities, including involvement with political parties, candidates, or issues, and participation by eligible employees in American Water's PAC. Participation is voluntary. Any employee of American Water may refuse to participate without reprisal.

Appointments and Speaking Engagements

In 2013 and 2014, we increased our public policy engagement efforts through education and dialogue. In April 2014, Loyd "Aldie" Warnock became Senior Vice President of External Affairs, Communications and Public Policy, reporting directly to American Water's President and CEO.

> "We must use every tool at our disposal to lay the foundation for future prosperity and create new jobs, including better collaboration between the public and private sectors with respect to infrastructure development and financing in areas such as transportation, water, ports, energy, and broadband among others."
>
> **President Barack Obama**
> (Presidential memorandum dated July 17, 2014)

Some of the organizations we have worked with, or will work with during the coming year, include:

- Accelerate Energy Productivity 2030, an effort of the U.S. Department of Energy, Council on Competitiveness, and Alliance to Save Energy
- Center for Public Utilities, at New Mexico State University
- Financial Research Institute (FRI)
- Institute for Regulatory Policy Studies, at Illinois State University
- Mid-America Regulatory Conference (MARC)
- Midwest ENERGY Association
- National Association of Regulatory Utility Commissioners (NARUC)
- National Association of Water Companies (NAWC)
- Society of Utility and Regulatory Financial Analysts (SURFA)

1 Braden John B. and Min-Yang Lee. "Consolidation as a Compliance Strategy for Small Water Systems." Universities Council on Water Resources. 2007.

Our BUSINESS

We act as a solutions provider in more than 1,600 communities. The U.S. water infrastructure is aging and, to meet the demands of a growing population, it continues to require a great deal of planning and investment.

Working with cities and communities of all sizes, American Water operates and maintains water and wastewater systems and plants that treat water from rivers, lakes, reservoirs, and oceans. We have the expertise, technology, and tools to solve complex challenges, such as providing a sustainable water supply to 400,000 homes in the middle of a desert. We have built self-contained wastewater recycling systems for New York high-rises and an NFL football stadium, and rescued a troubled treatment plant that converts sea water to drinking water. We are continuing to modernize our infrastructure and focus on operational efficiencies, while bolstering a culture of continuous improvement.

In this section:

Tampa Bay, Florida.

Engaging with Our Customers

Our customers are at the center of everything we do, helping us to shape our strategic priorities.

We seek to provide them with reliable access to clean, safe, and affordable water, reflecting the value of water in everyday lives. Delivering exceptional service requires a regular dialogue with our customers to understand and meet their expectations. Our "listening posts" include customer surveys, focus groups, service phone calls, and communications around, for example, where process enhancements are taking place, or our capital allocation process. Read more about our stakeholder engagement process.

Customer Focus Groups

During 2013–2014, we continued to hold customer focus groups facilitated by a third party. These help us to learn more about what our customers want from us, the types of services they currently need, and how they want to be contacted (for example, in emergencies). We have incorporated this feedback into our customer emergency system and it has helped us to deliver an easier billing format.

Case Study: My H2O Goes Mobile

Our web-based self-service program for customers, called My H2O Online, allows access to view bills or payment history and to modify account or billing details. Customers can also check their water-use history, make a payment, or schedule service appointments. In December 2012, we added paperless or "e-billing" for our residential customers.

Enrollment has continued to grow and it is expected to exceed 200,000 participants by year-end 2015. Last year, the platform was further enhanced to allow all our customers the opportunity to enroll and, in early 2015, a mobile-friendly version was introduced.

> "We launched our mobile-friendly platform in direct response to feedback from our customers, who tell us they want to be able to access their account information from wherever they are and at whatever time is convenient for them."
>
> **Karla Olson Teasley,** Vice President, Customer Service

Case Study: Paperless Billing

More than 155,000 of our customers have moved to the convenience of paperless billing and in excess of 388,000 now make payments electronically. Both programs are free and available through our website. The program enabled us to save more than eight tons of paper in 2013–2014, and it is reducing postage costs for our customers and our business. We aim to increase paperless billing customer enrollment to 200,000 by year-end 2015.

Case Study: New CodeRED System

In spring 2015, we launched a new customer emergency communication system called CodeRED. It uses outbound calls to alert our customers about incidents that can impact their water quality and water usage, including emergency notifications. A second phase will launch later in the year that will allow our teams to create and post outage maps. It provides new direct notification tools for employees in the case of emergency, rather than having them call in repeatedly to a hotline.

89% of customers in 2014 were either 'very' or 'extremely satisfied.' In 2013 this figure was 91 percent.

4.1m calls in 2014 — Our regulated business Customer Service Center is available 24/7 for emergencies.

Helping to Reduce Costs

Where approved by state authorities, our state subsidiaries offer customer assistance programs to help financially challenged or disadvantaged households with water services bills via one-time emergency grants and/or discount payment programs. We have seen a substantial increase in the number of customers taking advantage of the programs and in some states, such as California, where a customer meets the program threshold, data is shared to enable other utilities to approach them with similar offers of assistance.

In some states, where approved by state utility commissions, we also make rebates available to customers for water-saving appliances, water audits, and free water-saving devices to help them make their homes more water efficient and thereby reduce associated costs.

Case Study: Customer Assistance Program in California

We have seen a 349 percent increase in customer enrollment for our California Customer Assistance Program due to a ruling by the California Utilities Commission, which states that all investor-owned water and energy utilities must share information on customers who qualify for entry. The program has achieved dramatic increases for all participants to date and California American Water has increased enrollments from 5,477, to 19,130 state-wide.

We believe data-sharing has proven to be a cost-effective method of expanding participation in such customer assistance programs, particularly when penetration rates are lower (as is the case for such water programs).

Total enrollment	Pre-sharing	After
American Water	5,477	19,130
All Class A water utilities	117,071	250,200

Case Study: H20 Help to Others Program™

Illinois American Water has partnered with the Salvation Army agencies in their service areas to administer the company's H20 Help to Others Program™, a customer assistance program designed to help provide supplemental funding to Illinois American Water residential customers who would otherwise have trouble paying their bills. The Salvation Army's trained caseworkers determine the needs of families and individuals, who must be Illinois American Water customers.

In 2014, Illinois American Water assisted 1,009 households by giving $113,802 to help with the payment of their water bills through company and customer contributions.

Information about the program and how to donate is included on customer bills.

95% of Americans believe water is the most important service they receive, ahead of electricity, heat, the internet, and cell phone services.

96% of our customers were either 'very' or 'extremely satisfied' with the service line and plumbing protection service quality in both 2014 and 2013.

Communicating the Value of Water

There is a perception that water treatment and delivery has few, if any, associated costs, a view perpetuated by the historic low price of water. It is typically the least expensive utility service in the average American household – pennies per gallon or less in most of the communities we serve.

Public understanding around the economic value of water services is growing and by supporting educational campaigns, American Water also improves levels of understanding around water conservation, the impacts of aging infrastructure, and how variability in climate can affect water supply.

Each year we determine what imagery and media will resonate with our customers and, in 2013 and 2014, we published whiteboard videos and used social media to engage through quizzes and contests. Currently, Facebook, Twitter and YouTube channels are active for every state-regulated subsidiary and our engagement levels are continuing to rise.

Social Media Engagement

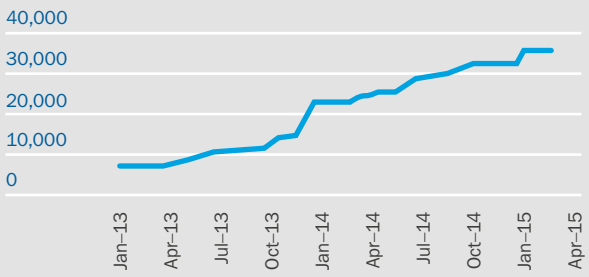
31,435 fans

17,239 followers

1,087,445 views

7,419 followers

Facebook Fans



69% of Americans take access to clean water for granted.

Case Study: The Value of Water Coalition

American Water is one of the founding members of the Value of Water Coalition, a group of public and private water agencies, business and community leaders, and national organizations seeking to communicate the importance of water to the economic, environmental, and social wellbeing of America. The coalition believes that a more informed citizenry is critical to advancing smart and sustainable water policy in America. It is providing tools, resources, and information designed to increase awareness among the public and decision makers about the value of water.

American Water is represented on the steering committee of the coalition, which has recently launched a new website, **www.thevalueofwater.org**.

In 2014, the Coalition had 13 new members, 12 of which are large cities. Now there are more than 30 members. We participated in the infrastructure week in Washington DC, which involved roundtables, congressional meetings, meetings with municipalities, a White House roundtable, and a U.S. Treasury roundtable looking at how public and private entities can help address water and wastewater infrastructure challenges.

In May 2015, the coalition issued a briefing paper, **The New Wave of Water Innovation**, highlighting innovative water practices and projects across the country, including details of **our partnership** between the Metropolitan Water Reclamation District and Illinois American Water in Chicago.

The San Clemente Dam Removal project is rerouting the Carmel River in Monterey, CA, and restoring 25 miles of habitat to the benefit of the steelhead trout who call the river home.

Our Technologies Roadmap

We maintain an industry-leading research and development program that is designed to enhance our services, help ensure compliance, and shape a more sustainable future.

We have developed a five-year Technologies Roadmap that outlines the projects we need to help deliver our business strategy. Each project is sponsored by one of nine business leaders, and is allocated a partner from our IT team.

Potential projects are considered against three key criteria: Key Performance Indicators (KPIs), payback, and risk. This enables us to move business-critical projects to the front of the line. We use focus groups to test "proof of concept" ideas, ensuring that a deliverable meets customer and business needs. Once a project features on the Roadmap, a business case is generated.

During 2013 and 2014, Roadmap projects have improved service infrastructure, software solutions, and field team technology. Internet and customer-facing technologies have also been improved, with the roll-out of an emergency internet system that alerts customers to major issues. We have upgraded mobile hotspots and initiated a "bring your own device" campaign, enabling employees to carry only one mobile handset on the job.

$4.2 million We invested $4.2 million annually for research and development activities in 2013 and 2014.[2]

2 Excluding in-kind support and research performed by our operating companies.

Our Innovation Development Process

In 2009, we launched our Innovation Development Process (IDP) to seek out innovations and leverage them for our customers and the water industry. Using the IDP, we have examined more than 600 technologies to date and are actively pursuing a dozen partnerships with domestic and international partners. This helps us to create greater efficiencies in the areas of water reuse, desalination, wastewater operations, and bio-energy.

We use an open collaboration model in four key areas:

1. Water treatment and distribution
2. Wastewater treatment and collection
3. Biosolids management
4. Energy management at the water–energy nexus

We collaborate on a significant number of our research projects with many stakeholders, including governmental entities (such as the EPA), consultants, universities, other utilities, and research agencies (such as the Water Research Foundation, WateReuse Research Foundation, and the Water Environment Research Foundation). We also participate and collaborate with numerous state and local organizations through our state-regulated entities.

Professional Committees – American Water Participation

AWWA Climate Change and Sustainability Technical Advisory Workgroup
Water Research Foundation Energy Focus Area Technical Advisory Committee
Center for Climate and Energy Solutions, Business Environmental Leadership Council
EPRI/Water Research Foundation Project, Electricity Use and Management in Municipal Water Supply
Wastewater Industries, Project Steering Committee

Research Projects – American Water Participation

Water project	Involvement
WaterRF 4090	Decision Support System for Sustainable Energy Management
WaterRF 4208	Identifying and Developing Climate Change Resources for Water Utilities: Content for Climate Change Clearinghouse
WaterRF 4223	Energy Efficiency Best Practices for North American Drinking Water Utilities
WaterRF 4224	Toolbox for Water Utility Energy and Greenhouse Gas Emission Management
WaterRF 4239	Building a Climate-Ready Regulatory System
WaterRF 4308	Drinking Water Pump Station Design and Operation for Energy Efficiency
WaterRF 4380	Opportunities for Managing Climate Change by Applying Adaptive Management
WaterRF 4381	Effective Climate Change Communication for Water Utilities
WaterRF 4469	Water and Electric Utility Integrated Planning
WaterRF 4378	Water Footprints and the Value of Water: New Concepts for Sustainable Water Utilities and Communities

80 grants American Water's research team has been awarded nearly 80 competitive research grants and been granted five U.S. patents based on its research.

Leveraging Technology

Our approach to innovation has resulted in product and service solutions that benefit our customers, our company, and the environment. American Water has received patents for new products or other legal rights for the following:

Fathom/Smart Earth Technologies (SET)

This is a single software platform that collects and aggregates meter and distribution system data into one integrated format. Our partnership allows for advanced metering and leak detection in our systems, resulting in dramatic decreases in leaks. SET has been acquired by Global Water Fathom, a world-leading company in water management.

NPXpress

Our patented wastewater treatment process reduces aeration energy consumption in the wastewater treatment process by up to 50 percent, and the need for added carbon by up to 100 percent. The process has been implemented at seven full-scale wastewater treatment plants in New Jersey and New York with other implementations pending.

ENBALA

American Water is the first U.S. water utility to use the Smart Grid technology of ENBALA Power Networks. The technology manages the way American Water's treatment plants and pumps use electrical power, and it allows us to offer capacity to the electric regulation market, resulting in both reduced peak electrical load and energy savings for the treatment facilities.

Advance Meter Infrastructure (AMI)

American Water continues to lead in the development and deployment of a smart water grid, an integrated system that will span from plant SCADA devices through the transmission and distribution pipes, valves and pumps, and on to customer meters. Our affiliate in Monterey, California, California American Water, has begun an AMI pilot program, whereby participating customers will be able to request text or email alerts if they have a likely leak, if they are about to break into the next rate block, or if their total bill is approaching a certain dollar value.

StreamControl

StreamControl is a technology to turn existing flow control valves into advanced, dynamic pressure management systems, resulting in decreased energy use and greenhouse gas (GHG) emissions.

LG Sonic

A Dutch company has developed an ultrasonic-based treatment system to reduce algae from surface water bodies without the use of chemicals or electric power. The buoys are self-contained and solar powered. Our partnership with LG Sonic provides reduced pricing for affiliate companies, as well as royalties for products sold in the U.S. and Canada. The systems have shown a two-year return on investment at the locations where they have been installed. See **case study**.

iOsight

This Israeli company is developing a new Smart Water Management System (SWMS). This will address the growing demand for efficiency tools by developing and integrating a comprehensive data management, data analysis, and reporting system in water treatment and wastewater treatment plants. It will allow local plant operators to leverage the reports and analytics to create a more efficient operation.

NewLimits

A new technology that provides a compact, nitrification/de-nitrification module to reduce ammonia levels in wastewater treatment has been piloted at American Water. It appears to be successful as a less expensive alternative to meet new ammonia limits that are being issued for our lagoon and sand filter wastewater facilities.

Using Technology for Business Transformation

Our goal is to develop and maintain industry-leading operational efficiency, driven by technology.

To deliver it we must continue to optimize our own systems, services, and solutions. In 2009, we embarked on a multi-year Business Transformation process to convert to SAP, recognizing it provides a more powerful tool for managing our relationships with customers.

All three phases are finished and producing a number of benefits.

80%

In 2015, we will implement 80 percent of critical and high-priority SAP System enhancements identified as of December 31, 2014.

Phase 1

Enterprise Resource Planning (ERP)

ERP is ensuring we have the people, goods, and services to assist our customers effectively. It is improving support for our employees from hire to retire, including processes for recruiting and onboarding, learning and development, and retirement. Our Finance Team is able to collect and deliver accurate financial information faster for all of our stakeholders. ERP also provides more transparency into organization-spanning processes to ensure even stronger and effective auditing and compliance processes.

Phase 2

Enterprise Asset Management (EAM)

EAM helps us manage our assets and make decisions about equipment construction, maintenance, and repair. We are using the new technology to optimize customer service in the field. This includes scheduling, dispatch, and execution of all work across field service, transmission, distribution, and production.

Phase 3

Customer Information System (CIS)

CIS provides a strong platform for connecting our people, processes, assets, and industry-based knowledge. Launched in 2013, our new integrated systems help us make proactive business decisions based on better information. It is improving the multiple interactions we have with customers, including our correspondence, billing, emergency notifications, and collections.

Next Steps

These new SAP-based systems are enabling us to change how we manage our business, ensuring American Water is prepared for the future. We are now optimizing functionality, and will use them to investigate customer drivers for satisfaction, seeking to meet our customer satisfaction score of 90 percent or above. Opportunities are also under review to increase levels of accessibility through payment services, self-service, and language.

Case Study: Asset Data in the Field

The EAM system has helped us to reduce the margin for data transfer error when we track our capital assets from a water source to the meter of a customer's account. Asset records have been converted from paper to electronic records, which simplifies planning for maintenance and capital projects. With the implementation of our work order management system, Click, we now have the ability to access asset information in the field via computer. As our system capabilities mature, more costing and financial information for our assets will be integrated into our ERP and capital management systems, allowing us to better manage the allocation of capital.

Case Study: Enhancing Our Customers' Experience

Our CIS has allowed us to consolidate 16 separate legacy systems and is integrated with both our ERP financial system and our EAM system. This simplification has helped us to remove manual touch points, and automated the end-to-end process, from customer request to financial reporting, of our revenue. Each customer contact, regardless of the platform being used (call center, IVR, web, email, or letter), is logged on our CIS system and shared across our other systems. It also holds copies of correspondence and bills for reference. The CIS has enabled us to introduce an e-billing option, helping our customers to quickly and accurately manage their financial relationship with American Water.

Case Study: Increasing Employee Effectiveness and Satisfaction

Our SAP platform offers new levels of functionality for our business, enabling us to increase self-service for employees to simplify process and reduce paperwork. We can now route with workflow to gain manager approvals. We have turned paper-based processes into consistent, easy-to-use web applications to help our people set performance goals, and capture reviews and evaluations. Development and succession planning has been automated, while we have integrated learning and development with employees' job class and career path to offer improved insight. The procurement process has also benefited, with a new shopping cart web application that is integrated with our SAP procurement system. Going forward, we plan to mobilize our employee and manager approval functions, purchase order approvals, shopping cart approvals, access request approvals, and other commonly used functions.

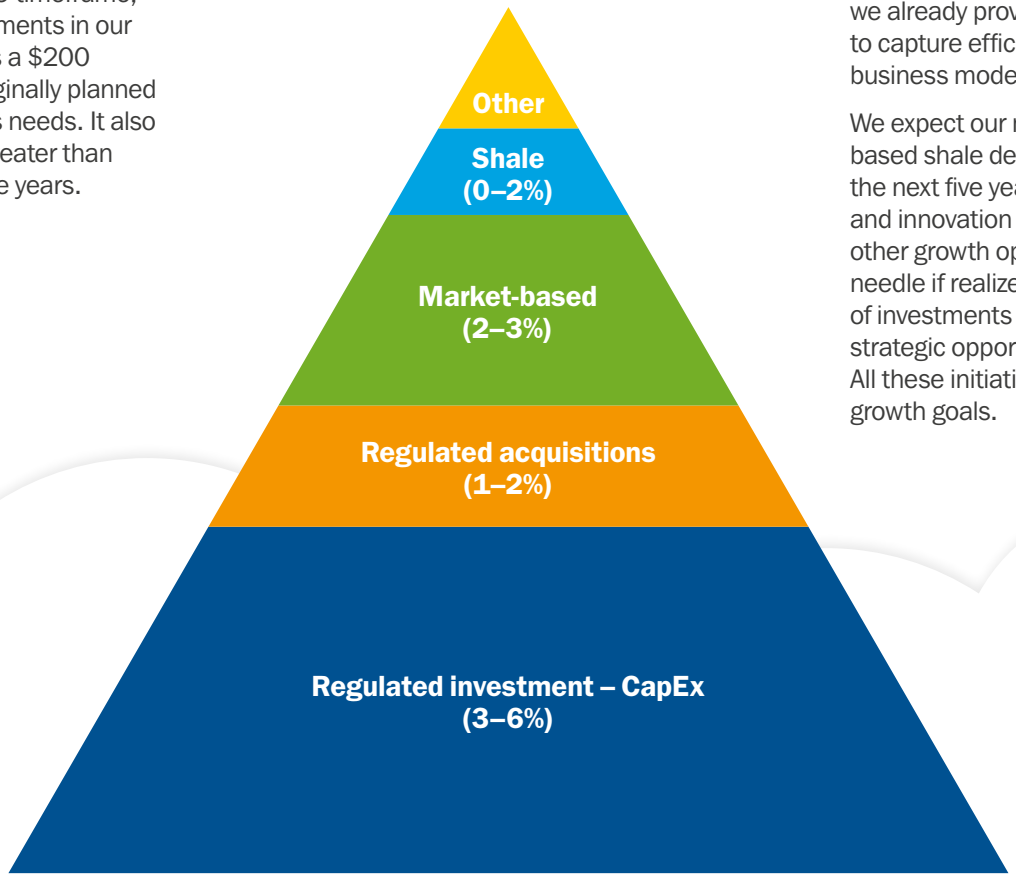
Members at our Elrama, Pennsylvania SCADA (supervisory control and data acquisition) center.

Growth Opportunities

Our strategy for the future will continue to focus on customers, expansion through targeted growth, environmental sustainability, and regulatory and public policy. In 2014, we shared our growth strategy for 2015–2018. Our long-term earnings per share growth plan is based on regulated growth opportunities, while leveraging market-based businesses.

To ensure the quality of our water services, we plan to invest about $6 billion in the 2015–2019 timeframe, with $5.2 billion for infrastructure investments in our core regulated business. This represents a $200 million increase from the $5.8 billion originally planned and is in response to increased business needs. It also reflects a capital plan that is $1 billion greater than what has been invested over the past five years.

Our future: 2015–2019 plan[3]



However, the full value of these investments is not found only in infrastructure repair and renewal. We believe that they will also improve service, reliability, and affordability for our customers. We will achieve this though our O&M efficiency efforts, which we consistently and strategically improve every year.

Regulated acquisitions continue to be a piece of our growth. We expect to invest over $540 million in the 2015–2019 timeframe. A key area of that growth is our strategy to acquire wastewater assets where we already provide water services. This allows us to capture efficiencies and is aligned with our business model.

We expect our market-based business and market-based shale development to contribute to our growth in the next five years. In addition, through our technology and innovation development process, we may identify other growth opportunities that could move the needle if realized. We have earmarked $230 million of investments in our market-based shale and other strategic opportunities in the 2015–2019 timeframe. All these initiatives will continue to contribute to our growth goals.

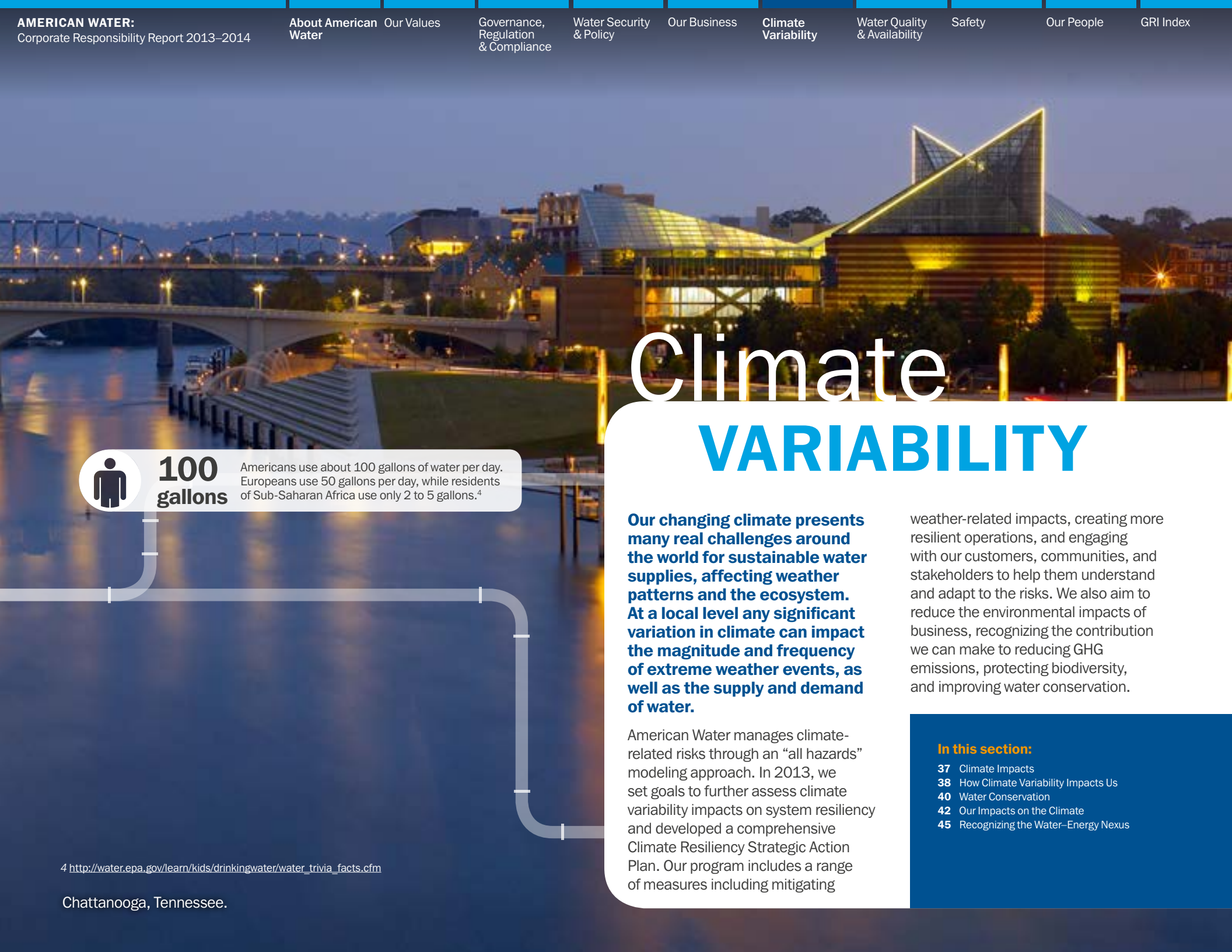
3 7–10% Long-term EPS growth target anchored from FY 2013.

Case Study: Helping Municipalities Find Solutions

American Water supports municipalities across the U.S. that are looking to address water and wastewater challenges. Our scope and size brings economies of scale, enabling us to control costs and address maintenance issues through investment. Our approach involves directly engaging with local residents to understand their needs, minimizing rate impacts, retaining existing water employees, and creating new jobs.

For example, in Arnold, Missouri, the sewer system required significant investment to address inflow and infiltration issues. Customer rates covered the operating costs and debt service, but did not allow for needed capital investments. Missouri American Water was able to offer the city $13 million to purchase the system. The company committed to $5 million in capital investment over the next four years and rate stability for customers. This offer was overwhelmingly accepted by the residents of Arnold in a November 2014 referendum. With the proceeds from the sale, the city will be able to retire the sewer system debt, upgrade the city's parks, and make needed repairs to streets and sidewalks.

Similarly, in Haddonfield, New Jersey, where the century-old water and sewerage system is in urgent need of modernization, the required majority of voters approved the sale of its water and wastewater systems to New Jersey American Water. This will bring $16 million of investment in capital expenditure over the first five years. The benefits of the sale for residents include a Citizen's Advisory Council, set up to meet local residents every quarter so that we can hear their concerns and update them on our progress, and a three-year freeze of water rates.



Climate VARIABILITY

100 gallons

Americans use about 100 gallons of water per day. Europeans use 50 gallons per day, while residents of Sub-Saharan Africa use only 2 to 5 gallons.[4]

Our changing climate presents many real challenges around the world for sustainable water supplies, affecting weather patterns and the ecosystem. At a local level any significant variation in climate can impact the magnitude and frequency of extreme weather events, as well as the supply and demand of water.

American Water manages climate-related risks through an "all hazards" modeling approach. In 2013, we set goals to further assess climate variability impacts on system resiliency and developed a comprehensive Climate Resiliency Strategic Action Plan. Our program includes a range of measures including mitigating weather-related impacts, creating more resilient operations, and engaging with our customers, communities, and stakeholders to help them understand and adapt to the risks. We also aim to reduce the environmental impacts of business, recognizing the contribution we can make to reducing GHG emissions, protecting biodiversity, and improving water conservation.

In this section:

4 http://water.epa.gov/learn/kids/drinkingwater/water_trivia_facts.cfm

Chattanooga, Tennessee.

Climate Impacts

Severe weather events

- Major storms/flooding
- Damage and disruptions
- Acid rain/water quality

Climate variability

- Shrinking snowfields/water supplies
- Increased pollution effects
- Algal blooms/water quality/public health

Biodiversity

- Biodiversity loss affecting the planet's ecosystems and services

American Water's response

Carbon footprint/energy

- Water conservation
- Pump efficiency
- Renewables
- Pressure management

Adaptation

- Water conservation
- Efficiency and leak detection

Integrated water resource management

- Reuse
- Desalination

Building resiliency

- Future-proofing water systems and infrastructure
- Sustainable design and construction

Long-term growth opportunity

- Increased sales of water to adjacent systems that do not have adequate water supplies
- New services and treatment technologies

How Climate Variability Impacts Us

The frequency and severity of extreme weather events are threatening the U.S. water system, causing poor water quality and water scarcity. They put added strain on an already deteriorating water infrastructure and jeopardize reliability.

Higher temperatures can generate more algae, introducing toxins, taste, and odor compounds to water sources. Typically, the algae present in lakes is treated with copper sulfate, which is expensive and can lead to the development of copper-resistant algal strains. Read how we are trialing the use of ultrasonic waves to counter this.

Melting snow from the mountains can create flooding, with variances to stream flow and potential impacts to operational infrastructure. In some cases, floodwater can overflow well casings, contaminating well-water sources.[5]

Freezing temperatures cause water mains to break, due to the added weight of water-saturated frozen soil. Additionally, as surface water in rivers and reservoirs approaches freezing, it comes into contact with relatively warmer underground mains. This stresses the metal mains, particularly in older mains, causing many to break.

Rising sea levels, due to melting ice caps and thermal expansion of the oceans, increases flooding risk to coastal infrastructure and can result in saltwater intruding into fresh water supplies. Higher intensity rainfalls also increase flooding risk and run-off rates from agricultural land and other non-point sources, generating higher levels of nutrients, pesticides, microbes, and debris in water sources. Likewise, flood waters can inundate sewer systems and wastewater plants, causing treatment upsets. These impacts in turn can increase algal blooms.

Lower water quality coming into our plants means higher treatment costs and energy usage. To ensure clean, safe, and affordable water and wastewater services for our customers and to protect the environment, it is essential that we continue adapting our business. We will optimize our technology systems to reduce risk and improve business resiliency, understanding that such solutions can also provide opportunities for business growth and investment, particularly in areas where climate impacts are anticipated to be greatest.

Climate variability can affect water sources in four general ways:

1. Changes to the frequency and intensity of annual rainfall
2. Changes to the amount and rate of snowmelt
3. Rising sea levels
4. Degraded raw water quality

> “We are seeing changes to our climate in the United States. Over the past 50 years, the amount of rain falling during the most intense 1% of storms increased by almost 20%.”[6]

5 AWWA and the Water Research Foundation and University Corporation for Atmospheric Research.

6 USGCRP (2009). Global Climate Change Impacts in the United States. Karl, T.R. Melillo, J.M., and Peterson, T.C. (eds.). United States Global Change Research Program. Cambridge University Press, New York, NY, USA.

Critical Asset Resiliency

Our vision of clean water for life recognizes the essential need of water for customer health and for use in daily lives. As such, we employ a systematic approach to assess the vulnerability of our water supply to climate variability. It is embedded into American Water's engineering planning studies, which drive American Water's capital needs assessments, business planning, and financial forecasting.

Our water and wastewater system assets must continue to be well managed with planned renewal and reinvestment strategies. This includes the identification and management of critical assets, the deployment of a robust emergency response planning process and source water protection program, and the use of a nimble supply chain process. These various elements help to prepare us for continued service in the face of threats from aging infrastructure, security-related concerns, and natural hazards, such as hurricanes, tornadoes, earthquakes, ice storms, and climate variability.

In 2014, we carried out a Critical Asset Study, which focused on the identification and management of critical assets, and provided an action plan to deliver the future needs of our business. The study was comprehensive, delivered through a strong collaboration among operating company and service company professionals in engineering, ORM, operations, environmental compliance, and our supply chain.

It utilized the J-100 "All-Hazards" protocol and the U.S. EPA WHEAT tool (Water Health Economic Assessment Tool). The analyses looked at the likelihood and consequences of failure of critical assets, both with and without readily available condition assessment data. Current response plans and capital improvement plans were reviewed and recommendations were offered, where applicable, to enhance those plans, improve resiliency, and mitigate the potential impact on customers. This approach allows for the deployment of the best available resources, while considering funding realities.

Using the methodology, we identified a list of more than 50 critical assets for our business, producing 12 case studies and a set of recommendations applicable to all systems. Each case study will be used as a template for assessing the customer impact and consequence of failure associated with other critical assets. The case studies examined a number of threats including:

- → Natural threats (earthquakes, hurricanes, ice storms, flooding)
- → Aging infrastructure
- → Source water contamination due to transportation accidents
- → Power outages and internal electrical grids
- → Security threats

Where applicable, recommendations for additional inspections, emergency response planning measures, and/or capital improvements have been made. Our approach allowed for the deployment of the best resources available, while considering the reality of both the timing and the amount of available funds.

Our goal is to implement mitigation plans during 2015 for the top 10 high-risk assets developed during this study, and to continue the assessment of 10 additional high-risk assets.

Case Study: Support for the EPA's Climate Resilience Evaluation and Awareness Tool

American Water is part of the EPA's working group that is in the process of developing version 3.0 of the EPA's Climate Resilience Evaluation and Awareness Tool (CREAT), the EPA tool for water and wastewater utilities to assess climate change risks and mitigate impacts. The new web-based program architecture features modules on Climate Awareness, Scenario Development, Asset Screening, Adaptation Planning, and Risk Assessment. The final CREAT version 3.0 is expected to be released in the middle of 2015.

Water Conservation

In households across the U.S., water usage is declining slowly but steadily, a trend that is likely to continue for the next 15 years or even more.[7] This is good news in light of the challenges faced by some areas.

According to the Water Research Foundation, the primary forces behind this drop are increased use of water-efficient appliances and a decrease in the number of occupants per household.[8] Other factors to consider are price elasticity, a growing conservation ethic among consumers, and conservation programs implemented by utilities and other entities.

The record summer heat and lack of rainfall in 2013 and 2014 in many parts of the country posed some challenges, but only in limited cases did we have potentially severe water supply issues, as the hardest-hit areas were largely outside the areas we service. Over the past 12 years, American Water has seen savings on indoor residential water consumption in the range of 10 to 17 percent.

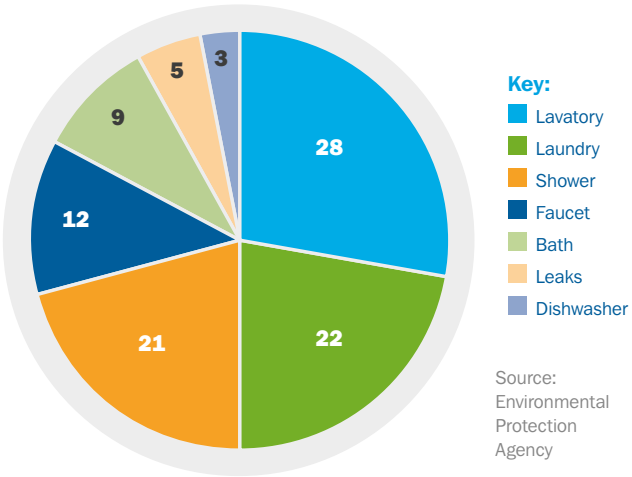
American Water continues to work closely with state utility commissions to encourage water conservation and efficiency. We use a number of methods to promote behavioral change, particularly in water-stressed states, including:

- A tiered-rate structure
- A water efficiency appliance rebate program for commercial and residential customers
- Supplying leak detection kits
- Water-saving hints and tips on our website, through social media and local microsites
- Customer educational literature
- Customer events
- Partnerships with the U.S. EPA and other organizations on public education programs, such as WaterSense

Case Study: Savings Through Good WaterSense

American Water is a voluntary member of the EPA's WaterSense Program. This aims to raise awareness about the importance of conserving water and promotes the use of WaterSense products, which are at least 20 percent more efficient than standard toilets, faucets, and irrigation fixtures. Since the EPA's program began in 2006, WaterSense has helped U.S. consumers save a cumulative 1.1 trillion gallons of water and more than $21.7 billion in water and energy bills.[9]

How U.S. Households Use Water (%)



Source: Environmental Protection Agency

7 Coomes et al. "North American Water Usage Trends Since 1992." Water Research Foundation. 2010.

8 Coomes et al. "North American Water Usage Trends Since 1992." Water Research Foundation. 2010.

9 http://epa.gov/watersense/about_us/index.html

Case Study: Water Conservation Efforts in California

From 2013–2014, California has experienced an approximately 11 percent reduction in water production. With one of the most severe droughts on record in the state, our Conservation Team is continuing to work with customers to maintain a reliable service. Together with our customers, we are preserving existing water resources, and small changes in water-use habits are helping our customers to lower their water bills.

After California Governor Jerry Brown's Executive Order in April 2014, regarding the reduction of state water waste and the implementation of voluntary water-use reductions of 20 percent, California American Water employed a number of additional outreach campaigns. They were aimed at reducing water usage in certain areas, and encouraging customers to reduce water use by voluntarily ending non-essential or unauthorized water use.

Our Actions:

1. The California American Water Rebate Program has seen $3,038,811 (2013–2014) paid to residential and commercial customers who have switched to water-efficient appliances, like toilets and clothes washers, resulting in annual water savings of more than 600 acre-feet

2. In Northern California, we provided classroom programs, conservation field trips, theater presentations with water themes, and other conservation activities and materials to local schools and other community organizations, directly reaching more than 19,000 students in 2014

3. California American Water has partnered with WaterSmart Software and provides all residential customers in its two highest per capita water-use districts (Los Angeles and Ventura) free monthly Home Water Use Reports, including a comparison to similar households in their area and suggestions to help reduce water with landscape and indoor retrofits

4. During 2013 and 2014, we made 1,853 free Water Wise visits to customers to review water use. The visits identified opportunities to save more than 74 acre-feet of water annually, and facilitated the discovery of customer plumbing and irrigation leaks, irrigation inefficiencies, and overspray. The visits also allowed us to provide recommendations for plumbing and irrigation upgrades that are rebated through California American Water

5. During 2013 and 2014, we supplied 19,904 water-efficient showerheads, 11,353 hose nozzles, 32,424 aerators, 1,552 toilet flappers, and 14,823 toilet leak detection kits in California free of charge to our customers

6. We are in the process of developing and constructing our own desalination plant, providing alternative water supplies to serve our customers in California's Monterey Peninsula for generations to come. American Water is the operator of the country's largest sea water desalination plant in Tampa, Florida

Next Steps

In April 2015, California Governor Jerry Brown issued an order asking all Californians to reduce water use by 25 percent. The State Water Resources Control Board released guidelines indicating how this target should be applied, ranging from 4 to 36 percent. The communities with high daily consumption are being asked to conserve more. California American Water immediately asked every General Manager and their local conservation staff to meet with their top 25 water users within 30 days to discuss the best way forward. They mailed all customers with information and revisited rebates and conservation incentives to ensure they were appropriate. We have filed with the California Public Utilities Commission and received approval for revised Rule 14.1 Drought Contingency Plans that will allow for additional pricing signals (drought surcharges) should expanded levels of conservation be necessary to meet required reduction targets.

Our Impacts on the Climate

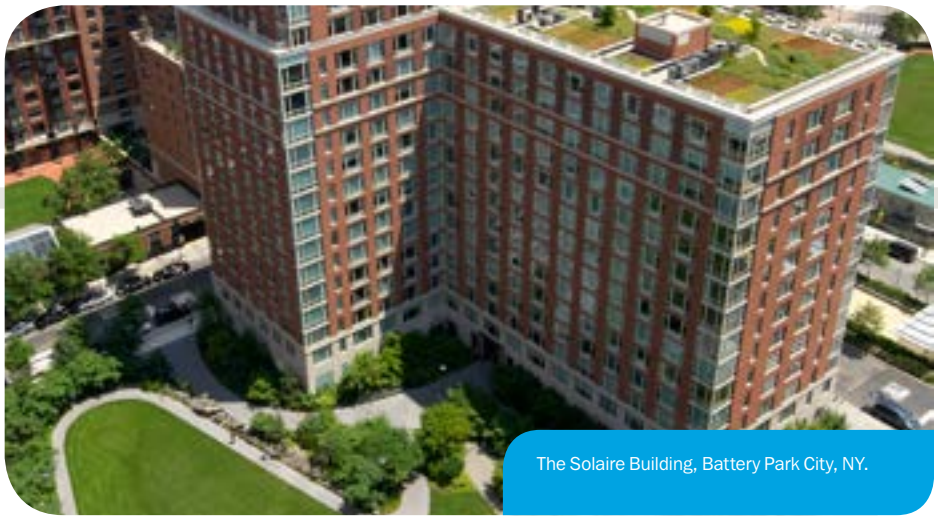
Case Study: Fix a Leak Week

It is estimated that more than a trillion gallons of water are lost annually nationwide through leaks within our homes, and some of the causes are seemingly small, such as leaky faucets or running toilets. Per average household in the U.S., this adds up to more than 10,000 gallons of water wasted every year, the same amount of water needed to wash 270 loads of laundry.

American Water partners with the U.S. EPA on national Fix A Leak Week (part of the WaterSense program) to raise awareness and help with solutions. For example, we offer our customers a detection kit, including a non-toxic leak detection tablet for toilet tanks. A guide is also available to help homeowners track down various types of indoor and outdoor leaks. As part of our effort, we have created an educational video called The Journey of Water about the value of water and the importance of preventing wastage.

Case Study: Working with Local Stakeholders

One of the systems in the New Jersey American Water operating area is experiencing a supply/demand imbalance, particularly in the peak summertime, when irrigation increases and coastal areas experience a surge in temporary population. While the region experiences significant seasonal shortages, groundwater and surface water sources remain under-allocated during the off-season. New Jersey American Water is addressing the issue from several angles. One of these is demand-side management through stakeholder outreach to major irrigation customers. Another approach is to store excess winter flows, as well as non-revenue water reduction and pressure reduction to reduce leaking pipelines. New Jersey American Water is currently engaged in a Comprehensive Planning Study to evaluate the numerous options.



The Solaire Building, Battery Park City, NY.

We recognize that our activities have an impact on the environment and that we need to manage them appropriately.

Our goal is to achieve long-term environmental leadership. As such, American Water has committed to the following actions:

- We will comply with all relevant environmental laws, regulations, and standards
- We will sustain the environment through responsible business practices that promote environmental stewardship with a holistic approach to the prevention of pollution
- We will be efficient in our use of natural resources, including energy, in both our operations and during construction

Each operating unit is responsible for managing its environmental impact in a systematic way, through the implementation of an Environmental Management Plan that includes both regulatory requirements and stewardship opportunities. These include a review of the Endangered Species Act and the development of a biodiversity strategy with a focus on watersheds and water resource management. We aim for a net positive impact on biodiversity and, as part of our environmental audit program, we query each facility's efforts to promote biodiversity. See **Regulation and Compliance Programs**.

Operational Efficiency

Our goal is to achieve industry-leading operational efficiency and we are working to cut our carbon footprint and our waste in half over the long term. Through research, innovation, and technology, we continue to identify operational improvements and to build environmental understanding at a state and a site level.

Pump efficiency remains a key focus, since the electricity we use to pump water accounts for about 90 percent of our carbon footprint. Our fleet and vehicle right-sizing initiative has reduced CO_2 emissions by 1,670 tonnes, increasing the company's fleet fuel efficiency by 0.3mpg, and providing fuel savings of $963,000.

American Water has made a public commitment to achieve a 16 percent reduction in GHG emissions (GHGe) by 2017, from 2007 levels. This goal surpasses the national agenda and leads the water industry. Our total GHGe for 2014 was 708,063 tonnes, a 17.1 percent decrease from the base year of 2007, surpassing our goal. Read about our **Technologies Roadmap**.

Contract operation at Lake Pleasant in Arizona: designed, built, and operated by American Water.

American Water Total GHGe (Scope 1 and 2) (Tonnes CO_2e)

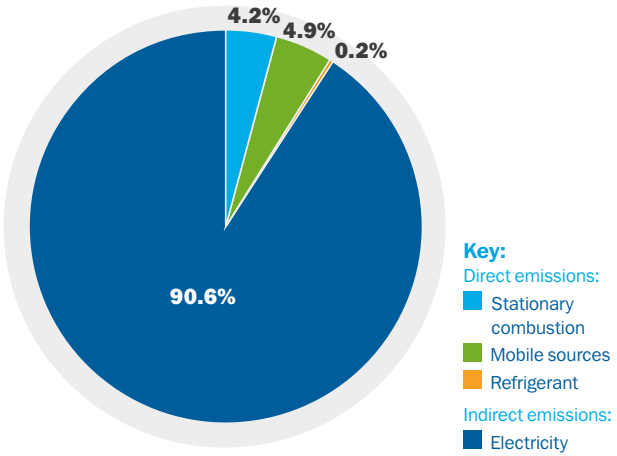
Direct Energy Consumption (Per million gallons of water produced)

	2010	2011	2012	2013	2014
Natural gas (therms)	8.74	10.39	10.27	12.01	11.37
Gasoline (gallons)	6.35	6.89	6.23	5.88	6.54
Mobile diesel (gallons)	2.18	2.13	1.96	2.04	2.16
Stationary diesel (gallons)	0.64	0.83	0.80	0.74	0.73

Direct Energy Consumption (Energy use in BTU equivalent) (%)

	2010	2011	2012	2013	2014
Electricity	78.60	78.30	78.80	77.46	77.32
Natural gas	8.40	9.80	10.00	11.68	10.97
Gasoline	8.20	8.10	7.50	7.10	7.84
Diesel	4.90	3.90	3.70	3.76	3.87

Total emissions by source 2014 (%)



Total Emissions by Source

		2013		2014	
		Emissions (tCO_2e)	Emissions (%)	Emissions (tCO_2e)	Emissions (%)
Direct emissions	Stationary combustion	31,332	4.5%	29,775	4.2%
	Mobile sources	31,889	4.6%	35,004	4.9%
	Process/fugitive	26	0.0%	26	0.0%
	Refrigerant	1,600	0.2%	1,617	0.2%
	Subtotal	**64,846**	**9.3%**	**66,422**	**9.4%**
Indirect emissions	Electricity	632,651	90.7%	641,641	90.6%
	Subtotal	**632,651**	**90.7%**	**641,641**	**90.6%**
Total		**697,497**	**100.0%**	**708,064**	**100.0%**

GHG Emissions Intensity

	2010	2011	2012	2013	2014
GHGe total (tonnes CO_2e)	800,655	790,922	710,878	697,497	708,064
Total emissions intensity (pounds CO_2e/kgal)	4.48	4.6	4.2	4.40	4.45
Direct emissions intensity (pounds CO_2e/kgal)	0.36	0.4	0.37	0.41	0.42
Indirect emissions intensity (pounds CO_2e/kgal)	4.12	4.2	3.83	3.99	4.03
GHGe intensity (year on year)	-0.30%	2.80%	-8.60%	4.7%	1.1%

Case Study: The Environmental Grant Program

We promote biodiversity and stewardship in the community, by working closely with local residents, community organizations, government agencies, and schools. Through our Environmental Grant Program, we are proud to support the efforts of local organizations that share our vision. We partner with local environmental groups to promote protection and stewardship of watersheds that impact our service areas. In 2013 and 2014, we partnered on 96 projects in 12 states totaling more than $386,000. To date, we have initiated 331 projects totaling more than $1.3 million in 12 states.

Recognizing the Water–Energy Nexus

American Water is a leader in reducing the energy costs of water and wastewater systems. Energy costs can be up to 60 percent of total operating costs for some utilities.

The electric and water sectors are highly interdependent, intersecting at critical "nexus" points during operations. Drinking water and wastewater systems consume large amounts of energy – about 2 to 4 percent of total U.S. energy usage – at an estimated cost of as much as $4 billion annually.[10]

Likewise, huge amounts of water are used to produce electricity – more than four times the amount of water consumed by all U.S. residences. It means energy efficiency efforts in one industry have a direct impact on another one. See Critical Resource Sectors.

We believe that if the state plans provide credit for water and wastewater industry energy efficiency measures, carbon emissions will be greatly reduced. American Water wishes to serve as a resource to the government to further develop and enhance the synergies that exist within the water–energy nexus.

10 Based on 4 percent energy use per the Environmental Protection Agency, "Strategies for Saving Energy at Public Water Systems," July 2013.

Pump Efficiencies

Water is heavy: 1,000 gallons weighs 4 tons. With the average household consuming about 250 gallons of water a day, water utilities are called upon to deliver 1 ton of this resource to millions of homes daily. Doing so requires a vast network of pipes and pumps that convey water up, down, and through many miles of pipes to customers. Powering these pumps requires a lot of electricity, which is why more than 95 percent of a typical water utility's total energy consumption is used for this purpose. As these pumps age, they become less efficient, requiring more energy to move the same amount of water.

American Water facilities consume about 1 million MWh per year of electricity, and over 95 percent of that is used to pump water. We are leading the way in seizing opportunities to improve pump efficiencies, reducing the amount of energy required to power them as follows:

Energy Usage Index Metric

This metric acts as a barometer for the condition of the pump fleet and helps us to pinpoint where pump improvements will make the greatest impact.

Wire-to-Water Pumping Efficiency Tests

Monitoring the efficiency of pumps and motors, and replacing or refurbishing older pumps can yield energy savings of 10–20 percent.

Pump Replacement/Refurbishment

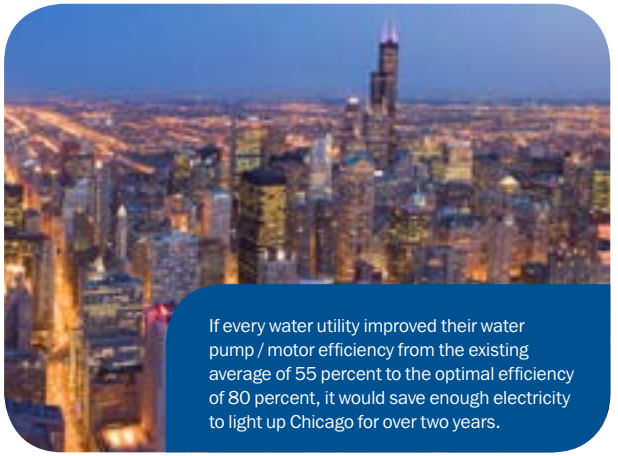
This is being done with the best available technology to improve efficiency.

Variable Frequency Drives

These have been installed to vary pump speed/output, which reduces electrical consumption.

Hydraulic Modeling

Distribution systems are modeled to analyze current and future hydraulic conditions to enable efficient pump selection and operation.



If every water utility improved their water pump / motor efficiency from the existing average of 55 percent to the optimal efficiency of 80 percent, it would save enough electricity to light up Chicago for over two years.

Over the past four years, American Water has refurbished or replaced 140 pumps at a cost of $25 million. These projects are expected to yield energy savings of 12 million KWh per year and a corresponding reduction in carbon emissions of 18 million pounds per year. Other initiatives are aimed at conserving water through improved leak detection and customer conservation. These reduce water pumped, which in turn reduces energy consumption and carbon emissions. Such a win-win-win is a rarity, and we believe there are more opportunities to be explored.

Reducing Waste

American Water is committed to minimizing resource consumption and waste production across our capital projects and during new construction. We promote recycling and work to recover energy from our waste. Residuals are by far our largest waste product, generated from water treatment where the silt and sediment is removed from raw water. In 2013, we initiated a company-wide review of our residuals management with the goal of setting a "baseline" for improvement.

In 2014, we set a target to reduce the residuals we send to landfill from operations under our direct control by 10 percent. This was surpassed with a 12 percent reduction of 3,773 dry tonnes, down from 4,304. This amount represents 5 percent of the total residuals we generate at our regulated operations, with a further 81 percent applied to land, and the remainder disposed of to a sewer system or back to the receiving waters (all under permit by the state environmental agencies).

For those residuals generated by our "non-regulated" market-based business (15,665 tonnes), we engage with our clients on options for beneficial use.

> "More than 2 trillion gallons of treated water are wasted due to leaks in water systems across the U.S. every year."

Case Study: Using Intelligent Water Meters

In February 2015, California American Water began to pilot an intelligent water metering program in Monterey, California – an area which has struggled with water scarcity. This new technology enables our customers to monitor their daily usage via a meter. High water use may suggest they have a leak, and finding and stopping leaks quickly reduces repair costs, chemical use, energy consumption, and associated greenhouse gasses. We are currently recruiting 200 residential and business customers to take part in the pilot, across a number of neighborhoods to ensure we get a good mix of data. By intensifying our efforts, we hope to garner enough information to evaluate feasibility, cost of operation, and which features our customers find most useful.

Our teams work hard to ensure customers understand the importance of measuring water consumption.

Case Study: Engaging with Learning Institutions to Detect Water Leaks

Every two minutes, a significant water line ruptures in the U.S., which leads to trillions of gallons of water wasted annually and severe economic losses. We are helping to identify cracks before they become a more acute problem. As part of a new research project at the Illinois Sustainable Technology Center, American Water and Echologics are piloting an advanced leak monitoring technique that looks set to deliver measurable water savings.

Acoustic monitoring detects leaks by monitoring the sound signatures of water flow. The location of the leaks is determined by using multiple sensors and sophisticated signal analysis. The sensors themselves are relatively small and can fit within fire hydrants. A wireless network of 79 sensors was installed in August 2014 in the city of Des Plaines' Waycinden Water District.

In September 2014, the acoustic monitoring successfully identified a leak that was draining into a storm sewer. Water from this leak was unlikely to surface. It could have taken more than six months for the break to grow large enough to be detected; instead it was repaired within 12 days, with minimal damage to surface features. It is estimated that this leak would have lost approximately 3.25 million gallons of water over 90 days. The software identified the location of the leak within 20 feet of the actual location, allowing the digging of a very small trench.

Water Treatment Residuals Disposal Issue in California

California American Water operates six water treatment plants in California that remove excess arsenic from raw water to achieve compliance with drinking water standards. After removal, if arsenic exceeds certain concentrations in a solid waste, it must be characterized as "hazardous".

After a request from the Monterey County Health Department (DoH) in June 2013, California American Water investigated disposal practices for the residuals and concluded it is likely we had shipped and disposed of residuals from three Monterey County facilities and one Sacramento County facility on numerous occasions between 2010 and 2013 that should have been characterized as hazardous but were not.

California American Water informed DoH and the Sacramento Department of Environmental Management (EMD) of these possible violations. In 2014, it reached an agreement to settle the matter with both regulators, and fines were approved by the courts totaling $850,855. Throughout, California American Water has worked cooperatively to address all Notices to Comply, which are now fully resolved.

Steps have been taken to avoid future errors of this type, including:

- → Development and finalization of Residual Management Practice
- → Significant staffing changes, including hiring of a new statewide Senior Director, Water Quality & Environmental Compliance
- → Modification/update of relevant Environmental Management Plans

Case Study: Employees Making a Difference

Our EcoZone program, launched in spring 2014, was designed to encourage employees to make simple behavioral adjustments to become more environmentally friendly. They include recycling paper, plastic, aluminum, and batteries – a practice that is becoming standard at our facilities.

The online site has received 16,361 page views since it began, with 3,501 visitors (approximately half our employee base). Some 293 employees have registered to become "green team" members. To date, 17 new projects have been completed by employee green teams and shared in our Project Library.

We have continued with our company-wide initiatives to save paper and printer toner. We had a further 12.2 percent reduction in paper use in 2013, a 44 percent reduction from 2009 levels. Additionally, all our paper has 30 percent recycled content.

Water Quality & AVAILABILITY

99% We score greater than 99 percent for drinking water compliance.

150+ awards Received for superior water quality.

$1 billion Capital investment for total infrastructure in 2014, up from $950 million in 2013.

New Cumberland, Pennsylvania.

Water quality and availability are affected by local issues, such as geography, weather conditions, and supply infrastructure.

This means that there is more water to go around per person in some areas than in others, yet we all expect to turn on a tap 24/7, and receive clean, safe water into our homes and businesses. Our vast network of 560 treatment plants, pumping stations, storage facilities, and approximately 48,000 miles of mains pipes, are put to work each day to provide our customers with the highest-quality service. We are proud of our performance, having received 68 EPA Partnership for Safe Water Directors Awards and, in 2014, American Water was about 15 times better than the industry average for compliance with drinking water quality standards (maximum contaminant levels). We were also typically 20 times better than the industry average for meeting all drinking water requirements in 2014.

In this section:

How Source Water Quality Impacts Us

The quality of a water source dictates the treatment it needs to meet drinking water standards and the costs to our business. We draw water from different sources:

- → **Groundwater**: Aquifers or artesian aquifers
- → **Surface water:** Streams, rivers, lakes, reservoirs
- → **Sea water**

Groundwater collects naturally through the water cycle and forms large pools under the Earth's surface, called aquifers. These can be hundreds of feet deep, often avoiding exposure to many contaminants. This makes treating groundwater much simpler and less expensive than treating surface water, on average up to five times less. Sea water contains salt and requires an energy-intensive desalination process as well as surface water treatment before it can be consumed.

Regional geological differences can also affect quality with higher levels of salt, soot, or other particles. In some instances, source water is contaminated by industrial byproducts and chemicals. Both cases result in water requiring more rigorous treatment. For residents and businesses in associated regions, it is likely that these challenges are reflected in higher monthly water rates.

Pollution Challenges We Face

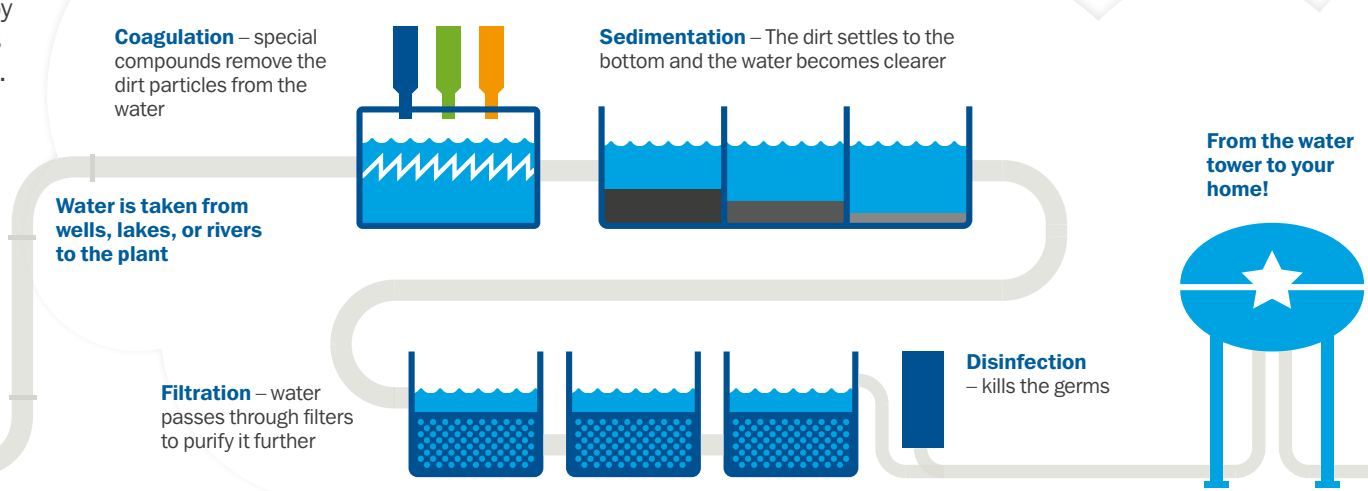
Today we are challenged with diverse sources of pollution, such as urban storm water, sanitary sewer overflows, agricultural runoff, and atmospheric deposition.[11] Human and animal waste, and pollutants such as fertilizer runoff are common causes of contamination.[12] Many of our nation's drinking water supplies include major rivers and streams that traverse urban and industrial areas with potential sources of contamination from industrial plant sites, railroad crossings, highways, and river traffic.

Recent research has identified chemical and pharmaceutical residues, from products such as cleaners and antibiotics, as a threat to the integrity of the country's water system. As a result, the EPA and water industry experts are collaborating to develop effective treatment methods that can address these new contaminants.

We are currently doing research on the removal of pharmaceuticals in wastewater and biologically active filtration (for both drinking water and reuse applications). We are also involved in projects on how to communicate these issues to the public.

American Water's scientists test water samples from across the country to protect against hazardous chemicals, algae, metals, minerals, viruses, microbes, and other potential contaminants. In addition to manual tests, computerized analyzers continuously monitor the water as it passes through the system. Every year, our team of professionals conducts nearly one million tests and measurements using the most advanced technology and equipment available. Read more in **Public Safety**.

How a Water Treatment Plant Works



11 United States Environmental Protection Agency. "Office of Water." 2001.

12 United States Environmental Protection Agency. "Water on Tap." December 2009. http://water.epa.gov/drink/guide/upload/book_waterontap_full.pdf

Case Study: Benefits of Biofiltration at Swimming River

A demonstration-scale trial of biofiltration was conducted at the Swimming River Water Treatment Plant, which is operated by American Water's New Jersey subsidiary. The plant is faced with several treatment challenges, including organics removal – which can affect taste and odor – and particulate removal.

A large number of surface water treatment plants in the U.S. use granular activated carbon (GAC) in filters, to absorb and reduce unpleasant tastes and odors in the water. In biofiltration, naturally occurring bacteria are allowed or encouraged to grow on filter media. By allowing the bacteria to control the tastes and odors, the replacement of GAC can be deferred, reducing costs and associated CO_2 emissions.

Results of the initial testing indicate the biofilters are capable of controlling taste and odor over the long term and less frequent GAC replacement can still meet organics removal goals. In 2014, deferring replacement of GAC led to savings of more than $2 million.

Based on internal estimates, if biofiltration was implemented across all our plants using GAC, the savings could exceed $4 million per year. It would also negate the need for replacing more than 3.5 million pounds of GAC. As part of a company-wide effort, 25 of these 32 plants are being tested to determine if biofiltration is appropriate.

Case Study: Innovation to Monitor and Control Algae Blooms

In 2014, as part of our **Innovation Development Process**, we formed a partnership with LG Sonic to help control algae in water treatment plants. The company's solar-powered ultrasonic algae control buoys, called the MPC-Buoy, transmit ultrasonic waves to disrupt algal cells, causing them to sink and prevent proliferation. The system operates entirely on solar power and the technology will not harm fish or other wildlife.

Four of these buoys were installed at the Canoe Brook Water Treatment Plant, which is operated by New Jersey American Water. It was the first use of this technology for drinking water reservoirs in North America. The new system provides continuous online water quality monitoring. During extensive testing in 2014, the buoys enabled the plant to reduce chemical consumption by more than 20 percent, thereby reducing the concentration of undesirable taste- and odor-causing compounds in treated water delivered to customers.

Based on the results of this study, we plan to purchase buoys for other reservoirs impacted by algae and we are looking at other uses, including clarification basins, waste backwash lagoons, and wastewater/reuse applications.

In 2015, our work in this area was recognized by the ***Environmental Business Journal***® with a Business Achievement Award.

Installation of LG Sonic solar-powered ultrasonic algae control buoys.

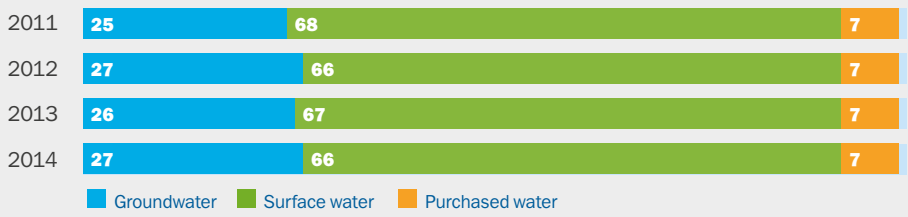
Water Withdrawal by Source (Thousands of gallons)

	2011			2012			2013			2014		
	Ground	Surface	Purchased	Ground	Surface	Purchased	Ground	Surface	Purchased	Ground	Surface	Purchased
Arizona American Water Company	15,287,709	3,866,469	–	–	–	–	–	–	–	–	–	–
California American Water Company	20,488,500	–	10,232,100	21,394,572	–	10,735,236	21,774,735	–	10,961,258	19,251,199	–	10,126,636
Hawaii (Wastewater Only – No Source of Supply)	–	–	–	–	–	–	–	–	–	–	–	–
Illinois American Water Company	13,498,889	24,128,987	4,708,084	15,083,373	23,580,914	4,892,442	14,495,952	22,355,732	4,779,357	14,609,603	22,997,662	4,649,730
Indiana American Water Company	22,559,281	17,849,428	485,540	23,239,599	18,009,334	441,552	22,437,469	17,857,246	496,666	22,906,177	17,679,428	423,295
Iowa American Water Company	6,921,641	–	–	1,121,145	5,981,404	–	1,061,708	5,634,875	–	1,095,562	5,314,231	–
Kentucky American Water Company	–	13,716,013	69,476	–	14,308,289	85,238	–	13,270,249	77,734	–	13,955,035	71,194
Maryland American Water Company	49,177	475,400	3,577	33,487	470,885	1,621	19,280	482,882	6,439	35,137	479,142	4,214
Michigan American Water Company	378,332	–	–	387,097	–	–	325,820	–	–	378,793	–	–
Missouri American Water Company	9,402,045	64,523,368	512,903	9,951,428	68,667,207	777,197	12,271,170	60,067,223	517,817	13,885,580	58,795,090	602,523
New Jersey American Water Company	20,970,682	73,036,354	5,571,763	20,882,664	72,382,101	5,676,517	20,844,949	70,993,956	5,339,457	23,207,157	69,613,097	5,106,389
New York (Long Island) American Water Company	10,166,828	–	–	29,044,678	–	–	–	–	–	–	–	–
New York American Water Company	–	–	–	–	–	–	16,917,500	–	–	16,367,456	–	–
New Mexico American Water Company	2,776,828	–	–	–	–	–	–	–	–	–	–	–

Water Withdrawal by Source (Thousands of gallons)

	2011			2012			2013			2014		
	Ground	Surface	Purchased	Ground	Surface	Purchased	Ground	Surface	Purchased	Ground	Surface	Purchased
Ohio American Water Company	1,898,255	4,016,095	301,344	–	–	–	–	–	–	–	–	–
Pennsylvania American Water Company	5,055,937	67,886,919	900,869	4,739,898	64,970,088	925,179	4,983,917	64,491,956	853,612	5,050,112	65,474,404	882,386
Tennessee American Water Company	6,931	13,522,938	14,953	2,242	13,242,391	17,610	2,313	12,530,278	16,749	2,931	12,411,948	16,713
Virginia American Water Company	95,086	7,514,216	7,575,141	98,358	7,359,296	7,242,836	91,774	6,896,616	6,995,945	95,017	7,287,616	7,041,554
West Virginia American Water Company	–	17,572,937	66,937	–	17,905,618	83,061	–	17,371,595	103,434	–	17,715,096	80,513
American Water totals	**129,556,121**	**308,109,125**	**31,626,666**	**125,978,540**	**306,877,527**	**32,174,111**	**115,226,588**	**291,952,608**	**31,320,649**	**116,884,724**	**291,722,750**	**30,168,338**

Water Withdrawal by Source (regulated businesses) (%)



60% Surface water (rivers, lakes, and streams) is the source of 60 percent of our nation's drinking water.

40% The quality of almost 40 percent of U.S. rivers, streams, and lakes still does not support their designated uses.

Wastewater Reuse Applications (Number of plants)

	2010		2011		2012		2013		2014	
	No. of plants	%	No. of plants	%	No. of plants	%	No. of plants	%	No. of plants	%
Aquifer recharge	–	–	57	45	15	27	15	29	15	29
Irrigation	–	–	26	20	19	34	18	35	18	35
Toilet flushwater	–	–	31	24	9	16	9	17	9	17
EMC (industrial process water)	–	–	5	4	5	9	2	4	2	4
Cooling tower makeup	–	–	8	6	8	14	8	15	8	15
Total	**0**	**0**	**127**	**99**	**56**	**100**	**52**	**100**	**52**	**100**

Material and Chemical Use (lb per million gallons produced)

	2010	2011	2012	2013	2014
Ammonia	2.93	3.8	4.4	15.2	15.34
Chlorine	27.24	30.7	27.8	26.77	27.32
SO_2	0.3	0.37	0.31	0.6	0.54

Costs of Increasing Regulations

Increasingly stringent federal regulations, such as the Stage 2 Disinfectants and Disinfection Byproducts Rule and the Long Term 2 Enhanced Surface Water Treatment Rule, require updates to treatment processes and changes in sampling requirements. These demand advanced levels of technology and operator skills that makes compliance more difficult and costly. In response to these challenges, utilities and industry organizations often work together with the U.S. EPA to establish regulatory solutions and to determine, for example, if a new regulation will provide effective value to the public.

Since the enactment of the Safe Drinking Water Act, our scientists have assisted the EPA on developing drinking water standards. The U.S. EPA National Drinking Water Advisory Council has also created an Affordability Work Group composed of senior members of the water industry to determine whether new federal compliance regulations will be affordable for customers and communities. Knowing that the water bill may increase to over $1,000 per year in the next decade, the Group is working to find ways to ensure that all communities can afford to become compliant without sacrificing their water quality.

Impacts We Have on Water Quality

We measure the sustainability of the water we use through our continuous **Comprehensive Planning Study program**, an engineering report in which we assess the balance between water supply and demand, and evaluate the long-term viability of our resources. Options for water supply are considered against each risk evaluation, such as conjunctive use, regionalization, Integrated Water Resource Management, non-revenue water reduction, wastewater reuse, and demand-side management.

Water utilities, including ourselves, are responsible for ongoing monitoring of the distribution system for disruptions that can affect water quality or cause adverse health effects.[13] They could include water main breaks, pipe leaks, pressure variations, microorganism growth, and inadequate pipe materials. We focus strongly on **water efficiency** and **operational efficiency**.

Case Study: Four National Awards for Excellence in Water Quality

Nationally, just over 400 surface water treatment plants are part of the U.S. EPA's Partnership for Safe Water Program, a voluntary effort that is designed to increase protection against microbial contamination through treatment optimization. American Water has a strong presence in the program, currently accounting for about:

- 20 percent of the participating plants nationwide (79 plants)
- 30 percent of the plants receiving the program's Phase III Directors Award (68 plants)
- 33 percent of all plants receiving the Five-Year Phase III Award (63 plants)
- 35 percent of the plants receiving the Ten-Year Phase III Award (59 plants)
- 10 percent of the plants receiving the Fifteen-Year Phase III Award (3 plants)

Pennsylvania American Water's Philipsburg Water Plant has received the Phase IV Presidents Award, the first of our treatment plants to receive the elite award. Our Military Services Group has been recognized with the Phase III Directors Award for Distribution System Optimization Program, highlighting the water distribution systems it manages for Fort Leavenworth, Kansas and Scott Air Force Base, Ill. It was also awarded to the facilities we manage in Fort Hood, Texas, and Fort Sill, Oklahoma.

> "We're delighted to be among the select few companies to achieve this national recognition from the Partnership. It's a true testament to the expertise of our people, their dedication to excellence, and commitment to protecting public health."
>
> **Todd Duerr,** President of Military Services Group, American Water

13 Environmental Protection Agency. "Water on Tap: What You Need to Know." October 2003.

Water Efficiency

Water efficiency is everyone's business at American Water; we are responsible for delivering it together. Our people work with customers, communities, and regulators to ensure that water efficiency is recognized and encouraged.

While conservation focuses on using less water, water efficiency promotes "using water wisely." Both yield tangible business benefits. Less water use leads to reduced power consumption, chemical usage, and waste disposal throughout the value chain. Decreased demand results in lower or deferred operating and capital costs, and reduces our carbon footprint. It means we can pump and treat water during off-peak times.

A Smarter Water Grid

We continue to invest in critical water infrastructure, seeking to develop a more intelligent water grid. We are looking at the integration of flow monitors, pressure monitors, intelligent meters, and SCADA devices in water treatment plants to provide a more reliable and efficient supply of water.

Each year, upwards of 2 trillion gallons of treated water are wasted due to leaks in water systems across the U.S. We have deployed leak detection technologies in many states, including **acoustic monitoring** and **advanced pressure management** to reduce the risk of leaks. Ongoing research is helping us demonstrate the feasibility of installing modifications on existing distribution system pressure.

Pipe Renewal

In 2013, we undertook a major initiative to use the American Water Works Association's "Buried No Longer Tool." This provides a long-range view of capital needs for water and sewer pipe renewal. We are using the information to help identify and prioritize classes and areas of pipes for renewal. For example, over time, unlined cast iron pipe will develop tuberculation, which can reduce flow, cause discoloration, and increase the amount of energy needed to pump water.

Data on our pipe networks is captured and updated continuously via our GIS (Geographic Information Systems). We are now able to calculate a reasonable approximation of pipe age in the American Water system, and estimate many of our systems have an average pipe age of 45–55 years of service, with some mains having over 100 years. Based on this data, we will need to increase our annual pipe renewal from about 350 miles to as much as 500 miles by 2030.

We are using water and sewer main rehabilitation techniques such as structural, semi-structural, and cement mortar lining programs to renew our infrastructure. We also continue to advance our analytical tools, hydraulic modeling software and leak detection tools to identify and prioritize this infrastructure renewal program and to coordinate with other roadwork.

Number of Notices of Violation

	2010	2011	2012	2013	2014
Notices of violation[14]	17	11	7	11	9

Customer Health and Safety Legal proceedings or incidents of violation (number)

2010 – 2013	2014
No legal proceedings or incidents of violation regarding the impact of American Water's products on customer safety and health with respect to the provision of water and wastewater services.	In January 2014, **Freedom Industries** spill. Also in 2014, subsidiary California American Water paid a total of $850,420 in civil/administrative penalties in connection with residuals disposal issues.

14 NOVs counted according to company targets, per American Water's written practice.

Case Study: The 3M™ Pipe Rehabilitation Program

In West Orange, New Jersey American Water has invested over $6 million in pipe cleaning and re-lining water mains to improve water quality and fire flows. The process removes sediment from inside a main, then lines the inner surface with 3M™ Scotchkote™ sealant. The procedure extends the life of the water main and offers environmental benefits as excavation is limited to each end of the pipeline, rather than the whole length, and uses fewer materials and resources. We have also replaced fire hydrants, valves, and any service lines from the main to the curb box that are made of galvanized iron pipe. We worked quickly and diligently to minimize inconvenience to our customers.

Every year, we deliver system improvements to the communities we serve – from extending water mains to replacing meters and hydrants to upgrading plant equipment.

Case Study: Advanced Pressure Management to Reduce Leaks

International efforts to reduce water leakage have confirmed that reducing excessive pressure reduces the volume of leaks through pipes and the frequency of pipe failures. American Water is a partner in a two-year award from the Israel–U.S. Binational Industrial Research and Development Foundation, along with Stream Control, to develop an advanced pressure management system. The Stream Control Research Project will assess the feasibility of installing modifications on existing distribution system controls that could reduce pressure for a system that has experienced reduced customer use.

Did you know? Just one quart of oil can contaminate 2 million gallons of drinking water!

Drinking Water Compliance

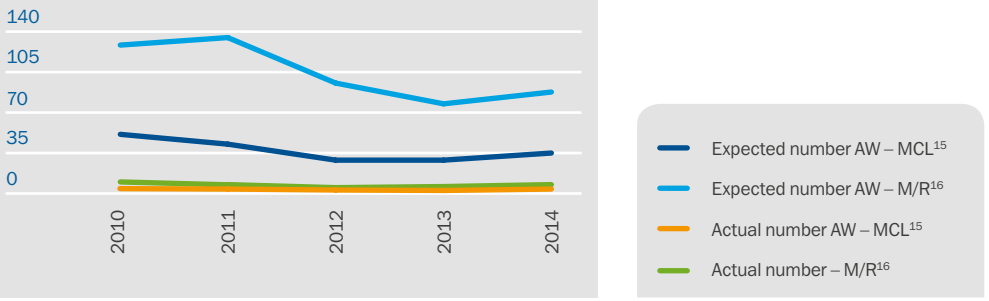
While the United States government and state governments set and enforce standards, water suppliers have a responsibility for the quality of the water that flows from the tap. We follow environmental, health, and safety rules set up by state, federal, environmental, and public health regulators.

American Water is at the forefront of monitoring and controlling microbial, chemical, and radiological contaminants, which is why we often achieve compliance with drinking water standards prior to deadlines that are established by state or federal regulations.

In 2014, we scored 99 percent for compliance with strict federal regulations for delivering clean, quality drinking water. We continued to perform better than the rest of the industry with respect to meeting drinking water requirements, performing about 15 times better with meeting health-based standards, and almost 20 times better for monitoring and reporting – something that we are immensely proud of.

We distribute a Customer Satisfaction Survey, which includes an analysis of our customers' opinion of our water quality. We have targeted 77 percent combined responses for questions on water pressure, clarity, taste, and odor by 2015.

Systems in Violation



Systems in Violation

	2010	2011	2012	2013	2014
Expected number AW – MCL	42.43	36.13	28.29	28.04	30.78
Expected number AW – M/R	122.88	130.86	95.25	73.45	87.19
Actual number AW – MCL	4	3	2	3	2
Actual number AW – M/R	6	5	3	2	5

15 MCL = Maximum Contaminant Level Violations per System.

16 M/R = Monitoring and Reporting Violations per System.

Case Study: Education Through Customer Confidence Reports

We are required by law to notify all customers regarding the quality of their water annually and we share government thinking that educating our customers on local water quality assists positive behavioral change. Everyone has the ability to improve the quality of water during everyday activities.

We make Consumer Confidence Reports (CCRs), containing information on water quality, available on our website or send a copy through the mail to customers. In addition, we post Basic Water Quality Summaries that contain information that our customers most frequently ask about on our websites.

In 2013, the pilot year, customers accessed online CCRs and other online water quality information approximately 50,000 times. The program has continued to grow in 2014, with customers accessing the information more than 150,000 times.

In addition to recognizing savings of over half a million dollars from 2013 to 2014, our move to internet-based reporting and customer notification by postcard has saved or eliminated 113 tons of wood, almost 75,000 pounds of solid waste, over 800,000 gallons of wastewater, and 225,000 pounds of CO_2 equivalents of GHG emissions.

Wastewater Compliance

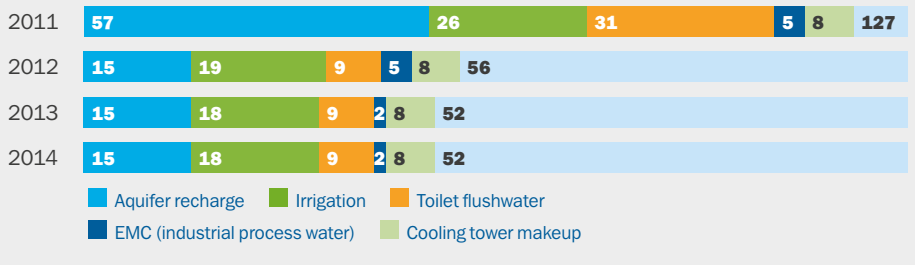
We want to increase the number of communities in which American Water provides both water and wastewater services, improving the cost of our wastewater service and developing our reuse and bioenergy business in North America.

Our current wastewater compliance rate is greater than 99 percent, with the majority of the facilities we own or operate meeting their discharge requirements every day of the year. American Water is committed to maintaining and improving this performance. We have formed a Wastewater Center of Expertise, a virtual community of American Water operations, business development, engineering, rates, finance, legal, and environmental stewardship professionals, who are willing to share their knowledge and skills when operational issues arise.

Each of our plants is permitted by law to expel certain levels of wastewater. To demonstrate best practice in the industry, we are working to achieve a 10 percent reduction on sewer overflows and end-of-pipe exceedances. We will share our findings with the EPA to help other organizations.

2 billion gallons More than 2 billion gallons of water are recycled annually.

Wastewater Reuse Applications (Number of plants)



Creating Alternative Water Sources

Over 90 percent of treated wastewater in the U.S. is not recycled. American Water sees this water as a valued resource and we are at the forefront of research to study and promote reuse.

Since 2006, we have conducted 15 research projects sponsored by the WateReuse Research Foundation, valued at over $5.9 million. The studies support the 40 reuse systems owned or operated by American Water and provide strategic groundwork for future growth in this area.

We currently recycle nearly 2 billion gallons of water annually and produce reuse water at more than 80 facilities. One example is the Gillette Stadium in Foxborough, Massachusetts, where we built and continue to operate a system that treats and reuses water during major events. Another is Homer Glen, Illinois, where treated wastewater feeds Spring Creek and is constantly monitored to help ensure compliance with environmental regulations.

At the Fillmore Water Recycling Plant in California, 100 percent of treated water is recycled and reused for the irrigation of school athletic fields, city parks and other green areas. Our wastewater solutions can be found in LEED®-certified buildings around the country, including The Solaire in Battery Park City, New York. The Solaire is the nation's first environmentally advanced residential tower, employing a wastewater reclamation, treatment, and reuse system to consume less resources and energy.

In the Copper Hill School in Raritan Township, New Jersey, our Applied Water Management Group helped the school achieve recycling goals. Wastewater is recycled from the cafeteria and gym showers to be used for toilet flushing, saving the elementary school about 12,000 gallons of wastewater each day.

40 facilities 40 facilities produce reused water.

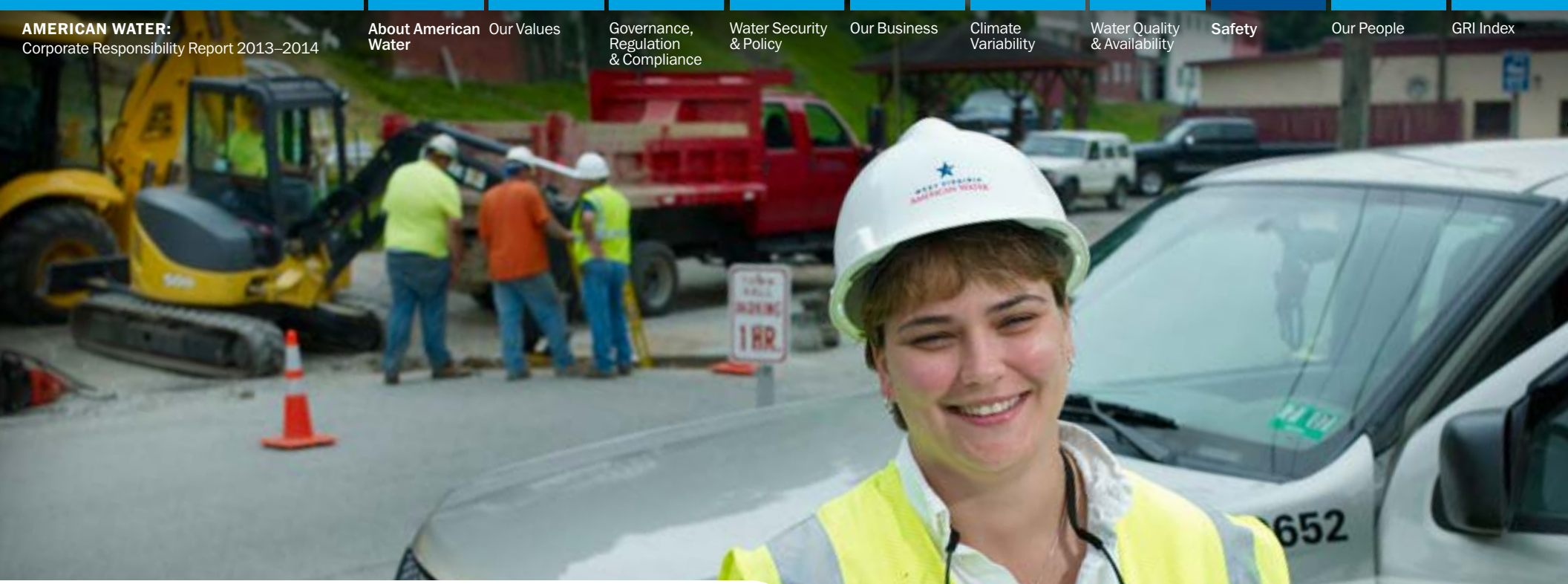
Case Study: Water Reuse, the Great Lakes, and Public–Private Partnership

American Water's Illinois operation has recently been selected by the Metropolitan Water Reclamation District of Greater Chicago (MWRD) to partner for a beneficial water reuse project.

As a result of a Supreme Court decree in the 1920s, Illinois must manage a limited amount of water allocation from the Great Lakes and plan for long-term water supply. The state has selected Northeastern Illinois as a priority area for water supply planning. This innovative public–private partnership between the MWRD and Illinois American Water is using resource recovery to help offset water treatment costs.

Illinois American Water will distribute non-potable, treated effluent from the Calumet Water Reclamation Plant (CWRP) to large water users in the area. The CWRP treats approximately 237 million gallons per day of wastewater from parts of Chicago and its suburbs, and it plans to make 10 million gallons per day available for reuse. **Read more here**.

> "It would be difficult to find a stronger partnership than the team of the District and Illinois American Water – two industry leaders coming together to change how we look at water reuse in the Midwestern part of the United States. The plan is ambitious and the outcome nothing short of life changing from an economic development, environmental, and sustainable perspective."
>
> **David St. Pierre,** Executive Director, Metropolitan Water Reclamation District of Greater Chicago



SAFETY

At American Water, safety is not just a key strategic priority, it is a core value. We do not compromise safety for speed, convenience, or profit.

We take the responsibility of ensuring the safety and wellbeing of our customers and employees very seriously. In support of this, we have put enhanced programs into place, embedding safety measures into all areas of our business and engraining strong safety principles into the American Water way of working.

We track both leading and lagging indicators of safety. We continuously evaluate our safety programs and performance, improving our process and procedures to reduce exposures that can lead to injury or illness.

In this section:

Instilling a Culture of Safety

We believe an effective safety program is one that is collaborative and engages our people. It must be led by our employees and supported by management.

Every employee at American Water is accountable for their safety and the safety of their co-workers. Employees are empowered to question and stop any activities they believe are unsafe, without repercussion.

We continuously review and update our practices and procedures, develop safer processes, introduce safer tools and equipment, and integrate safety into our operational training modules. This reinforces that safety is not an additional task that we must perform, but something we choose to perform, and that is part of everything we do. We listen to our employees' safety suggestions and incorporate them into our programs. This joint ownership strengthens the understanding and commitment of all employees.

Staff at all levels, from our CEO to employees throughout the organization, conduct "safety walks," whose purpose is to demonstrate our company's commitment to safety, to obtain feedback from employees who perform their tasks, and to evaluate the effectiveness of our strategy. Information gathered during these interactions is also incorporated into our continuous safety improvement process.

Safety Standards

We continue to develop company-wide standards that not only adhere to federal, state, and American Water-specific regulations, but go beyond and lower the risks our employees face as they carry out daily duties.

- In 2014, a Safety Strategic Action Group (SSAG), comprising employees at various job levels, including those in union-covered jobs, was formed to evaluate our safety program and provide recommendations for improvement. This comprehensive body of work resulted in 16 key recommendations that have been accepted and are being implemented
- A corporate level Safety Council has been established, comprising 12 employees from across the business and representative of our operations, including union-covered jobs. The Council is accountable to our Executive Leadership Team and charged with implementing existing recommendations as well as setting the strategic safety direction and making additional recommendations for improvements going forward
- Employees are required to develop personal safety plans each year. These plans are activity based. They do not focus on trailing metrics such as injury rates, but instead outline activities every employee will perform over the course of a year that contribute to lowering exposures and strengthening our culture

> "In 2014, American Water took a comprehensive look at safety. As part of this, we asked for feedback from employees across the business through surveys, face-to-face meetings, and one-on-one interviews. The intelligence gained from this exercise helped to shape new internal policies and goals which will ultimately help improve the culture of safety across the company."
>
> **Susan Story,** President and CEO, American Water

60,000 hours On average, more than 60,000 hours of safety training are given annually to American Water employees – that's about 16 hours per employee.

Contractor Safety

American Water is committed to fostering a wider understanding of safety and a stronger foundation of it with our contractors. We require our contractors to comply with American Water safety standards in addition to federal, state, and local occupational health and safety regulations.

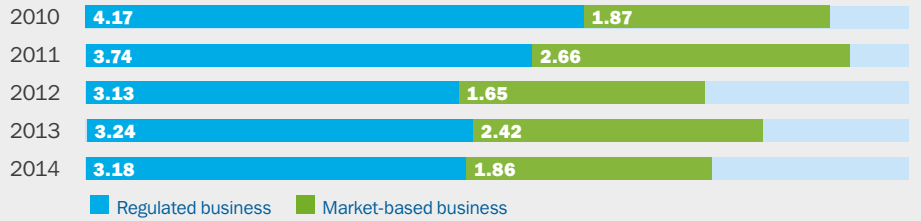
We have a formal process in place to prequalify contractors for safety. If contractors do not meet the safety qualification requirements, they cannot bid or perform work for us. This process is managed by a third party, PICS Auditing, that specializes in this area. Oversight is provided by a committee composed of representatives from health and safety, engineering, and supply chain.

Contractors must demonstrate that they have:

- → A comprehensive safety program
- → A Total Recordable Injury Rate (TRIR) (presented as a three-year average) at or below their respective industry average
- → An Experience Modification Ratio (EMR) at or below 1

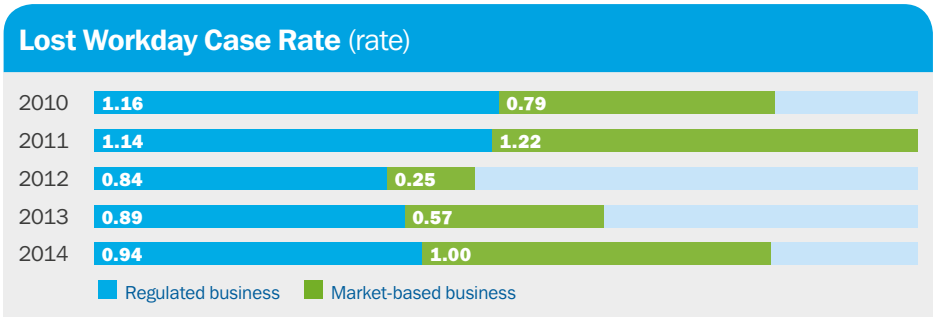
PICS Auditing has conducted 471 manual audits on behalf of American Water and verified over 3,000 individual safety programs. In 2013, we experienced a 1.2 percent decrease in our contractors' EMR average and a 54 percent decrease in the TRIR average for all contractors. In 2014, American Water saw a 1.5 percent decrease in our contractors' EMR average and an 18 percent decrease in the TRIR average for all contractors.

OSHA Recordable Injury Rate (rate)



Lost Time Injury Frequency Rate (Number/million hours worked)

Lost Workday Case Rate (rate)



Our Training Modules

Since 2014, we have focused on proactively improving safety and incident avoidance. To achieve our company goal of zero incidents, our people need to have the right tools, skills, and competencies to do their job safely and efficiently.

We are training and empowering employees to recognize and minimize exposures that can lead to accident and injury risk.

We have established a Learning and Development Department, recognizing that operational skills and safety are interdependent. Safety is embedded within our job skills training, and we utilize multiple delivery methods, offering classroom training conducted by experienced operational and safety personnel, online learning modules, on-the-job mentoring by our experienced field staff, weekly "safety toolbox talks," and refresher training at regular intervals. Additionally, "Safety Alerts," are issued after an incident or near-miss situation so that employees can review and discuss where and when they may encounter similar situations and how to apply appropriate corrective actions.

Case Study: Empowering Employees to Choose Safety

We have recognized that employee-led and management-supported safety programs are critical to sustaining effective programs and driving continuous safety performance improvement. The concept is taking hold and evidence can be seen across the company.

For example, in New Jersey, Safety Observation Teams have been formed whose purpose is to provide peer-to-peer safety feedback on observed activities. These teams are led and organized by employees with management support, providing time and resources to conduct the observations.

In Missouri, a Safety Culture Council has been established, comprising employees from across the state. It serves as a forum to discuss safety issues and recommend solutions that are reviewed and implemented.

Case Study: Improving Our Near-miss Procedures

A near-miss is any condition or action that could have caused injury, illness or equipment/property damage, but did not. In January 2015, we introduced a formal enterprise-wide near-miss reporting process. Employees who have been involved in or witnessed a near-miss incident, or have identified an unsafe condition, can report it through the internet or by telephone to a designated member of staff. We operate a "no fault" system to encourage reporting. Employees can report without fear of discipline, or if they prefer, choose to report anonymously.

Our near-misses are tracked by management, investigated by safety staff, and corrective actions are implemented before injury occurs. Each employee who reports a near-miss is kept informed of the outcome. Findings are disseminated to relevant team members on a weekly basis and a discussion held to identify how future incidents can be avoided locally.

Promoting the recognition, reporting, investigation, and correction of near-miss incidents and conditions, is fundamental to an environment of safety awareness and a continuous drive to lower exposures. Our ultimate goal is zero accidents and injuries. To achieve this, we need to ensure all employees are committed to a high-performing safety culture. Near-miss reporting is one of the measures of this culture, and our target for this year is a 20 percent improvement in the number of near-misses reported between Q1 and Q4.

54% 54 percent decrease in Total Recordable Injury Rate for contractors in 2013 and a further 18 percent decrease in 2014.

Public Safety

A reliable, sufficient supply of clean, safe, affordable water is essential to the life of all communities.

While no one owns water, the federal government and state agencies grant rights to utilities such as American Water to collect, treat, and distribute water to customers. Any disruptions, especially frequent ones, can affect quality of life and wellbeing. They can create adverse impacts for the provision of social services, as well as for transportation, health, education, and local economies.

Interruptions can occur during extreme conditions, such as droughts, heatwaves, power outages, and regrettably they also take place as a result of aging infrastructure.

While we cannot control weather patterns, we can prepare for them. And when drought or severe weather conditions do threaten a good water supply, the public's health and safety is our number one priority.

We use our Comprehensive Planning Study (CPS) program to assess the availability and reliability of water supply. This ongoing process enables us to study, evaluate, and adjust risk relative to water quality, quantity, and service continuity. It helps us to ensure plans are in place for source water protection, drought management, and emergency response.

American Water plans to invest about $6 billion over the next five years. Much of this investment is targeted for infrastructure repair and renewal, as well as water supply and treatment improvements, to ensure our customers continue to receive safe and reliable water supplies.

We will work with each of our states to ensure that we are able to balance investment with affordability for customers, as well as continue to work on operational efficiency in order to offset some of the investment impact on customer bills. See **Growth Opportunities**.

Some examples of our mitigation efforts are:

- We recently completed construction of floodwalls to protect major treatment plants in Bridgewater, New Jersey, and Davenport, Iowa, and began construction of floodwalls in Hopewell, Virginia to assure a safe, uninterruptible water supply during major floods
- We have installed treatment improvements and redeveloped several off-line wells in our California, New Jersey, New York, and Indiana operations to provide greater supply reliability and resiliency to ensure continuous service during peak usage months
- In the Streator, Illinois system, Illinois American Water constructed an off-stream reservoir. It will act as a backup water supply during droughts and when the primary river supply exhibits high nitrate concentrations in spring from farmland fertilizer runoff, thereby assuring high-quality water to the public throughout the year

See **Pollution Challenges We Face**.

American Water has earned more awards from the EPA's Partnership for Safe Water than any other water utility company.

Case Study: Response to Freedom Industries Chemical Spill

In January 2014, an undetermined amount of 4-Methylcyclohexanemethanol (MCHM) leaked into the Elk River from a storage tank at a facility owned by Freedom Industries. This spill occurred just upstream from West Virginia American Water's largest treatment and distribution center in Charleston, West Virginia, leaving residents across parts of nine counties without potable drinking water.

West Virginia American Water took immediate action to ensure that the health and safety of customers and employees was the number one priority. Plant staff visited the site of the spill to obtain more information, and increased treatment and monitoring immediately. West Virginia American Water worked closely with state agencies to issue a "Do Not Use" order to all customers served by the Kanawha Valley Plant, and to develop a plan to restore full water service. Members of the team set up a 24/7 local hotline, developed an interactive web-based map, which was visited more than two million times, and produced informational materials to distribute to the public. In addition, they deployed 14 water tankers and purchased 35 truckloads of bottled water, providing bulk water to customers for seven weeks following the spill.

West Virginia American Water employees and the interagency team worked around the clock for weeks, with the goal of returning drinking water to its longstanding high quality as soon as possible. They conducted a thorough evaluation and carried out rigorous tests at the plant. Once they were confident that no traces of the chemical existed in the system and had fully restored the water to its original quality, they began taking deliberate steps based on comprehensive evaluations to address other issues raised by this event. This included supplementing the source water protection planning, exploring alternate water sources, and making enhancements to the emergency customer notification system.

Lessons were learned at all levels from this incident, and we are pleased to report that other states are now looking at what happened and making preparations should a similar event occur in their communities. Following the spill, Dr. Peter Grevatt, head of the Environmental Protection Agency's Office of Ground Water & Drinking Water, discussed West Virginia American Water's response:

> **"In my view [West Virginia American Water] did what they absolutely had to do in that circumstance. They had this chemical coming in, people were detecting it just by being able to smell it, and we didn't know much about what it was. The only thing to do was to tell people that they couldn't use the water without cutting off the intake because we needed to have the water available for fire suppression and other emergencies."**

We are proud of how West Virginia American Water handled the Freedom Industries chemical spill, and continue to work to improve and progress business operations. Last summer, West Virginia American Water installed analytical equipment and built a new lab at the Kanawha Valley treatment plant. It is going beyond what is required by new state legislation and installing source water monitoring technologies at our treatment facilities, at a cost of approximately $30,000 per facility.

West Virginia American Water worked with the National Guard to conduct extensive around-the-clock sampling and testing of water in the impacted areas.

Our PEOPLE

Our culture is built on a foundation of innovation, diversity, and community involvement. Our people are immensely dedicated because they understand the importance of their work, and the impact they have on everyday life for millions.

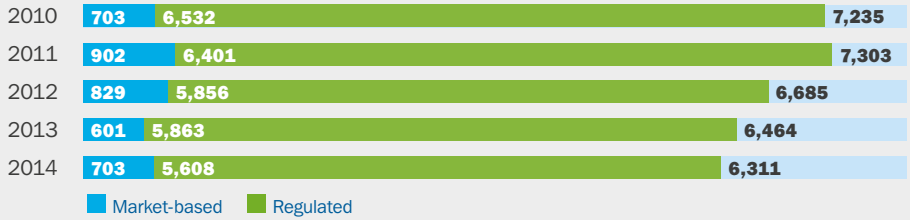
We continue to invest in creating the best conditions to support our people's professional and personal growth, providing an environment where involved, valued, and accountable employees will take us forward into the future.

In this section:

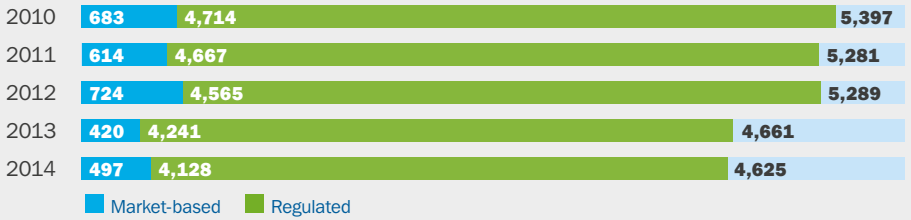
54% participation in Healthy Solutions.

Calumet, Michigan.

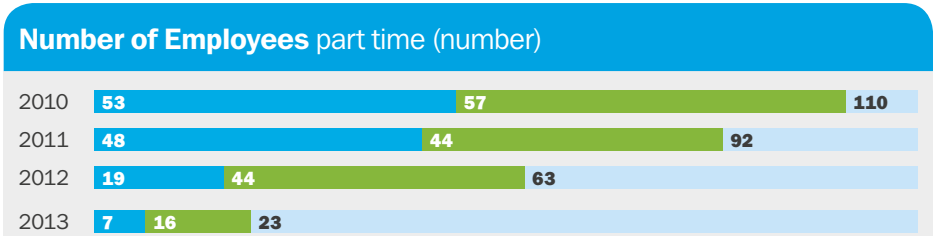
Number of Employees full time (number)



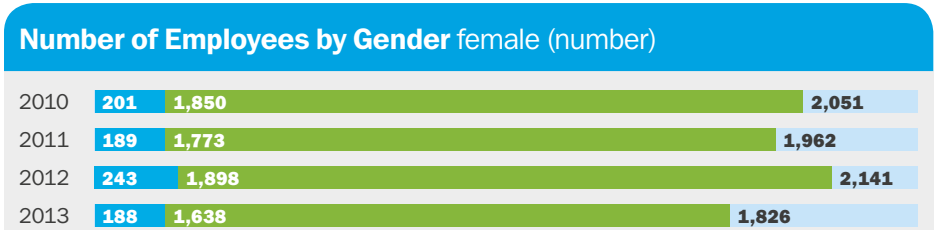
Number of Employees by Gender male (number)



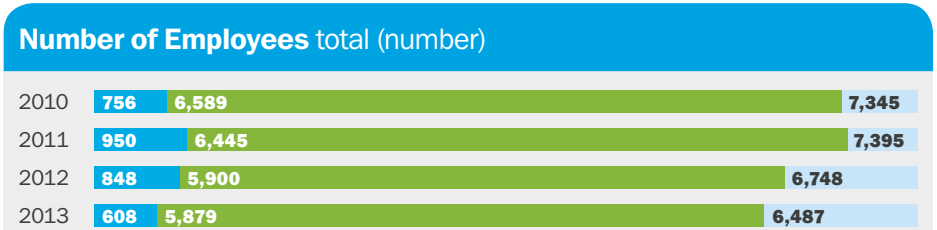
Number of Employees part time (number)



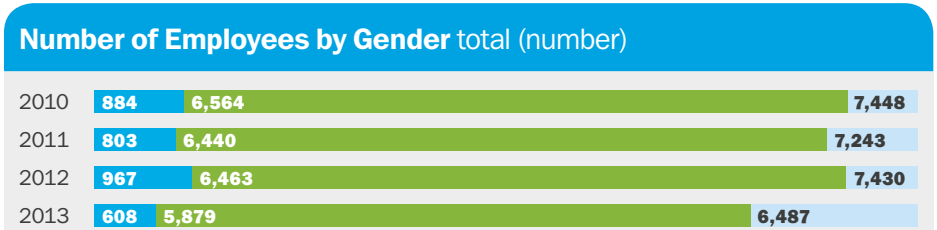
Number of Employees by Gender female (number)



Number of Employees total (number)



Number of Employees by Gender total (number)

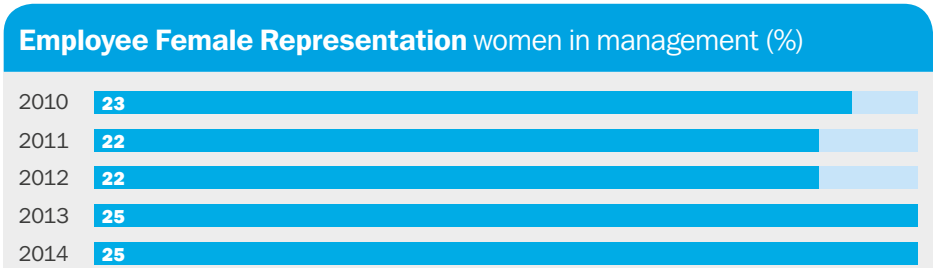


Employee numbers for 2010–2012 have been restated due to a transition on reporting from a manual process to SAP.

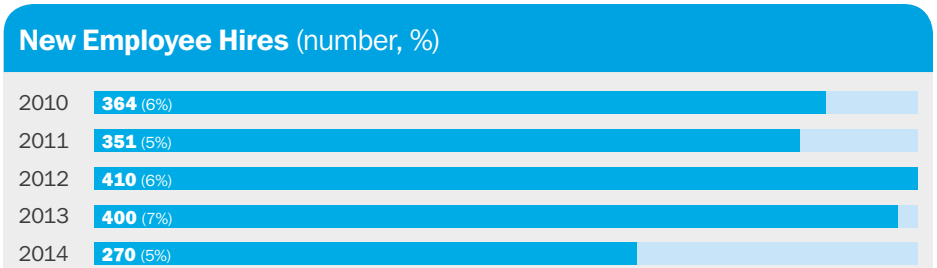
Regulated Businesses

Employee Female Representation total workforce (%)

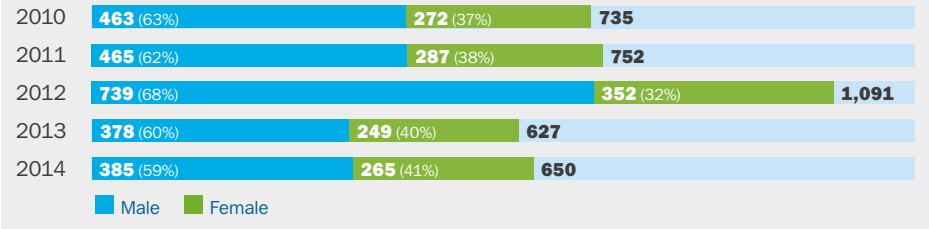
Employee Female Representation women in management (%)



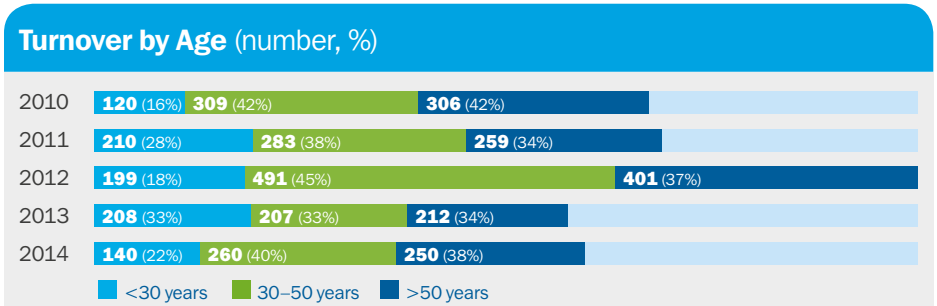
New Employee Hires (number, %)



Turnover by Gender (number, %)



Turnover by Age (number, %)



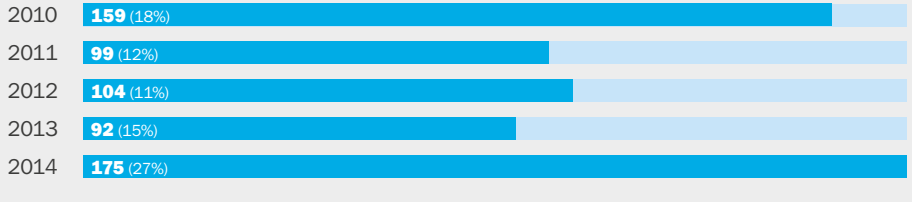
Employee numbers for 2010–2012 have been restated due to a transition on reporting from a manual process to SAP.

Market-Based Businesses

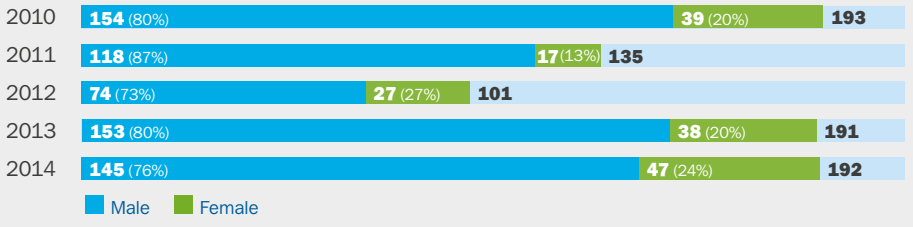
Employee Female Representation total workforce (%)

Employee Female Representation women in management (%)

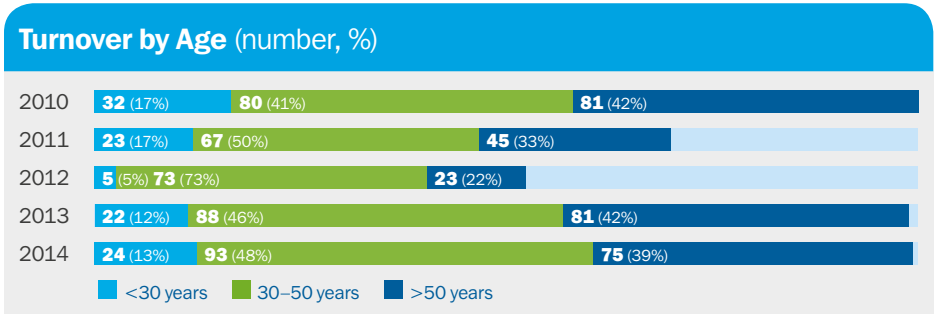
New Employee Hires (number, %)



Turnover by Gender (number, %)



Turnover by Age (number, %)



Employee numbers for 2010–2012 have been restated due to a transition on reporting from a manual process to SAP.

Aggregated Totals Regulated and Market-Based

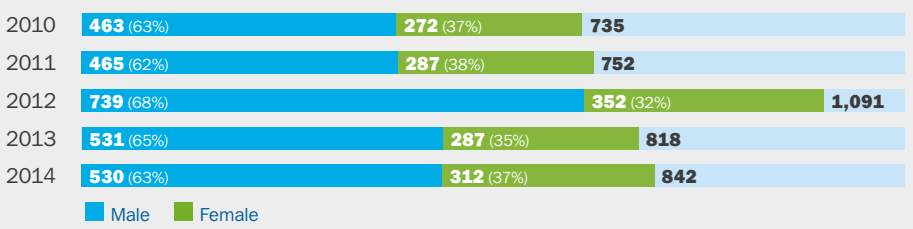
Employee Female Representation total workforce (%)

Employee Female Representation women in management (%)

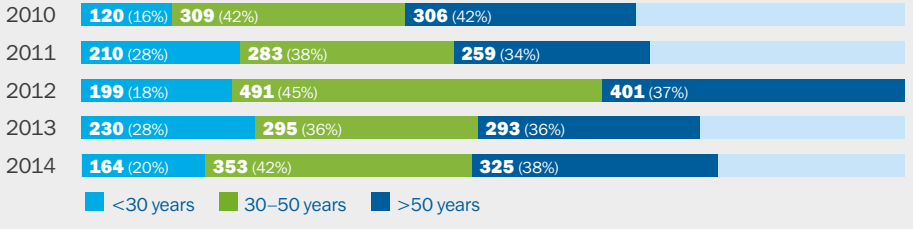
Employee Female Representation women on Board of Directors (%)

New Employee Hires (number, %)

Turnover by Gender (number, %)



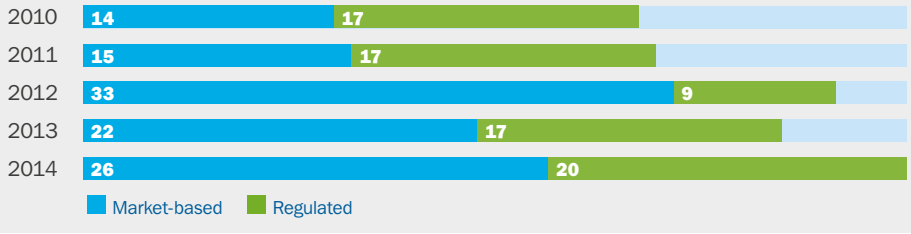
Turnover by Age (number, %)



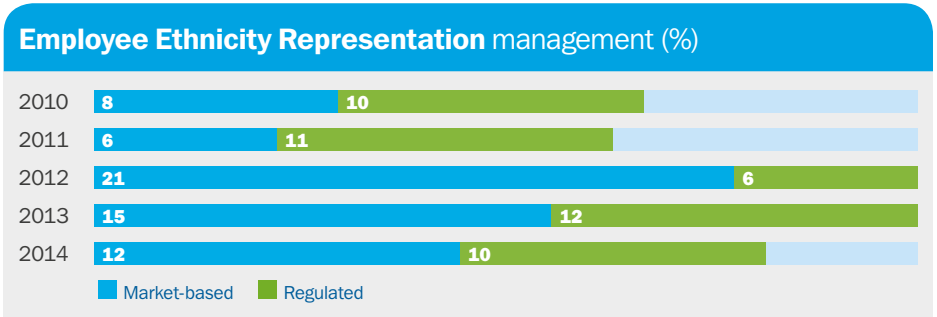
Employee numbers for 2010–2012 have been restated due to a transition on reporting from a manual process to SAP.

Employee Ethnicity

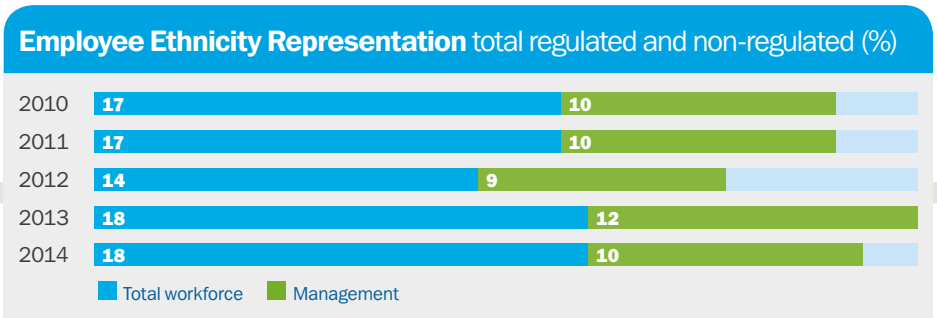
Employee Ethnicity Representation total workforce (%)



Employee Ethnicity Representation management (%)



Employee Ethnicity Representation total regulated and non-regulated (%)



Employee numbers for 2010–2012 have been restated due to a transition on reporting from a manual process to SAP.

Attracting and Retaining Talent

As an increasing number of American Water's workforce gets ready to retire, we are working to attract the next generation of employees, while leveraging the skills and knowledge of our long-term people.

Our goal is to create a reliable pool of talented applicants from a variety of professional, social, and ethnic backgrounds. Our Human Resources function has recently made organizational changes including the development of a new function within HR Services, called Workforce Planning/HR Systems, that is developing an approach to predictive modeling. This will bring together reporting and analytics from various HR functions to evaluate our workforce from a holistic data perspective. In this way, we can assess potential workforce gaps, in terms of skills and diversity, in the mid to long term.

Recruiting

Our Talent Acquisition department is organized around a customer-centric recruitment style. The centralized recruiting staff is overlaid with various verticals to seek, identify, hire, and retain competent and high-potential employees. Our strategy includes a strong commitment to diversity and inclusion. We are establishing relationships with organizations, communities, governmental agencies, and other providers of services to move in a positive direction for the selection and recruitment of people of diverse cultures, as well as transitioning military and the disabled.

See **Equal Opportunities and Diversity**.

Onboarding

After hire, in addition to standard onboarding training outlining basic company information, history and benefits, all American Water employees complete a training session called Water 101. It is designed to provide them with a broad understanding of how we do business, the regulations affecting our industry, how we treat our water, the difference between water and wastewater treatments, how our billing works, and how call centers operate.

Workforce Empowerment

Our future depends on the employees we develop today.

It is important to us that all our people across the business are confident that they have the right tools, skills, and competencies to take us forward. Training and work experiences are designed to equip people with the tools they will need to succeed. We also work closely with labor unions to learn how we can partner and improve our training effectiveness.

Through one new program, we are currently providing apprenticeships for two plant operators in West Virginia. The effort has involved a close partnership between our employee union and the management team at West Virginia American Water, with a joint committee of six members to oversee the program (three union members, three West Virginia American Water employees).

Competencies and Skills

We establish the competencies required for each of our positions, allowing us to identify the skills needed to fulfill them. The mapping of jobs to competencies, supported by our refined Jobs Catalog, is key to our succession planning. Positions are divided into job families, aiding natural advancement and potential moves to other parts of the organization. We have set up a Talent Management Center of Expertise to help attract, motivate, develop, and retain talented employees, and help foster a learning culture over time.

Using tailored software and systems, such as SuccessFactors, we identify high-potential employees and develop leadership attributes. We have established competencies for all job levels within our company and have integrated these competencies into succession planning, training and development, and performance management processes.

The deployment of Process Excellence began in 2012 and includes a holistic set of methods to build capability in the business for continuous improvement. These methods include Lean, Six Sigma, Innovative Design, Project Management, and Change Management. As of this report, we have certified over 500 people in various levels of achievement including Yellow, Green, Black and Executive Belt. The benefits achieved are now at over $40 million in efficiencies and expense reduction since the inception of the deployment.

The deployment of Process Excellence has three elements: Build Capability, Engage the Work Force, and Drive Benefits for the Customer, Business and Shareholder. All three of these elements have and will continue to drive our culture of customer focus, critical thinking, and continuous improvement.

The training, part of our continuous improvement culture, is a combination of workshops, e-learning, videos, and mentoring. We deliver training to employees who are sponsored with approved projects to work on. These projects are aligned to our strategy and tracked through our Process Excellence Program Office.

The Process Excellence Team also works on projects that are strategic and cross functions and/or business areas. These projects are used to achieve business purposes as well as to develop high potential employees.

Case Study: LEARN

Our ability to empower our people is underpinned by the educational tools that we develop. In April 2015, we launched American Water's new learning management system, designed to spearhead our employee training efforts. The new system, called the Leadership Education and Resource Network (LEARN), unifies our training efforts in a single company-wide platform (myCareer Solutions) that is available to all employees. Collaborating with a team of 160 coordinators enterprise-wide, LEARN provides an intuitive platform for both supervisors and employees to better manage career development.

Employee Engagement

Performance Management and Development

Our employee development philosophy is based on the idea that personal and professional learning is most effective when it involves hands-on experience through job rotations, special assignments, career coaching and mentoring, formal face-to-face teaching, and e-learning. We offer business education modules to develop our people's knowledge and business literacy about our wider operations. Training in 2013–2014 has focused on improving technical understanding of our operations, and on developing the competencies required to deliver safe and clean water.

Through the annual performance review process, we review professional growth in the context of past performance. Our software tool, myCareer Solutions, has helped us to set career targets and goals over the past three years, review achievements, understand the skills and capabilities of our people, and make decisions on how we shape training. In 2014, all employees who participated in the performance review process (non-union) were required to establish and maintain development plans identifying specific areas for development. By year end, 94.3 percent of employees had development plans in myCareer Solutions.

Collective bargaining agreements prevent American Water from conducting performance appraisals for union employees. In 2014, all of our 3,104 non-represented employees received an annual performance review. This represents nearly 48 percent of our total workforce approximately 6,400 employees (as of December 17, 2014).

We aim to provide a workplace that allows our employees to flourish, feel recognized for their value to our business, and be an active member of a team.

We can achieve this by adapting our culture, by fostering an appreciation of our people, and by supporting how they engage with the world around us.

Listening to Our People

The best way to understand how our people think is by talking to them. Our CEO, Susan Story, participates in listening tours on location across our business operations, accompanied by other members of American Water's Executive Leadership Team. In 2014, American Water used the Denison survey to further engage with employees, inviting them to comment formally through our anonymous American Water Culture Survey. More than 5,000 employees participated, including approximately 950 who responded via paper surveys, resulting in a 78 percent participation rate. In 2014, 127 listening tour events took place, involving around 1,100 employees. Interacting in this way with our people has given American Water's leadership the opportunity to hear direct feedback, concerns, and questions from our workforce.

Next Steps

The third phase of the culture initiative involves action planning. Each operating and functional area has reviewed both the survey results and focus group feedback. Small employee teams have been formed across the organization to recommend improvements that can be implemented in 2015 to address the feedback. Going forward, HR will track the progress with each team.

> "A more engaged workforce will be better trained, have better teamwork, a focus on continuous improvement, and achieve strong operations to serve customers well. As a result, we'll be more successful and provide more opportunities for everyone."
>
> **Walter Lynch,** President and Chief Operating Officer, Regulated Operations

Engaging with Trade Unions

About fifty percent of our employees are represented by an independent trade union or covered by collective bargaining agreements. In 2014, American Water had approximately 40 meetings with labor unions regarding business changes that affect our employees, including the national benefits settlement.

In March 2015, American Water met with union leaders representing 3,200 employees at a conference in Philadelphia. The meeting was a first of its kind with leaders and saw the 110 participants engage in topics of joint concern such as safety improvements, expanding training and development, and dealing with the implications of the federal Affordable Care Act.

It was followed in June 2015 with our biannual corporate leadership conference, Moving Forward, which included many of our supervisors, local union leadership, and front-line employees. The discussions provided informative and open dialogue.

Case Study: Volunteering with the Union Sportsmen's Alliance

In 2015, the **American Water Charitable Foundation** awarded a grant of $25,000 to the **Union Sportsmen's Alliance (USA)**. The partnership brings together USA's union members and American Water employees to volunteer their time and skills to improve public access to water-based recreational activities and enhance environmental sustainability. In 2015, our people will participate in **Work Boots on the Ground** projects that benefit American Water communities in Charleston, West Virginia, Chattanooga, Tennessee, and Peoria, Illinois. In April, West Virginia American Water announced a further $10,000 grant for the Charleston, West Virginia, Work Boots on the Ground project.

$360,000

Since 2012, our employees have volunteered more than 12,000 hours to help community charities, with matching gifts of $360,000 from the American Water Charitable Foundation.

Volunteering and Philanthropy

We see ourselves as members of the communities in which we operate.

Our commitment to act responsibly is made a reality with the time that our people donate through philanthropy.

In the three years since the American Water Charitable Foundation launched (2012), employees have volunteered more than 12,000 hours and donated thousands of dollars to charities they care about. In recognition, the Foundation has provided matching gifts of $360,000 to those same organizations.

Our annual AmerICANs in Action! employee month of community service event has seen a 30 percent increase in participants and project hours in each of the past three years. Over 1,700 employees across our state operations took part in 92 different community volunteer projects, totaling 4,739 hours.

Building Better Communities

In 2014, following recommendations from our Employee Advisory Committee, The American Water Charitable Foundation announced a contribution of $2.5 million over five years to the **National Recreation and Park Association (NRPA)**, in support of the **Building Better Communities program**.

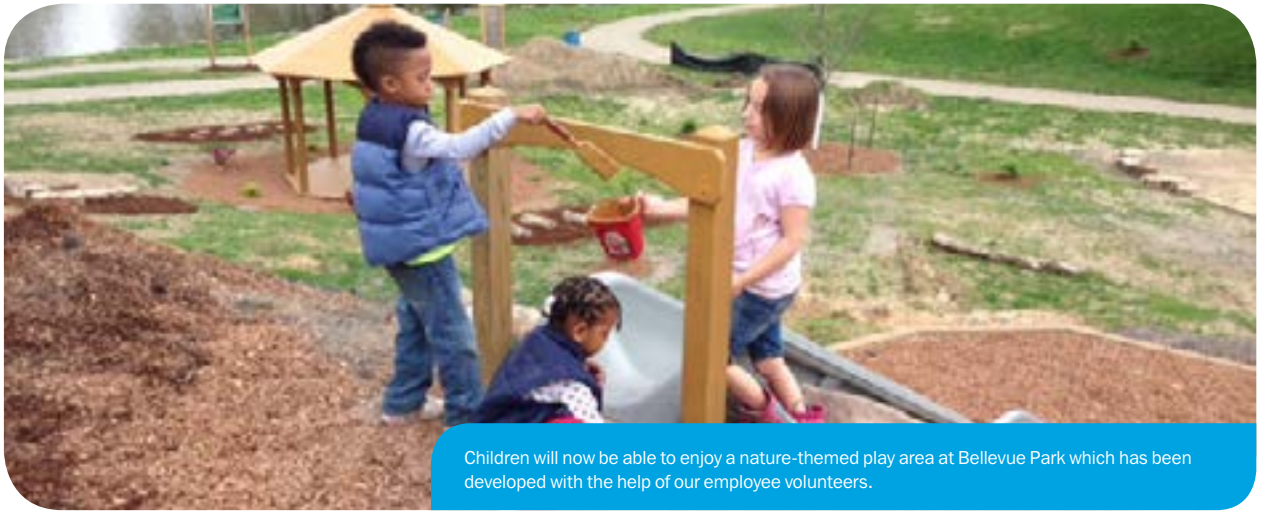
The signature program is closely aligned with American Water's core values of community stewardship and environmental sustainability, and aligns with areas of importance to the company's employees, including child welfare and education. It is designed to enhance the quality of life in the communities that American Water serves. It will initially focus on building or enhancing nature-based playgrounds and natural play spaces for children, and will connect and educate people on environmental stewardship practices related to water.

Of the 118 applications received in 2014, four projects were selected to receive grants totaling more than $380,000, based on criteria including play value, education value, proximity to American Water's service areas, relevance to project parameters, use of natural play materials, opportunities for American Water employee volunteer involvement, and construction of an actual children's play area.

> "In 2013, employees submitted 419 applications, resulting in matching gifts of $108,000. In 2014, the Foundation processed 600 applications, totaling $145,000 in matching gifts. And in the first four months of 2015, the Foundation has already processed 200 applications."
>
> **Debra Vernon,** Manager, Corporate Responsibility

The recipients were as follows:

- **The City of Belleville, Illinois,** will receive $109,000 to fund a 17,000 square-foot nature-themed play area within the 27-acre Bellevue Park. The area will tie into the lake at Bellevue Park, where the city's summer day camp will also use the area for play and outdoor education sessions on various topics such as water, water fowl, butterflies/insects, trees, and plants
- **The Lackawanna Heritage Valley Authority in Scranton, Pennsylvania,** will receive $150,000 to build a trail head park and playground along the Lackawanna River Heritage Trail. The playground will feature elements that are ADA-compliant to be inclusive to children with disabilities, as well as provide a water-learning experience to help instill a love and respect for the environment
- **The Pleasant Valley Recreation and Park District in Camarillo, California,** will receive $75,000 for the Camarillo Grove Park, an urban park and location for children to interact and learn about nature. The district is currently in the process of enhancing the only nature-based park in the area for the purpose of promoting outdoor education and environmental awareness
- **The Brunswick Redevelopment and Revitalization Committee in Brunswick, Missouri,** will receive $50,000 to expand the existing Brunswick Downtown Courtyard's water management area to develop natural play spaces and a venue for environmental education events



Children will now be able to enjoy a nature-themed play area at Bellevue Park which has been developed with the help of our employee volunteers.

> "The American Water Charitable Foundation's Building Better Communities program is a shining example of a company giving back to the communities it serves. By funding the largest national effort to build nature-based playgrounds in local parks, American Water is improving communities for its customers and employees, as well as helping educate the next generation about the importance of managing our water resources. The National Recreation and Park Association is thrilled to partner with the American Water Charitable Foundation to better connect children with nature through play."
>
> **Jimmy O'Connor,** Director, Grants and Partnerships, National Recreation and Park Association

Employee volunteers helping children to learn about nature at the Pleasant Valley Recreation and Park District, Camarillo.

American Water supported the build of a trail head park and playground along the Lackawanna River Heritage Trail, Scranton, Pennsylvania.

Compensation and Benefits

We aim to be an employer of choice. To help us achieve this goal, we provide a comprehensive compensation program, designed to recognize our employees for the vital role they play in our future, with rewards based on individual contributions to broader corporate goals.

We provide variable compensation for a significant portion of our employees, which links awards to both overall business and individual results. Our performance culture targets total cash compensation at the 50th percentile of the market with greater earning opportunities for exceptional performance. Through our American Water Employee Stock Purchase Plan (ESPP), we give all employees the chance to own stock in their company by purchasing American Water (AWK) common stock at a 10 percent discount from the market price, through after-tax payroll deductions.

American Water continues to provide a very competitive benefits package in line with our peers in the water and electricity industries. Employee benefits include a comprehensive medical and prescription drug, dental, vision, life, and disability insurance, and wellness, and tuition assistance. The 401(k) retirement program offers employees well-diversified investment options in order to successfully prepare for retirement based on their circumstances with an employer match.

We also offer a range of initiatives that provide support and assistance during times of change or challenging life events. These initiatives, grouped under our Employee Assistance Program (EAP), vary from flexible schedules and working from home arrangements to childcare locator information, and from elderly care specialists to discounts on specialist programs covering numerous issues. The EAP covers rehabilitation facilities, supplemental insurance, Advance Directives, Powers of Attorney, reverse mortgages, caregiver programs, home-delivered meals, home healthcare, hospice care, respite care, backup care, long-distance care giving, and assisted living facilities, among others.

> “Our Employee Assistance Program has childcare locator information on over 500,000 nationwide providers. Specialists are available to provide guidance and referrals and work with parents until satisfactory care is selected.”

Health and Wellness

Our assistance extends to lifestyle help: we encourage our people and their families to pursue healthier living habits and support them in maintaining better lifestyles.

Launched in 2010, our award-winning Healthy Solutions program gives members access to a dedicated website where employees and their families can participate in a free, confidential health assessment, and get tools and tips about health, fitness, safety, stress, and weight management. Our target is to see a 65 percent participation rate in the program for 2015.

Healthy Solutions offers annual biometric screening, scheduled wellness challenges throughout the year, and access to customized healthy living coaching programs, including personal health coaches. In 2015, we introduced more challenges to the program, almost half of which are dedicated to one of American Water's core values, Safety. By completing the challenges, employees are entered into prize draws for Apple iPads or exercise equipment.

54 percent of employees participated in Healthy Solutions in 2014, while 41 percent of our employees earned a $300 incentive for submitting a health assessment, having a physical or screening health exam, and participating in multiple activities.

Furthermore, in 2013, fewer employees (who participated in the Healthy Solutions condition management program for at least six months) suffering from asthma, heart conditions, and diabetes were admitted to hospital: 102 per 1,000 members (2013) compared to 149 per 1,000 members in 2012. This reduction in admissions generated cost savings of $197,374, a 2.67 return on investment.[17]

Month (2015)	Challenge
February	Choose Safety
March	Meatless One-Day
May	Dump the Junk
July	Be Active and Safe at Work
September	Big Green Salad
October	Be Safe & Prepared at Home
November	StressLESS

Fighting Stress

The mental wellbeing of our people is just as important to us as their physical condition. If a crisis or accident occurs at the workplace, our EAP provides immediate intervention, through counseling support for groups and individuals from a mental health professional. If the stress is not work-related, Healthy Solutions coaches help employees recognize and manage stress in their lives through our Stress Management Learning Center.

Case Study: Healthy Solutions for Healthier Families

Healthy Solutions keeps employees engaged by changing and expanding its services each year. For example, in 2014, seven new programs and challenges were introduced including the Gr8 Fruits and Veggie Challenge, Choose Safety Challenge and Healthy Numbers – Healthy Values, a program in which participants receive Wellness Credits for maintaining or improving their biometric screening results. Our employees and their family members can take advantage of Healthy Solutions to make a real difference to their lives.

> "I'm now eating more fruits and vegetables each day and I have passed those healthy habits on to my family."
> **Tre Gardener,** Team Leader

> "I started with Healthy Solutions and eating better and exercising just became a natural part of my daily routine."
> **John Danneker,** Project Manager

John Danneker (Project Manager) and Tre Gardener (Team Leader), participants in our Health Solutions program.

17 Alere Annual Performance Report for Period Ending December 2013 and April 1, 2015 report: "Financial Performance Indicators – Disease Management Admit Reduction (Cohort Population)"; 1,419 members who participated in Condition Management for at least six months during each year.

Equal Opportunities and Diversity

In 2014, more than 20 percent of American Water's source-able spend was with small businesses whose owners are women or disabled veterans, or from minority or disadvantaged groups.

We promote and provide opportunities based on merit and performance. Our goal is to be a diverse, inclusive, and socially responsible company.

We can achieve this through our performance-driven culture, which rewards employees who meet and exceed their potential and deliver outstanding results to our customers. American Water values and promotes diversity in its workforce and aims to reflect the local communities and customers we serve through the people we employ.

We are making progress in diversity. All utilities, including American Water, have certain specific factors which impact our workforce pools, such as the physical nature of many of our jobs and the local diversity of the talent pool in our operating states and counties from which we hire. Since 2012, our Talent Management Center of Expertise has deployed a talent acquisition strategy for increasing diversity. This supports our program to promote diversity throughout the company, including training and raising awareness.

Our target for 2014 was to make the candidate recruitment pool more diverse. In terms of racial diversity, we set ourselves the target of reducing the ratio of white employees when compared with people of color from 71:29 (2013) to 68:32 in 2014 and achieved this. In gender diversity, we have a goal for a greater ratio of female employees in leadership positions. In 2015, we are targeting a diverse candidates pool for key jobs, with 65 percent of director level and above positions including at least one such candidate for the post.

Supplier Diversity Program

We know that supplier diversity is essential to our success and to the success of the communities we serve. We continue to increase spend with diverse suppliers: it is one of the many ways we support the customers and communities that support us, by helping small and diverse businesses to grow.

Our supplier diversity program helps us to seek, identify, and encourage diverse suppliers, offering them an opportunity to compete for materials and service contracts. Where a supplier operates a company that is 51 percent-owned and operated by a woman or a disabled veteran or someone who is from minority group they can qualify to become certified as a diverse vendor for American Water.

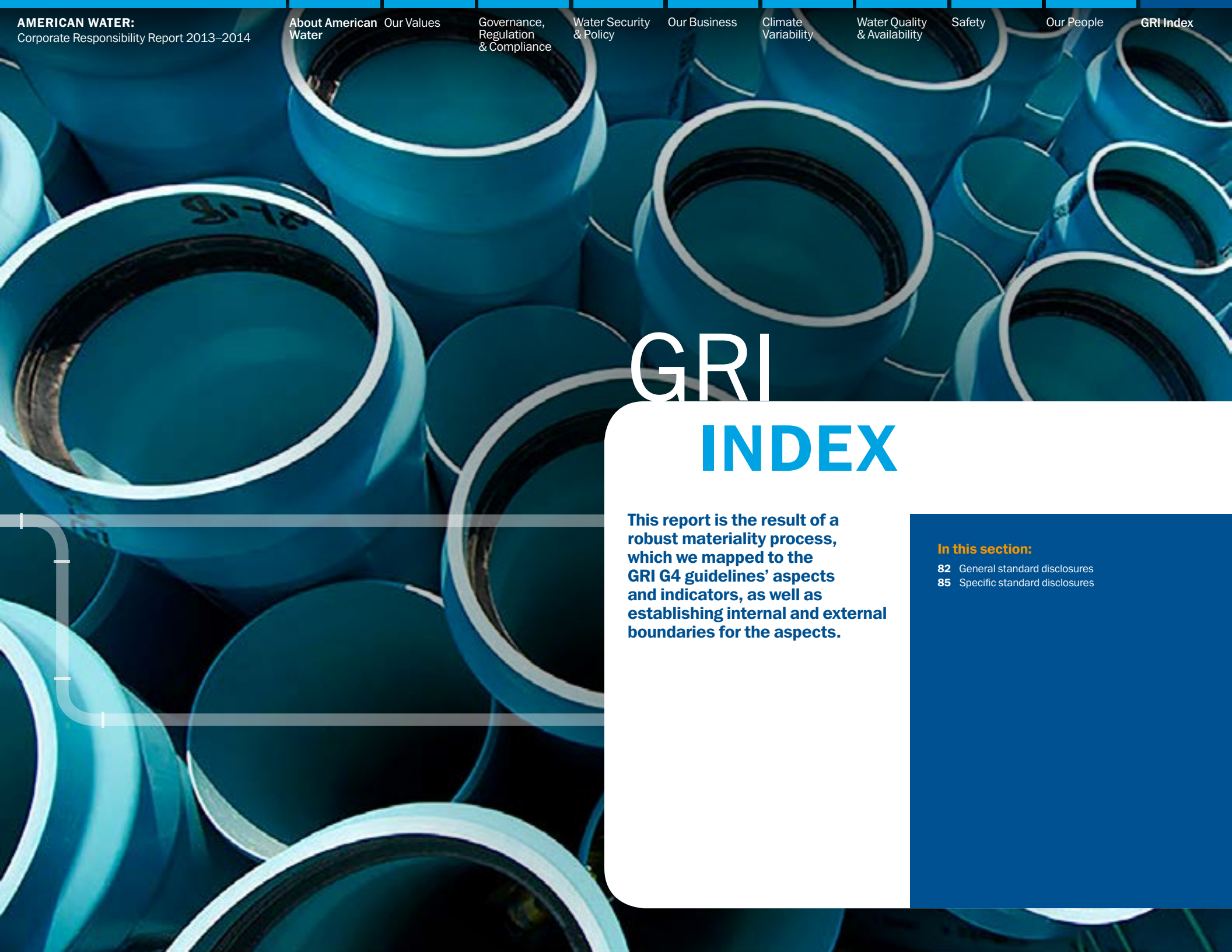
California American Water's president, Robert MacLean, co-chairs the National Utility Diversity Council, the national non-profit organization that conducts research and shares best practices to encourage diversity. Our procurement practices encourage the inclusion of diverse vendors with a Supplier Clearing house certification of MBE, WBE, or DVBE wherever possible. In 2014, second-tier reporting with prime suppliers was rolled out to encourage the use of MWDVBE suppliers as sub-contractors with American Water's suppliers.

Today, we employ a corporate supplier diversity manager, as well as diversity leads, throughout the footprint of American Water, to address and assist in all areas of supplier diversity, from sourcing to mentoring new diverse partners, and ensuring successful business-to-business relationships.

In 2014, the Supplier Diversity team attended national and regional supplier-diversity events across the U.S., and participated in one-to-one meetings with potential new suppliers.

Supplier diversity outreach includes, but is not limited to, the following outreach events:

- National Utilities Diversity Council
- National Reservation Economic Summit
- Greenlining – 21st Annual Economic Summit
- U.S. Pan Asian American Chamber of Commerce Celebrasian
- Women's Business National Annual Conference
- National Association of Regulatory Utility Commissioners Utility Market Access Summer Meeting
- Water Professionals Conference
- Elite Service-Disabled Veteran Owned Business Conference
- California Public Utility Commission En Banc Hearing, San Francisco, California
- National Minority Supplier Development Council Annual Meeting
- National Association of Regulatory Utility Commissioners/Annual Meeting
- Illinois Commerce Commission Regulatory Hearing
- Member Utility – Missouri Economic Development Association
- California Joint Utility – Member Utility
- California Water Association – Member Utility
- New Jersey Supplier Diversity Council – Member Utility



GRI INDEX

This report is the result of a robust materiality process, which we mapped to the GRI G4 guidelines' aspects and indicators, as well as establishing internal and external boundaries for the aspects.

In this section:

GRI INDEX

GENERAL STANDARD DISCLOSURES

GENERAL STANDARD DISCLOSURES	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
STRATEGY AND ANALYSIS				
G4-1	CEO statement	About American Water > CEO Message, p3–4		
ORGANIZATIONAL PROFILE				
G4-3	Name of the organization	About American Water, p1–4		
G4-4	Primary brands, products, and/or services	About American Water, p1–4		
G4-5	Location of organization's headquarters	About American Water, p1–4		
G4-6	Number of countries where the organization operates, and countries with major operations or relevant to sustainability issues	About American Water, p1–4		
G4-7	Nature of ownership and legal form	About American Water, p1–4		
G4-8	Markets served	About American Water, p1–4		
G4-9	Scale of the reporting organization	About American Water, p1–4		Information in the Annual Report was assured by PricewaterhouseCoopers LLP.
G4-10	Employees by employment contract and gender	Our People, p66–80	We currently do not collate data for contract type by gender, or for self-employed or contractor employees.	
G4-11	Percentage of employees covered by collective bargaining agreements	Our People, p74	Employees represented by an independent trade union or covered by collective bargaining agreements (%): 50	
G4-12	Description of supply chain	Our Values > Our Value Chain, p14 Please see our Supply Chain page on amwater.com: http://www.amwater.com/corporate-responsibility/ethical-practicies/supply-chain.html		
G4-13	Significant changes to size, structure, or ownership	About American Water, p1–4 2014 Annual Report, p3–12		Information in the Annual Report was assured by PricewaterhouseCoopers LLP.
G4-14	Whether and how the precautionary approach or principle is addressed	Governance, Regulation & Compliance > Risk Management, p17		
G4-15	Externally developed economic, environmental, and social charters, principles, or initiatives the organization subscribes or endorses	Our Values > Stakeholder Engagement, p7		

GENERAL STANDARD DISCLOSURES	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
G4-16	Association memberships	Our Values > Stakeholder Engagement, p7		
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES				
G4-17	Entities included in consolidated financial statements and if any are not in report	2014 Annual Report, p3–12		Information in the Annual Report was assured by PricewaterhouseCoopers LLP.
G4-18	Process to define report content and aspect boundaries How implemented Defining Report Content principles	Our Values > Our Materiality Process, p8 Our Values > Material Issues, p13		
G4-19, 20 and 21	Material aspects	See table below		

G4 ASPECT	INTERNAL		EXTERNAL	
	RELEVANT	BOUNDARY	RELEVANT	BOUNDARY
Economic performance	Yes	American Water	No	
Energy	Yes	All American Water operations	Yes	Suppliers
Water	Yes	All American Water operations	No	
Emissions	Yes	All American Water operations	Yes	Suppliers
Effluents and waste	Yes	All American Water operations	No	
Compliance (Environmental)	Yes	All American Water operations	No	
Employment	Yes	American Water	Yes	Contractors
Occupational health and safety	Yes	All American Water operations	Yes	Contractors
Training and education	Yes	All American Water operations	No	
Anti-corruption	Yes	All American Water operations	Yes	Contractors and suppliers
Public policy	Yes	American Water	No	
Anti-competitive behaviour	Yes	American Water	No	
Compliance (Society)	Yes	All American Water operations	No	
Customer health and safety	Yes	American Water	Yes	Customers
Products and service labelling	Yes	American Water	No	
Marketing communications	Yes	American Water	No	
Customer privacy	Yes	American Water	Yes	Customers, contractors and suppliers
Compliance (Product responsibility)	Yes	American Water	No	

GENERAL STANDARD DISCLOSURES	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
G4-22	Effect of restatements	About American Water > About This Report, p2		
G4-23	Significant changes from previous reporting period	About American Water > About This Report, p2		
STAKEHOLDER ENGAGEMENT				
G4-24	Stakeholder groups engaged by the organization	Our Values > Stakeholder Engagement, p7–8 Our Values > Our Materiality Process, p8		
G4-25	How stakeholders are identified and selected	Our Values > Stakeholder Engagement, p7 Our Values > Our Materiality Process, p8		
G4-26	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Our Values > Stakeholder Engagement, p7 Our Values > Our Materiality Process, p8		
G4-27	Key concerns raised through stakeholder engagement, and how the organization responded	Our Values > Stakeholder Engagement, p7 Our Values > Our Materiality Process, p8 Our Values > Material Issues, p13		
REPORT PROFILE				
G4-28	Reporting period	About American Water > About This Report, p2		
G4-29	Most recent report		The American Water Corporate Responsibility Report 2011/12 was published in July 2013.	
G4-30	Reporting cycle	About American Water > About This Report, p2		
G4-31	Contact for sustainability report	About American Water > About This Report, p2		
G4-32	Table with Standard Disclosure locations	About American Water > About This Report, p2		
G4-33	External assurance statement	About American Water > About This Report, p2		
GOVERNANCE				
G4-34	Governance structure	Governance, Regulation & Compliance > Corporate Responsibility Oversight, p16		
ETHICS AND INTEGRITY				
G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	Governance, Regulation & Compliance > Ethical Behavior, p19		

SPECIFIC STANDARD DISCLOSURES

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
CATEGORY: ECONOMIC				
MATERIAL ASPECT: ECONOMIC PERFORMANCE				
G4-DMA	Disclosure on management approach	Our Business > Using Technology for Business Transformation > Growth Opportunities, p34 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-EC1	Direct economic value generated and distributed	Annual Report 2014 p7–14		Information in the Annual Report was assured by PricewaterhouseCoopers LLP.
G4-EC2	Financial implications and other risks and opportunities due to climate change	Climate Variability > How Climate Variability Impacts Us, p38–39	Because American Water's operations depend on the provision of safe, reliable water service, its operation is clearly dependent upon climate, and can adversely be affected by climate change. This is why American Water was the first water and wastewater utility to voluntarily join the USEPA Climate Leaders program to track and reduce greenhouse gas. Additionally, because drought, storms, wind (power outages), and other extreme weather can affect water utility operations, water quality, and service reliability. For these reasons, the materiality of climate change is significant for American Water. Risks driven by changes in regulation Climate change may result in the need for more expensive water treatment processes in the future; e.g. increased use of energy intensive processes like UV disinfection, membrane filtration, and ozone disinfection. It may also result in more stringent and/or more conservative regulations regarding engineering design parameters to protect infrastructure against more extreme weather-related events. Risks driven by change in physical climate parameters or other climate-change related developments Increased frequency of severe weather events and flooding. Re-evaluation of the flood levels for our low lying facilities; e.g. per new FEMA Flood Maps. Building of levees, raising levees, or relocating facilities as required. Opportunities arising from climate change Climate change poses various opportunities for American Water, particularly in water stressed areas where water supplies are limited in quantity and quality and the effects of climate change are anticipated to exacerbate these problems. Opportunities include potential increased sales of water to adjacent systems that do not have adequate water supplies, and providing various services and treatment technologies to other water purveyors and communities to develop and/or treat auxiliary water supply options (e.g. water reuse, aquifer storage and recovery (ASR), etc.)	

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
			Managing risks and opportunities from climate change American Water manages climate change risks as part of its company-wide risk management process, where climate change risks and opportunities are integrated into the company's centralized enterprise risk management program covering all types and sources of risks and opportunities. Our Operational Risk Center tracks and manages Consequence Management Plans for a variety of climatic impacts and has been an active member in the development of the Risk Assessment Methodology for Water (RAM- W). American Water utilized this methodology to develop Vulnerability Assessments (VAs) on each water system serving 3,300 persons or more. Regarding risks related to changes in physical climate parameters, American Water maintains property insurance to protect its assets against perils usual to a loss including fire and lightning as well as for catastrophe risks of flood, earthquake, and named windstorm. American Water also carries liability insurance for injury and property damage to third parties resulting from main and service line breaks caused by weather, soil acidity and other events. In 2013 American Water developed a comprehensive Climate Resiliency Strategic Action Plan including a comprehensive assessment of risk management approaches and recommendations to enhance the incorporation of climate change into company risk management practices based on best practices and science. During 2014, American Water set and achieved its goals to identify and rank its most critical assets across the country, focus attention on the highest risks for the top 50 critical assets, and performed detailed risk assessments and mitigation plans on 10 of these top 50 critical assets. American Water's 2015 goals include continuing this program to complete risk assessment plans for 10 additional critical assets. As part of our efforts in completing our Climate Resiliency Strategic Action Plan and our individual Risk Assessment Plans for critical assets, we assessed a wide array of solutions and opportunities for mitigating impacts of climate change on water utility infrastructure. These solutions range from capital intensive asset hardening, supply development and treatment innovation, to robust emergency response plans. Such solutions can provide opportunities for business growth and investment, particularly in areas where climate change impacts are anticipated to be greatest. At this time there is no way to estimate the financial implications of climate change related risks, before taking action. We expect that these changes will take effect from 10–20 years. The total annual investment required for American Water's combined emissions reduction activities was $6,000,000.	
G4-EC3	Coverage of the organization's defined benefit plan obligations	Annual Report 2014 Note 13: Employee Benefits, p118	The Company's pension funding practice is to contribute at least the greater of the minimum amount required by the Employee Retirement Income Security Act of 1974 or the normal cost. Further, the Company will consider additional contributions if needed to avoid "at risk" status and benefit restrictions under the Pension Protection Act of 2006. The Company may also consider increased contributions, based on other financial requirements and the plans' funded position. Pension plan assets are invested in a number of actively managed and commingled funds including equity and bond funds, fixed income securities, guaranteed interest contracts with insurance companies, real estate funds and real estate investment trusts ("REITs").	Information in the Annual Report was assured by PricewaterhouseCoopers LLP

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
CATEGORY: ENVIRONMENTAL				
MATERIAL ASPECT: ENERGY				
G4-DMA	Disclosure on management approach	Climate Variability > Our Impacts on the Climate, p42–44 Climate Variability > Recognizing the Water–Energy Nexus, p45–47 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-EN3	Energy consumption within the organizations	Climate Variability > Our Impacts on the Climate > Operational Efficiency, p43	Fuels used for energy consumption are non-renewable. **Direct Energy Consumption** (Terajoules)	

	2010	2011	2012	2013	2014
Electricity	4,151.53	4,055.39	3,823.14	3,686.52	3,710.12
Natural Gas	442.31	507.69	484.96	555.71	526.56
Gasoline	399.45	418.28	365.65	338.13	351.58
Diesel	198.23	200.10	180.66	178.72	175.14

Conversion factors:
1 BTU = 1055.05585262 Joules

Source: Appendix 2 of the Climate Leaders GHG Inventory Protocol
http://www.epa.gov/climateleadership/documents/resources/design_princ_app2.pdf

MATERIAL ASPECT: WATER				
G4-DMA	Disclosure on management approach	Water Quality & Availability, p48–59 Water Security & Policy, p22–24 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-EN8	Total water withdrawal by source	Water Quality & Availability > Impacts We Have on Water Quality, p54		
MATERIAL ASPECT: EMISSIONS				
G4-DMA	Disclosure on management approach	Climate Variability > Our Impacts on the Climate, p42–44 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Climate Variability > Our Impacts on the Climate > Operational Efficiency, p43		
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	Climate Variability > Our Impacts on the Climate > Operational Efficiency, p43		
MATERIAL ASPECT: EFFLUENTS AND WASTE				
G4-DMA	Disclosure on management approach	Climate Variability > Our Impacts on the Climate, p42–44 Climate Variability > Recognizing the Water–Energy Nexus > Reducing Waste, p46 Water Quality & Availability > Impacts We Have on Water Quality, p54 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-EN24	Total number and volume of significant spills	Safety > Public Safety > Case Study: Response to Freedom Industries Chemical Spill, p65		
MATERIAL ASPECT: COMPLIANCE				
G4-DMA	Disclosure on management approach	Climate Variability > Our Impacts on the Climate, p42–44 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21 Governance, Regulation & Compliance > Regulation and Compliance Programs, p18		
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations		There were no significant fines for non-compliance with environmental laws or regulations.	

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
CATEGORY: SOCIAL				
SUB-CATEGORY: LABOR PRACTICES AND DECENT WORK				
MATERIAL ASPECT: EMPLOYMENT				
G4-DMA	Disclosure on management approach	Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21 Our People, p66–80 Please see our Supply Chain page on amwater.com: http://www.amwater.com/corporate-responsibility/ethical-practicies/supply-chain.html		
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Our People, p66–80		
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation		All full-time union and non-union U.S. employees are eligible for health, dental and vision benefits, the company wellness program, flexible spending account, employee assistance program, employee stock purchase plan, 401(k) plan, educational assistance, life insurance and disability benefits. All part-time union employees are eligible for the American Water Group Insurance and Retirement Income programs except for life insurance and disability benefits. All part-time non-union employees are eligible for the American Water Group Insurance and Retirement Income programs except for life insurance, disability insurance, dental and vision coverage. Temporary employees, seasonal employees and consultants are not eligible for American Water Group Insurance or Retirement Income programs. All full-time and part-time union and non-union employees in our Canadian operations are eligible for comparative benefits, except for participation in the flexible spending account program.	
MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY				
G4-DMA	Disclosure on management approach	Safety, p60–65 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-LA8	Health and safety topics covered in formal agreements with trade unions		In most of our collective bargaining agreements, there are health and safety protocols including H&S committees in our areas of operation. We also have a relationship with our largest national union and that union's national safety representative. In addition, several collective bargaining agreements include drug and alcohol policy statements and practices. We intend to roll out new company policies and practices to all unions in 2015 and 2016.	

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
MATERIAL ASPECT: TRAINING AND EDUCATION				
G4-DMA	Disclosure on management approach	Our People > Workforce Empowerment, p73–74 Governance, Regulation & Compliance, p15–21 Safety > Our Training Modules, p63		
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Our People > Workforce Empowerment > Performance Management and Development, p74	All American Water employees, except for those covered under collective bargaining agreements (approximately 50% of our employees) receive individual performance appraisals utilizing measurable targets set by the employee and his/her line supervisor, aligned with American Water's strategies.	
SUB-CATEGORY: SOCIETY				
MATERIAL ASPECT: ANTI-CORRUPTION				
G4-DMA	Disclosure on management approach	Governance, Regulation & Compliance > Risk Management, p17 Governance, Regulation & Compliance > Regulation and Compliance Programs, p18 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-SO5	Confirmed incidents of corruption and actions taken		There were no reported incidents of corruption, including criminal conduct such as bribery and extortion.	
MATERIAL ASPECT: PUBLIC POLICY				
G4-DMA	Disclosure on management approach	Our Values > Our Materiality Process > How We Engage with Our Stakeholders, p8 Water Security & Policy > Public Policy Engagement, p24 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-SO6	Total value of political contributions by country and recipient/beneficiary		In 2014, financial contributions to political parties, politicians and related political activity totaled just over $193,000.00, from both corporate and state subsidiary sources. In 2013, financial contributions to political parties, politicians and related political activity totaled just over $171,000.00, also from corporate and state subsidiary sources. A comprehensive process is in place to approve, track, record, and report these contributions. Details of donations can be found by inputting "American Water Works" on the Federal Election Commission website. These figures exclude Iowa which has a new Political Action Committee and the data is yet to be collated, this will be included in future reporting.	

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
MATERIAL ASPECT: ANTI-COMPETITIVE BEHAVIOR				
G4-DMA	Disclosure on management approach	Governance, Regulation & Compliance > Risk Management, p17 Governance, Regulation & Compliance > Regulation and Compliance Programs, p18 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes		American Water's regulated businesses are, by their very nature, a natural monopoly regulated by the Public Utilities Commissions in the states in which the company operates. We are not aware of any legal actions for anti-competitive behavior, anti-trust, or monopoly practices in 2013 and 2014.	
MATERIAL ASPECT: COMPLIANCE				
G4-DMA	Disclosure on management approach	Governance, Regulation & Compliance > Regulation and Compliance Programs, p18 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations		There were no significant fines or total number of non-monetary sanctions for non-compliance with laws and regulations in 2013 and 2014.	
SUB-CATEGORY: PRODUCT RESPONSIBILITY				
MATERIAL ASPECT: CUSTOMER HEALTH AND SAFETY				
G4-DMA	Disclosure on management approach	Governance, Regulation & Compliance > Risk Management, p17 Safety > Public Safety, p64 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21 Our Business > Engaging with Our Customers, p26–29 Water Quality & Availability, p48–59		
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	Climate Variability > Recognizing the Water–Energy Nexus > Water Treatment Residuals Disposal Issue in California, p47		

DMA AND INDICATORS	DESCRIPTION	LOCATION	NOTES AND OMISSIONS	EXTERNAL ASSURANCE
MATERIAL ASPECT: PRODUCT AND SERVICE LABELLING				
G4-DMA	Disclosure on management approach	Our Business > Engaging with Our Customers, p26–29 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes		There were no incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling in 2013 and 2014.	
G4-PR5	Results of surveys measuring customer satisfaction	Our Business > Engaging with Our Customers, p26–29		
MATERIAL ASPECT: MARKETING COMMUNICATIONS				
G4-DMA	Disclosure on management approach	Our Business > Engaging with Our Customers, p26–29 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications		American Water's had no incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotions, and sponsorships in 2013 and 2014.	
MATERIAL ASPECT: CUSTOMER PRIVACY				
G4-DMA	Disclosure on management approach	Governance, Regulation & Compliance > Risk Management, p17 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data		In 2013 and 2014, American Water did not report any significant breaches of data security or customer information.	
MATERIAL ASPECT: COMPLIANCE				
G4-DMA	Disclosure on management approach	Governance, Regulation & Compliance > Risk Management, p17 Our Values > Material Issues, p13 Governance, Regulation & Compliance, p15–21		
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services		In 2013 and 2014, American Water did not report any significant fines (defined as over $100,000) for non-compliance with laws and regulations concerning the provision and use of products and services.	

AMERICAN WATER

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