Water Conservation Education Program

To be successful, water conservation efforts should include an education program that informs individuals of the need to use water resources in a sustainable manner. Municipal education programs that promote water conservation can serve as good starting points for more comprehensive water conservation programs. Over time, as municipal education programs strengthen and grow, they should be expanded to reach and serve large audiences. Communities can earn points for taking the first step toward creating comprehensive water conservation education program(s) by initiating a smaller education program that will be built upon in the future.

As part of this action, municipalities may choose to implement a variety of different types of education programs. Possible education program activities include municipal demonstration projects that conserve water, workshops for homeowners or business owners, partnering with water conservation programs offered by non-profits or agencies which aimed at reaching residents within your municipality, and direct mailings to residents or businesses that provide tips on water conservation. Additionally, municipalities could consider working with school boards to come up with ways to conserve water within schools or to educate students about ways that they can conserve water. Similarly, municipalities should consider working with non-profit organizations to promote water conservation programs already developed for residences, business, institutions, or other targeted audiences.

Why is it important?

According to the USEPA, efficient water use can have major environmental, public health, and economic benefits by helping to improve water quality, maintain aquatic ecosystems, and protect drinking water resources. By using water more efficiently and by utilizing more water efficient products, communities can also help to mitigate the effects of drought. Water conservation is not possible without the support and participation of the municipality’s residents and businesses that consume water, and it is essential that these groups be provided with information on the benefits of water conservation as well as water conservation techniques.

Who should lead and be involved with this action?

Municipal planning boards, governing bodies, environmental commissions, conservation/open space commissions, local and regional natural resource protection groups, local school board(s), and other interested parties can be involved in developing water conservation education program(s).

Timeframe

The timeframe for the development of a water conservation education program will vary, depending on the amount of available, existing resources that can be used in program development. Using already existing examples will reduce the amount of time needed to implement this action; however, because each community is unique, it is likely that each community will have unique needs to address in its education program. Therefore, existing examples of education programs or educational materials may not be appropriate for reuse in all communities. Instead, communities should use existing examples as starting points and suggestions.

Project costs and resource needs

Project costs will vary depending on the size and reach of the program. Costs may include printing materials, staff time,
equipment, supplies, workshop/event expenses, postage, and advertisements.

What to do, and how to do it (“How to”)

Develop a water conservation education program that provides a targeted audience in your municipality with information on how to conserve water. For example, you may choose to work with schools or individual neighborhoods to encourage water conservation.

Below we have listed the requirements for earning points for this action.

1) In order to receive Sustainable Jersey points, your action must have been completed from within 3.5 years of the June submission deadline.

2) The following information is required to receive points for this action. A worksheet has been provided and can be used to provide this information (See Resources section for a link to this worksheet or click here)

   a. Targeted audience: Identify the audience targeted by the education program and provide a description of the characteristics of the targeted audience, including size, locations, type, etc. For example, if the municipality chooses neighborhood(s), please describe the location, type and the number of households. If schools are selected, please identify the number of schools and an estimate of the number of students. If non-residential users are selected, please identify the number and type of facilities (e.g. restaurant, doctor’s office, houses of worship, etc.). This information should be used to test the effectiveness of the education program, track water conservation, and identify improvements to the program.

   b. Type(s) of use: Identify the type(s) of water use addressed by the education program. The type of water use targeted should be directly linked to the water consumption patterns for the audience of the program.

   c. Conservation measures: Identify and describe the conservation measures addressed by the education program.

   d. Outreach method: Provide a description of the outreach methods utilized by the municipality. Please provide at least one example of each printed material. For public events, please provide a description of the event, including pictures, news articles, etc. to the extent possible.

   e. Resources: Describe the resources that were used and/or made available to implement the education program. The amount of staff or volunteer time and the estimated and incurred costs should be included.

   f. Schedule: Describe the timeline over which the education program was implemented. Please include the length of time required to develop the program, prepare for presentations, design and print documents, etc. In order to receive points for this action the program should have taken place within the past three calendar years.

3) You must submit examples of distributed materials, presentations, meeting notices or other information related to your municipal water conservation education program(s). Please be sure to provide information about when and where information was presented.

We have provided extensive guidance and recommendations for implementing the action. You do not need to follow this guidance exactly as long as your final product meets the requirements.

To create a water conservation education program, municipalities should take the following steps:

1) Select an audience to target by considering the accessibility of the audience and the ability of the municipality to reach the audience. The following list identifies examples of audiences that municipalities may choose to target for their education program(s). Municipalities should select one or more audiences depending on the size of the group, the municipality’s ability to serve that group, and the potential conservation results.

   a. Residents. The municipality may target all residential households, apartments, and/or assisting living facilities.

   b. Schools. The municipality may choose to target students as an avenue for reaching a larger audience. In addition to public school facilities, the municipality should reach out to private education facilities, as well as to colleges and universities, as appropriate.
c. Non-residential users. The municipality may target all non-residential water users, or a subset of those users, such as restaurants. Contacting larger facilities, such as hospitals, office buildings, faith-based institutions or corporate campuses may provide a higher rate of return on the education program as a smaller number of resources/contacts may be needed to reach a larger audience.

d. Apartment complexes/landlords. Residents in apartment complexes have a limited ability to control their water use through technological means (low-flow toilets or outdoor watering, for example). Contacting the landlords, or owners of such complexes is appropriate.

e. Organizations, Faith-based institutions, and clubs. Similar to schools, the municipality may target these organizations as an avenue to reaching a larger audience. If they have their own facilities, those can be made more sustainable. And their memberships can be brought into education activities leading to change in the home.

2) Identify the types of water use that the education program will address.

The following are examples of types of water uses. The types of water uses should be identified for the targeted audience(s) and the municipality should determine the types of these use(s) that will be addressed by the educational program.

a. Residential indoor water use. Residential uses, such as toilets, showers, dishwashers, washing machines, and other daily use devices.

b. Non-residential indoor water use. Non-residential uses may include food preparation, manufacturing processes, cooling, and cleaning, to name a few.

c. Outdoor water use. This can include both residential and non-residential uses, such as lawn watering or outdoor cleaning of cars, buildings, trucks, equipment, etc.

d. Retail purchases. The purchase of water bottles and a comparison of bottled water quality to that of public water may be addressed.

3) Identify measures that can be implemented to reduce the types of water usage that the education program will address.

The following are examples of measures that result in a reduction of water usage. More examples can be found using the resources section of this tool.

a. Installation of water-efficient equipment, such as low-flow toilets, low-flow shower heads, water-efficient washing machines, etc.

b. Change in behavior. Simple changes in behavior such as only washing full loads of laundry or dishes, or turning off water when not in use can have a significant impact in conservation.

c. Modify cleaning processes. Wash equipment only as necessary; utilize more efficient washing equipment and processes such as water collection and recycling.

4) Identify and select methods of reaching the targeted audience.

These methods may include, but are not limited to, presentations at municipal functions, workshops, mailings (including brochures with tax bills), placement of the material prominently on the municipality’s website and an accompanying email/mailing to drive people to the website, commercials on public access television, poster competitions, educational sessions at schools, demonstration projects, etc.

5) Identify resources and/or funding that could be used so support the education program.

The various audiences, methods, and information identified above that may be included in the education program(s) require a range of staff time and direct costs. Municipalities should consider these costs when selecting an audience and implementing the education program(s).
6) For campaigns that target organizations or congregations, the municipality should consider a way to recognize those that successfully participate in the campaign. This can be done through Mayoral Proclamations, Municipal Resolutions, or certificates of appreciation.

7) Create a timeline for implementation.

The time required for implementation of the education program is dependent on both the extent of the program, as well as the resources available to the municipality to implement the program. In order to receive Sustainable Jersey points, your education program must have been completed within 3.5 years of your submission date.

**What to submit to earn points for this action**

In order to earn points, your submission must meet the following standards:

Municipalities should submit a planning document detailing the scope, intent, resources available, and implementation measures for the education program (A link to a worksheet is provided in Resources section of this document). The documentation or worksheet should provide the following information in addition to any printed materials that were used to provide information to the audience of the education program.

1) In order to receive Sustainable Jersey points, your action must have been completed from within 3.5 years of the June submission deadline.

2) The information listed below (in the Upload section) is required in order for you to receive points for this action. A worksheet has been provided and can be used to provide this information.

3) You must submit examples of distributed materials, presentations, meeting notices or other information related to your municipal water conservation education program(s). Please be sure to provide information about when and where the information was presented.

Submit the following documentation to verify the action was completed to the above standards. (Log in to the password protected webpage where you submit your online application for certification to write in the text box and upload documents).

1) In the test box, please provide a short narrative (300 word max) to summarize what was accomplished and the general steps taken to accomplish it.

   * Upload: In this space, upload your completed worksheet or other documentation demonstrating the following:

   a. Targeted audience: Identify the audience targeted by the education program and provide a description of the characteristics of the targeted audience, including size, locations, type, etc. For example, if the municipality chooses a neighborhood(s), please describe the location, type and the number of households. If schools are selected, please identify the number of schools and an estimate of the number of students. If businesses or organizations are selected, please identify the number and type of facilities (e.g. restaurant, offices, etc.) and an estimate of the potential number of individuals reached. If houses of worship are selected, please identify the number of congregations and an estimate of the number of members reached. This information should be used to test the effectiveness of the education program, track water conservation, and identify improvements to the program.

   b. Type(s) of use(s): Identify the type(s) of water use addressed in the education program. The type(s) of water use(s) targeted should be directly linked to the water consumption patterns of the audience of the program.

   c. Conservation measures: Identify and describe the conservation measures addressed in the education program.

   d. Outreach method(s): Provide a description of the outreach method(s) utilized by the municipality. Please provide at least one example of each printed material. For public events, please provide a description of the event, including pictures, news articles, etc. to the extent possible.

   e. Resources: Describe the resources that were used and/or made available to implement the education program. The amount of staff or volunteer time and the estimated and incurred costs should be included.
f. Schedule: Describe the timeline over which the education program was implemented. Please include the length of time required to develop the program, prepare for presentations, design and print documents, etc. In order to receive points for this action the program must have taken place within the three calendar years prior to your submission date.

- Upload: Examples of distributed materials, presentations, meeting notices or other information related to your municipal water conservation education programs. Please be sure to provide information about when and where information was presented.

IMPORTANT NOTES: You can upload up to six separate documents for each action. Please excerpt relevant information from large documents. Please remember that your submissions will be viewable by the public as part of your certification report.

Spotlight: What NJ municipalities are doing

EVERY DROP COUNTS

Montville, New Jersey

Winner of the 2006 New Jersey Planning Officials’ Achievement in Planning Award as an innovative environmental program that has demonstrated a positive and lasting impact on the community, EVERY DROP COUNTS is a water conservation education program that encourages students, teachers, families, and residents to conserve water. The program meets core curriculum standards in all subject areas and teaches students ways to conserve water and protect water quality.

Inspired by a model of the Towaco Valley Aquifer, made by Vanessa Pena for an 8th grade science project, EVERY DROP COUNTS teaches students how aquifers store water, how water is accessed by wells, and how the Montville Water Department distributes, stores, and monitors water to meet water demands ranging from two to five million gallons daily. Through experiments, in-class demonstrations, field trips, contests, and festivals, EVERY DROP COUNTS focuses on both local water usage and worldwide water concerns. Students are encouraged to educate family and friends on the natural limits of this valuable resource and to practice conservation at home and at school.

Since the inception of EVERY DROP COUNTS, more than 4,000 Montville Township students have visited the Towaco Valley Aquifer area. Despite a 5% increase in population, Montville Township’s overall water usage is down more than 14% since 2001.

EVERY DROP COUNTS is sponsored by Montville Township and administered in cooperation with the Montville Township Board of Education. EVERY DROP COUNTS is protected by copyright laws and may not be duplicated in whole or in part without written permission.

http://www.montvillenj.org/index.php?option=com_content&task=view&id=244

Resources

Build-A-Rain Barrel Workshops, Rutgers Water Resources Program

Take an active role in recycling rainwater by installing a rain barrel at your house! A rain barrel is placed under a gutter’s downspout next to a house to collect rain water from the roof. The rain barrel holds about 50 gallons of water which can be used to water gardens and for other uses. Harvesting rain water has many benefits, including saving water by preventing the need to use your drinking water supply, saving money on your water bill, and preventing basement flooding. In addition, by collecting rain water, homeowners are also helping to reduce flooding and pollution in local waterways. This is because when rain water runs off of hard surfaces like rooftops, driveways, roadways, parking lots, and compacted lawns, it carries with it pollution to our local waterways. Harvesting the rain water in a rain barrel is just one of the ways homeowners can reduce rain water from running off their property and possibly causing pollution and flooding problems in local waterways.

http://www.water.rutgers.edu/Stormwater_Management/rainbarrels.html#home

New Jersey Project WET Teacher Training
An easy and effective way to start a water conservation program in schools is through the New Jersey Project WET program. Since 1984, Project WET, an award-winning 501(c)(3) nonprofit organization, has dedicated itself to the mission of reaching children, parents, teachers, and community members of the world with water education. Project WET achieves its mission of worldwide water education by publishing water education materials for teachers; providing training workshops on diverse water topics (i.e., watersheds, water quality, water conservation); organizing community water events, such as water festivals, and building a worldwide network of educators, water resource professionals and scientists. New Jersey has a Project WET coordinator that sends professionally trained instructors to schools to teach school teachers about water education in their classrooms. This six-hour training course is typically held during a teacher in-service day and now are offered FREE of charge to schools. Participating schools receive a 6 hour training session and free curriculum guides for each teacher who finishes the training.

http://www.projectwet.org/

http://www.state.nj.us/dep/seeds/wetsched.htm

**New Jersey Water Savers Program**

The New Jersey Water Savers can help your community by providing technical expertise and assistance to your municipality’s Green Team to help plan and adopt water conservation programs or projects in your community. The New Jersey Water Savers have piloted many successful conservation programs in 5 communities statewide and can help you replicate these programs in your town. Programs include: retrofit projects in public buildings and residential properties; high school leadership programs to engage and empower youth to take an active role in promoting water conservation in their schools and community; demonstration native plant gardens, rain gardens and natural retention basins; demonstration rain water harvesting projects, a cooperative art program in which artists paint, display and sell rain barrels; SMART irrigation system demonstrations; and workshops and lectures on water conserving/ environmentally friendly turf and landscape management techniques.

http://www.njwatersavers.rutgers.edu/

**U.S. Environmental Protection Agency (EPA) WaterSense**

The EPA is building WaterSense as a national brand for water efficiency. The brand is more than just a product label; it is a symbol that represents the importance of water efficiency in the United States. With the help of partners, WaterSense encourages water-efficient behaviors and the purchase of quality products that use less water. WaterSense provides partners with a tool kit of advertising materials including customizable flyers, bill inserts, press releases and website tools.

http://www.epa.gov/watersense/

**GreenFaith Water Shield**

GreenFaith, an interfaith environmental organization based in New Jersey, has developed a water conservation program for faith-based institutions called the GreenFaith Water Shield. The Shield helps institutions take very concrete water conservation steps indoors and out, and educate their members through water pledge forms, religious education classes, and a worship service focused on water. GreenFaith provides all of the resources and coaching an institution needs to succeed, including templates, lesson plans, sample prayers, an outline of best practices around water conservation, and more. Sites that complete the Shield gain an electronic badge for their website, a certificate printed on banana paper, and press coverage.

GreenFaith will work directly with a municipality to shape and implement an outreach effort that targets congregations for water conservation efforts in their facilities, and among their members. Publicity assistance can include providing appropriate language for a mailing or website posting, presenting in-person workshops/forums, or offering webinars to introduce the program to faith-based sites in the community. Once an institution joins the Water Shield program, GreenFaith works with them from start to finish, providing all resources, coaching and assistance needed.

In addition to a municipality doing outreach to faith-based sites about the Water Shield, at least one faith-based institution is required to complete the Shield in order for that municipality to gain credit towards the Water Conservation Education Program. For more information contact Stacey Kennealy: skennealy@greenfaith.org