**Table 2: Public Education Program Best Management Practices (BMPs)**

| **Delivery Mechanism / Activity** | **Public Education Topics** | **Target Audience(s)** | **Key Message** | **Standard of Effectiveness (recommended)** | **Mechanism Specific Audience (recommended)** | **Mechanism Specific Message(s) (recommended)** | **Milestone(s) (recommended)** | **Timetable / Timeline** | | **Responsible Party** | **Cost (recommended)** | **Evaluation** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Development** | **Implementation** |
| Road/stream crossing and watershed signs | A  B | Public, Residents, Visitors | Educate on specific watershed. Waterbodies the public can affect. | Get 50% of people to know the stream names and that they are in a watershed | Drivers and passengers, visitors going by specific sign | Entering a watershed; specific waterbodies; and watershed website | Increase in number of people recognizing the watershed and waterbodies they live in or passing by. Awareness leads to stewardship | Signs have been installed beginning in 2008 | Will continue to install until reached 200 sites, appox. 400 to 600 signs, then maintain existing signs. Proposed plan to expand with signs in Parks | SWM\ Road Commission | $3,000/yr. | Measure the number of residents that went to the website based on the information on the sign; social survey response |
| Watershed Maps | A  B  C  D  E  F | School Children, Teachers | Definition of a watershed - Educate on Specific Watershed the public can affect, purpose for protecting the watershed. Effects of human activities on waterways, illicit discharge, what is it? Promoting illicit discharge reporting. | Get 50% of students to know what a watershed is and which one they live in. | Teachers/classrooms | What is a watershed; specific waterbodies; and watershed website | Have maps posted in as many classrooms as possible and discussed in class. Also designed to be used as handouts | Printed 2014 | Distribute to appropriate teachers for class use. Reprint and send out upon request as needed. Available on website for download and printing | SWM | Development - $780.00 'Printing - $3,000 Promotion - $910.00/yr Distribution/workshop - $5,200.00/per session | Number of teachers incorporating lessons into curriculum. |
| Benthic Monitoring Program | A  B | Residents, School Children | Ways that individuals can affect the watershed through their activities. What is the actual condition of our waters? | Maintain current level of sites monitored or expand that number. Currently 18 | Interested volunteers. Produce results for public on website. (general health of Our Water) | Your efforts help us to better understand the watershed. | Consistent trends begin to paint a clearer picture of different reaches. | Program has been running in Flint River Watershed since 1999. Shiawassee Watershed added in 2008 | Twice a year | SWM/FRWC to administer program | $5,150/yr | No. of volunteers and sites surveyed. Use information to aid decision-making. |
| Project Green WQ monitoring Program | A  B  (Depending on who does the Mentoring, the following topics can be covered C, D, E, F, G) | School Children, Teachers Groups | Ways that individuals can affect the watershed through their activities. What is the actual condition of our waters? How pollution occurs | Maintain current level of participation or increase number of classrooms. | School children, teachers | Our actions have impacts on local waterways; how to act to better protect adjacent waterbodies. | Increased demand for the program | Program has been running since 1991. Since 2005 it has been under the FRWC administration. | Yearly | SWM/FRWC to administer program | $7,500/yr for sampling + private funds Up to $5,000 for analysis | #participating schools/ sites survey. Information to aid decision-making. Increased public awareness - social survey. |
| Display Booth for events | A  B  C  D  E  F  G  H  J | Public, public employees | Definition of a watershed - Ways those individuals can affect the watershed through their activities. | Residents adopt the recommended behavior changes. | Home owners, various associations and businesses | Same as "Seven Simple Steps" | Display at 6+functions  a year | Developed | Ongoing training of volunteers to man booth. attendance of booth at several events throughout year  # of people spoken to | SWM\Cons Dist | $9,500/yr | social survey Number of public spoken to.  Number of events attended |
| Website: http://cleargeneseewater.org/ | A, B, C  D, E, F  G, H, I  J, K | Public | Have messages on most topics. | Residents adopt the recommended behavior changes. | Permittees, home owners, associations, businesses | Same as key message | Number of hits per year stay the same or increase. | Developed | Expand site as new material becomes available. Update as needed | SWM | 100 hrs a year. Plus periodic costs for updates. | Number of hits on the site Number of times brochure is downloaded. |
| Conservation District presentation to school districts with Enviroscapes | A, B, C, D  (Depending on who does the training, the following topics can be covered E, F, G, I) | School Children, Teachers | What is a watershed - Importance of a riparian corridor, effects of human activities on waterways and wetlands. | Make presentation 5000 students/ teachers per year | School children | Our actions have impacts on local waterways; how to act to better protect adjacent waterbodies. | Number of presentations per year. | Developed | Schedule presentations annually to reach at least 5000 students/year | SWM\ Conservation District | $16,000/yr | - Number of presentations,  - Answer questions on social survey - Improvement in other metrics |
| Catch basin stenciling program that includes door to door delivery of brochures | A  B | Residents, schools, owners and employees of local businesses and industries, boy/girl scouts, volunteers groups | - Storm drains discharge to water bodies - Storm water discharged from separate storm sewer systems does not receive treatment prior to discharge - Impacts of storm water pollutants in the watershed - Knowledge of separate storm water drainage system in your front ditch and that it flows to a river | Get 10% of the people in the watershed where the catch basins were labeled to understand where there storm water goes and what the impacts are. | Homeowners; parties distributing brochures and stenciling | Same as key message | Stencil 1000 catch basins/yr - with residents receiving a brochure when stenciling is in their neighborhood | Program began in 2005; materials have been developed | Continue to deliver program plan training and brochure. Repurchase supplies, brochure as needed. Evaluate and modify message as needed when reprinting door hangers | FRWC/CD & SWM maintenance dept. | $5,300/yr. | Phone or mail survey of residents' awareness of the watershed; number of residents that volunteer to stencil storm drains. |
| Distribute brochures promoting the "seven simple steps" | A  B  C  D  E  F  G | Public and public employees | Actions everyone can take to improve water quality. Effects of residential waste on our waterbodies. | Residents adopt the recommended behavior changes. | All residents | Specific to each of the seven steps: Car Care, proper fertilizing, pet waste, water conservation, HHW, storm drains, earth friendly landscaping | Distribute 2500+ /yr | "Seven Simple Steps" brochure has been developed. | Continue to distribute "seven simple steps" through permittees/ events. Evaluate message, amend as needed, reprint as needed | SWM/ Permittees | Reprinting costs | - social survey - Other # of brochures distributed to public |
| Speakers | B  (Depending on who does the training, the following topics can be covered A, C, D, E, F, G, H, I, J) | Home owner associations, non-profit groups, rotary clubs… | What is a watershed - Actions everyone can take to improve water quality, effects of residential waste on our waterbodies; and other specific messages (7 simple steps) The talk is broken into segments by topic so each talk can be customized | Residents adopt the recommended behavior changes. | Home owners, various associations and businesses | Same as "Seven Simple Steps" | Address 10+ groups a year | Developed | Train new volunteers to give presentations as needed | FRWC | $2,040/yr | - social survey - Other Number of presentation given, number of attendees. |
| Articles on seven measures/ Newsletters on Ph II program | A  B  C  D  E  F  G | Public, non-profit groups, public employees | What is a watershed - Actions everyone can take to improve water quality, effects of residential waste on our waterbodies, The Phase II program. Implementation efforts | Residents adopt the recommended behavior changes.  Phase II permittees educated on program | Homeowners, businesses, industries,  Phase II permittees. Non Phase II Municipalities. | Same as key message | Increase sense of community stewardship and actions taken to protect waterways. | Some have been developed; new articles will be to address timely issues. | Submit articles to group, newsletters & newspaper for print | SWM | None | -Articles get published - Responses to the pending social survey |
| Advertise and distribute flyers about the Household Hazardous Waste Collection Day | G | Public, public employees, businesses | Identification of HHW (household hazardous waste), disposal locations and availability | Increase the number of residents dropping off HHW at events by 10% | Homeowners, businesses (painters, landscapers, etc.) | How and where to dispose of oil-based paint, pesticides, herbicides, etc. | Increase awareness of household hazardous waste and where and when it can be disposed | Develop advertisements/flyers for distribution twice a year | Distribution twice a year of advertisements /flyers developed by HHW group | All Permittees/ HHW Committee | Cost of advertisement / flyers, staff time, and hazardous waste disposal costs | Track the number of residents and the amount of waste collected during HHW Collection. |
| Educational materials for Homeowners With Septic Systems to be Given at “Time of Sale”. Main Topic: Septic System Maintenance. | C  G  H | Homeowners, public employees, realtors, haulers, inspectors | Proper septic system care and maintenance, how to recognize a system failure, impact of failure, where to go for assistance. | Educate septic system owners on proper care and maintenance, recognizing a failure and correcting | Septic system owners | How to properly maintain your septic system | Educate septic system owners on the proper care and maintenance of their systems and how to recognize failing systems. | Information has been developed. Delivery mechanism is being worked out. | Printing materials beginning in 2009 and distribute through communities & real estate agents. | SWM and TBD | 300 - 500 hours "printing - $3000.00 Mail\distribution - $1500.00 (estimated until 2013) | Social survey |
| Canoe trips | A  B  J | Public, landowners | Purpose for protecting the watershed, ways those individuals can affect the watershed through their activities, improving water quality and habitat and benefits to all. | Realize an increase in the use of the riparian corridor and a corresponding increase of volunteering/ stewardship of the waterbodies | Any resident | People that use the waterbodies for recreation are going to want to protect the waterbodies | Increase in volunteerism | Already ongoing | Schedule events annually 4+/year. | SWM/FRWC | $4,000/yr. | - The number on new people participating in each event. Participant comment |
| Presentation information about proper disposal of medications and personal care products on website | G | Public | Proper disposal of HHW, specifically medications and personal care products | Get 20% of those educated to utilize HHW program to properly dispose of in landfill | Public | Proper disposal of HHW, specifically medications and personal care products | Educate 10% public on program. Increase use of HHW program | Done | Information on WWS website | Water and Waste Services (WWS) | Staff time | Attendance and website hits |
| Information to riparian landowners on landscape improvements to protect waterways. | A  B  I  J | Riparian landowners, | - Importance of riparian corridors - BMPs for riparian lands - Landscaping for water quality - Shoreline stabilization techniques - Native vegetation alternative | residential riparian landowners to learn how to better manage the land. | Lake and stream associations, riparian land owners | How to properly manage and dispose of grass, leaf and animal wastes; how to improve your property to better protect adjacent waterbodies. | Educate the number of riparian land owners in the knowledge of how to protect banks from erosion and water quality. Educate 25% by 2012 and All watersheds by 2014 | Mailers and workshop literature developed and printed for distribution 2009 | Information is passed out to public at events and available on website | SWM | Printing | Number of information packets given out. |
| Pub ed workshop on proper disposal of restaurant waste | K | Business owners | Proper disposal of kitchen waste | Get restaurant owners that have had attended workshop to properly dispose of restaurant waste | Business owners | Proper disposal of kitchen waste | Educate 20% restaurants on program | Program developed by WWS. Will add stormwater component to their program | Have workshops in permit cycle or distribute information brochure. | WWS | Staff time and TBD workshop costs | Attendance to workshop |
| What is Green Infrastructure workshop | I | Engineers, Developers | What is Green Infrastructure?, Why should we develop with Green Infrastructure?, how to design Green Infrastructure? | Get Developers to support GI | Engineers, Developers | Get Engineers educated on how to design for GI, Get Developers, to buy into green Infrastructure | Educate 75% Engineers, 25% Developers | 2015 | 1 workshop before 2016 | SWM | Cost of development/ printing/ workshop | Attendance to workshop, voluntary compliance to GI |
| Operation and maintenance 1/2 day workshop for municipalities, entities and their contractors (Good House Keeping) | B  C  D  E  F  K | Public employees, contractors | Good housekeeping practices and their impact on water quality. | Adoption and recording of good housekeeping practices | PowerPt and manual | How to properly manage and maintain public infrastructure and related activities | Educate 50% by 2011 and 90% by 2015; Have maintenance crews adopt maintenance protocols on property by 2014 | Training is developed | Complete. Schedule training as-needed. | SWM/Tetra Tech | $6,000/ first yr. up to $6000/ year | Pass MDEQ inspections |
| Good House Keeping training video | B  C  D  E  F  K | Public employees, contractors | Good housekeeping practices and their impact on water quality. | Adoption and recording of good housekeeping practices | Attendance of training by video/ internet | How to properly manage and maintain public infrastructure and related activities | Have maintenance crews/ B&G staff trained within 1st year of hire or within permit cycle. | Training is developed.  Transferring information to a video or internet format is in development | Produce Video/ internet training.  Schedule training as-needed. | SWM/Tetra Tech | $6,000/ first yr. up to $6000/ year | Pass MDEQ inspections |

Education efforts by individual Permittee

| **Delivery Mechanism / Activity** | **Public Education Topics** | **Target Audience(s)** | **Key Message** | **Standard of Effectiveness (recommended)** | **Mechanism Specific Audience (recommended)** | **Mechanism Specific Message(s) (recommended)** | **Milestone(s) (recommended)** | **Timetable / Timeline** | | **Responsible Party** | **Cost (recommended)** | **Evaluation** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Development** | **Implementation** |
| *Provide a link on our website to the Clear.geneseewater.org website* | | *A, B, C*  *D, E, F*  *G, H, I*  *J, K* | *Public*  *Residents*  *Visitors*  *Public Employees and Businesses* | Have messages on most topics. | *Residents adopt the recommended behavior* | *Permittees, Homeowners, Associations, and Businesses* | *Same as key message* | *Stay the same or increase hits per year on site* | *Done* | *Done* | *Municipality* | *Staff Costs* | *Number of hits per year and number of downloads per year* |
| *Provide literature at the entrances of the Township Hall:*  *Seven Simple steps, Septic Booklet, Riparian Landowners, IDEP identification* | | *A, B, C*  *D, E, F*  *G, H, I*  *J* | *Public*  *Residents*  *Visitors*  *Public Employees and Businesses* | Educate on various topics relating to watershed and stormwater best practices | *Residents adopt the recommended behavior* | *Permittees, Homeowners, Associations, Businesses, Riparian Landowners, and Lake & Stream Landowners* | *Same as key message* | *Distribution of at least 100 of each brochure yearly* | *Done* | *Done* | *Municipality* | *Staff Costs and Printing* | *Number of brochures distributed* |
| Creation of an illicit discharge reporting mechanism  (See IDEP Plan Attachment 2 pgs. 25-28) | | C | Public and Public Employees | What is an illicit discharge? How to report illicit discharge. | Eliminate known illicit discharges to storm drains and waterways | Public and Public Employees | Recognize and Report illicit discharges or improper disposal of materials that threaten the water supply | Reporting mechanism for IDEP is being used by the communities. | Attachment E has been created and is in place.  Attachment C has to be customized will be done by 7-1-2014 | Printing can be done as-needed. Placed on Website, and Placed on Counter for Public | Municipal | Staff costs printing cost | Is the illicit discharge reporting mechanism being used. |
| *Staff Training on Goodhousekeeping/ IDEP identification* | | B  C  D  E  F  K | Public employees, contractors | Good housekeeping practices and their impact on water quality. | Adoption and recording of good housekeeping practices | Public Employees | How to properly manage and maintain public infrastructure and related activities | Have maintenance staff trained within 1st year of hire or within permit cycle. | Done | Schedule training as-needed. | Municipality,SWM/Tetra Tech | Staff Costs | Pass MDEQ inspections |
| *Participate in HHW*  *Promote? financial?*  *Host?* | | G | Public, public employees, businesses | Identification of HHW (household hazardous waste), disposal locations and availability | Increase the number of residents dropping off HHW at events by 10% | Homeowners, businesses (painters, landscapers, etc.) | How and where to dispose of oil-based paint, pesticides, herbicides, etc. | Increase awareness of household hazardous waste and where and when it can be disposed | Distribute advertisements/flyers twice a year  Aid in financing twice yearly. Hosting as needed. | Distribution twice a year of advertisements /flyers developed by HHW group | Municipality,All Permittees/ HHW Committee | Cost of advertisement / flyers, staff time, and hazardous waste disposal costs | Track the number of residents and the amount of waste collected during HHW Collection. |

Many of the Public Education actions are performed by other Permittees or non- Permittee partners. Each Permittee is responsible to execute the permitted Public education efforts regardless of who is actually doing the work.  
All work identified in the PEP is being done on a Countywide basis. They have not been ranked by priority.