

Lake Champlain Basin Program

Final Report

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Organization Name: Lake Champlain-Lake George Regional Planning Board

Project Name: New York State Champlain Watershed Storm Drain Marker Program

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Executive Summary:

The New York State Champlain Watershed Storm Drain Marking Program was focused on educating students and the public about the issues pertaining to stormwater and non point source pollution. This was achieved through the partnership of the Lake Champlain-Lake George Regional Planning Board (LCLGRP) and members of the Clinton, Essex, Franklin, Warren and Washington County Water Quality Coordinating Committees.

The LCLGRP developed an educational presentation that was given to school and youth groups about the origins of stormwater runoff for their homes, the effect it has on local waterbodies and methods of decreasing stormwater runoff and pollution. EPA produced outreach materials on residential stormwater runoff sources and control were printed and placed in participating municipal lobbies for the general public. A hands-on experience to learning was added to the program by allowing youth groups and students to mount storm drain markers above municipal storm sewers to alert the general public not to dump any chemicals, waste, or fertilizers down the storm drains.

From July 2010 to June 2011 nearly 250 students and municipal employees placed 300 storm drain markers within the; Towns of Elizabethtown, Jay, Keene, Moriah, Westport, Wilmington and Willsboro (Essex County); Village of Saranac Lake (Franklin County); City of Glens Falls and Town of Queensbury (Warren County); and the Village of Fort Ann (Washington County). The markers were placed in an array of residential and commercial areas around housing developments, store fronts, schools, gas stations and even at the Warren County Airport.

Also throughout the Program over 1500 educational materials were disseminated. Maps of the storm drain marker locations have been produced per municipality as well as watershed wide to denote areas within the watershed where further educational opportunities can be presented.

Project Introduction:

Stormwater runoff from construction sites and household activities has a devastating affect on neighboring lakes, rivers and streams. Runoff that is high in pollutant concentrations can cause increased stream temperatures, loss of aquatic habitat and fisheries and impact the water cycle. It is an issue that is greatly affecting Lake Champlain, and should be a focus of water quality education in the basin.

The New York Champlain Watershed Storm Drain Marking Program was designed to do just that, and consisted of three components; a stormwater presentation, outreach materials and storm drain marking. The goal of the stormwater presentation was to teach students about the movement of stormwater through their towns, the pollutants that are picked up from various sources, and the journey into their local water bodies. Outreach materials focusing on stormwater related issues were distributed to the participating audience, as well as placed in participating municipal lobbies for the general public.



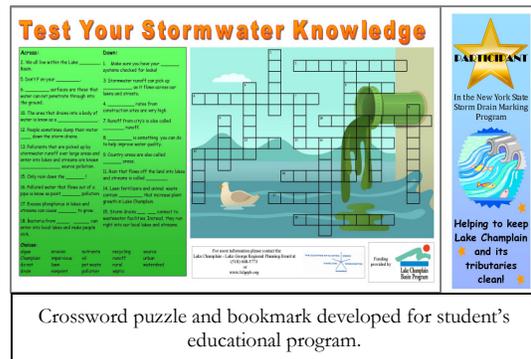
The third component, storm drain marking, added a hands-on approach to decreasing the pollution associated with stormwater runoff. After the presentation, the students traveled around to the storm sewers in their communities and attach storm drain markers above the grates with caulking adhesive. These markers will remind the public not to dump chemicals, waste or pollutants down the storm drains with phrases such as “Only Rain down the Drain” and “No Dumping, Drains to Lake.” This activity gave the participants a feeling of involvement in helping to decrease the amount of polluted stormwater

leaving their communities and ending up in their local waterways, including Lake Champlain. The main goal of the storm drain marking program was to show how much stormwater can affect the health of Lake Champlain and its tributaries and how we should all be more aware of what goes down the drains.

The Champlain Watershed Storm Drain Marking Program was a collaborative effort between the Lake Champlain-Lake George Regional Planning Board (LCLGRPB) and the County Water Quality Coordinating Committees (WQCC) of Warren, Washington, Essex, Clinton and Franklin Counties. Members of all organizations performed the Program in their local communities and aided in the placement of storm drain markers. Specific stormwater issues pertaining to the Lake Champlain basin and *Opportunities for Action* that were addressed include; non point source pollution from impervious surfaces, construction impacts that result in sediment and phosphorus loading, biological impacts such as bacterial transfers from pet waste, movement of toxins associated with petroleum products, and household runoff, for example fertilizer, that result in increased algal growth.

Tasks Completed:

In June 2010 an educational stormwater presentation was developed by the Project Coordinator for use with the storm drain marking program. The presentation focused on teaching students about watersheds, stormwater pollution, the effects that stormwater pollution has on aquatic ecosystems and ways that they can present stormwater pollution in their own homes.



Crossword puzzle and bookmark developed for student's educational program.



Project Coordinator Beth Gilles of the Lake Champlain – Lake George Regional Planning Board puts adhesive on a storm drain marker with the 4th grade class from Fort Ann Elementary School, Washington County, NY.

Educational materials were also developed and printed for use as outreach materials to the participants and the municipalities. The outreach materials developed for the students include a stormwater crossword puzzle, stickers and a bookmark. EPA developed pamphlets for homeowners on stormwater pollution prevention include *After the Storm: A Citizen's Guide to Understanding Stormwater* and *Make Your Home the Solution to Stormwater Pollution! A Homeowner's Guide to Healthy Habitats for Clean Water*. Also printed were Municipal Garage Maintenance posters to educate municipal highway workers on Best Management Practices that will reduce the amount of polluted stormwater runoff coming from the highway garages. The storm drain markers and supplies were also ordered in

June 2010, and once received, the supplies, along with the presentation and educational materials were distributed to representatives from the Warren, Washington, Clinton, Essex and Franklin Water Quality Coordinating Committees, which included employees of the County Soil and Water Conservation Districts and the Ausable River Association. From July 2010 to April 2011, over 15 presentations on stormwater pollution prevention were given in 10 municipalities (map 1) to classes ranging from 4th grade to 12th grade. Storm drain markers were placed in an array of residential and commercial areas near housing developments, gas stations, storefronts and even county airports. A GPS point was taken at each storm drain marker and maps of the locations were produced in GIS for each municipality as well as county and watershed wide. This will help us identify other municipalities that could benefit from a similar program.



Deliverables Completed:

1. Informational Stormwater Presentation was developed by the Project Coordinator.
2. Outreach materials were developed and over 1,500 pieces were ordered and distributed throughout the watershed.
Appendix 1: Stormwater Crossword Puzzles
Appendix 2: Bookmark
Appendix 3: EPA's "After the Storm" pamphlet
Appendix 4: EPA's "Make Your Home the Solution to Stormwater Pollution" pamphlet
Appendix 5: DPW Garage Maintenance Poster
3. From July 2010 to June 2011, over 300 storm drain markers were placed throughout the Champlain Basin. Participating municipalities (map 1) and locations of storm drain markers include;

Essex County (map 2)
Town of Elizabethtown (map 6)
Town of Jay (map 7)
Town of Keene (map 8)
Town of Moriah (map 9)
Town of Westport (map 10)
Town of Wilmington (map 11)
Town of Willsboro (map 12)

Franklin County (map 3)
Village of Saranac Lake (map 13)

Warren County (map 4)
City of Glens Falls (map 14)
Town of Queensbury (map 14)

Washington County (map 5)
Village of Fort Ann (map 15)

Conclusions:

Over 250 kids and municipal employees have been educated on stormwater runoff through this program and an increased awareness of each individual's impact on stormwater pollution has occurred throughout the basin. However, there are still a number of municipalities that did not participate in the program, and therefore a list has been developed in anticipation for future funding opportunities that will allow us to perform this program in those municipalities. Teachers are always looking for educational, hands-on activities to help enhance the lessons that they are already teaching. Many of the presentations performed were before the classes discussed storms, stormwater and pollution, so better timing to coordinate with the teachers will be taken into consideration. Also throughout the course of the program, it was discovered that many of the rural towns within Champlain Watershed do not have sewer systems, and rely on infiltration into fields and forested areas to control runoff. However, the public in those areas should still be educated on stormwater runoff and pollution. Therefore, should future funding become available, a different hands-on activity will developed for areas that do not have storm drains to mark.

Appended Documents: Maps, presentation and outreach materials will be sent in separate files.

Photos: Photo will be sent in a separate file.