



Ulster County Department of the Environment

2011 Update



February 2012

Michael P. Hein, County Executive



Ulster County Department of the Environment 2011 Update

1.0 Department Background and Mission Statement

The UC Department of the Environment was established by local law in the fall of 2007 and staffed in the spring of 2008. It has a unique role within Ulster County government, responsible for coordinating programs and activities related to the environment across six different county departments and agencies. Those Departments and Agencies include: UC Health Department, UC Planning Department, UC Information Services, Cornell Cooperative Extension of Ulster County, UC Soil and Water Conservation District, and UC Department of Public Works. The Department of the Environment is responsible for working with all the involved departments, as well as the UC Environmental Management Council, to increase efficiency and efficacy of projects with a variety of environmental implications

UC Department of the Environment mission includes supervising select environmental compliance responsibilities, providing a forum for the Coordinated Departments to share information on environmental projects, providing technical assistance to County departments, and helping County departments characterize and address existing environmental needs. This helps the County to prevent duplication of services. The Department also allows the County to ensure that environmental stewardship is being balanced with fiscal responsibility.

The Department's responsibilities are detailed in the establishing Local Law #17 of 2007. According to that law, The Department of the Environment is to:

- Coordinate environmental policy and resource planning for all interrelated County Departments and the Ulster County Environmental Management Council;
- Review the progress of environmental projects through oversight of the duties of technical staff assigned and make recommendations to ensure the project is on-time and the goals of the Environmental Management Council are being met;
- Provide administrative and technical assistance to the Environmental Management Council;
- Review on-going County projects and/or activities with environmental implications and assure that the requirements and guidelines of the project are followed in context with established policies and procedures;
- Act as administrative liaison with personnel in other County Departments, as well as with Federal, State, regional and private environmental planning agencies, consultants and other interested parties involved with environmental issues;
- Prepare plans, reports, informational material and administrative documents designed to support or implement environmental objectives of Ulster County and the Environmental Management Council to meet both State and Federal requirements; and,
- Coordinate the efforts of County departments and municipalities to utilize Geographic Information System (GIS) equipment and software, as well as global positioning equipment to compile, collect, organize and analyze geographic information relative to the focus and planning objectives of Ulster County and the Environmental Management Council.

2.0 Accomplishments 2011

This annual update is a summary of the UC Department of Environment's activities from January- December 2011. The update is divided into the Department's four main work areas: Department Operations and Development, Stormwater Compliance, Sustainability Initiatives, and Natural Resources.

2.1 Work Area #1- Department Development & Administration

Ulster County created a unique department through the formation of the Department of the Environment. Although the Department has now been staffed since 2008, it is important to continue to actively develop the distinct 'coordinating' department model through which the department operates.

- **Department Administration and Operations**

Staff worked with Information Services to complete web page content for the Department of the Environment. Up to this point, the Department had limited web presence. The revamped web pages (www.co.ulster.ny.us/environment) went live in early July.

Staff supervised an intern to assist with the various GIS mapping work that our department provides to other county departments and occasionally to municipalities. The intern worked from February through December on the outdoor recreation map, entering utility data for county buildings, and on a project at the direction of UC Information Services.

Staff formalized a GIS internship agreement with a Geography student at SUNY New Paltz for January – May 2012 to work on the 2012 recreation map, the Ulster County REConnect website, among other tasks.

- **Ulster County Environmental Management Council (EMC)**

As per local law, our department continued to provide administrative support to the EMC, including posting minutes and agendas to the EMC website (<http://ucenvironment.org>) as well as maintaining the website and updating it every other week with events of interest throughout Ulster County.

In conjunction with the EMC, the Department held an 'environmental roundtable.' All municipal environmental committee members in the County (there are 16 municipalities with some form of environmental committee) were invited to a presentation and networking session held at SUNY Ulster.

- **Ulster County Creek Week (September 17 -25)**

Staff worked with the EMC to organize and coordinate the 2nd annual *Creek Week*, which celebrates water resources in Ulster County. Due to the flooding caused by Hurricane Irene and Tropical Storm Lee, a number of the scheduled events were canceled and the focus of *Creek Week* was somewhat shifted to reflect the concerns related to flooding. Of the original 30 events planned, 22 were held. A list of the events can be seen on the EMC website at: <http://ucenvironment.org/ulster-county-creek-week/>. More than a dozen local organizations and agencies partnered with the County in making this event a success.

2.2 Work Area #2- Stormwater & Pollution Prevention

Stormwater pollution- commonly recognized as a major source of non-point source pollution- can negatively impact water quality and ecosystem health and has the potential to increase flood flows and damage infrastructure during precipitation events. The County is regulated by the NYS DEC MS4 Stormwater program and as such must comply with the permit conditions of this program. Compliance requires a wide range of planning, education, and operational work.

- **MS4 Stormwater Regulatory Compliance**

Staff completed triennial training for 175 County employees on stormwater best practices, illicit discharge detection and elimination, and good housekeeping practices.

Staff developed a presentation on the MS4 audit process and a report card by identifying common deficiencies in each of six minimum control measures (MCMs). We also continued to acquire additional videos for our lending library to support municipal MS4 compliance in Ulster County.

Staff continued with stormwater outfall monitoring. This consists of relocating mapped outfalls on or near County roads and checking them to ensure that there are no illicit discharges or other problems. This is a requirement by the NYS DEC. 129 (37%) of the County's 345 outfalls were monitored in 2011.

Staff completed the stormwater annual report for 2010-2011 and presented it to the Environmental Management Council in April. The annual report was publically noticed and submitted to the NYSDEC.

- **Green Infrastructure – 17 Pearl Street Demonstration Rain Garden**

Department of the Environment coordinated the design and installation of a demonstration rain garden next to our 17 Pearl Street building. Rain gardens are an alternative method of managing roof water runoff (a type of stormwater) which also helps to improve water quality. We worked closely with Buildings & Grounds on the technical aspects of the design. Additionally, we found a landscape architect who donated her design services and the plant materials were donated by Cornell Cooperative Extension and Friends of Forsyth Park. After the site preparation work done by Buildings & Grounds, the rain garden was planted at the end of August by staff and volunteers.

On November 3, staff organized and hosted training for municipalities on rain gardens and other examples of green infrastructure. The workshop, titled "Rain Gardens: a Tool for Municipal Stormwater Management" was presented by Cornell Cooperative Extension and included a tour and discussion of the new rain garden. Representatives from the Town of Hurley, Lloyd, Saugerties, Shawangunk, Ulster, the Village of Saugerties and the City of Kingston attended.

Staff completed a brochure and developed information packets on the rain garden that are now used for public outreach and education. This material is posted on our webpage.

An article on the rain garden was published in Daily Freeman on December 19, 2011 (<http://www.freemanonline.com/articles/2011/12/19/news/doc4eee7481db986786760651.txt>).

- **Ulster County Non-Toxic Pest Management Committee**

In June, the Department convened the UC Advisory Committee on Non-toxic Pest Management, which oversees the implementation of Local Law #4 of 2009. The committee did not entertain any waiver requests at this meeting but did meet to discuss the overall implementation of the local law.

- **Other**

Staff submitted two Ulster County projects (17 Pearl Rain Garden, Ulster Landing Park permeable paver trail extension) to Hudson River Estuary Program (HREP) for the Green Infrastructure website. Projects can be seen at: <http://www.dec.ny.gov/lands/79016.html> and <http://www.dec.ny.gov/lands/79022.html>

Department of the Environment maintains a spatial database of DEC spills cases within Ulster County which have not been administratively closed. This database matches the DEC files with section, block and lot numbers for parcels. This is a unique and useful database for screening properties for suspected environmental contamination. The database was reviewed and updated in 2011.

Department of the Environment helped UC DPW further implement the low/no VOC paint policy by developing written guidelines for paint selection.

2.3 Work Area #3- Energy & Sustainability

In 2011, sustainability initiatives were focused on two main areas. First, the Department of the Environment continued to coordinate the County's implementation of our \$754,400 US Department of Energy-Energy Efficiency and Conservation Block Grant (EECBG) award. There are several capital project as well as some other small projects related to this grant. Second, we continue to coordinate the implementation of Ulster County's adopted Energy Policy (2008). To date, the Department has been involved with projects, funded by EECBG, NYSERDA, and Central Hudson, which reduce ongoing energy costs, cut down on maintenance costs, and replace outdated equipment. Cumulatively, these projects total more than a million dollars.

- **Energy Efficiency and Conservation Block Grant (EECBG) funded Capital Projects**

Using resources available to the County through the Department of Energy- National Renewable Energy Labs, staff arranged for the County to receive a detailed third party technical review of a proposed energy performance contract.

Staff worked with Buildings & Grounds, and Contract Management to facilitate the retrofit of over 100 outdoor lighting fixtures at Golden Hill. Work began in October, and by December, nearly all installation work (of LED lights and fixtures) was complete. Some minor installation and engineering work will occur in early 2012. This project is the largest outdoor LED lighting project in the area and includes freestanding solar powered parking lot lighting.

Staff worked with Buildings & Grounds, and Contract Management to facilitate the removal and replacement of two old cooling towers with more efficient units in 2011 at Ulster County DPW and Ulster County Mental Health buildings. This project will be completed early in 2012 and is 90% funded with EECBG money. This project was not included in the original scope of the EECBG grant but cost

savings on other projects (i.e. LED outdoor lighting and the solar installation at the New Paltz material storage facility) allowed it to be progressed.

Additionally, Ulster County was highlighted throughout the New York and New England region at the EECBG 'peer to peer' exchange as an example of what larger municipalities are doing to successfully implement their EECBG funding.

- **Central Hudson Lighting Program**

Staff worked with Buildings & Grounds, Contract Management, Central Hudson, and Alliance Energy to complete an extensive lighting retrofit project at six County buildings. These projects totaled \$115,000 in value but came at no cost to the County. The estimated annual savings in utility bills to the County is \$40,000. The installation of the 1,496 fixtures occurred at the County Office Building, County Courthouse, Mental Health, Information Services, Records Storage, and UCAT. The work took place during October and November.

- **Recycling**

Staff created a recycling survey and distributed it electronically to 700 employees in the targeted buildings. Based upon the results from the survey, new recycling bins, individual desk recycling bins, and information on recycling (paid for with EECBG funds) were delivered to UCAT, Mental Health, BRC, Flatbush, Trudy Resnick Farber, Hall of Records, Public Works, Information Services, the Law Enforcement Center, the County Courthouse, and Family Court. Staff continues to upgrade county buildings, and address any needs that arise. These efforts have significantly improved the capture of recyclable materials.

- **Sustainable Ulster (www.SustainableUlster.org)**

This site provides residents and businesses with a valuable resource to find and act on the many incentives to improve energy efficiency, reduce energy demand, use green energy, and save money. The site was launched in December of 2010 but staff continued to provide regular updates (such as appliance rebates, incentives for homeowners, hazardous waste collection dates, etc) throughout 2011 to ensure the information on the site remained current. In 2011, the website received 98,790 total website visits and has enjoyed a semi-permanent link on the County's homepage.

- **Utility Data Tracking**

During 2011, Department of the Environment coordinated with Information Services and Buildings & Grounds to greatly improve our tracking of utility data. We were able to procure a software package which would allow for energy consumption tracking and comparisons across the nearly sixty different utility accounts for which the County is responsible. Department of the Environment staff formatted and imported over twenty four months of historic bill data in order to populate this program. The new program will allow for more consistent tracking of utility expenditures and greater analysis of energy use and conservation efforts.

2.4 Work Area #4 – Natural Resources

Under this work area, the Department of the Environment focuses on a variety of different efforts that aim to improve coordination around and protection of natural resources. These activities range from Open Space planning, GIS data creation, projects at our County parks to various mapping initiatives. More specifically, the Department of the Environment has significant experience in the field of watershed management and is able to provide a high level of technical support to a variety of watershed management issues and initiatives across the County including the issues related to the Lower Esopus Creek.

- **Ashokan Release Working Group**

Our staff continued to be active in the Ashokan Release Working Group (ARWG) regarding NYCDEP's releases from the Ashokan Reservoir. This work area has occupied significant staff time and effort. Department staff attended frequent work group meeting, provided ARWG with mapping, provided a database of all riparian land owners along the Esopus, as well as a draft summary of issues and concerns as well as potential ways to assess those impacts.

Department of the Environment staff received all of the returned surveys (145) of impacts from the releases on behalf of the ARWG. Additionally, staff has fielded dozens of calls and emails from concerned residents regarding the Lower Esopus Creek.

In addition to regular working group meetings (and those of the various sub-committees), staff attended approximately 40 site visits to streamside properties potentially impacted by the releases. These site visits occurred from June through August

During October, a draft Ashokan Release Protocol was issued by NYS DEC to outline the general terms under which releases from the reservoir will be permitted. Staff reviewed this document and provided technical comments to the NYS DEC.

Throughout the year, staff presented at multiple public meetings in Saugerties and Ulster as well as presenting to various community groups regarding the Lower Esopus, the ARWG and the new community releases to the creek.

- **Other Lower Esopus Activities**

Staff continued to work with the Lower Esopus Watershed Partnership (LEWP) to help them produce maps, collect data, and provide technical review of materials for their recently-released draft stream management plan. Additionally, our staff reviewed, provided information, and supplied some images for "A Journey through the Lower Esopus Creek," a 50-page booklet produced by LEWP. Staff also provided data, mapping assistance, and suggestions to LEWP and their designer for their "Recreational Access to the Lower Esopus Creek" map which was also printed in 2011.

- **Greater Catskill Flood Remediation and Buyout Program (GCFRBP)**

Staff was involved in the environmental aspects of the GCFRBP (Wawarsing). Our work included helping to interpret geologic studies as well as the environmental and SEQR aspects of the program. In addition to doing an environmental review of the project, we also continue to provide GIS technical support to the project team.

Additional staff was also appointed to the committee that scored and ranked the applicants to the GCFRBP. This committee met multiple times throughout November and December.

- **Ulster County REConnect (www.UlsterCountyAlive.com/REConnect)**

The online version of the recreation map, UC REConnect, was launched in early June to coincide with National Trails Day. A procedure and schedule for data updating was established in order to keep the map current.

Staff continued to work alongside UC Tourism and UC Planning to strategize on getting the word out about the REConnect website. One outcome was the production of a 'palm card', designed by Focus Media. 6,000 copies of this glossy 4" x 9" palm card were produced and continue to be distributed.

Staff presented at the Ulster County Trails Conference held at SUNY New Paltz on November 5 on the Ulster County REConnect website. Staff also assisted in the planning of the event, funded through Hudson Valley Greenway. The conference was attended by 70 people.

- **Ulster County Tourism Guide Outdoor Recreation Map**

Department of Environment staff and an intern collected, compiled, and fact-checked an extensive amount of data to ensure the production of a high-quality outdoor recreation map for the centerpiece of the 2011 Tourism Guide. Staff worked closely with a map designer over the course of several weeks to produce the map. The final map measured 22" x 32" and included things such as hiking trails, rail trails, scenic drives, trailheads, boat launches, publicly-accessible lands, municipal parks, and fishing access sites.

To ensure accuracy and completeness of the finished map, we partnered with UC Planning, Tourism and Information Services. Additionally, we sought local review of the product, and therefore distributed municipality-specific versions to elected officials and the UC EMC for review and comment.

- **Watershed Management Efforts**

Staff continued to be consistently involved with the Ashokan Watershed Stream Management Program (AWSMP) Project Advisory Committee. (The AWSMP is responsible for helping to program about two million dollars in grant money for various projects in the Ashokan watershed.) Staff also regularly attended various sub-committees and working groups, which included the grant review sub-committee, strategic visioning sub-committee, the education and outreach working group, the stream access and recreation working group, the highway managers working group, and the Shandaken area flood assessment and remediation initiative (SAFARI) group.

Staff assisted the AWSMP in pulling together materials, including printing of large scale images of Hurricane Irene flood damages for their December bus tour which was used to educate and inform Ulster County elected officials on flood response progress.

Staff attended floodplain mapping meetings held by the NYS DEC to update and describe the process of revising the FEMA floodplain maps for the area of Ulster County in the DEP West of Hudson watershed. Draft maps for Ulster County are expected in spring 2013.

Staff continued to attend a handful of meetings pertaining to different watercourses in the County, including those convened by the Rondout Creek Watershed Council and the Rondout/Neversink Stream Management Program. Staff also visited the Sundown Highway garage to inspect the Catskill Streams Buffer Initiative planting being installed at the site – in part by Tri-Valley Central School students.

- **Open Space Planning and Implementation –**

Staff attended the NYSDEC Region 3 Open Space Plan meeting and continues to be part of this group – tasked with developing a State Open Space Plan in 2013.

In September, we received notice that we were awarded a NYS DEC Hudson River Estuary Program grant for \$30,000 for “Open Space Implementation – Natural Resource Inventory Update and Expansion.” This grant will fund water resource data creation that will allow for better planning and implementation of both growth and conservation in the County. Staff submitted a revised work plan, researched municipal “open space plans” and similar documents that exist for Ulster County.

- **Emerald Ash Borer (EAB)**

In March, staff participated in a workshop and afternoon fieldtrip with regional researchers to discuss, learn about, and strategize how to better prepare communities for the Emerald Ash Borer infestation. In November, staff attended the Emerald Ash Borer (EAB) Task Force kick-off meeting in Saugerties and will continue to be part of this effort in 2012.

Over the summer, Department of the Environment staff identified and tied flagging tape around several ash trees at Ulster Landing Park as well as posting signs on these ash trees to inform the public about EAB. It was part of a regional effort to increase the awareness of Emerald Ash Borer. EAB has been found extensively through the northeastern portion of the County. EAB kills ash trees which are not only an important part of our native forests but an economically significant forest product.

- **UC Fairground Plant Materials Center**

Department continues to work with the County Attorney’s Office, the UC Agricultural Society and the UC Soil & Water Conservation District to establish a plant materials center at the Ulster County Fairground in New Paltz. This planting area will provide plant material to be used to stabilize eroding banks across the County.

3.0 Key Statistics

- As of December 2011, the County had spent \$687,063 of our \$754,400 Energy Efficiency and Conservation Block Grant. \$465,015 of this grant was expended during 2011. These Federal funds were matched by \$183,050 of NYSERDA funding. The Department of the Environment has overseen the program of this grant as well as all the federal reporting requirements.
- The County received \$115,000 worth of lighting upgrades through Central Hudson's lighting efficiency program. This program replaced 1,496 aging light fixtures with new energy efficient fixtures and bulbs which will save the County approximately \$40,000 in electricity costs annually. The program came at no cost to the County.
- SustainableUlster.com, the County's energy efficiency website, received 98,790 website hits during 2011. The website not only supplies residents with information on how to save energy and take advantage of various incentives but highlights the County's sustainability initiatives.
- REConnect, the County's recreational mapping website, received 1,352 unique page views from August-December 2011. The hard copy of the recreational map was included in the Ulster County Travel Guide. 100,000 copies of the Travel Guide were produced and an additional 10,000 copies of the map were produced and distributed.
- The UC Department of the Environment was awarded a \$30,000 grant from the NYS Department of Environmental Conservation. This grant will fund water resource data creation for Ulster County and a large format plotter for the Department.
- The County installed a 305 square foot rain garden next to 17 Pearl Street. The County received approximately \$1,200 in donated plant materials and \$1,800 in donated design services to complete the demonstration garden.
- 175 County employees were trained in stormwater best management practices as per the County's MS4 Stormwater mandate.
- Representatives of seven municipalities in Ulster County regulated under the DEC stormwater program employees received training through a County sponsored stormwater workshop.
- 14 different buildings received recycling upgrades, 90 co-mingled /paper containers were placed in those buildings and 375 individual desktop recycling trays were distributed.

4.0 Collaborations

By design, the Department of the Environment is charged with coordinating environmental projects and activities across County government. As such, we are continuously collaborating with other County departments and outside agencies. The preceding list of 2011 accomplishments highlights our regular collaboration across County government. The section below highlights additional 2011 collaboration not previously mentioned.

- **Information Sharing**

Upon the completion of the new GIS web based map application by UC Information Services, we worked to arrange a presentation of the updated web map to the environmental sanitation division at the Health Department. This web map application is very helpful for their site review work. Staff also prepared a list of other publically available environmental databases for reference during their site review.

In July, staff organized a coordination meeting with the new head of Environmental Sanitation at the UC Health Department. This served as an introductory meeting to orient the manager to what the Department of the Environment. Specific projects and opportunities for collaboration - like water resource data, recreation and stormwater, and the local law banning pesticide use on County property- were discussed. In August we convened a follow-up meeting with personnel from UC Planning, UC Health Department- Environmental Sanitation Division, and UC Information Services- GIS Division, to discuss the current water resources data available at the County and what the group's priorities are for new data creation. This meeting was used to inform our implementation of the Hudson River Estuary Program grant.

Supported UC Planning application to the NYS DOS Brownfield program through mapping and providing text for the grant application.

- **Hurricane Irene and Tropical Storm Lee Relief**

Staff assisted the UC Planning Department by contacting businesses throughout the County and obtaining and compiling damages sustained from Hurricane Irene and Tropical Storm Lee.

Staff worked with UC Planning, UC Soil and Water, UC Emergency Services, the Ashokan Stream Management Program, and NYCDEP Stream Management to identify, map, and inform potential funding agencies about locations where there are large woody debris jams or other post-flood conditions that threaten county-owned or other infrastructure.

Staff began compiling potential locations, for stream debris removal in the West-of-Hudson watershed in anticipation of submitting an application to the CWC through their new debris removal grant program. This was done in conjunction with the Ulster County Soil & Water and Cornell Cooperative Extension of Ulster County.

- **Healthy Places**

Staff continues to support the *Healthy Ulster* initiative and partner with the UC Health Department by actively participating in a sub-committee that is tasked with combating Environmental Quality (ozone) and Overweight & Obesity, which were flagged as "priority health indicators" in the *Healthy Ulster: A Public Health Approach* – the document that is focused on improving the health of Ulster County.

5.0 Goals for 2012

Work Area #1- Department Development & Administration

- In coordination with the Environmental Management Council, host a workshop for municipal environmental board members.
- In coordination with the Environmental Management Council, organize the 3rd annual Ulster County Creek Week event in September 2012.

Work Area #2- Stormwater & Pollution Prevention

- Seek and apply for at least one stormwater related grant.
- Explore more formal inter-municipal stormwater collaboration.
- Update the County's Stormwater Management Plan.
- Host two workshops for municipalities on regulatory stormwater management issues.
- Monitor 20% of the County's stormwater outfalls in 2012 for illicit discharges.

Work Area #3- Energy & Sustainability

- Successfully close out the County's EECBG grant program.
- Seek and apply for at least one additional funding opportunity for energy conservation initiatives.
- Continue to work collaboratively with other county departments to implement the 2008 Ulster County Government Energy Policy.

Work Area #4- Natural Resources

- Seek and apply for at least one natural resource related grant.
- Continue to work collaboratively with Planning, Information Services, Health, and Public Works departments to acquire, map, disseminate, and analyze natural resource data - for surficial and groundwater aquifers in particular, and potentially for other datasets as well which are pertinent to the Natural Resource Inventory (NRI).
- Work to ensure that Ulster County remains a proactive partner in helping our communities prepare for and ultimately recover from the effects of the Emerald Ash Borer (EAB) infestation.
- Improve the visibility, functionality and use of the REConnect website as tracked by website visits.