

## **FY 2008-2009 work plan goals and related accomplishments:**

### **FY 08-09 Goals:**

#### **WQ 1: Decrease nutrient inputs to groundwater from residential and commercial land uses.**

*Related themes:* Nutrient Reduction Action Strategy, Implementation of strategies to achieve or assist with the nutrient reduction, Use GIS-based water quality hydrologic model to assist with predictive methods for pollution loads.

**Volunteer Water Quality Monitoring.** The Program is continuing to manage the local corps of citizen volunteers as is has done for the past 11 years. Data gathered by citizens and Program staff is being incorporated into the newly developed Coastal Bays Report Card and accompanying website.

Additionally, all data has been submitted to MDE for inclusion into the 2010 Integrated Report of Surface Water Quality for compliance with federal requirements from the Clean Water Act. The Program has been active in state modeling exercises for the anticipated TMDL for the entirety of the Coastal Bays watershed.

**Clean Watershed Needs Survey.** MCBP coordinated the local submission for Maryland's CWNS to document all known capital needs related to stormwater, wastewater and non-point source projects. This Survey is a response to EPA from each state for budgetary and planning purposes under the State Revolving Fund

**Atmospheric Deposition Monitoring.** DNR, UMES , NPS and MCBP continue to coordinate and extrapolate data from this program that monitors atmospheric inputs of nutrients.

**Watershed Restoration Action Strategy.** -- MCBP and other partners including Worcester County have developed a Watershed Restoration Action Strategy for Chincoteague, Newport, Sinepuxent, Assawoman and Isle of Wight bays. Over the past year, the programs have worked together to upgrade the WRAS for Isle of Wight Bay and create a new Assawoman Bay WRAS. The broad but detailed strategy outlines the most efficient ways to achieve nutrient reductions and TMDL goals.

#### **WQ 2: Decrease nutrient inputs from stormwater runoff**

*Related themes:* Nutrient Reduction Action Strategy, Implementation of strategies to achieve or assist with the nutrient reduction, Use GIS-based water quality hydrologic model to assist with predictive methods for pollution loads, Improving communication between local, state and federal agencies to identify restoration and policy opportunities.

#### **Emerging challenges for Coastal Lagoons**

Coastal Bays STAC sponsored and organized a conference March 5-7 in Ocean City on challenges facing coastal lagoons. It was co-sponsored by AERS, Barnegat Bay NEP, HDR and the Coastal and Estuarine Research Foundation. It brought together scientists from DC, DE, MD, NC, NJ, PA, and VA to discuss estuarine and coastal environments and policies.

**Nutrient Reduction Action Strategy (NRAS).** The program has developed a matrix to keep track of implementation of all of the actions in the NRAS. The past year's highlights include purchases of land for spray irrigation, cover crop tracking, a final draft of the ONRW designation for Chincoteague Bay, securing state dollars to enroll all interested farmers in the cover crop program, development of a BMP subcommittee, both county and state passage of regulations requiring nutrient removal systems in the coastal bays critical area, implementation of HB 1141 for stormwater, and implementation of state program that pays for trees near poultry houses.

**WQ 4: Decrease nutrient inputs from agricultural sources.**

*Related themes:* Nutrient Reduction Action Strategy, Implementation of strategies to achieve or assist with the nutrient reduction, Use GIS-based water quality hydrologic model to assist with predictive methods for pollution loads, Improving communication between local, state and federal agencies to identify restoration and policy opportunities.

**Stream monitoring-nutrients.** Three years of Program monitoring has been analyzed for nutrient concentrations in non-tidal areas of the watershed. Data has been correlated with local landuse to determine nutrient loading hotspots, with the intention of prioritizing best management practices that may remediate excessive loading. This analysis has been presented to the Program Implementation/BMP subcommittee and to regional scientists at the 2009 Atlantic Estuarine Research Society Conference.

**Chincoteague Bay Water Quality Improvement Strategy**

In order to determine the cause and correct the trend of declining water quality in Chincoteague Bay, the Coastal Bays STAC is in the process of developing with the Implementation Committee a scope of work, including 2-year nutrient reduction goals, and associated budget by the next Policy Committee meeting. The Policy Committee, which directed the work, will seek funding for this plan at all levels of government.

**Stream monitoring-macroinvertebrates.** In addition to chemical and physical monitoring, biological sampling is being conducted in 2009 in collaboration with DNR's Streamwaders Program. This program monitors macroinvertebrate species richness and abundance throughout the state. This program is helpful for determining the health of terrestrial streams within the watershed, and may lead to the development of another indicator of watershed health.

**Geographical Information System.** -- Implementation and maintenance of an in-house GIS is being used for decision making, landscape analysis, nutrient loading estimates & changes over time, and many other applications. Reports, maps and graphics are used to educate the public about a variety of issues relating to water quality, wildlife and quality of life issues. Additionally the MCBP strives to remain current with new technologies that its partners are using for planning and monitoring the watershed. Currently, an office server has been established to access ArcGIS programs and geographical data. A data inventory consisting of maps, reports and geographical layers has been completed.

**WQ 5: Reduce nutrient inputs from point sources.**

*Related themes:* Nutrient Reduction Action Strategy, Implementation of strategies to achieve or assist with the nutrient reduction, Use GIS-based water quality hydrologic model to assist with predictive methods for pollution loads, Improving communication between local, state and federal agencies to

identify restoration and policy opportunities, Chincoteague Bay Outstanding National Resource Waters designation.

**Spray irrigation.** Berlin and Worcester County agreed last year to spray irrigate any new point sources and to get rid of some current ones. Both Worcester County and Berlin now have purchased land to spray irrigate effluent three separate point sources. Hook up is scheduled to take place within the next two years. Much of this was a result from pressure and assistance from MCBP.

**FW 2: Enhance forest habitats to protect songbirds, other wildlife populations, and aquatic resources.**

*Related themes:* Promoting and stabilizing the local economies and practices of agriculture, aquaculture and forestry to assist in maintaining the rural character of the watershed, Terrestrial monitoring program, Improving communication between local, state and federal agencies to identify restoration and policy opportunities, Habitat protection and restoration

**Terrestrial Monitoring Plan.** This comprehensive plan that looks at habitat and the wildlife populations that live there has been submitted to STAC for approval. Implementation begins this year. See also \$14,500 EPA sub-award.

**DNR Green Infrastructure and Herp Atlas Work Groups.** MCBP Director Dave Wilson sits on both the DNR Herp Atlas and Green Infrastructure Work Groups. The Herp Atlas Group will play a key role in helping to implement the parts of the terrestrial monitoring plan that address reptiles and amphibians by enlisting citizens and others to scientifically inventory the species in the watershed. The Green Infrastructure group is working to change the paradigm at DNR from exploitation to one of conservation and a look toward biodiversity with regard to the state's natural resources.

**Newport-Chincoteague Land Conservation Area.** The Policy Committee directed MCBP to work with the State and Worcester County to develop specific land conservation targets and a strategy for achieving them for the Newport/Chincoteague Conservation Area approved in December 2008. The IC approved the strategy for the 64,000-acre region in May. It includes a goal of protecting 20% of the area (3,300+/- additional acres) by 2015, or 471 acres/yr (starting 2009 ending end of 2015) by using a variety of land conservation programs.

**TPL CELCP work.** The Coastal Bays Program is playing a primary role in the conservation of 430 acres in Newport Bay watershed by working with the Trust for Public Land to secure Coastal and Estuarine Land Conservation dollars for the project. Unfortunately DNR has ranked the project low on its priority list so we are lobbying for a higher ranking.

**Forestry white paper implementation.** The Terrestrial Monitoring Plan, Green Infrastructure Workgroup, Newport-Chincoteague Land Conservation Area and land conservation projects each play an important role in implementing the actions called for in the Forestry White Paper. MCBP also supported a bill that passed in the MD legislature this year that allows no net loss of forests in Maryland. More work needs to be done to address the accumulation of pine over hardwoods.

**Land Conservation-general.** The Coastal Bays Program has become adept at connecting landowners with conservation organizations. We are helping protect land in the watershed with various permanent conservation programs including the Rural Legacy Program, Maryland Agricultural Land Preservation Foundation, Trust for Public Land, US FWS, Program Open Space, and Wetland Reserve Program. Four

projects totaling 1,300 acres are currently in the works.

**Delmarva BioBlitz.** The MCBP co-sponsored a BioBlitz in August designed to help inventory native flora and fauna while at the same time letting locals enjoy the outdoors. The blitz included 10 teams who chronicled over 990 species of plants and animals in and around the watershed. The teams also procured sponsors, and the Coastal Bays team, which won \$500 for chronicling the most species, also raised an additional \$2,000 in sponsorships.

**DNR Fisheries data collection.** Coastal Bays staff and interns regularly go out with DNR fisheries biologists during their annual trawl and seine survey. This helps staff learn about the bays and understand methodologies involved in data collection.

**Colonial waterbird count.** This year MCBP participated in counting breeding colonial waterbirds and collecting and synthesizing data to help DNR establish base populations of wading birds in the coastal bays.

**Flying Wild.** 100 educators trained in the first year. Program is designed to make educators aware of complexities of bird conservation; more environmentally literate; comfortable teaching about birds, migration, diversity, and habitats; more at ease when taking students outside for field study; able to identify action steps and behavior changes they can make for the benefit of birds; and recognize Maryland's coastal bays as critical habitat for a tremendous diversity of bird species. Associated programs and field experiences have been developed. Delmarva Flying Wild City Partner MOU signed November 2008. Delmarva City Partners: Ward Museum of Wildfowl Art, Assateague State Park, & Maryland Coastal Bays Program. Since the program start in late November 2008, 16 facilitators & 76 educators have been trained.

### **FW 3: Protect and enhance wetlands for water quality and wildlife.**

*Related themes:* Terrestrial monitoring program, Enforcement staff for wetlands, shorelines, stormwater and sediment and erosion control, Improving communication between local, state and federal agencies to identify restoration and policy opportunities, Habitat protection and restoration.

**State Diamondback Terrapin work group** – MCBP has become an integral part of this work group tasked with preserving and protecting terrapin habitat and terrapin populations in the state of Maryland.

### **Living Shoreline projects**

Gum Point Rd.- involved in planning, design and implementation, created 2,000 sq ft of tidal marsh

Carlson Project - involved in planning, design, and funding 5,000 sq ft of protected shoreline, tidal marsh is planned but has not yet been completed

Smith Property - involved in planning, design, and funding, ~2,000 sq ft of tidal marsh, project is in permitting stage. Should be completed by Aug 2009.

Rohe Property - involved in planning, design and funding. ~6,000 sq ft of tidal marsh, project is currently in design stage, permit is in hand. Should be completed by Aug., 2009.

**Marsh Ditching Project.** Monitor effects of ditch plugging project. Ditch plugs have been installed at EA Vaughn and Isle of Wight. Plugging will restore marsh hydrology and some 400 acres of

marsh. Monitoring started last summer and will continue indefinitely.

**Bishopville Dam restoration.** Monitored and coordinated project to remove the dam at Bishopville and restore a 30-acre sand and gravel mine to an Atlantic white cedar wetland. Bishopville Dam modification underway will allow for passage for river herring, white perch and the restoration of approximately three acres of tidal/nontidal wetland/stream habitat, 41 acres of floodplain and opening of approximately seven miles of upstream habitat for anadromous fish spawning.

**Perdue Property Restoration.** Program secured funding and contractor to restore 90 acres of forests and wetlands on the former agricultural property. Wetlands and contiguous forest are being restored with help from NRCS and MDE. Site is near Showell, MD and has been acquired by MCBP.

**Beneficial use of dredge material.** Coordinated stakeholders to find uses for dredge material. Worcester County and Corps of Engineers do not appear to be favorable to this approach but we'll keep trying to link suitable material with potential uses.

**CE 3: Manage the watershed to maximize economic benefits while minimizing negative resource impacts.**

*Related themes:* County Comprehensive Plan and zoning (using sea level rise/coastal hazards and nutrient reduction as means to guide implementation), Promoting and stabilizing the local economies and practices of agriculture, aquaculture and forestry to assist in maintaining the rural character of the watershed.

**Ayres Creek Kayak Launch.** The Coastal Bays program is partnering with the town of Ocean City and DLITE to create a kayak launch and wetland restoration with interpretive trails on 40 acres owned by the city on the mainland. The work helps implement important parts of our CCMP related to low impact tourism promotion and education.

**The Delmarva Birding Weekend/Great Worcester Herp Search.** Co-organized by MCBP, the event hosts 700 people on 40 trips on private and public farms and forests. The trips educate visitors and show them as well as the business community the economic value of open space. The Great Worcester Herp Search for reptiles and amphibians also hosts more than 75 residents every May and provides invaluable data for scientists.

**Aquaculture Lease Planning.** The MCBP spent the 2008 MD legislative session working with the state to promote modest aquaculture development in the coastal bays. The state's final bottom leasing bill was not protective enough of coastal bays resources so we are working with DNR to create buffers around important resources and protect sensitive areas.

**Fish Ruler.** MCBP created 3,000 36-inch fish rulers for boaters to put on their boats and coolers. The ruler contained fish ID and safety and conservation tips for keeping boating safer and cleaner. It took only six weeks for all rulers to be taken.

**CE 4: Enhance the level of sustainability in land use decision making.**

*Related themes:* County Comprehensive Plan and zoning, Enforcement staff for wetlands, shorelines, stormwater and sediment and erosion control, Improving communication between local, state and federal

agencies to identify restoration and policy opportunities, Institutionalizing the Delmarva Atlantic Watershed Network (DAWN).

**Worcester County Comprehensive rezoning.** In 2006, Worcester County finished its comprehensive plan and was then tasked with updating its zoning to be consistent with that plan. The rezoning effort began in February 2009 and MCBP underwent and is still undergoing a massive public education campaign to be sure the rezoning keeps with the plan's goals of no new growth in wetlands, forests or flood plains and updated numerous wastewater and stormwater provisions, all of which are CCMP-related. The program is utilizing public information sessions, TV, radio, and newspaper, to educate residents on the importance of updating the plan in a manner consistent with water quality and wildlife protection.

**Grow Berlin Green.** Grow Berlin Green is a three-year campaign to establish Berlin and the surrounding area as a model community for participatory environmental protection, conservation and smart growth that is driven by community education, involvement and action. The campaign is managed by a coalition of Assateague Coastal Trust, Lower Shore Land Trust and Maryland Coastal Bays Program. In the past year we have held GBG town meetings and April 11 celebration, created a Greenbelt concept for town, provided scholarships for professional development for Berlin teachers, held a 5-week afterschool conservation program conducted at Berlin Intermediate School, presented to the Berlin P & Z Commission, held a native plant sale, and underwent an extensive branding and community outreach campaign.

**DAWN (Delmarva Atlantic Watershed Network).** This Coastal Bays Program project, which involves the creation of regional planning goals and tech transfer in the coastal counties of Delaware, Maryland, and Virginia, began in Jan. 2005 with a regional meeting in Ocean City, MD. This was followed by another in Chincoteague, VA both of which were heavily attended by planners and decision-makers who looked at ways to learn from other counties and to think about wildlife and water quality on a regional level. This was followed by 1.5 years of planning which culminated in build out workshops in each of the four coastal counties in December 2007. More than 130 people got to see what their counties would look like when built out with the current zoning. Maps included loss of forest, wetlands, agricultural lands, and water quality declines. In June, both Delaware and Virginia held big visioning-style workshops that engaged thousands of residents. DAWN continues with the goal of educating residents about how their planning decisions affect the coastal and inland bays water quality and wildlife.

**Berlin Greenbelt.** The Coastal Bays Program, in concert with the Lower Shore Land Trust and Worcester County, developed and presented a greenbelt plan for Berlin. The plan outlines which properties the town could work with state and local governments to protect in order to create a greenbelt around Berlin that would serve to help the town keep from eventually sprawling outward. The Berlin Planning Commission wrote a favorable recommendation letter to Berlin Council to adopt the plan. Although council members favor the idea, how to implement it is still being discussed.

**Interpreting Nature & Heritage Courses.** MCBP partnered with Delmarva Low-Impact Tourism Experiences (DLITE) and a diverse group of partners to pilot a new course through Wor-Wic Community College. The course was developed to provide training for staff and volunteers of local cultural and natural heritage sites. The course provided 12+ hours in the art of effective interpretation. The diverse group of instructors included representatives from MCBP, DLITE, Assateague Island National Seashore, Assateague State Park, Crisfield Heritage Center, Ward Museum of Wildfowl Art, Sturgis One-Room Schoolhouse, and more. Topics included natural and

cultural heritage, communicating with diverse audiences, and advocacy. In order to ensure accessibility for all, the Community Foundation of the Eastern Shore provided scholarships for applicants. The course filled to capacity very quickly, so another course has been scheduled for 2009. Additionally, two other courses are being developed. MCBP Education Coordinator Carrie Samis serves on the course planning and curriculum development committee and is an instructor.

**CCMP General: Improve community involvement by targeting outreach and educational efforts to determine solutions to environmental problems that are important to both the general public and minority businesses and other niche groups.**

**Upward Bound Marine & Estuarine Program.** Program partners include MCBP, University of Maryland Eastern Shore (UMES), Assateague Island National Seashore, Assateague State Park, MD Department of Natural Resources (DNR), and the US Environmental Protection Agency (EPA). The academic year portion of the program serves 25 students from Worcester, Wicomico, and Somerset counties. The Upward Bound Program is coordinated by the UMES, an historically-black university. The program targets minority high school students and provides a variety of experiences for the group throughout the school year. For the 2007/2008 academic year, eight Saturday sessions were scheduled. The 2008 Summer Upward Bound Marine & Estuarine Program focused on blue crabs. Six sessions on topics ranging from wastewater treatment to birds and reptiles were scheduled for the 2008 Academic Year. Five sessions are scheduled for summer 2009 and another eight in the fall.

**Speaking Circuit.** Coastal Bays Program staff has been on the speaking circuit to local community groups, chambers, non-profits etc. to update on the status of the bays and what the NEP is doing about correcting problems. The 30-slide power point is given at 4-6 venues per month.

**Outreach.** MCBP has regularly running TV and radio PSAs, a monthly educational TV show, a Power Point presentation it gives to 30-50 organizations annually, and in 2008-09 appeared in 32 radio and TV programs plus 188 newspaper articles. A quarterly newsletter sent to 5,000 people and the MCBP website educate residents on a constant basis.

**St. Patrick's Day Parade float.** Our first ever entry into this popular parade float competition resulted in a first place win for overall best float. Great public relations and leverage for future needs. Float featured a diversity of both people and sea creatures.

**Events.** As stated in the 2008 work plan, the following events were held by the program last year in addition to others mentioned in this section. Community native plant plantings/cleanups, Delmarva Birding Weekend, Earth Day celebration, Great Worcester Herp Search, MD Coast Day, Osprey Sprint Triathlon, Horseshoe Crab Class, Worcester Environmental Summit.

**Maryland Association of Outdoor and Environmental Educators Conference.** The MCBP education coordinator served on the conference planning committee for the 2009 Maryland Association of Environmental & Outdoor Education (MAEOE) Annual Conference, which was held February 26-March 1, 2009. MAEOE is the largest state-wide organization of environmental educators in the United States. Conference themes and strands will include diversity and environmental justice. Over 580 people attended the conference. Samis worked with the committee to identify speakers, presenters, full and half-day workshops, conference sessions, and all related

activities. Special efforts were made to ensure diverse speakers and presenters as well as diverse group of conference attendees who work with and serve diverse audiences.

**Children & Nature Initiative.** MCBP is working with other local organizations, including the Community Foundation of the Eastern Shore, to spearhead a local Children & Nature Initiative. A stakeholder group, including representation from minority communities and minority-serving institutions, participated in a day-long workshop in this summer in an effort to bring focus to and establish support for the local initiative. A committee will be established and modeled after the Maryland Partnership for Children in Nature, established by Governor O'Malley in April 2008. After extensive inquiry and research, we are confident that no other regional organizations or efforts have undertaken a Children & Nature Initiative of this scope.

### **BUS STOP – Bringing US Students to Our Parks**

MCBP was invited to partner with the National Park Service (NPS) for its BUS STOP program in the summer of 2008. The NPS BUS STOP initiative provides funding for transportation for Title I schools, whose students are largely from low-income, minority, and underserved communities. Transportation funds were used to bring students from Somerset and Dorchester counties to Assateague Island National Seashore for education programs. Two MCBP staff members conducted the programs. Programs were provided at no cost to the students, teachers, or schools.

**Internet Outreach.** MCBP has secured an affordable deal (\$5,000 for \$15,000 worth of work) for a custom designed, up to date, live website, which will have technological capabilities not available on the old site. Collected and reviewed current content for inclusion and wrote new content for the site, which is expected to be online by mid-summer, 2009. The new Coastal Bays Program blog is updated at least two to three times a week. The blog will be linked to the new website once it goes live, and will be highlighted more prominently. The blog serves several purposes: It provides a place where media can regularly check on Program activities, it is an easy way for readers to find information and resources they want or need, and also furthers overall outreach efforts. Facebook is a social utility that connects people with friends and others who work, study and live around them. MCBP Facebook members number more than 500 and are updated regularly about program activities. Media is embedded right in Facebook and the opportunity to do storytelling with audio, video and live-streaming video is available. Facebook is an easy and effective way to connect with target audiences, as well as engage with a broader audience. Potentials benefits are powerful promotion of your blog, e-news, events and an organic way of staying in touch with core audiences on an ongoing basis.

**MCBP Brochure.** Hired designer, chose images and wrote content for this new brochure, which hadn't been updated in several years. The brochure is a general introduction to the MCBP, with an explanation of Program goals and what the pressures are on the Coastal Bays. The brochure further serves as part of the Program's branding campaign. Program was able to secure the use of photographic images from local minority artist Patrick L. Henry.

**Exhibits.** Exhibit contains MCBP literature, a display board, sometimes live animals and information on the state of the bays and what citizens can do to improve that state. Updated the display board for booths that were set up at the following area events: AERS conference, Salisbury Zoo Earth Day, OC Hotel Motel Restaurant Association trade show, OC Seaside Boat Show, Coast Day, Commercial Fishing Trade Show, Surf Expo, Herp Search, Delmarva Birding Weekend Tally Rally, Maryland Association for Environmental and Outdoor Education (MAEOE) Conference,

Health & Wellness Expo, the Town of Berlin Spring Festival, the Worcester County Women's Commission, Town of Berlin Village Fair, Berlin Blues and Jazz Festival and five others.

**Boaters Guide to the Coastal Bays.** During the past year the program updated this map but DNR funding is not available until summer 2009 so we have delayed printing until then. This two-sided map includes a chart of the northern coastal bays that depicts channels, seagrass areas, access ramps, fishing areas, navigation markers and roads. The guide also includes clean and safe boating tips, wildlife and water quality information, navigation marker explanations, important phone numbers and fishing tips.

### **Minority Outreach and Involvement Strategy**

The MCBP Minority Outreach and Involvement Strategy was developed to expand outreach and education efforts to specifically include minority populations of the coastal bays watershed by incorporating a proactive approach of informing citizens on how to participate in program activities with emphasis on increasing participation of low income, minority, and non-English speaking communities. Recently the program created a Diversity Advisory Committee to increase Environmental Awareness, Career and Job Training, and Stewardship and Involvement. The group of 13 mostly minority members meets bi-monthly and includes members from a diverse group of stakeholders. Maryland Coastal Bays Minority Internships provide funds to employ two interns and to produce educational materials associated with non-point source water quality issues and minority outreach.

### **GREENetwork (Governor's Regional Environmental Education Network) & Delmarva Environmental Educators Network (DEEN)**

The MCBP education coordinator is serving on the Governor's Regional Environmental Educators Network (GREENetwork) and is coordinating efforts of the Delmarva Environmental Educators Network (DEEN). Both networks exist to offer opportunities to promote best management practices and professional development opportunities for environmental educators. They also serve as a vehicle for communication between formal and non-formal education professionals in an effort to maximize opportunities and partnerships for the benefit of students, children, families, and the environment.

**Coastal Bays column.** Weekly column is written by Coastal Bays staff and published in three local newspapers reaching 200,000 people. It educates the public about a variety of issues relating to water quality and wildlife. Columns are printed in Daily Times, Worcester County Times, Ocean Pines Independent and sometimes MD Beachcomber.

**Greys Creek Nature Park.** Several meetings with county recreation and parks department personnel yielded some positive results relating to environmental education programs at the park. While the program is very happy with the design of the park, which keeps it pristine, county parks employees did not take our advice relating to what the facility needs to be a bonafide educational facility.

**The program undertook the following education programs between May 2008 and May 2009:  
(See attachment III for more details)**

May 2008	MD/DE Children's Water Festival
	Upward Bound – Herp Search
	Worcester County Environmental Summit – Stephen Decatur Middle School

BUS STOP

June 2008 Horseshoe Crab Program – Stephen Decatur Middle School  
Upward Bound (2 sessions)

July 2008 OC Coastal Bays BioBlitz Camp  
OC Coastal Bays BioBlitz Camp  
Maryland Summer Center for Gifted & Talented Students: Diary of a River  
Upward Bound (7 sessions)  
Speaker Series speaker Nicole Charles  
Eastern Shore Restoration & Education Program  
Children & Nature public lecture & stakeholder meeting  
Discover Delmarva’s 10 Top 10 – 100 minority students

August 2008 Salisbury University’s Eastern Shore Partnership for Real World IT in Science  
BioBlitz

DEEN/Worcester County Board of Education – for Superintendent, all supervisors, & all teachers  
DEEN – Wicomico County Board of Education Program – for Superintendent, all supervisors & all teachers

October 2008 Upward Bound  
OC Coastal Bays Nature Clinic  
Atlantic White Cedar service project with 4 local schools  
Harbor Day at the Docks

November 2008 Flying Wild Facilitator Training  
Upward Bound (1 session)

December 2008 Upward Bound (1 session)

January 2009 Upward Bound (2 sessions)

February 2009 Upward Bound (1 session) Wicomico Environmental Science Teacher Training  
Upward Bound (1 session)  
Flying Wild Educator Training – DNR Ranger School  
Flying Wild Educator Training – MAEOE  
Career Day – Stephen Decatur Middle School  
No Child Left Inside/Martin Luther King Day of Service w/Upward Bound

March 2009 Blue Crab Issues Investigation  
Nature & Heritage Interpretation  
Project WET, Wild, Learning Tree & Flying Wild Training

April 2009 Blue Crab Issues Investigation  
Green Earth Book Awards  
Earth Day  
Afterschool Program – Berlin Intermediate School

May 2009 Nature & Heritage of the Pocomoke  
Blue Crab Issues Investigation – Gifted & Talented Program  
Afterschool Program – Berlin Intermediate School  
Mayday for the Environment

**Additional implementation of 2008 Work Plan VI. B. Actions, Attachment III and related items**

**Horseshoe crab surveys.** Analyses of survey data from the past 7 years has been reviewed and presented to DNR staff, the Atlantic National Marine Fisheries Commission and at the 2009 Atlantic Estuarine Research Society Conference. The 2009 Survey will continue to work with locally trained citizens & DNR staff to monitor species abundance at local spawning beaches during May through July.

**Tracking and Evaluation of the CCMP.** The Program is scheduled to enter Phase III of our CCMP Implementation beginning October 2009. We are currently reviewing and documenting all accomplishments and impediments to progress by our office and Program partners. The information will be consolidated and summarized for review by the Implementation and Policy Committees. Additionally, MCBP will use this exercise as a driver for future strategic planning purposes, including but not limited to an Outreach Strategy, Eutrophication & Terrestrial monitoring, the Nutrient Reduction Action Strategy, grants management, and the 2010 EPA Program Evaluation.

**Shifting Sands: Environmental & Cultural Change in Maryland's Coastal Bays, book project.**

Throughout 2008 final edits were made and funding has been appropriated for publishing this book. The roll out will occur June 8, 2009 in conjunction with the first annual Coastal Bays Report Card. More than 100 hundred people were invited, including Gov. Martin O'Malley, Rep. Frank Kratovil and Senators Barbara Mikulski and Ben Cardin. The book chapters are as follows: Conclusions & Recommendations, Management of the Coastal Bays, History & the Future, Assawoman Bay, St. Martin River, Isle of Wight Bay, Sinepuxent Bay, Newport Bay, Chincoteague Bay, In context with other lagoonal systems, Dynamic Systems, Water Quality, Diversity of Life and Habitats.

**Coastal Bays Report Card.** Grant funding from the Chesapeake Bay Trust was secured to finance the technical expertise of the UMCES/IAN for creating the first annual report card of local environmental conditions. The report card and accompanying website will allow the public to recognize and understand the role of science within their watershed. The report includes an interactive website which allows citizens to navigate an interactive map of local environmental conditions and monitoring sites. Other layers will be developed including restoration sites, public access areas, sensitive habitats etc. The report card roll out is being combined with the Shifting Sands release June 8, 2009.

**Offshore faunal communities.** UMES MS student is involved in compiling and analyzing fishing data with locations of offshore reefs and bottom types. MCBP will continue involvement with the research project. Additionally, the Program has joined the Atlantic Coast Fish Habitat Partnership to assist in the promotion of the sustainability of Atlantic coast diadromous and other estuarine-dependent fishes and their essential habitats through on-the-ground habitat protection and restoration projects.

**Maryland Coast Day.** MCBP holds and co-sponsors numerous events aimed at educating and informing the public/local community about the Coastal Bays and how they can protect the natural resources they support. MCBP is the lead organizer of Maryland Coast Day, a 4,000-strong festival on the beach every year at Assateague. The educational event features 30 conservation organizations who educate participants on issues important to the environment.

**Grant writing.** The Coastal Bays staff spends significant time going after grant money for projects. Yet the watershed suffers from being in the shadow of the Chesapeake. Despite having more data than many other watersheds and providing excellent proposals to grantors we have, in the past year applied

for some 26 grants totaling \$4.5 million. We have received funding from 10 requests totaling \$131,000 and currently await two others.

**Coastal Bays Canoe and Bike stand.** The program continues to run regular interpretive canoe trips from its canoe and bike stand on Assateague.

**Citizen and Scientist Involvement.** The monthly and bi-monthly meetings of the Citizens Advisory Committee, Implementation Committee, Scientific and Technical Advisory Committee and Coastal Fisheries Advisory Committee continue to direct policy through community participation and sound science.

**Advisory Meetings:** Program staff, board members, CAC representatives and other program partners are actively involved with many advisory and technical committees which have responsibilities of implementing actions in the CCMP. These committees have generated policy and process recommendations to local decision makers that advanced efforts for the coastal bays watershed:

Aquaculture Advisory Committee  
Association of National Estuary Program board (D. Wilson-Treasurer) and Executive Committee  
Atlantic States Marine Fisheries Committee for sea bass, flounder, scup  
Berlin Chamber of Commerce – President  
Chesapeake Bay Modeling Subcommittee  
Children & Nature Network  
Citizens Advisory Committee  
Coastal Ecosystems Study Unit  
Coastal Wetlands Initiative  
Coastal and Watershed Resources Advisory Committee  
Clam Aquaculture Subcommittee  
Coastal Fisheries Advisory Committee  
Conservation Education Committee, Association of Zoos and Aquariums  
Community Foundation of the Eastern Shore – Excellence in Education Committee  
Delmarva City Partners-Flying Wild  
Delmarva Low Impact Tourism Experiences Board of Directors  
Delmarva Environmental Educators Network  
Delmarva Atlantic Watershed Network steering committee  
DNR Diamondback Terrapin Work Group  
DNR Future Search Green Infrastructure Committee  
Eastern Shore Restoration and Education Project  
Estuarine Research Federation  
Flying Wild City Partners-Council For Environmental Education  
GREENetwork (Governor’s Regional Environmental Education Network)  
Green Drinks Delmarva  
Grow Berlin Green  
Horseshoe Crab management committee  
Implementation Committee  
Lower Shore Land Trust  
Lower Eastern Shore Heritage Committee  
Lower Shore Trib Teams  
Marsh Ditch Restoration Work Group

Maryland Association of Environmental and Outdoor Educators Conference Steering Committee  
Maryland Herp Atlas Work Group  
Maryland Fisheries Task Force Habitat Work Group  
No Child Left Inside Coalition  
Ocean Pines Marine Advisory Committee  
Ocean City Coastal Resources Legislative Committee  
Policy Committee of Coastal Bays  
Quantifiable Goals Work Group  
Scientific and Technical Advisory Committee Meetings (STAC)  
SAV Subcommittee  
State Aquaculture subcommittee  
State Water Front Task Force  
Terrestrial Monitoring Steering Committee  
Upward Bound Planning Committee  
Working Waterfront Commission  
Wor-Wic Community College Foundation – Board of Directors  
Wetland Planning Group  
Watershed Restoration Action Strategy workgroup

**Presentations:** Staff has provided many informational presentations to a wide variety of local, regional and national groups in an effort to share and educate about the NEP's processes, efforts, and successes. These include:

- Regular updates to County commissioners and OC Town Councils on MCBP status
- Regular updates to Chambers of Commerce
- Maryland Legislature about MCBP efforts and funding
- MD BayStat

Staff presented at MD Association of Environmental and Outdoor Educators Conference, AERS conference on Coastal Lagoons, Restore America's Estuaries, Biannual Conference, Maryland Association for Environmental & Outdoor Education Conference, Worcester County Diversity Summit, Children & Nature Network Grassroots Gathering, Horseshoe crab survey training workshop.

Presentations also given to: Worcester County Democratic Club, Berlin Planning Commission, Worcester County Elementary Schools, Salisbury School, Fagers Island staff, Maryland Saltwater Sportsfishing Association, Wicomico County Talented and Gifted Program, Ocean Pines Anglers, Guided natural history canoe trips on Assateague Island, Tri-County Bird Club, Wicomico County Board of Education, Worcester County Board of Education, Salisbury University-Eastern Shore Partnership for Real-world Information Technology in Science, Delmarva Environmental Educators Network, Six elementary, middle and high schools, Worcester County Development, Review and Permitting, Caine Woods HOA, South Point HOA, West Ocean City HOA, Stockton Community Residents, East Berlin Community, Bishopville Community Association, Glen Riddle HOA, Ocean Pines Environmental Club, Kiwanis, Worcester County Women's Commission, Citizen's Advisory Committee, Wor-Wic Community College Foundation Board of Directors, Berlin Chamber of Commerce, Gull Creek Retirement Home, Women's Democratic Club, Bay Vista HOA, Worcester Preparatory School, Girl Scout Troup.

## 2. Subawards (EPA funded)

Because 25% of the Coastal Bays Program Manager's salary is paid through EPA funds and since a primary role of hers is to administer grants, below we've provided a list of Mini-Grants funded May 27, 2008 that were completed by May 6, 2009. Note that these funds were provided by a Chesapeake Bay Trust grant and EPA money on a reimbursable basis. These projects address research, implementation of CCMP actions and other watershed issues.

# 08-09 Grants provided by MCBP

## Community Stewardship Mini-Grants Program Final Report Summaries 2008 – 2009

**Total Awarded:** **\$25,070**

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Total Spent: \$22,578.69

Total Remaining: \$2,421.31

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Total Cash Match: \$25,325

Total In-kind Match: \$19,127.87

### **1. Project Title *Development of Educational Tools Teaching Youth about Shrinking Habitats in the MD Coastal Bays***

Project Applicant University of MD (Jennifer Ali)

Amount Awarded \$920

Amount Received to Date: \$902.44

#### Project Abstract:

Worcester County 4-H has developed two programs entitled Loss of Habitat and Maryland Coastal Bays Watershed. The first program deals with how housing development has affected the habitat of local wildlife. The second program deals with the watersheds of the Maryland Coastal Bays, and the process of point and non-point source pollutants affecting the bay health. The importance of wetlands and buffers is explored. The existing program consists of 2-liter soda bottles, milk cartons and construction paper to represent different aspects of nature and development. We plan to upgrade our materials in these programs to items of better quality (i.e. wood and metal) so that the program can be sustained for many years.

Students will help to make maps, trees, houses and other props needed in this hands-on program. They will then participate in the programs to learn about area development and the pollution that occurs within it and its effect on wildlife. Students will also learn about the benefits of trees, buffers, and wetlands and how destroying them is bad for the Coastal Bays and wildlife.

#### Final Report Summary:

Watershed and Habitat programs were successfully presented to 1800 people and an additional 1000 more will be served through scheduled programs at Stephen Decatur Middle School (300 8<sup>th</sup> grade students), Pocomoke Middle School (50 7<sup>th</sup> grade students); May Day for the Environment at the Ward Wildfowl Museum (150 students), and MD Coast Day on Assateague Island (500 people).

We made 15 watershed maps out of bed sheets (see diagram); and an area of about 3 sheets are used at any certain program to display the local watershed where the program is being presented. Area schools also worked on painting watersheds near their areas.

The following are schools and events where programs on watersheds and habitat were conducted:

#### ***Worcester County Schools – School presentations and service learning***

Watershed & Habitat Programs:

- Stephen Decatur Middle School: 300 8<sup>th</sup> grade science students, participated in Watershed Programs; 200 7<sup>th</sup> grade students made houses and trees, painted watershed maps
- Buckingham Elementary School – 95 students from 3<sup>rd</sup> & 4<sup>th</sup> grades served during summer school programs (Watershed); 85 students served from 2<sup>nd</sup> and 3<sup>rd</sup> grade (Habitat)
- Snow Hill High School – 15 students from 10<sup>th</sup> – 12<sup>th</sup> grade served through afterschool programs
- Pocomoke Middle School – 80 students from 6<sup>th</sup> & 7<sup>th</sup> grade enrichment program served; 10 7<sup>th</sup> grade students participated in painting watershed maps.
- Wor-Wic Community College – 15 5-12 year olds served participating in summer daycare programs.

Total served: 695 students

***Worcester County Libraries – Presentation of Watershed & Habitat programs***

- Ocean Pines Library – 15 participants
- Snow Hill Library – 15 participants
- Pocomoke Library – 2 participants

Total served: 32

***Area Towns and Organizations***

- Ocean City, MD: Home, Garden & Condo Show: 280 participants
- Berlin, MD: Spring Celebration: 200 participants
- Summer activities throughout Worcester County, MD for 4-H members: 20 participants

Total served: 500

***Program Descriptions:***

Watershed Programs: Maps of the Coastal Bays are placed on the ground. Students are selected to be trees, wetlands, homes, rain drops, etc. As houses are built and placed on the map, trees and wetlands are destroyed. Cars, blacktop, septic and other pollutants are introduced (these pollutants represented by cards). The students become rain drops and follow rivers downstream into the bays, collecting up pollutant cards as they travel. Trees and wetlands can absorb one pollutant card each. If the student reaches the bays with pollutant cards, those pollutants go into the water. We discuss how pollutants might be reduced or recycled and how they impact the bays.

Habitat Programs: Carpet squares represent habitat, both land and water. Beaches and wetlands are represented by sandpaper and sponges. Trees are added and poker chips are added too, representing food and water. Local animals are introduced, each requiring a certain amount of food, water and space. Their habitat needs are discussed. Developers are introduced and build houses, malls, etc. Trees, wetlands and beaches are destroyed on each carpet square developed. The effect on local animals is determined. Many have to relocate or die. The total number of lost species is also tallied. The students then get the chance to start over and with smart development, lessen the effect of development on local habitat and wildlife.

<b>2. Project Title</b>	<b><i>Aloha Garden – Vegetated Wetland Buffer</i></b>
Project Applicant	OC Chapter Surfrider Foundation (Shelly Dawson)
Amount Awarded:	\$3,000
Amount Received to Date:	\$2,599.75

Project Abstract:

The Aloha Garden is a vegetated wetlands buffer located on 125<sup>th</sup> Street and the Bay. Started in 2001 as an addition to the Northside Clean sweep – debris removal from the wetland; the garden is intended to minimize intrusion into

the wetlands by pedestrians and their pets, as well as enhance the aesthetics of the athletic complex.

Final Report Summary:

To protect the wetlands along the Assawoman Bay at 125<sup>th</sup> Street/Montego Bay area, the OC Chapter of Surfrider partnered with the OC Department of Parks and Rec to develop and maintain a perimeter buffer along the athletic complex. In the past several years, the needs of the Park have changed. The Parks Dept. requested the OC Chapter of Surfrider to stabilize the shoreline of the interior ponds. In pictures, 2-4, last year's successful efforts are clearly visible.

This year, to celebrate Earth Day, the Chapter held its annual Northside Clean Sweep and garden planting. With the Park's (Northside Park) assistance, Chapter members installed thousands of spartina patens along three sides of the large interior pond and replanted five beach vitez along the bay shoreline.

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**3. Project Title**

***Nature and Heritage of Maryland's Coastal Bays***

Project Applicant      Delmarva Low-Impact Tourism Experiences (Jim Rapp, Exec. Director)

Amount Awarded:      \$4,000

Amount Received to Date:      \$4,000

Project Abstract:

Delmarva Low-Impact Tourism Experiences (DLITE) and partner organizations will develop interpretive training for regional park, museum and environmental organization interpreters; residents interested in volunteering at parks, museums and environmental organizations; and professional guides and outfitters in Maryland's Coastal Bays. The course will help interpreters tell wonderful stories about the nature and heritage of the coastal bays, and provide students with a sense of place and purpose for stewardship. The course will train interpreters to help visitors discover the wild and scenic beauty and rich history of the coastal bays in a responsible, sustainable manner. Ultimately, these courses will improve the nature-based tourism economy of the coastal bays watershed, as more low-impact travelers spend time – and money – exploring our coastal land and water.

Final Report Summary:

Local nature and heritage scholars and researchers have joined together to develop an interpreter-training program titled "The Delmarva Nature & Heritage Institute." Curricula have been developed to teach three courses through Wor-Wic Community College before December 31, 2009. The three course titles are: *Interpreting Nature and Heritage Sites for Visitors*, *Nature and Heritage of the Pocomoke River*, and *Nature and Heritage of Maryland's Coastal Bays*. \$43,000 in federal and state funding has been obtained to develop curriculum, pay instructors, and provide training manuals for all three courses.

\$4,000 was provided from the Maryland Coastal Bays Program and \$6,400 from the Community Foundation of the Eastern Shore to complete the funding needed to teach *Nature and Heritage of Maryland's Coastal Bays*.

Course content for *Nature and Heritage of Maryland's Coastal Bays* will include interpretation theory, program development, Native American history, African-American history, colonial history, natural history, industry, culture, and stewardship. The courses will improve the interpretation programs of museums, parks, and heritage sites, as well as stewardship organizations and tourism professionals working in the coastal bays watershed. Project management will be provided by Delmarva Low-Impact Tourism Experiences (DLITE), and course management will be provided by Wor-Wic Community College. 50 students will be taught during the course, which will be taught once in June 2009 and again in 2010. The 50 trained interpreters will be asked to train other partner staff and volunteers using the "train the trainer" model. All courses will be taught by local nature and heritage scholars at partner museums, parks and heritage sites.

The course will help interpreters tell wonderful stories about the nature and heritage of the Maryland's coastal bays,

and provide students with a sense of place and purpose for stewardship. The course will train interpreters to help visitors discover the beauty and rich history of the coastal bays region in a responsible, sustainable manner. Ultimately, these courses will improve the nature and heritage-based tourism economy of our region, as more low-impact travelers spend time – and money – exploring Maryland’s coastal bays.

Course partners have met several times to plan the curriculum for the 20-hour course titled *Nature and Heritage of Maryland’s Coastal Bays*. Course partners include: Maryland Coastal Bays Program, Assateague State Park, Assateague Island National Seashore, Ocean City Life-Saving Museum, Rackliffe House, Assateague Coastal Trust, Lower Shore Land Trust, Worcester County Tourism, Town of Berlin, Calvin B. Taylor House, Ocean City Development Corporation, Ward Museum of Wildfowl Art, and The Nature Conservancy.

The course has been marketed through Wor-Wic Community College and course partners. Although the first course offering was planned for 25 students, we have registered 31 students who will be trained on June 8, 10, 15 and 17. The course will be taught at four different sites involving multiple museums, parks and heritage sites: Ocean City, Assateague Island, Berlin, and the landings of Chincoteague Bay.

Instructors are preparing content for student notebooks, and planning their presentations and field trips. Worcester County Tourism will be assisting DLITE with grant administration.

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#### **4. Project Title *Land-use Planning and Important Bird Areas in Maryland Coastal Bays***

Project Applicant	Audubon Society of Maryland-DC (Dr. David Curson)
Amount Awarded	\$3,000
Amount Received to date:	\$3,000

##### Project Abstract:

This project seeks to promote ecologically sound land-use planning and reduce the loss and fragmentation of natural habitats within the Coastal Bays. Incorporate important bird areas (IBAs) into the local land-use planning process and educating the public, elected officials and planning professionals about the bird conservation value of IBAs within the Coastal Bays watershed.

##### Final Report Summary:

This project relating to the Coastal Bays watershed is part of a broader project being implemented across the lower Eastern Shore of Maryland. Here, I report on activities within the Coastal Bays watershed.

The project has been very successful. In August 2008, scientific data on Important Bird Areas (IBAs) was delivered to Worcester County Planning Department in order to facilitate the incorporation of IBAs into the land use planning process. Planning staff were provided with the following materials (see attachments):

- 1) GIS shape files and associated files of IBA boundaries in Maryland.
- 2) An introduction for planners to IBAs on Maryland’s Lower Eastern Shore.
- 3) Detailed site descriptions for 7 IBAs on the Lower Eastern Shore, including Maryland Coastal Bays IBA and Assateague Island IBA.
- 4) Map of IBAs in Maryland.
- 5) IBA criteria for site selection.
- 6) IBA Program Fact sheet.

**These materials have also been provided to the Lower Shore Land Trust. In July, 2008, David Curson gave a**

presentation to the Board of LSLT about IBAs, their conservation value, and their utility to land planning and prioritizing land for protection. This relationship with the LSLT has continued and David Curson will be participating in a biodiversity workshop being jointly held by LSLT and Defenders of Wildlife in Salisbury in May 2009.

In order to educate elected officials and the public about the conservation value of Important Bird Areas, a ceremony was held on April 25, 2009, to dedicate Maryland Coastal Bays IBA and Assateague Island IBA. The great majority of expenses submitted for reimbursement under this grant relate to this major event. The ceremony was held in conjunction with one of the birders' social "Tally Rallies" scheduled as part of the Delmarva Birding Weekend (DBW), and so was co-hosted by Delmarva Low Impact Tourism Experiences (DLITE), who organize the DBW. The tally rally setting of the ceremony, with about 50 birders present, increased the size of the audience. Prior to the ceremony, invitees were hosted by Audubon on the "Shorebird Explorer" boat trip, scheduled as part of the DBW, and this presented an excellent opportunity to showcase not only the birdlife and habitats of Assateague Island and the Coastal Bays, but also the enthusiasm of birdwatchers whose visits boost the local ecotourism economy. Both of these messages were reinforced among the invitees throughout the field trip and ceremony event.

Attendees at the IBA dedication event included 3 Worcester County Commissioners, Judy Boggs, Linda Busick and Louise Gulyas; Worcester County Planning Commissioner Carolyn Cummins, and Director of Comprehensive Planning, Sandy Coyman. Nine organizations and individuals were recognized for their contribution to land protection and habitat management within the IBAs. IBA plaques were presented to:

- 1) National Parks Service - owner and land manager, Assateague Island National Seashore. Trish Kicklighter, Superintendant, received award.
- 2) Maryland Park Service (DNR) - owner and land manager, Assateague State Park. Park Ranger, Angela Baldwin, received award.
- 3) Wildlife and Heritage Service, (DNR) - owner and land manager, E. A. Vaughn WMA. Glenn Therres, Associate Director NHP received award.
- 4) Maryland Coastal Bays Program. Dave Wilson, Executive Director, received award.
- 5) Worcester County Board of County Commissioners. Judy Boggs and Linda Busick received award.
- 6) Assateague Coastal Trust. Kathy Phillips, Executive Director and Assateague Coastkeeper, received award.
- 7) Lower Shore Land Trust. Ken Keffer, staff, received award.
- 8) Todd Burbage, private landowner and conservation easement holder.
- 9) Katherine Munson, land use planner and conservationist.

The event was publicized widely by press releases. Photo below shows award recipients at the ceremony.

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<b>5. Project Title</b>	<b><i>Rain Barrels for Ocean Pines</i></b>
Project Applicant	Ocean Pines Environment and Natural Assets Advisory Committee (Dave Blazer)
Amount Awarded	\$1,500
Amount Received to Date:	\$1,500

Project Abstract:

The Community of Ocean Pines' Environment and Natural Assets Advisory Committee will organize a workshop to build and distribute rain barrels to residents of Ocean Pines as demonstrations of what residents can do to help address stormwater and water quality issues in the community.

Final Report Summary:

The Ocean Pines Environment and Natural Assets Advisory Committee used the grant from the Maryland Coastal Bays Program to promote the use of rain barrels within Ocean Pines. We set up a booth at the OP Library during the OP anniversary celebration on August 23rd. We engaged over 50 residents and distributed 17 rain barrels to interested residents.

Additionally we showcased a rain barrel at the OPA 40<sup>th</sup> Anniversary Events and parade. Our committee built a float that incorporated a rain barrel and several environmental messages into the float. The float won second place in the parade. The committee has also established a write up in the OPA quarterly newsletter entitled "Green Streets". The Article in the corresponding newsletter addressed rain barrels and their importance. We also have emphasized water conservation and management issues.

In the original grant proposal we were requested to try to sell an additional 15 rain barrels. We asked for donations from recipients but could not raise enough money from the participants to buy many additional rain barrels. We did collect over \$100 at the OPA 40<sup>th</sup> anniversary event which was donated to the Coastal Bays Program.

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<b>6. Project Title</b>	<b><i>Environmental Messaging for the Ocean Pines Community</i></b>
Project Applicant	Ocean Pines Environment and Natural Assets Advisory Committee (Dave Blazer)
Amount Awarded:	\$1,750
Amount Received to Date:	\$0

Project Abstract:

The Ocean Pines Environment and Natural Assets Advisory Committee will launch an environmentally focused education campaign including the placement of signage to raise awareness of Ocean Pines residents, guests and visitors about the community's wildlife and natural habitat with an overall goal of ensuring the protection and preservation of these resources.

Final Report Summary:

Regretfully, The Ocean Pines Environment and Natural Assets Advisory Committee did not use the grant from the Maryland Coastal Bays Program for the signage component of the environmental messaging in Ocean Pines. We ran in to a few issues and timing delays kept us from fulfilling our objective of the grant. We did not expend any of the funds allocated and do not request any funds.

Since we are a small committee (5 people) we ended up overextending ourselves to the point where we could not dedicate enough time in the beginning to accomplish the grant tasks.

We did promote some educational messaging to the community through various media (website, quarterly newsletter, communication with other groups and board). The committee did spend much time getting organized and worked with several committees to lay out a plan. One of the problems we encountered was there were too many locations for signs and ideas to pursue and the committee got bogged down with too many choices to pursue. We did not reach agreement until spring of 2009. Instead of rushing to spend the money for the signage and fulfill our grant request we decided to wait and develop a stronger better organized effort for another RFP process.

We are putting the final touches on an actual plan for signage and also improved maintenance of the south gate pond area and the two trails that are in the Sports Core area. We hope to re-apply for funds in the next cycle and ***Promise*** that this effort will be accomplished if funded. We hope that the committee will look favorably upon our next messaging effort.

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<b>7. Project Title</b>	<b><i>2008 Maryland Coast Day</i></b>
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Project Applicant                      Assateague Coastal Trust (Kim Fehrer and Steve Farr)  
Amount Awarded:                      \$1,840  
Amount Received to Date:            \$1,840

Project Abstract:

For the past eleven years, Assateague Coastal Trust has sponsored "Maryland Coast Day" each September. The purpose of this event is to celebrate the wildlife and natural resources of Maryland's coastal region and to educate participants about the need to protect these valuable resources. While this event is co-hosted by several organizations (see item VII), Assateague Coastal Trust bears primary responsibility for funding it. ACT respectfully requests \$3,000 from the Maryland Coastal Bays Program and the Chesapeake Bay Trust to help fund 2008 Maryland Coast Day.

Final Report Summary:

ACT had requested \$3,000 to cover expenses associated with 2008 Maryland Coast Day. The purpose of the event is to celebrate the wildlife and natural resources of Maryland's coastal region and to educate participants about the need to protect these valuable resources. The grant award of \$1,840 was designated to cover the cost of tent rentals and communications/PR activities.

Maryland Coast Day was held on September 13, 2008 at Assateague State Park. The event was a great success with estimated attendance of 4,200 people.

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**8. Project Title                      *Landowner Training Course: The Woods in Your Backyard***

Project Applicant                      Worcester County (Katherine Munson)  
Amount Awarded                      \$1,060  
Amount Received to Date:            \$1,060

Project Abstract:

Worcester County Department of Comprehensive Planning will provide a wildlife habitat management workshop to interested Worcester County landowners of up to 10 acres of forest. If space permits, the workshop will also be open to natural resource professionals, educators, or other citizens. The purpose of the workshop will be to teach sound forest, tree care and wildlife management practices to people who would like to create or enhance forest on their small properties, or can impact the way small parcels of forested land in Worcester County are managed. Topics will include: Maryland's eastern shore forest ecology; Worcester's forest wildlife and habitat; sound forest/tree stewardship to improve forest health and wildlife habitat; the regulatory programs that affect urban forest; and the resources available to help manage small properties. Classroom learning will be reinforced with an outdoor field trip. The County conducted a program for large properties last year which was attended by 22 landowners owning collectively over 3,000 acres of land in Worcester County.

Final Report Summary:

WC Dept. of Comprehensive Planning will provide a wildlife habitat management workshop to interested WC landowners of up to 10 acres of forest. If space permits, the workshop will also be open to natural resource professionals, educators or other citizens. The purpose of the workshop will be to teach sound forest, tree care and wildlife management practices to people who would like to create or enhance forest on their small properties or can impact the way small parcels of forested land in Worcester County are managed. Topics will include: Maryland's eastern shore forest ecology; Worcester's forest wildlife and habitat; sound forest/tree stewardship to improve forest health and wildlife habitat; the regulatory programs that affect urban forest; and the resources available to help manage small properties. Classroom learning will be reinforced with an outdoor field trip.

Held November 7 and 8, 2008 at the Sarbanes Coastal Ecology Center, this workshop provided guidance on developing and implementing a property vision and plan, identifying native trees and invasive plants, forest ecology,

local regulations, and woodlot management. Experts from across Maryland taught sound forest and wildlife management practices that landowners can implement in their own backyards. Every family/individual attending received a free copy of the *The Woods in Your Backyard*, a workbook for small woodlot owners.

The cost of \$6 per registrant helped cover the cost of food for participants. 39 landowners attended the program. Agenda and poster included.

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**9. Project Title *Coast Kids: Educational Coast Cards, Tree Planting, and Bird Houses***

Project Applicant	Coast Kids (Kim Quillin)
Amount Awarded	\$4,000
Amount Received to Date:	\$4,000

Project Abstract:

Coast Kids is the family-focused environmental education program of the Assateague Coastal Trust. Our mission is to create fun opportunities for kids and their parents to learn about and experience the natural resources of the coastal bays area to encourage them to be good stewards of these resources. This year we are seeking funding from the MCBP to print 12 monthly educational large-format post cards (Coast Cards) featuring local organisms, habitats, and conservation challenges. We are also seeking funding for two projects (two of the twelve monthly events in this membership year), one for June to learn about bees and plant native trees and shrubs to replace lawn in the an area adjacent to the AINS (Assateague Island National Seashore) Visitor Center, and another in December for kids to build bird feeders to support over wintering birds (and help them to create a rapport with nature).

Final Report Summary:

Thanks to the MCBP Mini-Grant 2008, the Coast Kids Program was able to:

- Look inside a honey bee hive and plant native plants at Assateague Island National Seashore
- Build 25 screech owl houses in December 2008
- Create monthly Coast Cards featuring local animals and places

**Bees & Trees**

The Bees & Trees event made the connection between pollination skills of honey bees and the importance of native plants.

The event took place on June 15, 2008 at the Assateague Island National Seashore. Beekeeper Wes Townsend provided an observation bee hive with live bees. Verena Chase had worked at the Institute for Bee Science in Oberursel, Germany for two years so the two experts were able to answer lots of questions about bee development and behavior, bee habitat and their importance as pollinators, colony breakdown syndrome, and even peculiar questions such as, “Are bees able to hear?” (Answer: They are not).

Then Coast Kids planted 40 native trees and shrubs such as red maple, smooth alder, buttonbush, dogwood, persimmon, and possum haw. Herbaceous plants included aster, joe-pye weed, cardinal flower lobelia, monkeyflower, and marsh fleabane. NPS Park Ranger Jonathan Chase instructed the children how to plan the trees and shrubs properly. We also talked about eutrophication, and the importance of plant buffers along the edges of waterways. After planting the trees and shrubs, the kids watered their plants. For the next 8 weeks, either Jonathan or Verena Chase watered the plants every few days to keep them moist. In April 2009, 75% of the plants were alive and growing well. The Coast Kids Program would have liked to put up a sign acknowledging the MCBP Mini-Grant at the planting site but was unable to due to National Park Service policy.

The planted trees and shrubs at the Assateague Island National Seashore will provide an important plant buffer, and habitat for native animals. The participating Coast Kids members were encouraged to take some flowering herbaceous plants home and plant them in their yards to create food sources for bees and other insects.

### **Screech Owl Nest Boxes**

Eastern Screech Owls are small owls that live in some Delmarva woodlands. They usually nest in a natural tree cavity or a tree cavity excavated by a woodpecker but they will also use nesting boxes – a good alternative since some of their habitat has been lost to development.

The event took place on December 13, 2008 at the Paul S. Sarbanes Coastal Ecology Center. The event gave Verena Chase and Dana Montoya the opportunity to explain what habitat means, and to talk about habitat loss and restoration. Owl diet and behavior were also interesting topics. The kids identified different owls by their calls.

We gave out an information sheet about owls for the kids to read at home (see attached). The brochure also included instructions on where and how to install the owl house.

Then the children received a prepared owl nest box kit, screws and tools and were instructed on how to assemble the owl house. All 25 kits were used. Lastly, the owl houses were decorated with paint. The children were careful to use “wood-like” colors and designs to make the owl homes welcoming for their inhabitants. The Coast Kids enjoyed the event very much and we hope that all the nest boxes will house owl families in the spring.

### **Coast Cards**

Coast Cards are large format, full color, fun postcards each with a theme relating to habitats or creatures in the Coastal Bays. The MCBP Mini-Grant funded 12 Coast Cards.

May 2008 – Pelicans  
June 2008 – Bioluminescence  
July 2008 – Blue Crab  
August 2008 – BioBlitz  
September 2008 – Menhaden  
October 2008 – Woolly Bears  
November 2008 – Leaves of fall  
December 2008 – Giving and receiving: Bird houses/bird feeders  
January 2009 – Ducks: Dabblers and divers  
February 2009 – Love birds: How some birds find partners for life  
March 2009: Bald Eagles  
April 2009: Diamondback Terrapins

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<b>10. Project Title</b>	<b><i>Rain Garden “How To” Manual for Homeowners</i></b>
Project Applicant	Town of Ocean City (Gail Blazer)
Amount Awarded	\$4,000
Amount Received to Date:	\$3,676.50

### **Project Abstract:**

The Town of Ocean City and Worcester County are in the process of re-printing a document published originally by the University of Wisconsin – Extension Environmental Resources Center. This document is called “Rain Garden: A How-To Manual for Homeowners”. The document is a step-by-step instruction manual for sizing, building and planting a rain garden. This document will be reprinted with native plant list and design templates for the Maryland Coastal Bays watershed. Once this document is designed and printed there will be a workshop offered this summer

to put the document in action. The Town will be offering a \$400 mini-grant to those who take the workshop in order to help pay for the rain garden plants in the Town.

Final Report Summary:

The grant was to help with the printing of the Rain Garden How-to Manual for homeowners. We ordered 2,000 copies. We have also had two rain garden workshops and plan on more over the year. The rest of the program is a mini-grant opportunity for homeowners who want to put in a rain garden. Homeowners will receive help to design the garden and help to pay for plant material. Printing of the manuals has been completed and the project is ongoing. The Town of OC's mini-grant program will continue until 20 are completed.

### 3. Success stories/examples of transferable activities, tools, etc.

**See descriptions in Section C. 1.**

**See “ongoing” actions in Section B (Attachment III)**

### 4. Support of CWA program implementation

*(See project descriptions in sections B. and C. 1. for information about the role MCBP played in the use of CWA tools)*

#### **Primary role**

- Emerging challenges for Coastal Lagoons
- Chincoteague Bay Water Quality Improvement Strategy
- Perdue property restoration
- Newport-Chincoteague Land Conservation Area
- Implementation grants & Community Stewardship grants
- Fish ruler
- Harbor Day at the Docks
- MCBP Brochure
- Exhibits
- Internet outreach
- Berlin Greenbelt
- Speaking circuit
- Outreach (newsletter, articles, website, fundraisers, events, speaker series, etc)
- Environmental education
- Water quality monitoring of watershed non-tidal streams
- Volunteer Water Quality monitoring
- Bishopville Dam
- DAWN
- Clean Water Needs Survey
- Terrestrial monitoring plan
- GIS Implementation
- CCMP Tracking & Evaluation
- Nutrient Reduction Action Strategy
- Minority outreach and involvement
- Shifting Sands State of the Bays Report
- Grow Berlin Green
- Open space preservation

- Ocean City BioBlitz
- Forestry White Paper Implementation
- Beneficial use of dredge spoil
- Kayak launch on Ayers Creek
- Coastal Bays column
- Boaters Guide to the Coastal bays
- Herp Search
- Worcester County Environmental Summit
- BUS STOP
- Upward Bound
- Maryland Summer Center for Gifted & Talented Students: Diary of a River
- Delmarva's 10 top 10
- OC Coastal Bays Nature Clinic
- Tracking and Evaluation of the CCMP
- Horseshoe Crab survey
- Coastal Bays Report Card

### **Significant role**

- Grey's Creek Nature Preserve
- Eastern Shore Restoration & Education Program
- Colonial waterbird count
- Delmarva Birding Weekend
- Maryland Association of Outdoor and Environmental Educators Conference
- Shoreline improvements
- Worcester-Wicomico teachers summits
- Marsh restoration
- Spray irrigation site acquisition
- Outstanding Natural Resource designation for Chincoteague Bay
- Delmarva BioBlitz
- Flying Wild Facilitator Training
- Offshore faunal communities

### **Support role**

- Aquaculture leasing
- Atmospheric Deposition Monitoring
- DNR Green Infrastructure and Herp Atlas Work Groups
- DNR Fisheries data collection
- State Diamondback Terrapin work group
- Children's Water Festival