Accomplishments, Initiatives and Funding
To meet Delaware's 2009- 2011 Milestone Goals

Delaware's 1999 Nutrient Management Law: Mandates that all farmers, golf courses, and other nutrient handlers develop and implement phosphorus (P)-limited nutrient management plans, maintain nutrient handling records, attend certification training, obtain and maintain nutrient certification, and submit annual reports. Since 2007, all farms requiring a nutrient management plan now have one and implementation levels will be maintained into the future.

Delaware Department of Agriculture's Relocation Program: Moves poultry litter/manure from farms with insufficient land or high soil phosphorus levels to farms with nutrient needs or to alternative use facilities. This has resulted in relocating almost all of the excess litter in Delaware; most comes from Chesapeake Bay watersheds. Over 50% of the excess litter was sent to alternative use projects like the Perdue AgriRecycle fertilizer plant, which processed a total of 39,508 tons of Delaware's litter and 31,316 tons of Maryland's litter in 2009.

Delaware's Nutrient Management Commission: Continues to implement agreements with Delaware poultry companies (Allen's, Mountaire, and Perdue), resulting in the incorporation of the phytase enzyme in all feed, which helps poultry digest phosphorus (P) and reduces the amount in litter. Phytase and other litter/manure amendments and handling practices have reduced the P content in litter by 30-40%. Poultry company agreements have also led to increased nutrient management education, certification, and stewardship, and additional funding for the Relocation Program.

Concentrated Animal Feeding Operations: The Delaware Department of Agriculture and DNREC have been working with EPA over the last year to prepare for modifying the State's current Concentration Animal Feeding Operation regulations in response to changes in the federal regulations. Delaware's revised regulations will be presented to the agriculture community and general public during the summer of 2010 and will be finalized in the fall of 2010.

The Invista facility, which produces nylon in Seaford, has recently downsized their operations. Additionally, a monitoring study to better quantify their nutrient loadings in their discharge indicated that a reduction in permitted loads was warranted. The permit will be renewed by early 2011 and the nitrogen loads will be cut in half – decreasing the amount of nitrogen allowed to be discharged into the Nanticoke River from 430,700 pounds per year to 215,350 pounds per year.

Best Management Practices (BMPs): Delaware is working to improve the tracking and reporting of many best management practices in order receive more model credit. This year, cover crop data differentiated between early and standard plantings and the crop species planted in most regions. Stormwater data was updated for the first time since 2004. Additionally, a new database to track stormwater BMPs, known as MUDtracker, is nearing completion and data will be extracted and electronically submitted to the Bay Program through the National Environmental Information Exchange Network, which is becoming a reporting requirement in 2010. Finally, a pilot program in the Choptank River and Gravely Branch watersheds will attempt to fill data gaps on voluntary agricultural BMP implementation.

- Early cover crops (goal: 18,600 acres) – In 2009, 6,595 acres of early cover crops were reported. (35% of goal). Only the Sussex Conservation District was able to specify early versus standard plantings, but all three County Conservation Districts and the Natural Resources Conservation Service (NRCS) are working to revise their programs to gather all of the needed information in 2011. The County Conservation Districts are also working to secure alternate funding sources to

better fund cover crops and place an emphasis on early sign ups.

- Standard cover crops (goal: 18,600 acres) – In 2009, a reported 16,600 acres (89% of goal) was achieved. More funding is needed to meet demand. County Conservation Districts are working with NRCS to help fund the programs.

- Forest buffers (goad: 2,700 acres) – In 2009, 2,226 acres of forest buffers were reported. (82% of goal). This value only represents the buffers planted through the Conservation Reserve Enhancement Program (CREP), so buffers planted voluntarily or through other programs are not yet captured.

- Wetland restoration (goal: 420 acres) –In 2009, it was reported that 286 acres of wetlands were restored (68% of goal). The Restoration Subcommittee is developing a more comprehensive database to determine the total restoration that has already occurred and will identify potential future projects.

- Tree Planting (goal: 200 acres) – 99 acres of urban tree planting (50% of goal) was completed by 2009. The NRCS is also gathering data on the implementation of this practice, so the value will increase. Additionally, EPA will count poultry house windbreaks as tree planting.

- Poultry litter transport and nutrient management – 2009 goal was met; programs continue to maintain current implementation levels.

- Updated stormwater data – Resulted in increased stormwater BMPs (best management practices

- New regulations: Work is underway to revise regulations on stormwater runoff, residential septic systems and combined animal feeding operations, which when promulgated will have additional protective measures in place and will provide more BMPs.

DNREC's Division of Fish and Wildlife: has been working to enhance American shad populations in the Nanticoke River. Most of the American shad that run up the Nanticoke River in the spring are returning to spawning sites in Delaware tributaries and headwaters. During the first five years of the project, American shad larvae were obtained from the Maryland Department of Natural Resources and stocked in the upper Nanticoke and tributaries. Division staff constructed a hatchery on the Nanticoke River, and by 2005 the project began rearing and stocking American shad larvae from collections of spawning adults from the upper River and tributaries. In 2009, an estimated 713,000 three-day-old larvae were stocked. Because the larvae in the hatchery are marked with tetracycline, they can be distinguished from wild juveniles by examining their otoliths (ear bones) under ultraviolet light. Since 2005, it has been determined that more than 30% of juveniles were of hatchery origin. In 2009, 22% of a sample of returning adult American shad that had been captured downriver in Maryland originated from the Division's hatchery.

Nanticoke River Water Trail: DNREC and its local and private partners will launch the Nanticoke River Water Trail this summer. The 26-mile long trail will be accessed from at least six public sites. A map and guide will be available providing paddlers with information to safely plan their water-based recreational experiences and interpretation highlighting the area's rich history and noteworthy natural and cultural heritage.

DNREC: Under Secretary Collin O'Mara's leadership, DNREC will be reorganized in 2010 to improve communication and coordination between the previously five separate divisions. The new DNREC

structure will have a Natural Resources focus and an Environmental Protection focus. Delaware's involvement in the Chesapeake Bay Program has reinforced the need to integrate good science, monitoring and assessment findings, environmental improvement recommendations, and implementation activities. This reorganization will advance our goals in the Chesapeake.

Funding for Chesapeake Bay Watershed restoration: Delaware recently re-assessed the funds available to do work in the Chesapeake Bay Watershed during this first 2-Year Milestone period and more funds will be available than originally anticipated. The original Milestones published reported that $16.948M could be available to do work in the Chesapeake and new estimates indicate that $25.307 million may now be available. While some sources of funds have been cut, other sources are expected to be greater than originally anticipated. This increase in funds is due to several factors.

- First, due to State fiscal shortfalls, State general funds for conservation practices were expected to be significantly decreased during the FY 2010 budget period. However, Governor Markell and the Delaware General Assembly were able to increase the amount of State general funds used for conservation practices.

- Secondly, funds from the Chesapeake Bay Watershed Initiative through the Natural Resources Conservation Service and Farm Bill were not initially included in the milestones because actual funding amounts were unknown at the time of publication. This source of funds will provide almost $6 million for conservation cost-share practices in Delaware's portion of the Chesapeake Bay Watershed during this milestone period.

- Finally, Delaware was also eligible for a one-time regulatory and accountability grant from EPA and these funds will help improve regulatory programs, WIP development, and track progress toward 2-Year Milestones.