

# Blackbird-Millington Corridor Conservation Area Plan

## Strategic Actions for Restoration and Management

As previously discussed, strategic actions are the on-the-ground programs and activities developed (via workshops, focus groups, and individual meetings) to achieve the conservation objectives for the Corridor. Many of the agencies and organizations in leading and supporting these strategies were identified, and most played a role in the development of those strategies. However, there are instances where leads were identified by others and the ability or commitment of the lead for carrying out the strategy is uncertain. Building any capacity or resources needed to carry out strategies is assumed to be the responsibility of the lead and supporting entities, with the recognition that there are no guarantees when resources are inadequate. Figure 32 is a table identifying all of the strategies (including those described below) and the primary attributes or threats that each was designed to address.

Meeting Corridor objectives will require a significant effort to restore key areas to their natural vegetated state and to manage existing or restored areas for maturity and to keep them free from non-native invasive plants. Restoration and management efforts will focus on creating, connecting, and managing mature forests in the Forest Conservation Priority Area, creating forested buffers along streams, and at the edges of tidal wetlands and coastal plain ponds, and creating and maintaining natural cover in tidal wetlands. The following strategies (summarized in Figure 34) are designed to meet that need.<sup>1</sup>

**1. Focus new DNREC Division of Fish and Wildlife landowner incentive program (LIP) funds to priority areas in the Corridor for building forest interior through reforestation, forest stand improvement and management, and creation or improvement of coastal plain pond, riparian, and tidal wetland buffers.**

The DNREC Division of Fish and Wildlife's new program for providing landowner incentives for wildlife habitat creation is a great asset to the Corridor, and can be used to focus restoration efforts to private lands in Corridor priority areas. By working with The Nature Conservancy and using the results of this plan, the Division of Fish and Wildlife can identify priority lands for restoration and conduct outreach to those residents. By focusing on small farms and large residential lots that may not be served by farm service programs in areas where there are already covenants preventing additional development, the Division of Fish and Wildlife can make the best possible use of program resources.

Because this program focuses on wildlife habitat for species of concern, and has the capacity to do significant landowner outreach, it can also play an important role as a source of information on the wide variety of programs available to landowners, including others that don't have the same capacity to reach out to landowners, but which can provide significant resources (through cost-sharing) to landowners. (See Strategy 2 below.)

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<sup>1</sup> There may be minor differences in the wording of strategies presented in Figure 34 from those presented here, and in the Executive Report. Strategic Action titles/statements were simplified for brevity in the Executive Report, but numbering is consistent.

**2. Increase and/or consolidate capacity to conduct an active landowner outreach program for restoration (reforestation<sup>2</sup>, buffer creation, invasive species control) and Best Management Practices that incorporate information from a variety of programs.**

There are many existing sources of information, technical, and financial assistance for landowners interested in habitat improvement: DNREC (as described above), the Natural Resources Conservation Service (NRCS), Farm Service Agencies, the Delaware Forest Service, the US Fish & Wildlife Service Delaware Estuary Project, and Ducks Unlimited all have programs that provide assistance to landowners in the form of cost-sharing. However, not all of these programs have a great deal of capacity to conduct landowner outreach, or especially to focus outreach efforts on the Corridor. To reach more landowners with these services, and to utilize and combine these services in a way that results in the maximum restoration possible, requires knowledgeable people reaching out to landowners with information and personalized assistance. The new and staffed DNREC landowner incentives program (described above) can provide this kind of assistance and outreach covering many different programs from different sources.

The Nature Conservancy can also work to secure funding for more general outreach on conservation options and incentives to Corridor landowners. One possible source of such funding might be the NRCS Conservation Partnership Initiative -- this is a matching grant program that provides funds for planning using implementation costs as the match. With planning efforts already funded, The Nature Conservancy hopes to use grant funds for implementation, using planning funds as match.

The NRCS and Farm Service Agencies of both states offers several different landowner incentive programs that can be used for restoration efforts. Finding a way to prioritize these programs and their outreach efforts to Corridor priorities (via "wildlife zone" designation in ranking systems, or some other mechanism) would be beneficial, since outreach capacity is limited. NRCS in Delaware should also increase its advertising and publicity of programs and include landowners of record in their mailings and announcements as a way of increasing awareness of these programs to Corridor residents and others.

The U.S. Fish & Wildlife Service has two programs which provide funding and technical assistance for habitat restoration on private lands: 1) the Partners for Fish & Wildlife Program, and 2) the Coastal Program. Through these programs USFWS Delaware Bay Estuary Project is able to cover some or all of the costs of habitat restoration aimed at restoring a site to natural condition, including stream, wetland, buffer, and forest habitats. In some cases, funds have been used to cover the landowner's share of restoration costs under the various farm programs (like CREP). These programs are flexible and can work in concert with programs administered by other agencies/partners to maximize results and feasibility to landowners.

Determining which programs are appropriate for what kinds of activities can be difficult for landowners with a variety of programs and sources out there. To introduce landowners to the variety of programs and put them in touch with the program staff that can work with them to provide assistance for restoration, The Nature Conservancy can hold a conservation options workshop in the Corridor, where all programs will be represented. To demonstrate how different programs can be used for different restoration efforts, The Nature Conservancy can also work with NRCS to complete a demonstration map

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<sup>2</sup> For this purpose of this report, the term "reforestation" refers to replanting any area that was once forested – whether currently a recently harvested area or cropland ("afforestation," technically.)

of a property in the Corridor showing all of the landowner incentive program opportunities and how they could be applied to a real property.

**3. Provide technical and cost-sharing assistance to restore riparian, tidal wetland, and coastal plain pond buffers on private properties.**

Because restoration can be difficult and costly over time, even with the financial assistance provided by existing programs, The Nature Conservancy is exploring ways to help landowners cover restoration and long-term maintenance costs in other ways. One potential way is to cover the landowner's portion of cost-sharing so that landowners could restore critical habitats at no financial cost to themselves. Another important way to assist landowners would be by covering ongoing maintenance costs through annual payments based on maintenance costs, lost crop revenue, or lost land lease income. Restoration involves far more than the initial installation of plant material. Ongoing management, especially invasive species control, requires a great deal of ongoing effort on the part of landowners, but is crucial to restoring healthy habitats, especially mixed hardwood forests.

**4. Develop and pilot a program for aggressive and coordinated invasive species control on state and private lands.**

The spread of invasive plant species smothers diverse native plant communities and makes restoration efforts especially difficult. Invasive species of concern in the Corridor include non-native *Phragmites* (in tidal wetlands and coastal plain ponds), multiflora rose, autumn olive, and oriental bittersweet (in forests) and agricultural weeds (in coastal plain ponds). Combating these invasive species requires an aggressive regiment of control that is most effectively carried out by experience stewards. DNREC (Division of Fish and Wildlife, in coordination with other divisions and state agencies) can take a Corridor-wide approach to invasives control by first (in partnership with the Department of Agriculture) developing a list for distribution to all agencies and Corridor landowners and getting agency commitments not to use or recommend these species. Next, DNREC could create and staff a Corridor invasive species control crew led by DNREC staff, and utilizing AmeriCorp volunteers as crew members. The DNREC Division of Parks and Recreation and the National Park Service both have good models that should be explored in designing the invasive species control crew concept. This team would be charged with controlling invasive species on the Corridor's public lands (of various agencies) and also providing Corridor landowners with information, training, and assistance for controlling invasive species on their lands. Providing this type of assistance to landowners engaged in reforestation efforts should be the highest priority, because invasive species control is such a challenge to reforestation. Some combination of reduced-fees for crew services to private landowners and allocations of funds from the various public agencies with lands in the Corridor could be developed as the means of funding the crew's efforts.

**5. Maximize the applicability and use of existing programs that provide technical and financial assistance to landowners.**

Existing landowner incentive programs like the Natural Resource Conservation Service' Wildlife Habitat Incentives Program (WHIP) and Wetland Restoration Program (WRP), and the Farm Service Agencies' Conservation Reserve Program (CRP), have a great deal to offer but could be improved to offer the greatest possible opportunities for restoration in Corridor priority areas.

In particular, expanding the use for these incentives to cover more long-term management/maintenance costs would fill an important need in the Corridor, especially for stream buffer and forest restoration efforts which require ongoing management to control invasive species and insure a healthy mix of species. Opportunities to modify existing programs, such as the Wildlife Habitat Incentives Program (or WHIP) to provide assistance for more long-term maintenance/management of reforested buffer areas should be explored by the Natural Resource Conservation Service (NRCS).

Expanding the Conservation Reserve Program (or CRP, a Farm Service Agency program) encourages farmers to convert highly erodible or sensitive land to vegetative cover, such as tame or native grasses, wildlife plantings, trees, filter strips, or riparian buffers by providing technical and financial assistance in the form of an initial cost share and annual rental payment for the term or a multi-year contract. Allowing CRP funds to be used for reforestation and management of coastal plain pond buffers of up to 500 feet would also benefit restoration efforts in the Corridor, as these funds can currently be used for buffers up to 100 or 150 feet (less than the width recommended to preserve habitat values.) Farm service agencies could explore expanding that allowance (but not making it a requirement) and/or DNREC could explore providing complementary funds to finance the creation of larger coastal plain pond buffers that scientists know benefit coastal plain pond species.

Also part of the Conservation Reserve Program is the Conservation Reserve Enhancement Program which allows large landowners to receive annual payments for establishing and maintaining stream buffers via a 15-year agreement. None of these agreements has yet matured, but when they do it will be critical to find ways to encourage renewals. In the meantime, NRCS and farm service agencies can be evaluating the effectiveness of the 15-year CREP agreements in restoring and managing forested buffers, and develop ways to encourage renewals in the Corridor.

The Natural Resource Conservation Service's Wetland Reserve Program (WRP) is a similar voluntary program offering landowners technical and financial assistance in the form of cost-sharing for restoring and/or enhancing wetlands and/or in the form of a purchased conservation easement for protecting wetlands. In cases where hydrology has been altered through ditching or draining and where there is good species diversity, WRP funds can be used more frequently for coastal plain pond restoration and even protection. In Maryland particularly, NRCS reports that WRP funds have not been used often for this purpose, and that there is great support for increasing this use of WRP funds, especially where there are endangered species. The NRCS's Wildlife Habitat Incentives Program (or WHIP) is another program that provides both technical and cost-sharing assistance to landowners (usually over 5-10 years) for establishing and improving fish and wildlife habitat.<sup>3</sup>

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<sup>3</sup> For more information on these and other NRCS programs, go to [www.nrcs.usda.gov/programs](http://www.nrcs.usda.gov/programs).

All of these landowner incentive programs provide technical assistance, information, and cost-sharing, but rely on the landowner to do the actual work, in most cases by hiring contractors. Finding knowledgeable and reliable contractors to do stream restoration and management work can be difficult. To help landowners with this, the DNREC Division of Fish & Wildlife can collect information and suggestions from NRCS and other state agencies to compile a list of qualified contractors for stream restoration and management to provide to landowners.

**6. Identify and work to convert (where feasible) publicly-owned agricultural fields in priority areas for reforestation.**

Both the Millington Wildlife Management Area and the Blackbird State Forest include areas of agricultural land, leased to farmers, which might be priorities for reforestation. State-owned lands provide some of the best opportunities for reforestation in the Corridor, because they have the expertise and resources needed to effectively reforest, and because reforestation is compatible with their mission and conservation goals. Both agencies have already made strides to restore some agricultural lands to forest. For example, the Delaware Forest Service has reforested nearly 100 acres of farmland in the Blackbird State Forest

Based on planning results, The Nature Conservancy can work with both agencies to identify priority areas for reforestation (which are often also marginal farmland) so that opportunities can be explored for removing those lands from leases when leases come up for renewal (every 5 years for Blackbird State Forest). Because agencies rely on the income from agricultural leases to support their work and need some agricultural lands to meet their goals and the needs of users, removing lands from agricultural lease is not always possible. The Delaware Department of Agriculture (of which the Delaware Forest Service is part) generally does not support taking productive farmland (or forest land) out of production. But both agencies can explore funding alternatives (in addition to CREP) for restoration and to replace lease revenues, so that where there are high priority restoration lands that are only marginally productive, they might be removed from lease.

**Balancing Uses**

Planning for the Corridor required striking a balance between several uses critical to its future, which was not always easy.

Finding a healthy balancing between protecting and enhancing land for its habitat value (mostly forested) and protecting and enhancing land for its working value (timbering and farming) is perhaps the biggest challenge in planning for Corridor conservation..

The plan addresses this challenge, by identifying priority areas in a way that allows for each of these important uses in the places where they make the most sense, and by developing strategies designed to strengthen agriculture, forestry, and conservation in the Corridor. But the need to manage this balance will continue for as long as these important uses co-exist in the Corridor.

**7. To help develop and protect mature healthy hardwood forests, utilize Delaware Forest Service and Millington Wildlife Management Area programs/efforts to the full extent possible to achieve forest management and protection objectives in the Corridor.**

The Blackbird State Forest and Millington Wildlife Management Area (MWMA) staff are a significant presence in the Corridor and have many opportunities to promote forest conservation on agency lands, and through their contact and services to private landowners. Management staff of both agencies can use this plan as an opportunity to focus efforts to promote healthy and diverse mature forest habitat on

agency lands: First, by working with The Nature Conservancy to utilize the results of forest analysis to identify key areas where mature forest habitats exist and/or where favorable conditions exist for cultivating mature forest habitat through management. (In Blackbird State Forest, this would include any of the seven designated "nature preserves" within the Forest Conservation Priority Area.) Then, by managing these areas toward healthy mature oak-mix forest habitat today, and building these management directives into management plans for the future.

The Delaware Forest Service and Maryland Department of Natural Resources (administrator of the MWMA) can (and already do, in fact) play an important role in promoting forest management for biodiversity on private lands in the Corridor. Both agencies are involved in preparing Forest Management Plans for private landowners -- in Delaware the Forest Service writes plans for landowners, and in Maryland DNR reviews plans written by private foresters. By promoting mature forest habitat management principles to surrounding landowners to the greatest extent possible, through educational materials, personal contact, and through their involvement in creating forest management plans, both agencies have tremendous opportunity to impact private forest conservation in the Corridor. By continuing and/or increasing efforts to present the concepts and practices of forest management for biodiversity as an option in all forestry educational materials and outreach efforts, these two agencies will play an important role in achieving forest conservation goals.

The Delaware Forest Service can also provide and/or prioritize its cost sharing programs for forestry to Corridor landowners who manage for maturity and biodiversity. Forest management for biodiversity conservation measures should be eligible, or even a priority, for landowner cost share programs available through either agency.

#### **8. Combat non-native *Phragmites* invasion by maintaining or strengthening the State of Delaware's *Phragmites* control program.**

The State of Delaware has a very active program for controlling non-native *Phragmites* through herbicide spraying, mostly in tidal marsh areas where acres of *Phragmites* occur. The State and the Natural Resource Conservation Service cooperate to spray *Phragmites* for private landowners and cover 75% of the costs.<sup>4</sup> The remaining cost is currently \$4.00 per acre to the landowner. There is no acreage limit when funding is available (if under-funded, there may be a 200-acre limit) and the Natural Resource Conservation Service (NRCS) or the U.S. Fish & Wildlife Service (USFWS) Delaware Bay Estuary Project can often cover the remaining 25% of the cost, if needed. This is a tremendous opportunity that many landowners take advantage of, but there are many who do not.

The Nature Conservancy and DNREC can work together to identify the priority parcels where *Phragmites* control is needed in tidal marsh areas of the Corridor and contact those landowners with information about the *Phragmites* control program and its benefits. The Nature Conservancy can also provide additional cost-sharing in the unusual instance that costs are not covered by the state, NRCS, and/or USFWS, as necessary.

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<sup>4</sup> The actual cost share rate for the *Phragmites* spraying program has been 87.5% for the last few years, with 50% from NRCS and 37.5% from the State. (Source: personal communication with Sally Griffith-Kepfer of Delaware NRCS, January 2005.)

Delaware's *Phragmites* spraying program is funded by annual appropriations from the Legislature. This program has strong support and is generally funded, but maintaining legislative support for funding is important for its continued success. The Nature Conservancy, other conservation organizations, and residents can help provide the annual legislative support needed to keep this program up and funded. *Phragmites* control, like most invasive species control, is an ongoing effort that will only be successful over time and repeated efforts, requiring continued funding well into the future.

**9. To achieve the greatest possible restoration results, focus all available public land restoration and management funding and efforts on Corridor priorities.**

As indicated by the previous restoration strategies, there are numerous public programs that provide assistance and/or funding for land restoration efforts, and that can be applied in the Corridor. To maximize restoration in the Corridor, these programs can be directed and applied to Corridor priority areas to the greatest extent possible. To initiate this strategy, The Nature Conservancy will present or otherwise share plan results and priorities with the agencies and organizations that offer funding or other assistance for restoration efforts with the request that they use the focus resources and efforts on restoration and management in the Corridor to the greatest extent possible. Some of the primary programs or agencies involved in restoration and management include: the Natural Resource Conservation Service and Farm Service Agencies (in both states), the National Oceanic and Atmospheric Administration (NOAA), the Army Corp of Engineers Estuary Restoration and Protection Plan, the Nutrient Management Commission, the U.S. Fish & Wildlife Service, the DNREC Division of Fish & Wildlife, the Delaware Forest Service, the Maryland Department of Natural Resources. Each of these agencies will be asked to explore opportunities for including Corridor priorities in their priorities for restoration work and funding.

**10. Secure new funds for restoration work, especially in key areas along riparian corridors, via an EPA 319 grant or other mechanisms.**

Restoration is costly and requires a long-term commitment that can be difficult for any landowner to undertake. There are sources of funding that can be explored to help riparian corridor restoration work -- Environmental Protection Agency (EPA) 319 grant funds are one potential source. Proposal guidelines come out in the spring and proposals are due in the fall. There is a 40% match requirement, but it might be possible to use Blackbird State Forest staff salaries as this match. The Nature Conservancy can work with the New Castle County Conservation District to submit an EPA 319 proposal to obtain funds for riparian corridor restoration in the Corridor.

Places not eligible for Conservation Reserve Program or Environmental Quality Incentives Program (Farm Service Agency and Natural Resource Conservation Service programs, respectively, that can provide financial assistance to landowners) funds would be a smart place to focus additional funds. The Nature Conservancy and others will continue to explore this and other future opportunities for funding riparian corridor forest restoration work.