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| Pathways Toward Increased Land Trust Involvement in Agricultural Conservation Planning and Implementation |
| Draft  Prepared for the Pennsylvania Land Trust Association |
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| Kreitler Research & Consulting, LLC |
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Table of Contents

[EXECUTIVE SUMMARY 2](#_Toc181962)

[PROJECT OVERVIEW 3](#_Toc181963)

[Project purpose and research issues 3](#_Toc181964)

[Research scope and methods 3](#_Toc181965)

[FINDINGS 4](#_Toc181966)

[EXPERT PERSPECTIVES 4](#_Toc181967)

[Challenges, needs, and barriers to better farm stewardship 4](#_Toc181968)

[Perspectives on roles that land trusts can play 8](#_Toc181969)

[FUNDING RESOURCES 11](#_Toc181970)

[NFWF Central Appalachia Fund 11](#_Toc181971)

[NFWF Delaware River Funds 13](#_Toc181972)

[Delaware River Watershed Conservation Fund 13](#_Toc181973)

[Delaware River Restoration Fund 14](#_Toc181974)

[Pennsylvania Bureau of Farmland Preservation promotion of BMPs on protected farmland 15](#_Toc181975)

[NRCS contribution agreements and funding 15](#_Toc181976)

[PERSPECTIVES OF LOCAL LAND TRUSTS 17](#_Toc181977)

[Perspectives of the land trusts active in ag stewardship 17](#_Toc181978)

[Perspectives of land trusts not now active in ag stewardship 18](#_Toc181979)

[Receptivity to Potential Pathways 19](#_Toc181980)

[Appendix A: Organizations and individuals who participated in this research 23](#_Toc181981)

[Appendix B: Other insights 24](#_Toc181982)

[Outreach to farmers 24](#_Toc181983)

[Building internal capacity 25](#_Toc181984)

[Partnering with Private TSPs 25](#_Toc181985)

[Helping farmers navigate cost share programs 26](#_Toc181986)

[Collaborating with NRCS 26](#_Toc181987)

# EXECUTIVE SUMMARY

This project was undertaken to identify potential pathways toward increased involvement of land trusts in the Ohio and Delaware River basins in spurring more preparation, updating, and implementation of agricultural conservation plans. Land trusts interact with farm owners and operators on a regular basis, are respected by governmental and non-governmental conservation practitioners for their expertise and their unique landowner relationships and, in short, are well placed to initiate conversations and follow-up with farmers on protection and stewardship matters. Identifying pathways that will help foster more of this activity was the goal of this research.

During 2018, a series of in-depth telephone interviews was conducted with experts in agricultural (ag) conservation practices that contribute to improved water quality, the type of practices addressed in ag conservation plans and the cost-share programs offered by the US Department of Agriculture’s Natural Resource Conservation Service (NRCS). Through these interviews, intelligence was collected on key barriers to greater conservation plan development and implementation, opportunities for change, and perceptions about the roles land trusts can play in addressing these needs and opportunities. Another series of interviews was then conducted with land trusts operating within the Ohio and Delaware River watersheds to uncover current activity in ag conservation plans and best management practice (BMP) promotion, and to vet several concepts elicited from the expert interviews on how land trusts might move forward.

This research uncovered broad support for an increased role for land trusts in informing and supporting farmers who undertake conservation planning and implementation of BMPs. Experts identified a number of challenges that impeded wider adoption of conservation plans and measures, including access to technical assistance as well as educational information, the need for incentives for BMPs and sometimes for plans as well, and the need for assistance in navigating the requirements of cost-share programs and in managing the various activities and contractors that BMP installation entails. Land trusts are viewed as being a good fit for these outreach and support needs by agencies, funding entities, other NGOs, and by the private sector.

A number of ideas were suggested for how land trusts might increase their activity in supporting farm conservation. The solutions which seem to appeal to the most land trusts, based on feedback from the seven interviewed, are:

* A circuit rider who would be shared among multiple land trusts
* Partnerships with external parties who have certified plan writers
* Training to increase the capacity of land trusts to assist farmers on a one-on-one basis in navigating NRCS cost share programs
* Monitoring the condition of BMPs in the field
* Establishing a fund to cover transaction costs for ag-related work
* Incorporating language in easements that requires a conservation plan
* Helping to set up educational workshops for farmers

This brief report discusses highlights from the research interviews.

# PROJECT OVERVIEW

## Project purpose and research issues

Agricultural lands are a significant contributor to sediment and pollutant loads that adversely impact water quality; as a result, addressing these sources of impairment is viewed as a fundamental component of successful holistic clean water strategies. Across Pennsylvania there is interest in boosting the adoption of agricultural conservation plans and the installation of best management practices that will result in improved water quality. Land trusts can be and have been lynchpins in efforts to foster increased conservation plan development and implementation, and there is interest in identifying opportunities to expand this participation in water quality solutions. This project sought to identify potential pathways to increase the involvement of land trusts in spurring more preparation, updating, and implementation of agricultural conservation plans. The geographic focus of this project was to define opportunities that might be implemented in the Ohio and Delaware River basins, to enhance and accelerate water quality initiatives underway in those regions.

## Research scope and methods

The research completed for this project primarily consisted of in-depth telephone interviews; these were supplemented as needed with e-mail communications and review of on-line information. Research was first conducted with agencies, private companies, and non-profit organizations active in agricultural conservation work in the state. This background research was designed to capture expert perspectives on opportunities and barriers in fostering on-farm conservation practices, success stories and lessons learned, and valuable roles that the land trust community can play. The majority of the first tranche of interviews was undertaken with entities active in the Susquehanna watershed and the Chesapeake Bay efforts where there has been a longer history and larger scale of effort. Following this, interviews were completed with selected funders in the Delaware and Ohio river basins, namely the Natural Resources Conservation Service (Pennsylvania state-level) and three regional fund managers of the National Fish and Wildlife Foundation (NFWF), to elicit information on funding support for land trust engagement on plan development, updating, and implementation.

The last tranche of interviews focused on land trusts active in the two target watersheds. Potential pathways for increased activity on agricultural conservation planning and BMP implementation, taken from the expert interviews, were vetted with this interview pool. Some of these land trusts are already active in this arena and able to offer experienced perspectives on what works and what’s needed; others are not yet highly active in encouraging improved on-farm practices and were asked about factors that influence their decisions on whether or not to engage to a greater degree.

Key findings from each of these sets of interviews appear in the following sections of the body of the report. Additional information from the interviews is summarized in the appendices. The information compiled in the appendices was not essential to the report’s overarching emphasis on identifying promising strategic directions, but is likely to prove valuable to land trusts at a more tactical level as they move ahead on one or more of these pathways.

A list of the organizations and individuals who participated in this research appears in Appendix A. Appendix B, as noted, compiles insights gleaned during these interviews which did not contribute directly to the vetting of concepts, but which none-the-less offer insights meaningful to practitioners in the field.

# FINDINGS

## EXPERT PERSPECTIVES

Universally, there is a view that land trusts can play a valuable role in promoting conservation plans and their implementation on Pennsylvania farms. Most commonly the key assets land trusts are viewed as bringing to the table are:

* Many already have trusted relationships with farm owners and operators, and are known in the community as offering assistance to farm owners due to their protection work; they are seen as sympathetic organizations sharing a common interest in the long-term future of the farmland
* They are not part of a government agency and so have a better ability to initiate conversations with farmers who avoid interactions with government agencies
* They are on farm properties on a regular basis and can help identify where there is a willingness to move ahead or where there are resource issues that need to be addressed
* There is a preference to fund BMP investments on protected lands and land trusts offer a channel for approaching the owners of these lands
* Land trusts can help farmers who are establishing easements on their land to afford conservation plans and BMPs using the tax reductions created by the new easements.

Against this backdrop of wide support for land trusts increasing their involvement with agricultural conservation plans and BMPs, experts were asked to identify the key barriers and opportunities that impact success in working with farmers, helping to identify areas of activity where the additional manpower of land trusts might prove beneficial.

### Challenges, needs, and barriers to better farm stewardship

The top issues identified by experts were:

* the lack of conservation plans and nutrient management plans at some agricultural operations, and/or plans which are out-of-date
* backlogs and long delays in obtaining plans when requested
* an insufficient pool of certified plan writers and technical service providers (TSPs) in some portions of the state
* the drawn out timeline for certification training and the difficulty of securing a place in training classes
* project management demands involving engineering and complex measure installation
* the significant investments which may be involved in whole farm conservation/management, the economic distress of some farmers, and the need to procure adequate financial incentives
* the complexity of navigating cost-share programs
* farmers’ self-selection out of the NRCS cost-share programs, and
* gaps in existing incentives offerings.

Details on each topic follow.

#### Lack of plans and out-of-date conservation plans

Farm-specific conservation plans are a pre-requisite for participation in the cost-share programs offered by NRCS, which provide the bulk of the financial incentives for BMP installation. NRCS looks for plans developed by certified plan writers, addressing important resource concerns specific to the individual farm. The conservation plans are required to be updated every ten years or earlier if the operations of the farm are changed.

Some studies and anecdotal information have suggested that a substantial proportion of farms in Pennsylvania lack conservation plans. Other anecdotal information counters that finding and NRCS’ investigation of the issue suggests that the problem is not as substantial as it has been characterized to be. None-the-less, every person interviewed in the course of this project seems to believe that there are unmet needs in Pennsylvania for creating and updating agricultural conservation plans.

Some farmers are wary of government entities scrutinizing their farm operations. This creates a barrier to plan preparation as traditionally much of the plan writing has been done by either federal or county personnel (NRCS itself or County Conservation Districts). There is an important role for the private sector in addressing this portion of the market, to reach those farmers who are not convinced that the benefits of bringing in outside scrutiny from the government outweigh the potential downside risks. There is also an important role for the private sector in areas where insufficient government manpower exists to meet demand and where the attendant delays risk farmers walking away from the process.

#### Delays in obtaining plans

Many experts reported that farmers they have worked with have faced delays in getting plans written for their farms. Delays of one or more years were reported and were generally attributed to under-staffing at NRCS district offices, County Conservation District offices, or both. This feedback echoes findings from others, and from PALTA’s report[[1]](#footnote-1) on the state farmland protection program, indicating backlogs in conservation plan development are a significant issue in some parts of the state. However, this issue is uneven across the state and, where the staffing is strong, partnering with NRCS and County Conservation District staff has been a highly successful approach for land trusts. NRCS’ own analysis suggests that the delay issue can also differ across plan types as well as geography.[[2]](#footnote-2)

Some of the feedback received from private sector TSPs also refutes the observation that there are significant delays in getting plans written. This may reflect the better availability of plan writing services where private sector TSPs are present to serve farmer needs. It is likely that the private sector addresses requests in a timely fashion, but they do not offer one benefit that the government offices do – free plan writing. The fact that some farmers wait years for a plan to be written uncovers a related point, namely that a portion of the market is unwilling or unable to pay the associated fee for a plan. In other words, there is some number of willing farmers for whom the process is stalled, in spite of their willingness to examine how to improve practices on their farm. The barrier here is not one requiring more persuasion that plans be written, it is a matter of servicing the requests. [It is also likely that financial assistance will be required at the implementation stage as the fees for conservation plans are a lesser expense than the costs of the measures and their installation.]

#### Need for certified plan writers and technical service providers

Problems with delayed plan preparation are widely attributed to a shortage of certified plan writers. This can be a real challenge in some locales although the degree of need may ebb and flow as a result of staff turnover in county conservation districts offices. Once certified, district staff are able to command higher salaries than the counties can offer, causing staff to migrate out to other positions offering higher compensation. The government manpower issue has persisted over a number of years and there is no evidence of increased funding on the horizon to ameliorate the situation.

The ability of the private sector to fill gaps in certified planner availability hinges upon the ability to recruit individuals who have been certified by NRCS. A couple land trusts also have certified staff in house, but not all will find it easy to offer the competitive salaries commanded by certified planners. The certification process is time consuming and not to be undertaken lightly. It may not be a good fit for most land trusts seeking to play a role in promoting on farm conservation practices. More than one respondent indicated that partnering with private sector TSPs is a preferable solution, offering more economical, and feasible, means to achieve the desired conservation outcomes on local farms.

#### Certification training timelines and enrollment difficulties

As mentioned above, NRCS looks for conservation plans written by certified plan writers; certification is achieved through completion of NRCS-offered training. The certification process involves completing several courses and, by design, requires multiple years to complete. NRCS builds in a one year lag between completion of the first course and being eligible to enroll in subsequent courses. This is to provide a period in which the trainee can put their education to work in the field. Further delays frequently arise as a result of course scheduling, the propensity of the courses to fill up, and the priority given to government employees for seats in the classes. This priority arises from the authorizing language for NRCS, which emphasizes training of their own staff and county conservation district personnel. Land trusts and other NGOs are eligible; NGOs which have contribution agreements with NRCS, such as the Chesapeake Bay Foundation and Pheasants Forever, may be prioritized over NGOs without such agreements. The bottom line is that most land trusts will be at a disadvantage when trying to enroll staff in the NRCS certification training courses, resulting in a drawn out certification process.

#### Project management demands

Throughout a conservation plan’s development and implementation, there can be a need to meet with a number of people, including some or all of the following: the plan writer, an engineering technician, a surveyor, NRCS staff, contractors who are bidding on the work, and the field crew undertaking the installation. Farmers who are already busy with their farm operations or other business demands may feel unable to effectively oversee and manage all the attendant activities. This is a role which some land trusts have been able to fill for the farmers they are assisting, and which has proven crucial in keeping some projects moving forward. Some NGOs address the need by contracting with external TSPs.

#### The need for adequate financial incentives

While acknowledged as playing a “huge” role in fostering BMP installation, the major incentive programs of NRCS and the Farm Service Agency are reimbursement programs; this poses a challenge to economically distressed farmers who cannot spare the cash up front. Dairy operations are persistently one of the weakest sectors financially; this has been exacerbated by the new trade tariffs imposed this year. These farmers are most likely to be unable to afford the costs of the plans themselves, let alone the recommended measures. One program that offers funds for plan writing in the Susquehanna basin is DEP’s Agricultural Planning Reimbursement Program. This program, which is administered by private sector TSPs, has been helpful to the dairy sector in particular.

Anecdotal information suggests that in cases where a farmer refuses to sign a conservation plan due to fears about not being able to afford the recommended measures, the plan writer may scale back the plan’s scope in order to execute a plan with that farmer. BMPs can vary widely in their costs, making certain on-farm improvements much more challenging to get installed. NGOs can help make a farmer whole on new investments in some cases, and this approach underlies the success of some of the more active land trusts. In other cases, practitioners feel that special attention is needed to improve the federal program incentives for particular measure types or types of agricultural operations. One private TSP mentioned a concern that existing programs do not adequately address the nutrient management issues of mushroom farms. He believes there is a need to fund innovations that will address wastewater of these operations and other waste practices not covered under NRCS’ EQIP program. Other measure types singled out as needing increased incentives included biomass gasification and biochar production. While NRCS codes do include this technology, there are issues with the eligibility criteria that have prevented adoption by some farms in Pennsylvania.

Another suggestion, this one from a land trust, was to target stronger efforts and incentives to areas within a watershed with high concentrations of livestock operations. A more concentrated density of livestock produces elevated nitrogen loads which may cause stream impairments even if the farms are implementing BMPs such as riparian buffers. This practitioner believes that more needs to be done to incentivize solutions such as digesters and nutrient sequestration and capture. Sponsoring pilot studies and demonstration projects would be useful along with offering new incentives for these measures.

#### Challenges in navigating cost-share programs

The cost-share programs can be both rigid and complex for applicants to navigate. Farmers may struggle to stay on top of all programmatic requirements, deadlines, and paperwork, particularly if using more than one funding source, which is often necessary. There can be negative repercussions for failing to meet program requirements, including financial penalties for failure to implement all approved conservation measures.

#### Self-selection out of the NRCS cost-share programs

One niche of the farmer population is reported to believe that the NRCS programs do not apply to them. Given a history of federal programs and crop insurance being directed primarily toward large conventional farms emphasizing commodity crops, a number of members of the Pennsylvania Association of Sustainable Agriculture (PASA) – who operate diversified farms - now view the ensemble of such programs as intended for a different audience. Awareness of newer programs offering a better fit for diversified farms, and of NRCS interest in engaging sustainably managed farms, lags. Other owners of sustainable farms who have requested technical assistance from their conservation districts feel that they are assigned such low priority that they never see any response. The Executive Director of PASA believes that some targeted outreach and education to PASA members is warranted to overcome these perspectives. She sees potential in replicating a program piloted outside of Pennsylvania which requires certified organic farms to have a conservation plan. It would seem that the failure to receive services requires more attention as well, to ensure that any new program marketing results in a successful outcome and won’t just create more frustration among PASA members.

A second self-selection issue was identified by a private sector TSP. He reported that a farmer may refuse to sign a conservation plan if s/he feels unable to pay for the measures it recommends, and that this may happen for 5-10% of farms. Other NGO respondents confirmed the importance of bringing funding to the table when working with farmers in the plan development stages, saying that they always assume they need to bring funding to the farmer.

#### Gaps in existing incentives and strategies

Various suggestions were offered identifying areas where new incentives or strategic effort would be beneficial. One suggestion, identified by multiple experts, was a need for a greater emphasis on soil health. Experts see a need for farmer education on the practices themselves, also on conveying that such investments are economically advantageous. There is a perceived need to change farmer mindsets with respect to cover cropping and no till approaches. Promoting soil health is viewed as yielding a good bang for the buck and today is not well addressed by NRCS-level conservation plans.

Another area identified as not currently attractive enough to farmers is riparian buffers. Taking acreage out of production for the purposes of stream buffering inherently risks lowering farm income unless incentivized or replanted with marketable crops. More flexible programs for riparian buffers such as the state’s promotion of multifunctional buffers were felt to be a move in the right direction. Unfortunately, this program has struggled due to the weak economics of agriculture in 2018 and the new uncertainties introduced by tariff policy shifts. It was reported that there is ‘no market’ now for the crops suggested for buffers, and a corresponding lack of farmer interest in that program.

In addition, multiple experts pointed out that there is a need for more funding to increase the amount of follow up with farmers after BMPs are installed. Measures are not always functioning well in the field five years after installation and more attention needs to be devoted to ensuring the durability of on-farm investments. This issue was germane to a range of BMPS: examples were cited involving gutters, drains, and culverts, other stormwater management measures, manure/waste storage facilities, as well as riparian buffers. In other instances the installed measures may not be used consistently as intended (an unused livestock holding pad was cited as an example of lack of operational follow through). Checking farms 2-3 years after implementation, ensuring the sound operations and maintenance – and use – of BMPs in the field, is underemphasized and under-resourced at present.

### Perspectives on roles that land trusts can play

This research found universal support for land trusts playing an active role among experts who have been involved with endeavors to accelerate on-farm conservation practices. Land trusts are perceived as having unique, positive relationships with farm owners, making them a natural fit for an outreach and education role; furthermore, the proven track records of a number of land trusts have demonstrated the viability of such a role when the skill set of staff is aligned with the job needs. There is also a keen interest in the potential of land trusts in helping deliver BMP implementation on protected lands. The likelihood of greater durability of investments on protected lands appeals to funders and there is enthusiasm for options that could increase implementation on easement-bearing lands.

Some additional detail on each of these roles follows.

#### Outreach and education

Outreach is needed to maximize farmer adoption of conservation plans and measures. As one respondent put it, “someone has to go out and beat the bushes.” Land trusts are seen as credible, trusted entities for farmer outreach by both agencies and NGOs; this credibility arises organically out of their established and ongoing business operations, their familiarity to agricultural landowners, and their non-regulatory, non-governmental status. As one funder remarked, the willingness of farm owners to establish easements with the land trusts is an indicator of the trust placed in them. Their intrinsic credibility as outreach agents is further augmented by the ability to offer tax incentives for farm preservation actions – a factor which is viewed as giving land trusts additional persuasive strength, and which is a unique value-adder of the land trust community. In any formulation of potential strategies for fostering more ag conservation described by our interview pool, raising awareness is seen as a role which land trusts could perform well. Creating awareness of the need for a current conservation plan, directing farmers to sources of additional information, referring farmers to technical service providers, notifying farmers of cost share program opportunities and of educational workshops – all of these outreach roles are seen as ones which land trusts can fill well.

In addition, face-to-face outreach on a one-on-one basis was emphasized by some experts as an essential component for effective promotion of practices changes. To persuade farmers to try out new practices such as multispecies cover crops, it is important for them to be persuaded that the unfamiliar practice is a good fit for their particular farm. Because every farm and every farmer is different, the outreach process can require a personalized approach to generate action on the farm. These types of one-on-one interactions, positive landowner relationships, and a local presence in the community are seen as real strengths for land trusts.

#### Promoting conservation on protected lands

All else being equal, conservation investments on protected lands are often preferred by funders to investments on other lands, because of the reduced risk that the land use will change with a resulting loss of the BMP investments over time. While there is a benefit to directing BMP investments to preserved farmland, most outreach efforts are broad in scope and not designed for the purpose of specifically engaging owners of preserved lands. Land trusts are uniquely situated to engage the owners of protected farms, by virtue of having an established relationship with the landowner and undertaking annual inspections for easement violations. In this way, land trusts have greater access than many other entities to both the landowners and the land. In the words of one expert and funder, “It’s a better investment to do conservation planning and BMP implementation on protected lands. The more land trusts can take ownership of improved management of these lands, the better. Going beyond enforcing the terms of the easement, and focusing on how to get farmers access to the services and programs [that incentivize conservation measures]” is highly desirable.

#### Identification of farms in need of technical assistance

Land trusts are also seen as being able to help partners identify farmers with whom follow up conservation planning action is needed, whether that is to create the first conservation plan for the farm, or to identify farms with out-of-date plans. In some cases, it may be possible for land trust personnel to identify the need to update a conservation plan to reflect changes in the farm’s production.[[3]](#footnote-3) However, to undertake a systematic assessment of the need for new or updated conservation plans across an entire agricultural community is more challenging as NRCS does not share conservation plan information unless the landowner has signed a release of records form granting permission. A community-wide assessment can be undertaken and would provide useful information for a strategic effort, but requires time and effort to obtain the needed permissions and compile the related data.

It should be noted that a number of experts recommended that land trusts not limit their activity solely to NRCS-level conservation plans. It was felt that there is “enough need out there” and opportunities to pursue similar outcomes via the state’s planning requirements that this option should remain on the table as well.

#### Line up funds for plan writing and implementation

Several experts felt that land trusts would contribute an important service if they lined up private funding for plan writing. This is viewed as overcoming an important hurdle. One expert felt that being able to offer money for plan writing that was not associated with government funding sources might be surprisingly effective. He had just witnessed EQIP money being left unused and felt that there was a resistance to getting plans written that was, in turn, linked to an aversion to exposure to government agencies. He also felt that, without NGO involvement, it was somewhat difficult to get funding for plan writing. In his experience in the Susquehanna basin, there is very high farmer awareness of the state’s requirements for plans, yet a residuum of farms that do not get plans, even after decades of this mandate. Some new approach is needed; perhaps an independent channel for plan creation would do the trick.

One factor identified as important by a TSP partner is lining up funding resources that will support not only costs for plan preparation but also for follow through to get measures installed. “Without that there is no clear path forward,” and the fact that land trusts and other NGOs have been able to line up this funding is of great value. High performing land trusts have been able to help overcome the challenges created by “a patchwork of funding” which impede farmer implementation of measures as well as TSP ability to influence the farmers to undertake more comprehensive fixes.

#### Partnerships on education and delivery

As one interviewed expert phrased it, “land trusts shouldn’t go it alone.” Lining up partners with complementary strengths and experience was recommended frequently as a means to circumvent staffing, budget, and timely performance considerations and as a strategy for seeking funding. If local NRCS offices or County Conservation Districts are able to provide conservation plan writing services in a timely manner, land trusts can partner with these agencies. If circumstances suggest that other partners are needed, land trusts can collaborate with other conservation organizations, the private sector, or both. Multiple experts recommended partnering with the private sector. These firms have highly trained staff in house, and partnering with strength is seen as making a good deal more sense than trying to develop this specialized expertise within land trust organizations.

Other NGOs, Stroud and PASA especially, indicated an interest in expanded partnerships with the land trust community in the eastern and western regions of the state. The private sector TSPs interviewed for this project were also interested in collaborating with land trusts to reach more farmers. The partnership between Stroud, Brandywine, and Mowery Environmental was held up as a model that works well for the private sector TSP and for the NGOs. The TSP found good support for the private sector partner in the provision of funds for both planning and follow up, engineering and construction checks. Stroud relied upon Brandywine and the TSP to do the ‘hand holding’ with farmers that brought projects to completion. Brandywine valued the local presence of this TSP partner and their ability to follow through on implementation with the farmer. Brandywine and Stroud had implementation funds lined up at the time that plan writing was being undertaken; this factor helped avert plans being scaled back to lower cost measures. Both NGOs emphasized the need for a strong private sector to partner with, and the importance of their own role in making critical funds available.

# FUNDING RESOURCES

Before interviewing the land trusts in the Delaware and Ohio River Basins, a quick examination of the availability of funding for land trusts to work on conservation plan development and implementation was undertaken. While NRCS programs and the funders listed here all provide moneys for the measures themselves, a principal focus in these discussions was uncovering funding availability for the time and effort of land trusts for the activities associated with getting a farmer to implement these measures. Consequently, most of the various Farm Bill programs of NRCS are not mentioned here even though programs such as EQIP are vital to BMP implementation. Readers wanting more information on these programs are referred to information on-line. In addition, this summary is limited to synthesizing information on major governmental and quasi-governmental funding sources and does not call out individual private sources of funds which may also provide needed resources.

Interviews were completed with the directors of three funding programs of the National Fish and Wildlife Foundation (NFWF) as well as with the Pennsylvania Bureau of Farmland Preservation which was launching a new initiative with RCPP moneys from NRCS; an initiative which may serve as a model for an expanded program in future years.

The table on the next page presents top line information on these resources along with an example of RCPP money used by the Stroud Water Research Center and the contribution agreements that Chesapeake Bay Foundation and Western Pennsylvania Conservancy have had with NRCS. These examples were included to illustrate how available funding support may be used for outreach and technical assistance services as well as to cover the costs of measures themselves.

## NFWF Central Appalachia Fund

A relatively new fund, issuing its first grant awards in 2017, the Central Appalachia Fund addresses funding priorities of USDA NRCS, the US Forest Service, the US Fish and Wildlife Service, the Richard King Mellon Foundation, the American Forest Foundation, and Shell. In Pennsylvania, the geography of the grantmaking encompasses most of northern, western and central Pennsylvania with portions of the funds directed to defined sub-geographies within the larger region. Among the conservation goals of the fund is improving the quality of habitat in river and stream systems; within this goal, one emphasis is on reducing pollutant and sediment run-off from farmlands.

Funding can be used for outreach, education, technical assistance, and plan writing as well as BMP implementation. While implementation is the ultimate goal, given the 2-3 year award period, there is an expectation that applications will propose plan writing and outreach as well. Outreach and technical assistance are seen as a big part of this NFWF program and innovative approaches would be welcome.

Funds for reducing pollutant loads from farmlands fall under the second conservation objective of this program, “Improve Aquatic Habitats.” Past awards for agricultural BMPs have considered the biodiversity of the watershed in which the investments were to be made and how they would benefit specific aquatic species in that river. Land trusts seeking funds for on-farm work should expect to address the linkage to aquatic ecosystems likely to benefit from their work. Applicants are encouraged to demonstrate partnerships with other organizations in their proposed work.

For agriculture, run-off is the biggest priority. The fund will invest in BMPs to reduce both sediment and pollutant loads. Riparian buffers are one BMP they fund. One emerging area that interests this NFWF

**FUNDING RESOURCES FOR**

**CONSERVATION PLAN WRITING AND IMPLEMENTATION**

|  |  |  |  |
| --- | --- | --- | --- |
| **Source of funds** | **$ for plan preparation** | **$ for implementa’n** | **Notes** |
| NFWF Central Appalachia Fund | YES | YES | Funds projects focused on forest and aquatic systems as well as agricultural conservation. This fund can support a multi-year effort to first write, then implement plans. Will also support outreach and education. Grants range from $50,000 to $200,000 and require a 1:1 match. No funds are offered for land acquisition. |
| NFWF Delaware River Watershed Conservation Fund | YES | YES | Brand new fund with more geographic flexibility than the sister Restoration Fund, covering the entire basin. At this juncture the fund provides moneys for technical assistance to farmers, capacity building, and BMP installation. The fund would entertain applications that include training of land trust staff. Funds can be awarded for BMPs not backed up by a conservation plan if they are proven, cost-effective performers like riparian buffers. Grants range from $50,000 to $200,000 and require a 1:1 non-federal match. No funds are offered for land acquisition. |
| NFWF Delaware River Restoration Fund | YES | YES | Funding for outreach, plan writing and BMP implementation are available in specified sub-geographies of the watershed, per the funding priorities of WPF. Funds have not been made available for ongoing operations and maintenance of BMPs. Grants have ranged from $50,000 to $500,000. Funds for land protection are not combined with funds for restoration. Applicants can use federal dollars for match and several of the larger successful applications have used NRCS dollars for this purpose. |
| NRCS RCPP award to the Pennsylvania Bureau of Farmland Preservation for an Initiative to Implement Conservation Plans and BMPs on preserved farms | YES | YES | Not now available in the Delaware and Ohio river basins, however, if this new initiative succeeds in the Susquehanna watershed, the Bureau will look at expanding this approach to a larger geography. Of the current money, $33,000 out of $6.3 M will be available for plan writing; $1 M will use ACEP funds for easement acquisition, and the balance will go to BMP installation. Fundable BMPs must be recommended by a conservation plan. The Bureau is highly interested in making investments on conserved farms and open to expanding this program. |
| NRCS contribution agreement (CBF example) | YES | YES | These agreements are individually negotiated with NRCS, so will vary, but require a 1:1 non-federal match. The current agreement includes activities under RCPP, EQIP and CREP programs, but CBF is considering adding other Farm Bill programs. A recent (2017) RCPP award for $420k included funds for outreach and technical assistance during both planning and implementation. |
| NRCS Contribution Agreement (WPC example) | YES | YES | Western Pennsylvania Conservancy had a contribution agreement in place with NRCS for 9 years. This covered multiple counties where WPC manpower could fill gaps in TSP availability. |
| NRCS RCPP (Stroud example) | YES | YES | Stroud received $1.5+M in RCPP EQIP funds for work in targeted watersheds in Berks and Chester counties on riparian buffers. Associated outreach work was covered through other funders. |

Coordinator is the potential of linking work addressing gravel roads to this funding program. He sees a lot of potential in this area due to the associated sediment loads. In the end, while outreach is viewed as

necessary, implementation is paramount. Requests for funds should not be solely focused on outreach and plan writing.

## NFWF Delaware River Funds

The National Fish and Wildlife Foundation administers two grant programs in the Delaware River basin which include monies for reducing water quality impacts from agricultural activities:

* Delaware River Watershed Conservation Fund
* Delaware River Restoration Fund

### Delaware River Watershed Conservation Fund

The Delaware River Watershed Conservation Fund (DRWCF), initiated in August 2018 by NFWF and the US Fish and Wildlife Service (USFWS), brings millions of new dollars to the basin for projects to improve the ecological and economic health of the Delaware River basin. NFWF will distribute roughly $4M for fiscal year 2018, an amount determined by Congressional appropriations, for projects which implement the vision of the *Delaware River Watershed Business Plan*[[4]](#footnote-4)*.* The Business Plan includes an emphasis on not only implementation but also capacity building for technical assistance, volunteer development, and municipal engagement. Technical assistance to farmers and increased adoption of agricultural BMPs are explicitly identified as desired outcomes.

The scope of grantmaking under this fund may shift over time to place a greater emphasis on traditional wildlife and habitat objectives of USFWS. However, in this first year, the stakeholders advising the fund’s development persuaded NFWF to implement a broad-ranging grantmaking program which includes technical assistance to farmers. There is great flexibility in what can be funded.

The Delaware River Conservation Fund will provide funds for technical assistance and capacity building. NFWF’s Program Director for the Delaware River views technical assistance as a very valid goal. She feels that there is a need to be deliberate about the longer term value achievable through more technical assistance, and that big benefits can result from these investments. With respect to capacity building, this fund can support skills development of staff, but not the hiring of new personnel.

The program director is interested in the role land trusts could play in helping farmers navigate the Farm Bill programs. In her experience, a number of practitioners have expertise in a single Farm Bill program and they stick to implementing that. She would like to see the expertise of these points of contact broadened so that they can do more in cultivating farm participation. NFWF’s Conservation Fund has greater latitude to fund things like this than its sister fund, the Delaware River Restoration Fund.

The Delaware River Conservation Fund is able to support the installation of some on-farm practices even if the farm does not have a NRCS-level conservation plan. Proven measures with a well documented history are fundable without plans. Riparian buffer plantings are one example of measures NFWF is already confident are good investments. NFWF’s Delaware Program Director is also quite interested in funding restoration work on protected lands and believes there is the potential for a large ripple effect from investments in this.

The Delaware River Conservation Fund can provide support to land trusts working anywhere in the watershed, including areas outside of the Delaware River Restoration Fund. This offers eligibility for projects in large areas of Wayne, Monroe, Northampton, Bucks, and Montgomery counties that cannot receive funding under the Restoration Fund.

The first grant round for DRWCF was underway at the time of the interview; no applications had yet been received, but it was anticipated that the applications may well be for smaller projects, including ones which emphasize plan writing. This expectation was linked to the fact that applicants will have to find scarcer non-federal dollars for matching contributions. In contrast, the established Delaware River Restoration Fund which is supported by the William Penn Foundation is easier to find match funds for; it is anticipated that the types of projects submitted for consideration will differ across the two funding programs.

### Delaware River Restoration Fund

The five year old Delaware River Restoration Fund is supported by the William Penn Foundation, the American Forest Foundation, and the US Forest Service. The Restoration Fund directs moneys to projects to restore water quality and habitats within defined priority geographies within the Basin, called clusters, which reflect strategic funding priorities of the William Penn Foundation. Funding is currently being prioritized to smaller focal areas within these clusters. Awards do not combine funds for land protection and stewardship.

Partnerships between land trusts and private sector TSPs are viewed favorably. It is advantageous to cover the costs of facilitating these arrangements; having someone certified on the applicant’s team who can handle the engineering and design work helps get things done. This approach that has been funded before and it has worked well.

Grants have been awarded to applicants for the purpose of updating existing conservation plans. The Delaware River Program Director indicated this has occurred ‘several times.’

Reviewers prefer applications that are specific about the number of farms that will be addressed. Because there is data to show better outcomes when farmers ‘have skin in the game’ as demonstrated by cost sharing, there is an interest in applications being able to demonstrate this investment by farmers in the queue.

One proposal was received this year to do O&M follow-up on installed conservation practices. In another year with less demand for funds, this might have been successful but it was outcompeted by other applications for new implementation. O&M work is also difficult to find funding for because each grant award has a finite term. It’s unclear where the funding for ongoing maintenance would come from.

A revolving fund is something that has been supported in the past by the Delaware River Restoration Fund and might be again. The past effort was at a relatively small scale. A larger scale revolving fund might be more of a challenge but it is something that could be explored for the Restoration Fund. The Delaware River Conservation Fund does not have the latitude to fund this approach.

## Pennsylvania Bureau of Farmland Preservation promotion of BMPs on protected farmland

With a major award from NRCS RCPP funds, the Pennsylvania Bureau of Farmland Preservation launched a new initiative in 2018 to promote ag conservation on lands protected under the state farmland conservation program. This initiative, which will be focused in six counties in the Susquehanna Basin, will fund conservation plan writing, implementation of BMPs, as well as conservation easement costs. If this initiative proves successful, the Bureau will look at expanding the geography; it is possible that this expansion could extend to watersheds outside the Susquehanna.

In this first phase of the program, the bulk of the funds will go toward BMPs: $1M will be directed toward agricultural conservation easement purchases using ACEP funding, $33,000 will cover plan writing costs, and the remainder of the $6.3 million total will go to plan implementation. The funds for conservation plans and measure installation are sourced from NRCS’ EQIP program.

The philosophy which will guide review of applications is that the needs on the farm will drive funding. This implies the completion of conservation plans for approved applications.

The Bureau of Farmland Preservation wants to get this initiative off to a successful start before looking at expansion in to other watersheds, but it is aware that interest exists, so future discussions should be undertaken.

## NRCS contribution agreements and funding[[5]](#footnote-5)

Two of the organizations interviewed, Chesapeake Bay Foundation and Western Pennsylvania Conservancy, have utilized formalized arrangements with NRCS called Contribution Agreements to further their work with farmers. Under a Contribution Agreement, the NGO and NRCS split the cost of one or more employees whose sole function is to work with farmers to pursue conservation plan implementation by participating in Farm Bill programs. NRCS will enter into a Contribution Agreement with an organization when there is a known need for more manpower in a specific geographic area and when the NGO can provide staff with certified planning credentials and an ability to inventory on-farm resources and practices.

The benefits of a Contribution Agreement are the increased certainty of a farm being approved for cost share incentives, the funding support for land trust personnel, and the increased on-the-ground implementation rates for prioritized practices. Constraints include the exclusive use of the resources and the employee for NRCS programs. This may preclude the employee from pursuing measures with a landowner that fall short of NRCS standards (for example, narrower riparian buffers). Another constraint is the required employee certification; if a certified employee leaves, it may be difficult to replace them with another certified planner. However, when all the conditions align, a Contribution Agreement can be a valuable pathway to boosting ag resource conservation that benefits water quality. One respondent who previously operated under a Contribution Agreement while employed at Pheasants Forever reported that that organization has over 100 employees across the country supported by NRCS Contribution Agreements and the on-the-ground results are demonstrable on maps of the areas where these agreements have been in place.

Land trusts do not need to enter into a Contribution Agreement to benefit from NRCS program funds and in most cases have not. There are multiple cost-share programs, and layers of funding pools which are allocated at the national, state, and Regional Conservation Partnership Program (RCPP) levels. The Director of Pennsylvania’s NRCS programs encourages land trusts to confer with NRCS to identify the best pathways at a given point in time for seeking funds. More than one of the land trusts active in ag conservation indicated that they don’t do any of this work without NRCS, one went so far as to state that he has NRCS staff identify which program to apply to for every farmer he helps seek Farm Bill cost shares.

# PERSPECTIVES OF LOCAL LAND TRUSTS

Seven land trusts operating in the Delaware and Ohio basins were interviewed to investigate what is needed to boost ag conservation activity in these regions. Some of these land trusts are not now working with farmers in this capacity, others have many years of experience working on farm stewardship and assisting farmers in applying for financial assistance. A rough characterization of the interview population would be that 4 of the land trusts have significant familiarity with NRCS programs and are actively working to promote conservation plans and BMPs, with the other 3 having limited or no involvement in this area. The table below introduces information on this research pool, of which two were situated in the Ohio River basin and five in the Delaware River basin.

**OVERVIEW OF INTERVIEWED LAND TRUSTS IN**

**THE OHIO AND DELAWARE WATERSHEDS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level of experience in addressing farm stewardship** | **Number interviewed** | **Level of activity in promoting better on farm stewardship** | **Notes** |
| Highly experienced | 4 land trusts | 3 maintaining or looking to increase level of activity | 1 has a certified planner on staff  1 is having an employee pursue NRCS training  1 is not pursuing training of staff |
| 1 scaling back from past levels | Lost certified planner; focusing on nutrient mgmt. which has less training burden |
| Less experienced | 3 land trusts | 2 interested in increasing activity | No certified planners on staff |
| 1 not pursuing greater activity | No certified staff and no perceived demand for their organization to address farm conservation planning |

## Perspectives of the land trusts active in ag stewardship

All of the land trusts that are highly active in ag conservation work use or have used NRCS funding heavily. This is a central piece for accomplishing ag outcomes. In the words of one, “The funding is a really big thing ... We’re not going to start a project unless we can find the funds for it.” Other funding sources are utilized regularly as well, with NFWF funds being another major resource. Some of the other funding resources used today include Pennvest, Growing Greener, private foundation grants, and, less frequently, funds from water suppliers and other entities, as well as PALTA’s small grants for easement transaction costs. These land trusts take a large degree if not the primary responsibility for lining up the funding that will be used by the farmer to cover BMP costs, recognizing the risk to the farmer if they fail to fully execute a contract with NRCS. It is often necessary to cobble together multiple sources of funds to cover enough of the implementation expenses that a project can move ahead.

These active land trusts are taking different approaches to the challenge of plan writer certification. The extended period of time required for certification and the number of hours of training are such that most land trusts cannot justify putting their employees through the process. The is especially true when the employee’s job would be less than 100% devoted to working with farmers on conservation plans and implementation. The one land trust that is pursuing certified planner training now has justified this decision, in part, on the basis of enabling the staff person to improve stewardship of their own properties with active farming.

One land trust is able to rely upon NRCS field staff and/or county staff to do all the conservation plan writing, and collaborates with TSPs when 590s (federal nutrient management plans) need to be completed. The three others work with private sector TSPs to varying degrees. One has moved out of a past role in which their own staff wrote conservation plans; now they have moved into a role of writing manure management plans and collaborating with TSPs who do the conservation plans. These land trusts have built up a level of expertise on Farm Bill programs over the years and now tend to focus on issues relating to where there are gaps and caps in funding availability that hinder further progress as a top concern.

Similar to other experts, these experienced land trusts emphasized the importance of understanding the farmer’s perspective on farm operations as well as the importance of becoming knowledgeable about agriculture regulations, conservation plans, and cost-share programs. It’s fine for a less experienced land trust to start with one program and to build from there, but personnel in the field are urged to be mindful of being as knowledgeable as possible and not to try to fudge it in conversations with farmers.

One of these land trusts mentioned that they have valued partners among watershed associations who do outreach and farmer identification for them. Most discussions of partnering focused on partners who offer technical assistance skills; this was the only conversation in which the land trust was the receiver of field intel from other NGOs. More often the conceptual model discussed was of a possible arrangement in which the land trust performed the screening role for a partner that would do the plan preparation.

## Perspectives of land trusts not now active in ag stewardship

One of the three land trusts interviewed among those not now active in ag stewardship does not anticipate becoming involved in enrolling farms in cost share programs or in promoting the adoption of conservation plans on farms. To their knowledge, there is no conservation plan preparation need that is not being addressed by the county conservation district, and no known desire among their community members to have their organization step into this role. The two other land trusts in this group were interested in becoming more engaged in this type of role, being well aware of the activities of their fellow land trusts and desiring to join in to a greater extent than they are presently doing. One, which has many protected farms in its portfolio, is eager to do more on the stewardship of eased lands in active farming, but has neither the resources nor the in-house expertise at this point in time. The other, which serves an area with some farms but also with a lot of natural lands along streams, is interested in doing some work on ag stewardship but also equally interested in stream restoration work separate from this. Internal capacity and funding resources are also issues at this organization. Both are interested in creating some means for land trusts like theirs to share resources; this is where the idea of a circuit rider bubbled up in the discussions. There is also a recognition of the untapped potential among their landowners and a desire to find a way to help those willing to implement better stewardship practices. They see greater work with owners of eased lands as a good fit for their mission and operations.

## Receptivity to Potential Pathways

On the basis of the expert interviews, several concepts were vetted with the local land trusts to identify which were most likely to get traction. These concepts included: easement language requiring a conservation plan, partnering with other organizations that have certified planners on staff, a revolving fund to help land trusts cover the costs of plan writing, establishing a contribution agreement with NRCS, helping farmers navigate incentive programs, checking BMP condition in the field, compiling information on farms in their area regarding conservation plan status, and organizing workshops for farmer education. In addition to asking for reactions to these specific concepts, land trusts were prompted for their own ideas as to what would be helpful.

The solutions which seem to appeal to the most land trusts, based on feedback from the seven interviewed, are:

* A circuit rider who would be shared among multiple land trusts
* Partnerships with external parties who have certified plan writers
* Increasing the capacity of land trusts to assist farmers on a one-on-one basis in navigating NRCS cost share programs through training
* Monitoring the condition of BMPs in the field
* Establishing a fund to cover transaction costs for ag-related work
* Incorporating language in easements that requires a conservation plan
* Helping to set up educational workshops for farmers

The first idea in this list, that of a circuit rider, emerged spontaneously from three of the seven respondents and was not vetted with all. But the strength of the tendency to identify this as a solution, and its consistency with concerns raised elsewhere, signify its attractiveness to these organizations.

The concept of a fund to cover transaction costs also arose spontaneously during these discussions. Further details follow on each of the concepts listed above.

#### Circuit Rider

The circuit rider concept was brought up spontaneously by multiple land trusts during discussions about staffing, certification training, and arrangements for working more closely with NRCS. A circuit rider would meet several land trust needs: providing access to individuals with the requisite certification cost-effectively, better matching staffing with expected demand levels for agricultural services, conducting field assessments of the functioning of installed measures, and supporting the need for a full-time, exclusive position if a contribution agreement with NRCS is contemplated. The circuit rider concept has the most potential in the Delaware River watershed where there are multiple land trusts operating; this research found at least three in the region who have an interest in this pathway. Two of the land trusts in this watershed suggested that a circuit rider would be useful as a way to pursue a contribution agreement with NRCS, something they did not otherwise see their organizations pursuing.

#### Partnerships

Few land trusts envision training staff for NRCS program support, judging that they don’t have the demand for a full-time position devoted to ag conservation practices and, given that, they cannot justify the time and expense of NRCS certification training. There is also uncertainty about the ability to afford the salary requirements of certified planners if the land trust were trying to staff up. As a result, most land trusts would opt to partner with outside entities employing certified planners. The ability to partner with county or NRCS staff will depend upon the current staffing at those offices (over which the land trusts have no control), hence this discussion focuses on the potential for increased partnerships with the private sector. The vision of the partnership arrangement is consistent across land trusts: in the preferred construct, the land trust would do the initial outreach to farm owners and operators, while the partner would write the conservation plan. Most land trusts would like to assist the farmers with navigating incentive programs, whether or not they are now playing that role. The one role where there was a split opinion was in follow up work on the implementation of the plan-recommended BMPs, some intending to be active in this role and others looking to the TSP partner to address these needs. Because private sector TSPs will be looking for clarity on expectations around roles in any future partnerships, land trusts should plan to clearly articulate the arrangements they envision. TSPs expect that the land trusts will do the front end outreach, and value that aspect of the partnership but, to build an effective partnership, the full range of interactions should be worked out at the outset.

#### Capacity building

There is interest among the less involved land trusts in expanding their role and a recognition that their staff does not presently have the full skill set or knowledge base that would enable them to perform this role well. These land trusts have an interest in training on agricultural conservation planning, cost-share programs, and the procedures required to apply for the incentives. Experts recommended that training to build capacity of new entrants also cover the fundamentals of agricultural operations. It would be useful to create a training tailored to land trusts with staff who want to enter into agricultural and the land trusts (as well as others) see this as a good role for PALTA. At the time of this writing, PALTA was co-sponsoring a training workshop along with the Land Trust Alliance and others to provide information to land trusts in the Chesapeake watershed. It would be useful to examine attendee feedback from that workshop and to incorporate it along with the findings from this research in planning workshops in the Delaware and Ohio watersheds. The training needs in these watersheds may differ from those in the central part of the state and from each other.

One successful, self-taught land trust employee advised that building capacity in this field requires a commitment to learning, and recommended that land trust staff not rely solely on packaged training sessions to become informed. Great value was found in accompanying NRCS and county personnel during their visits to farmers who were asking for conservation plans and BMP cost shares. By piggybacking on these visits, he was able to build knowledge of the pertinent practices, programs, and resource concerns, knowledge that he has used to assist farmers in applying for funding through all the NRCS cost-share programs.

#### Monitoring the condition of BMPs in the field

Six out of seven land trusts expressed support for this idea, four indicating that this is something that they do already on lands on which they hold easements or own outright. While most land trusts are comfortable with this type of activity, multiple comments reflected its dependence on funding; some noted that the activity would need to be included in a grant award, that there is never enough funding for this work, and/or that it is important that BMP inspection (in a non-regulatory sense) be more fully funded. One remarked that NRCS does inspections in their area, while the land trust monitors non-NRCS funded installations. Others indicated that they would not need funding for monitoring lands that they have protected, but any additional BMP monitoring will require funding.

#### Transaction cost fund

A couple land trusts specifically suggested a fund analogous to PALTA’s conservation easement assistance fund, a fund that would cover the costs incurred by the land trust in transacting business supporting improved agricultural practices. Such funding would be useful to both those land trusts not presently doing much work on ag land stewardship as well as to highly active land trust staff who cobble together funds from multiple sources in order to continue their ag work. Land trusts seem to have relied primarily on private funding sources for these revenues to date, with mixed results.

#### Requiring conservation plans for new easements

A couple land trusts indicated that this is already their practice and a couple more indicated it was something they could consider doing. Another couple indicated that they would not imperil an easement transaction if the conservation plan was a sticking point, as land protection is their primary mission. One made the point that the act of protecting the land is, in itself, contributing to the water quality of the watershed by permanently removing the possibility of development and increased impervious coverage.

#### Workshops for farmers

Land trusts were about evenly split on their interest in helping set up workshops for farmer education. For the purposes of discussion, it was assumed that willing partners with technical expertise would be available as speakers. During the expert interviews, a couple organizations [Stroud, Pennsylvania Association for Sustainable Agriculture] expressed interest in collaborations to offer workshops on particular sustainable agriculture topics and/or cost share programs. Stroud also suggested that the Pennsylvania No Till Alliance was also very likely to be interested in providing speakers for workshops.

#### Other concepts

These interviews directly examined land trust interest in several other concepts as well and uncovered less interest in the following: hiring a certified planner in house, putting a staff person through NRCS training for plan writer certification, individually establishing a contribution agreement with NRCS (although a shared circuit rider model might be of interest), tapping in to a revolving fund for agricultural conservation planning work, and systematically profiling the farms in an area to determine needs for conservation plans or updates and/or BMP follow-up. Reasons for the lesser interest in these pathways were related to cost versus need, wariness of using loans to bridge funding gaps, and a lack of necessity for the systematic farm profiling at their expected levels of activity.

#### Additional ideas

Some additional ideas were brought forward during the interviews, but, because they arose spontaneously out of the conversations, they were not systematically tested with all respondents. Other noteworthy suggestions included the following:

* Funding collaborations Funding collaborations in the Chesapeake and the Schuylkill basins (the Chesapeake Bay Funders Network and the Schuylkill Action Network, respectively) were instrumental in providing critical resources for NGOs working to promote on-farm BMPs. The potential for replicating these models is worthy of investigation to sustain and increase conservation efforts. The SAN model brought together federal, state, and county government agencies, as well as multiple water suppliers. Private foundations could may be recruited into new funding collaborations focused on a shared mission of protecting water quality, as demonstrated by the example of the Chesapeake Bay Funders Network.
* Establishing new state funding resources One concept that was mentioned was a funding option that would better serve mosaic properties and landscapes that are part ag, part natural resources; this could be considered as a new direction for future Growing Greener moneys. Another need identified was for the protection of seeps and springs on farms. It was also mentioned NGOs are often outcompeted by county conservation districts for funding in this arena and that if might be valuable to establish funding set-asides targeted to NGOs as a means of increasing the number of actors working on water quality on farms.
* PALTA workshops for land trusts Most land trusts interviewed feel that it would be valuable for PALTA to offer workshops or forums for discussing ag issues and funding programs. One interested land trust stated, “Getting up to speed is our greatest need.” Some specific topics of interest included a basic introduction to NRCS and other programs, information on the components of conservation plans, and case studies of what is being done by other land trusts. Featured speakers might include private sector TSPs, NRCS and Conservation District personnel, and experienced land trust staff.
* Promoting a transition to organic farming One respondent heavily emphasized the potential in fostering a transition to organic farming as another pathway. Taking an active role in promoting organic practices might ultimately benefit land protection as well as improved water quality. Because organic farming creates a more viable livelihood for farmers, yielding 2-3 times the per acre returns, being the advocate for that might cause farmers to become more interested in other objectives of the land trusts.
* PALTA policy actions Several ideas were proposed for lobbying that PALTA could undertake. These included:
  + lobbying DCNR for a circuit rider to address ag conservation
  + lobbying DEP to expand its program offering funds for conservation plan preparation
  + lobbying the state to do more to incentivize and get information on organic farming in to the hands of farmers
  + lobbying for ag stewardship funds in the next round of Growing Greener
  + lobbying to lift the annual funding caps on CRP and CREP awards
  + work toward establishing a precedent demonstrating that the Act 115 language allowing up to 25% of referenda funds be used toward maintenance can be applied to eased land, not merely fee simple acquisitions.

# Appendix A: Organizations and individuals who participated in this research

The author thanks the following individuals for sharing their time and perspectives during the course of this project.

Organization Individual contacted

Allegheny Land Trust Christopher Beichner

Roy Kraynyk

Alliance for the Chesapeake Bay Ryan Davis

Berks Nature Larry Lloyd

Brandywine Conservancy John Goodall

Grant DeCosta

Chesapeake Bay Foundation Bill Chain

French and Pickering Creeks Conservation Trust Bill Gladden

Heritage Conservancy Kris Kern

Lancaster Farmland Trust Jeffery Swinehart

Mowery Environmental Adam Mowery

National Fish and Wildlife Foundation Jake Reilly

John Wright

Rachel Dawson

Natural Lands Dave Steckel

Pennsylvania Dept of Agriculture , Bureau of Farmland Preservation Doug Wolfgang

Stephanie Zimmerman

Pennsylvania Association of Sustainable Agriculture Hannah Smith-Brubaker

R-Farm, LLC Roger Rohrer

Stroud Water Research Center Lamonte Garber

Team Ag Chris Sigmund

Jedd Moncavage

USDA Natural Resources Conservation Service Denise Coleman

Gwendolyn Crews

Western Pennsylvania Conservancy Jennifer Farabaugh

Woods and Waters Consulting Katie Ombalski

# Appendix B: Other insights

This appendix captures lessons learned from both outside experts and active land trusts, lessons which didn’t fit well in to the body of this report but which are likely to be of benefit to land trusts who seek to step up their activity on stewardship of agricultural lands.

## Outreach to farmers

Relationship building is central to effective outreach with farmers. When working with protected farms, land trusts have an advantage as a result of that ongoing relationship. Land trusts can build upon that trust; having a local presence and not being a regulatory entity are other strengths. Private sector TSPs can also build trusted relationships with farmers. In either case, the relationship is of paramount importance in being able to persuade farmers to venture into new practices or to incur new expenses on their farms.

One approach that a land trust can take to farmer outreach is to focus on landowners with easements. A land trust might begin by determining who among their easement holders has a conservation plan, whose plans are up to date, and who does not have a plan, current or otherwise, for their farm. Another suggestion was to take a targeted approach to outreach as a way to build impact. Success in a farming community builds from word of mouth, with neighbors influencing neighbors. A successful effort in a smaller target geography can grow to influence a larger area.

Respondents who have years’ of experience in assisting farmers emphasized that when doing outreach to farmers it is critical to remain cognizant that farming is a business upon which that family depends. Every option that reduces the acreage in income-producing use lowers the ability to provide for the family. Land trusts should be prepared to articulate the return to the farmer of the measures being recommended. It is also important to recognize that farmers generally intend to be good stewards of the land and see themselves as such. Conversations about changes to current farm operations should be undertaken with that context in mind.

Sometimes flexibility on the resource solutions will be critical. Land trusts should strive to solve resource problems while also fitting the needs of the farm. Discussions with farmers should reflect this balancing of priorities; land trusts should be attentive to the financial and business concerns that are the context for the farm’s conservation efforts. One TSP cited as a model the philosophy of Doug Beegle of Penn State as helping farmers develop the information and skills to improve their decisionmaking.

Another suggested outreach approach is to engage farmers who can serve as shining examples of operations with fully implemented conservation plans. Letting the success stories be told by peers is another angle on delivering a message through a trusted source. In addition, this expert recommended finding opportunities to do outreach at meetings other organizations regularly host for farmers. Off-season (winter) meetings were recommended.

It was also emphasized by multiple experts that individuals doing outreach on agricultural practices will need to have a basic understanding of farming and should not pretend to have knowledge or expertise that they do not have. Experienced practitioners reported that farmers can be quick to dismiss people that they view as ill informed. Land trusts should pursue staff training as needed; PALTA could play a valuable role in helping fill the educational needs of its members by organizing trainings with expert speakers.

## Building internal capacity

With respect to plan writing, this task falls to certified plan writers, and the proper training and expertise of these plan writers is viewed as being of paramount importance by experts in ag conservation. Because certification requires a major commitment, several respondents warned land trusts considering putting their own employees through NRCS certification to assess whether that investment of time and effort is worthwhile. One of the larger land trusts is pursuing that option now to help them in better managing their own preserves, but the prevailing opinion was more of a sense that the certification process is “impossible” for land trusts or unduly drawn out.

Some land trusts have hired certified planners from the work force. Brandywine Conservancy has a certified planner on staff full time. Western Pennsylvania Conservancy once did as well. Chesapeake Bay Foundation hired retired NRCS personnel into part-time positions, supplementing these individuals with staff to handle data entry tasks for using NRCS software. Land trusts should anticipate that individuals who have a planning certification from NRCS will command higher salaries.

As a result of the expense and the training difficulties, land trusts may opt to seek out partners who employ certified planners, rather than put their own staff through the training process. However, there are other ways to strengthen internal capacity with respect to ag expertise. Less demanding coursework on related training could be a valuable investment, more commensurate with the needs and abilities of a land trust. Western Pennsylvania Conservancy is a model of one pathway for building capacity by pursuing other certifications for staff. WPC has members of its ag staff get certified to do nutrient management plans and/or erosion and sedimentation plans. In their experience, there is also a shortage of writers of nutrient management plans and the training can be completed within a six month period. The training for E&S plan writing can be completed on-line.

## Partnering with Private TSPs

The two private sector firms interviewed expressed interest in working with land trusts and in having a clear understanding from those organizations about expected roles, processes, and outcomes. For example, is the objective to focus solely on Farm Bill programs or would Erosion and Sedimentation Plans along with Nutrient Management Plans be adequate? Who will handle initial outreach and subsequent follow up with farmers? Does the land trust prefer turnkey services from the TSP or a more partnered approach? What are the expected timelines and deliverables? One of the land trusts that is already partnering with private sector plan writers similarly emphasized the importance of having conversations with these partners to help align outcomes and understand the timelines for plan writers so as to allocate plan writing jobs effectively.

Private sector TSPs are attuned to the dual goals of farm economics and healthy ecology which will shape farmer decisions on BMPs. They will try to find a fit for the farmer’s objectives, and will be mindful of concerns over how the farmer will pay for recommended measures. Land trusts should communicate to TSPs early on about any new funding resources they can bring to bear that will facilitate implementation of more comprehensive plans that might otherwise be beyond the means of the farmer.

One TSP respondent wanted to make the point that estimating project costs can be challenging as they are influenced by varying inputs such as PNDI hits and township ordinances. This may necessitate more expense up front than is initially anticipated, funding to cover the work with municipalities and the state to get needed approvals. Such costs may arise as much as one-third of the time and unanticipated costs will often be a burden to the farmer.

If one or more land trusts are working to bring TSPs into an area where they are not presently based, it should be recognized that this will incur travel costs on top of the costs of service onsite. If land trusts can help in creating a pipeline of work for these firms, this could be helpful in building a stronger private sector.

## Helping farmers navigate cost share programs

Practitioners who work with farmers recommend staying involved with the farm owner after the plan is written. If obstacles arise when applying for incentives or during the implementation process, serve as an intermediary to help the farmer in navigating these. The smoother the process for the farmer, the more likely they are to recommend going through it to their peers. Land trusts should not assume others are addressing these challenges; facilitation in the implementation stages can be a great value to the farmer.

To expedite the process of applying for incentives, one land trust recommends compiling lists of the practices that need to be implemented, including the measure name, code, quantity, and other details in a summary record to be referenced during the application process.

One basic matter to address in working with farmers who have a conservation plan is to have them sign NRCS’ release – the 1619 release of records agreement – that grants permission for NRCS to share the conservation plan’s information with a third party. A land trust will have no access to the information on recommendations if the farmer has not signed this agreement, and usually the farmers are not aware there is a constraint on land trusts gaining access to the information. Land trusts should be proactive in addressing this privacy issue so that their efforts to aide farmers are not hindered when attempting to pursue cost share funds.

Once a contract between farmer and NRCS is signed, NRCS expects all the measures to be implemented. It is important to have all the funding for implementation lined up in advance to avoid a situation where there is a failure to fulfill the contract obligations. Financial penalties can be assessed and the farmer may be required to return monies. There is also reputational risk involved for the land trust if the farmer feels that they weren’t supported through the process.

Working closely with NRCS can help in this regard. One active land trust reported that regional NRCS staff will identify which programs fit the farm. While EQIP is most often the program used, the NRCS advice can open up other options; it was highly recommended to be in dialog with NRCS.

## Collaborating with NRCS

NRCS has witnessed multiple success stories involving land trust partners and is open to further future partnerships. However, their perspective on what is needed may vary from one part of the state to another, depending on known manpower issues and backlogs which are uneven from place to place. Land trusts are advised to coordinate with NRCS when developing strategies for farmer outreach and assistance.

Successful working relationships can take different forms. A land trust might establish a formal agreement with NRCS or, more simply, stay in close contact with regional NRCS staff while trying to get farmers assistance through NRCS programs. The latter works well where NRCS offices are well staffed and the regional rep can work closely with the land trust staff. NRCS staff can suggest which programs the farmer should apply for; this information has proven vital to land trusts that have been working closely with NRCS. From NRCS’ perspective, the collaborating NGO alleviates workload for their staff.

Land trusts who seek a closer working relationship with NRCS may want to establish a more formalized agreement in which NRCS helps cover salary of employees working on conservation plan writing and implementation. NRCS has two types of partnership agreements which land trusts and other NGOs can utilize when there is deemed to be a need for more certified personnel in an area – and if the NGO can meet NRCS standards. The Contribution Agreement has been used by NGOs in Pennsylvania, including Chesapeake Bay Foundation, Pheasants Forever, and Western Pennsylvania Conservancy. Under this agreement, NRCS will pay 50% of an employee’s salary for work to enroll farmers in NRCS programs. The employee needs to be dedicated to this role, and may be asked to work at least part of the time out of an office of NRCS. The skill sets NRCS looks for in these arrangements include plan writing, an ability to inventory on-farm practices, and the ability to create positive relationships with farmers. NRCS recognizes that some farmers prefer to work with a non-governmental entity and sees NGOs as providing value in filling this function. In NRCS’ experience, the 50% match requirement is the largest challenge for NGOs interested in a Contribution Agreement.

In the second formalized arrangement, the Cooperator’s Agreement, NRCS covers 100% of the services provided by the cooperator, but the threshold for eligibility is set higher. Not only must the cooperator have a certified planner, they must also have engineering services capability. These are skill sets commensurate with those of NRCS staff, a high bar to meet.

1. *Water Quality and the Pennsylvania Agricultural Conservation Easement Purchase Program*, prepared for PALTA by Kreitler Research & Consulting, 2016, at https://conservationtools.org/library\_items/1447-Water-Quality-and-the-Pennsylvania-Agricultural-Conservation-Easement-Purchase-Program-An-Examination-of-Present-Practices-Challenges-and-Opportunities [↑](#footnote-ref-1)
2. Nutrient management plans or 590s are an additional type of plan required for entry into NRCS’ cost-share programs. There are related plans required by the state; for an overview, see the fact sheet published by Penn State at https://extension.psu.edu/programs/nutrient-management/act-38-law-and-regulations/pa-planning-summary [↑](#footnote-ref-2)
3. In theory, an ag conservation plan is supposed to be updated every 10 years. In practice, this is not enforced and many farms hold plans that are out of date. Similarly, ag conservation plans are supposed to be updated to reflect changes in farm operations, but this frequently is not reflected in the conservation plan. [↑](#footnote-ref-3)
4. At http://www.nfwf.org/delaware/Documents/delaware-river-watershed-business-plan.pdf [↑](#footnote-ref-4)
5. As mentioned previously, this discussion is not intended to provide a thorough review of NRCS funds for ag resource conservation. Instead, it is highlighting two approaches to obtaining NRCS financial support for land trust personnel as they enroll farmers in cost share programs and assist them in implementing conservation plans. [↑](#footnote-ref-5)