

# NONPOINT FINANCE PROJECT

## *SUMMARY OF FINDINGS AND RECOMMENDATIONS* *Chicago Nonpoint Finance Forum,* *October 13, 1999*

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*The Nonpoint Finance Project is a joint effort of the Marine Studies Consortium, Chestnut Hill, MA, and the Northeast-Midwest Institute, Washington DC. The Project's goal is to develop innovative ideas that improve the efficiency, effectiveness, and integration of federal funding programs that address NPS water pollution. The Project is funded by a grant from the Joyce Foundation.*

*On October 13, 1999, the Nonpoint Finance Project held its first forum at the Chicago Illini Union on the campus of the University of Illinois, Chicago. The Forum brought together representatives from state and federal agriculture and environmental agencies, as well as members of the environmental, sustainable agriculture, and finance communities. Representatives of agricultural organizations, particularly the Farm Bureau and the Farmers Union, could not attend but expressed interest in continuing to work with the Project.*

*The following report provides background on the Nonpoint Finance Project and the October 13 forum. The report also explores potential future activities and directions for the Project.*

## INTRODUCTION

### *Background*

The percentage of degraded U.S. lakes, rivers, and streams decreased from more than 60 percent to 26 percent from 1972 to 1989. This improvement was due largely to enforcement against point sources of pollution under the Clean Water Act (CWA), in conjunction with federal/state funding programs for municipal wastewater treatment. However, despite the CWA's continued success at reducing point source pollution, U.S. water quality has declined over the past decade, reversing the positive trend initiated by the CWA. According to the Environmental Protection Agency (EPA), the fraction of degraded U.S. waters increased from 26 percent in 1989 to 36 percent in 1999, due mainly to the growth of nonpoint source pollution (NPS). EPA estimates that NPS pollution accounts for 60 percent of all water pollution.

The adverse impact of NPS pollution is gaining increased attention from the media. Hog lagoon ruptures in North Carolina, outbreaks of *Pfiesteria* in the Chesapeake Bay, and the "dead zone" in the Gulf of Mexico have made national headlines. Americans are becoming increasingly aware of NPS pollution's impact on public health and quality of life.

On the legal front, environmental groups have successfully sued the EPA and dozens of states under Section 303(d) of the Clean Water Act. These suits have compelled states to develop total maximum daily load (TMDL) limits for pollutants in water bodies that do not meet water quality standards. These TMDLs will draw attention to NPS pollution's contribution to degraded water quality and increase pressure to regulate or otherwise reduce NPS pollution.

Paradoxically, growth of NPS pollution and the corresponding decline of water quality have occurred despite a growing federal commitment to NPS remediation. NPS pollution has also been targeted by the Clean Water Action Plan, a joint effort of the EPA and U.S. Department of Agriculture. EPA has effected stricter regulation on animal feeding operations and stormwater runoff, formerly considered nonpoint sources, by reclassifying them as regulated point sources. In addition, the Clinton Administration successfully has fought to nearly double the budget for EPA's NPS remediation program (Section 319 of the Clean Water Act). In all, perhaps \$2 billion per year in grants or loans is potentially available for NPS projects, mainly through USDA and EPA funding programs.

While the federal government has dedicated significant fiscal resources to NPS abatement, little attention has been given to maximizing their efficiency. Given tight federal budget caps and growing demands for NPS abatement, it is critical that every federal pollution abatement dollar be spent as effectively and efficiently as possible.

## *The Nonpoint Finance Project*

The Nonpoint Finance Project seeks to develop innovative ideas to improve the efficiency, effectiveness, and integration of federal funding programs for NPS pollution remediation. In short, the Project aims to ensure that every dollar spent on NPS pollution purchases the maximum NPS abatement possible.

The Project explores NPS finance through forums involving key stakeholders, including the regulated community, regulators, funding program managers, environmental and agricultural organizations, finance experts, and academics. Project forums examine how federal NPS programs and other potential NPS funding mechanisms may be integrated, leveraged, or otherwise changed to make NPS funding efforts more efficient and effective. Changes to current law, regulation, finance mechanisms, and technical assistance programs are within the purview of the Project. The forums are confined to finance issues, and thus do not address whether or how to regulate NPS pollution. In particular, the forums seek to:

1. Identify inefficiencies in federal NPS funding programs;
2. Consider innovative finance mechanisms and funding sources; and
3. Explore how to integrate, modify, or leverage NPS funding programs in order to maximize their effectiveness and increase NPS funding.

## *Developing a Forum Structure*

To help develop a forum structure, the Project convened a working group that represents a broad array of NPS stakeholders. Working group members include representatives from Clean Water Action, Council of Infrastructure Financing Authorities, Farmers Union, Soil and Water Conservation Society, and University of Maryland Environmental Finance Center.

Rather than present a series of abstruse ideas to forum participants, the working group decided to challenge participants to use their own creativity. To this end, the working group developed a forum structure (Appendix A) centered on the analysis of innovative finance mechanisms described in a hypothetical farm scenario (Appendix B). The forum structure requires participants to divide into break-out groups to analyze the scenario's innovative finance mechanisms, propose changes to these mechanisms, and develop new ideas of their own. During a final session, participants attempt to reach consensus on the proposals developed in response to the scenario, then make recommendations to guide future Nonpoint Finance Project efforts.

In addition to its contributions to developing the forum structure, the working group provides valuable feedback on the scenario and other aspects of the Project. For example, the group recommended that the Project provide forum participants case studies of innovative NPS project finance (Appendix C), and descriptions of federal programs that provide NPS funding (Appendix D).

## THE CHICAGO FORUM

The first Nonpoint Finance Project Forum was held on October 13, 1999, at the Chicago Illini Union on the campus of the University of Illinois at Chicago. Twenty-three participants attended the one-day forum (Appendix E contains a list of participants).

Each breakout group was assigned several tasks. In the first breakout session, participants were asked to analyze the funding mechanisms contained in the scenario and answer several questions. In particular, they were to decide (1) whether the ideas in the utopian NPS funding scenario were good ones? (2) what would work better? and (3) at what level are changes needed: local, state or federal; legal or regulatory?

In the second break-out session, participants were asked to (1) outline what it would take to implement their recommended changes to NPS finance programs; (2) make recommendations for legal, regulatory, inter-agency or “behavioral” changes at both the state and national levels; (3) identify which constituencies would need to be enlisted to implement their vision; and (4) tell how they would enlist the support of these constituencies.

Due to time constraints, neither breakout group was able to answer all of these questions, particularly those concerning implementation. However, each breakout group did provide valuable feedback on the innovative funding mechanisms contained in the scenario, as well as on several funding mechanisms suggested by forum participants.

### ***Breakout Group #1***

This breakout group did not closely adhere to the structure provided by the questions in the forum schedule. Instead, its members developed an overarching set of principles to guide NPS funding programs and developed a toolbox of innovative finance mechanisms. The finance mechanisms contained in the toolbox were drawn from the forum scenario, participants’ recommendations, and federal programs not traditionally considered as NPS funding programs.

Breakout Group #1 developed six guiding principles for funding NPS abatement efforts:

- Identify the problem.
- Fund the problem, not the program.
- Integrate funding streams and program administration.
- Coordinate funding priorities.
- Allow innovative and flexible financing.
  - develop options on a watershed basis.
- Recognize the interaction of regulation and financing voluntary efforts (the stick and the carrot).

Within the framework of these principles, Group #1 supported providing to NPS program administrators a broad array of flexible funding mechanisms. To this end, the group believed

that the following innovative finance mechanisms deserved strong consideration as potential tools in the NPS toolbox.

1. Greater Flexibility for Acquiring Permanent Easements.

Many programs contain restrictions that make it difficult, if not impossible, to acquire a permanent easement. Participants felt that permanent easements were an important tool for addressing NPS pollution, particularly when promoting buffers within riparian zones. In particular, participants supported the creation of a *de minimus* exemption from restrictions on permanent easements for easement in a riparian zone.

2. Non-Profits Financing NPS Abatement.

Several nonprofit groups, such as Ducks Unlimited, Trout Unlimited, and the Sportfishing Association, may have some interest in funding Best Management Practices (BMPs) as a way of increasing wildlife habitat. In fact, Ducks Unlimited helps fund wetlands restoration efforts in Maryland. Participants believed that non-profits should be considered as a possible finance source for NPS abatement, particularly for funding the local match for federal programs. However, several participants emphasized that the landowner should be required to pay some part of the cost of implementing a BMP. Without this requirement, the landowner would not have a financial stake in seeing the NPS abatement succeed.

3. Providing SRF Loans to Farmers vial Local Banks.

In Ohio, West Virginia, and elsewhere, the state SRF agency purchases certificates of deposit in local banks to serve as collateral for loans to fund qualified water-quality projects. The banks assume the responsibility of checking the credit-worthiness of the borrower and servicing the loan. The bank funds its administrative costs from the spread between the interest rate on the CD and the interest rate on the loan. Group #1 participants supported the use of SRF linked deposit loans.

4. US Army Corps of Engineers Funding for BMPs.

The group supported U.S. Army Corps of Engineers funding the creation of wetlands for NPS mitigation purposes. The group also supported Corps financing for habitat restoration and other projects that would qualify as structural BMPs.

5. Wetland Mitigation.

Participants generally supported the idea of using wetland mitigation as a means of funding NPS abatement efforts. Entities required to offset the loss of wetlands elsewhere could be encouraged to fund the construction of wetlands that would serve as structural BMPs. Participants noted the prevalence of wetland mitigation banks, but expressed concern about the effectiveness of constructed wetlands.

6. Municipalities Funding Agricultural BMPs.

In certain instances, municipalities may be able to reduce their drinking water and sewage treatment costs by funding BMPs on farms and other private lands. Implementing these BMPs may reduce polluted runoff and improve water quality. Better water quality can reduce a city's cost of treating drinking water or may be the most cost-effective way of

meeting water quality standards in a watershed that receives the city's treated wastewater. Group #1 encouraged NPS programs to consider municipalities as a possible funding source.

7. Using SRF Loans to Fund Local Matches.

EPA's nonpoint program and most federal agricultural conservation initiatives require beneficiaries to provide a local match for any federal grants. Nothing in federal law prohibits grant recipients from borrowing from the SRF to obtain the local match. Unfortunately, many states have adopted regulations that prohibit their SRF from making such loans. Participants supported lifting these state restrictions.

8. SRF Collateral Reserve Arbitrage Capture.

State SRF funds are financed in part through federal capitalization grants. Some states use these grants to issue bonds, which allows the state to create a bigger pot of money for making SRF loans. When doing so, the state must set aside funds to serve as collateral for the bonds. Federal law restricts the return (interest) that these collateral funds can earn to the interest rate on the bonds issued by the state. U.S. Treasury Notes or other AAA bonds usually pay a higher interest rate than state bond rates, sometimes in excess of 1% higher. If states could invest their collateral funds in U.S. treasury notes or AAA instruments, the additional return on collateral could fund other water projects. This process of buying and selling notes with different interest rates is commonly called arbitrage. Forum participants would support SRF arbitrage if arbitrage returns were directed toward NPS abatement. Arbitrage is a fairly complex concept and some participants may not have fully grasped the intricacies of this proposal.

9. NPS/Green Taxes & Fees.

Several states impose taxes or fees on agriculture products that contribute to NPS pollution (fertilizers, pesticides, herbicides, etc.). Most use the revenue from these taxes to fund projects that address farm pollution. Participants in Group #1 believed this fee/tax system should be considered as a means of financing NPS abatement, while recognizing that instituting such a tax would be difficult politically. NOTE: no agricultural organizations (those most likely to oppose taxes) attended the forum. Several were invited.

10. Accumulator Effect.

Provide a financial bonus or some other type of reward to encourage group participation and performance in NPS abatement efforts.

11. Provide Flexibility to Fund Education, Outreach, Administrative Support, and Technical Assistance.

Too often, NPS programs overlook marketing and selling the program to its target audience. A program can be successful only if the target audience is aware of its existence and understands the benefits that the program provides. As an example of an unnecessary restriction, the group cited the Clean Water Act state revolving fund (SRF) 4-percent cap on administrative costs. The group supported lifting this cap.

12. Joint Applications.

Develop a single application for customers (farmers) to fill out when applying for financial

assistance from several different programs. Participants commented favorably on the State of Illinois' efforts in this area.

13. Removing Restrictions on Federal SRF Grants.

Under current law, Congress appropriates funds to states for the purpose of capitalizing their clean water and drinking water SRFs. States cannot use these funds to issue grants or below-cost loans. Group #1 believed that states should have the flexibility to use these funds for this purpose in limited situations (for example, negative interest loans in hardship cases). NOTE: this concept is similar to the Clinton Administration's proposal to set aside 20 percent of fiscal 2000 SRF funds for NPS grants.

14. Income and Property Tax Credits for NPS abatement.

Under this proposal, farmers and other landowners would earn tax credits for implementing whole farm plans or BMPs. While the group supported the use of tax credits, they did note that some municipalities might oppose property tax credits that could erode their tax base. The group also expressed concern that some farmers may not have sufficient income to qualify for an income tax credit.

15. Expand Federal Reforestation Tax Credit.

Under current law, the federal government provides a 20 percent tax credit against the cost of planting trees in an area that traditionally has been forest land. Under this proposal, eligibility for the tax credit would be expanded to include agricultural land, particularly riparian zones and plantings designed to serve as filter strips.

16. Non-traditional Federal NPS Funding Streams.

Group #1 participants noted that SRF abatement could be funded through federal programs administered by the Federal Emergency Management Authority, the U.S. Department of Transportation, and the Rural Utilities Service. Participants encourage interested communities/individuals to explore these sources when pursuing NPS abatement.

Participants were ambivalent or had concerns about the following innovative finance proposals.

1. Unified USDA Easement Programs.

Under this proposal, several federal land retirement programs would be combined into a single program dedicated to environmental purposes, including NPS abatement. Group #1 participants were apathetic about this proposal, feeling it was more important to integrate and coordinate all NPS abatement efforts. Under the theme of "fund the problem, not the program," participants did express concern about whether large land retirement programs were sufficiently targeting environmental problems such as NPS pollution.

2. 100 Percent Up-Front Easement Payments.

Under this proposal, landowners would be able to receive an up-front, lump-sum payment, as opposed to annual rental payments for taking land out of production. Participants were concerned that up-front payments would remove a landowner's incentive to maintain BMPs on the retired land. Participants also noted that land retirement payments currently are

assignable, meaning that landowners could sell the right to their annual payments for an up-front lump sum.

As noted earlier, participants in Breakout Group #1 did not have time to discuss how to implement the policy changes they endorsed. Nor did they have time to identify the particular legal, regulatory, or behavioral barriers that prevented the use of the innovative funding mechanisms contained in their toolbox.

### ***Breakout Group #2***

Breakout Group #2 took a more structured approach to evaluating the innovative finance mechanisms contained in the scenario. For each mechanism, the group discussed its operation, debated its pros and cons, and then voted yes, no, or neutral to each idea. Because time was short, most discussion focused on the concepts that the group judged to be most viable.

#### Unified USDA Easement Programs

5 yes    3 neutral    1 no

As envisioned by the group, this mechanism would function more or less like the existing CREP - focused on water quality and/or habitat restoration. While the group was generally supportive of the concept, there was concern that some states may not be as supportive. In particular, participants noted that those states not prepared to meet the 20-percent match for CREP are unlikely to embrace this unified easement program.

The group also spent some time discussing the use of permanent easements. While the group supported permanent easements, it strongly believed that they should be one of several land retirement options provided to farmers. Participants also noted that some farmers might be concerned about the federal government holding title to the easements. The Illinois CREP addresses this concern by holding easements at the county level. According to participant surveys by Illinois Department of Natural Resources, localizing easement ownership was an important selling point for its CREP.

#### 100 Percent Up-front Easement Payments

all yes

While very popular with Group #2, there was concern regarding how to enforce BMP provisions required as part of the easement. Participants noted that Illinois enacted the Real Property Conservation Rights Act in order to help address this concern. The law empowers the state to enforce compliance with the terms of a conservation easement funded in any part with state dollars. One participant noted that, because permanent easements always involve state funds, it would be easier to enforce BMPs associated with permanent easements than BMPs associated with a standard CRP ten-year contract. Under current law, USDA can take action against a farmer that has abandoned a required practice, regardless of the duration of the easement/retirement contract.

Participants from Illinois and Minnesota observed that the default rate on CRP and CREP contracts was very low (probably less than 5 percent), and that landowners were usually quick to respond if violations were brought to their attention. Participants also underscored that choice (providing the option of an up-front payment) is an important selling point to farmers.

#### Helping Landowners Develop and Market Hunting & Fishing Rights

3 yes 5 neutral 2 no

Landowners already have the ability to sell or rent certain land use rights on CRP lands, and an active market exists for such rights in some states. In other states, the terms of easements held by some state departments usually require that the land become open to the public. Ultimately, the terms and price of the easement should reflect the rights purchased from the farmer.

An intrinsic conflict regarding the notion of selling rights on easement land is the issue of whether the public should have access to easements purchased with federal dollars. After a CREP easement sale most rights to the land remain with the farmer, who often wants to maximize profits on his lands by selling hunting or fishing rights. Participants noted that in at least two states, Illinois and South Dakota, the relatively lively market for hunting and fishing rights has created a tourism benefit that is valued by rural communities. As the vote indicates, the group felt that issue was too complicated to have simple solutions that would please everyone.

#### Combining EQIP, Section 319, and SRF loans at the field (delivery) level

all yes

Before addressing this proposal, Group #2 first discussed the pros and cons of current programs. Participants noted that 319 and SRF are not well coordinated, that some landowners are unable to provide the cost-share for 319 and EQIP grants, that SRFs do not make enough loans for NPS purposes, and that there is little assessment of ecosystem baseline conditions or the beneficial impacts of BMPs.

Some states have made important steps towards integrating environmental and agriculture programs. For example, the Ohio EPA has an effective invertebrate sampling-based monitoring program, which NRCS relies on to identify problem watersheds where EQIP funds should be targeted. Illinois has a joint state-federal interagency watershed program for four watersheds that combines 319 funding and State of Illinois Conservation 2000 funding. Participants noted that, unless the local match requirement for 319 is relaxed, states would have to meet the 319 cost-share, as Illinois has done, to imitate such monitoring programs.

The downside to concentrating funding on critical watersheds is that fewer watersheds will receive funding. However, Group #2 felt that targeting various funding streams to critical watersheds is the only way to demonstrate the pollution control benefits of BMPs and other conservation practices.

Participants also noted two ways to make it easier for states and landowners to meet cost share requirements: 1) allow states to apply their cost share contributions more than once if they satisfy the requirements of distinct federal programs, and 2) make it easier for SRFs to issue loans to farmers for BMPs/cost share matches.

### Providing SRF Loans to Farmers via Local Banks

8 yes 2 neutral

Federal law allows state SRFs to loan money to private individuals for NPS abatement efforts (BMPs). However, many states have erected legal and programmatic barriers to this practice. In addition, federal law requires that SRFs identify some revenue stream that will be used to repay SRF loans. While municipal utilities can meet this requirement with revenue from ratepayers, the reliability of farm revenues as a SRF repayment source is difficult to evaluate.

Some states have removed these barriers by processing SRF loans through local banks. By employing the bank to perform credit risk-analysis and service loans, SRFs reduce their credit exposure and loan servicing related time and labor. In turn, the banks make low-interest loans available to farmers in order to implement BMPs or other clean water related efforts. These loans are free of the red tape and paperwork requirements often associated with federal programs. One participant noted that some farmers in his state had turned down 319 grants because of the paperwork burden. Currently, Ohio, West Virginia, Maryland, and Minnesota have partnered with local banks to provide SRF-backed loans for agricultural BMP.

### US Army Corps of Engineers Funding for BMPs.

No Vote Taken

The notion of using Water Resources Development Act (WRDA) funds for nonpoint control was not controversial in the abstract to Group #2. A U.S. Army Corps of Engineers (ACE) participant explained that there are two paths to ACE funding: direct appropriations for a specific project, which requires some political influence; or through existing programs like aquatic ecosystem restoration (Sec 206 of Water Resources Development Act).

However, using Corps funds to construct wetlands was controversial because of the negative environmental consequences of some constructed wetlands/mitigation banking projects. Participants seemed more amenable to constructing wetlands on agricultural land if those wetlands were not part of the mitigation banking process.

### Funding from Public Utilities or Private Organization for BMPs

No Vote Taken

This topic was not controversial, and all participants were in favor.

### SRF Collateral Reserve Arbitrage Capture

8 yes 1 neutral 2 no

This idea was strongly supported by the group, but participants recognized that it would be a tough political sell. One participant thought that arbitrage capture might be more palatable to Congress if packaged with other innovative NPS finance concepts. Another said that, because of the Department of Treasury's strong opposition to any type of arbitrage, efforts might be better spent trying to get Congress to fund a new NPS grants program.

## New Ideas

Several new ideas were suggested for enhancing NPS finance and/or remediation:

- The agricultural chemical industry could help fund “high-tech” BMPs.
- Create an insurance program to protect against losses from BMPs.
- Provide tax incentives for landowners who implement BMPs.
- Allow states to count cost shares more than once.
- Create incentives for private innovators to provide hardware, software, consulting, and technical assistance, as well as assistance in implementing BMPs (BMP planners like soil and water conservation districts (SWCDs) are already in place, but BMP implementation is beyond the capacity of many farmers).
- Provide conservation payments instead of program funding that requires a cost share.
- Provide assessment mechanisms for 319 and EQIP.

## ***Presentations, Discussion, and Conclusions***

During the final session, forum participants gathered as a single group to discuss the findings of the breakout groups and to lay the foundation for future Nonpoint Finance Project activities. At the start of the session, a representative from each group reported that group’s findings. During these presentations, each representative noted that the group did not have sufficient time to discuss how to implement recommended NPS finance changes. The floor was then opened to questions and comments about the presentations.

Discussion initially centered on how to implement changes to NPS finance endorsed by the breakout groups. However, participants quickly veered to discussing how to develop political strategies in preparation for the 2002 federal farm bill. Participants discussed two strategies for the 2002 farm bill: (1) shift federal funding from commodity price support programs to conservation programs, and (2) start from scratch and draft farm conservation legislation that would be separate from the farm bill.

The ensuing discussion centered on how to build coalitions among agriculture, sustainable agriculture, and environmental groups. Participants expressed strong support for developing a working group that would meet periodically in preparation for the 2002 bill. There was consensus that many of the players pivotal to such an effort were present at the Forum, and that the Nonpoint Finance Project could play an important role in this effort. There was concern about the absence of agriculture groups at the forum. Project staff acknowledged their absence, recounted efforts to get farm interests to the forum, and promised to redouble these efforts for future meetings. Participants also recognized that environmental and agriculture groups would be unable to find common ground on regulatory issues, but felt that federal financing for NPS abatement and other conservation efforts represented an opportunity for cooperation.

Participants also noted that the environmental community needed to work more cooperatively on farm conservation issues. In particular, forum participants noted that many environmental groups focus on one or two particular issues and do not work together for more

comprehensive change. Forum participants expressed their belief that environmental groups must show more unity before an agriculture/environment partnership could develop.

At the prompting of Nonpoint Finance Project representatives, the discussion returned to innovative finance mechanisms for NPS pollution. Forum participants expressed support for developing a set of principles similar to those developed by Break-Out Group #1. Participants also expressed support for providing NPS program managers greater flexibility when financing projects. The group spent little time debating the relative merits of the particular funding mechanisms discussed during the breakout groups.

At the conclusion of the session, most participants commented favorably on their experience and indicated that they wanted to remain involved with the project. Participants also expressed support for holding a similar forum in a different region of the country.

**9:00 Continental Breakfast Available.**

**9:30 Welcome and Introduction**

**9:40 Presentation: Problem Statement and Case Studies of Innovative Solutions**

Dozens of lawsuits based on the Clean Water Act are forcing states to develop total maximum daily load (TMDL) criteria for degraded waterways. Some state and local governments are adopting more stringent NPS standards. The EPA has estimated that NPS abatement costs will be several billion dollars each year. However, the growing trend toward NPS control has not been accompanied by a corresponding increase in funding.

Given the improbability of major new NPS appropriations, it is important to make the most of the substantial fiscal resources potentially available for NPS control. Unfortunately, most of these NPS programs lack the flexibility to leverage, integrate or otherwise maximize the efficiency of available funding. In this session, we will present innovative case studies of existing projects that have increased program efficiency or effectiveness. Among the projects we will discuss are:

- (1) Drinking water utilities reducing treatment costs by funding BMPs (NY)
- (2) Distributing subsidized State Revolving Loans via local banks (WV)
- (3) Integrating state and non-profit organizations' efforts to reduce NPS pollution (MD)
- (4) Army Corps of Engineers investing in BMPs as a way to reduce the need for dredging (OH)

**10:10 Presentation: Innovative Finance Concepts**

This session will use some hypothetical agricultural scenarios to introduce how existing and potential NPS finance tools could work. We will closely examine the innovations contained in the scenario provided to forum participants. During the break-outbreakout sessions that follow, you will take these ideas apart and put them back together again into new, more efficient ways to finance NPS abatement efforts. Among the novel finance and program concepts we'll introduce are:

- (1) Creating a market for CRP contract payments to stimulate landowner interest in permanent easements
- (2) Financing a dedicated NPS funding program with SRF arbitrage earnings.
- (3) Merging USDA land retirement programs into one program
- (4) Expanding non-profit participation in BMP funding

**10:40 Break**

**11:00 Break-Out Session: Idea Gathering**

Are the ideas in the utopian NPS funding scenario good ones? What would work better? At what level are changes needed: local, state or federal; legal or regulatory?

- 12:30**            **Lunch**
- 1:30**            **Break-Out Session: Implementation**  
Based upon ideas developed during the first session, outline what it will take to implement your recommended changes to NPS financingfinance programs. Make recommendations for legal, regulatory, inter-agency or “behavioral” changes at both the state and national levels. What constituencies would need to be enlisted to implement your vision? How would you enlist their support?
- 2:30**            **Break**
- 2:45**            **Presentations and Discussion: Break-Out Groups Report**  
Each break-outbreakout group will have 15 minutes to present their findings and proposals to the group at large. Participants then will discuss the various ideas presented by the break-out groups
- 4:15**            **Conclusion/Next Steps for the Nonpoint Finance Project**
- 4:30**            **Adjourn**

## THE UTOPIAN SCENARIO

Nonpoint Finance Project -- Chicago Forum  
October 13, 1999

### **FARM #1 – A Row Cropper Does His Part to Reduce NPS Pollution**

Farmer Brown's soybean fields by the river flooded this spring for the third time in ten years. His crop was destroyed. Cash-strapped and debt-ridden, he had no insurance. Farmer Brown calls his Soil and Water Conservation District (SWCD) agent to see if any new programs might help.

#### CCRP: Creating a Unified Environmental Easement Program

The agent tells Farmer Brown about a new easement program managed by the State of Utopia DNR. The program combines state funding with payments from the new Combined Conservation Reserve Program (CCRP) to purchase permanent easements. The CCRP is the result of Congress's decision to integrate the pre-existing Conservation Reserve Enhancement Program (CREP), Wetland Reserve Program (WRP) and Conservation Reserve Program (CRP).

Utopia wants to clean up the Little River, and its new easement program is part of this effort. The easement idea is attractive to Mr. Brown. He needs to get out of debt and he's losing money on his flood-prone land over the long term, even though it yields well in dry years.

#### Annual Easement Payments or a Lump Sum, the Landowner Decides

>From the SWCD, Farmer Brown also hears about a new program that could offer him an up-front payment in lieu of the 15-year pay-out on the CCRP portion of his easement sale. In exchange for the \$1,500/year he would receive from CCRP for 15 years, he could receive a single payment of \$16,000 from a Wall Street bond house, of all places. This up-front payment is possible because under the new Farm Bill, third parties can buy and sell his CCRP payment stream.

#### Non-Profits Finance NPS Abatement

Farmer Brown decides to clear his debts with the one-time payment, yet loss of the easement acres reduces his potential income. Fortunately, Ducks Unlimited and the Sportfishing Association will help him market hunting and fishing rights on the easement land through their publications and web sites. These groups also offer to cover the cost of habitat restoration on the easement acres, which will enhance the value of Mr. Brown's hunting and fishing rights.

While sale of hunting and fishing rights doesn't come close to the potential per acre profit from cropping, it will be more dependable than farming his wetter acreage. Setting aside the acres for hunting and fishing also costs little to maintain and, unlike commodity income, has the potential to provide increased revenue in the future. Mr. Brown is reassured knowing that property values for farms with easements have been rising, and anything that could increase his net worth would be welcome.

#### Combining EQIP, Section 319 and the Clean Water SRF to Fund BMPs

Farmer Brown is feeling better about the opportunities he's learned about, but he still worries about poor margins in soybeans, which got him into debt in the first place. Even if he retires his debt by selling an easement, he's got to lower his costs to stay in business. The agent has some ideas here too. In addition to the easement program, the Little River Watershed Initiative includes targeted funding to help farmers implement best management practices. Utopia has pooled funds from the USDA EQIP program and the EPA's 319 program to provide 60% cost shares for BMPs like conservation tillage equipment, which Farmer Brown has wanted for some time. To match the 60% grant, Farmer Brown can borrow his 40% share from a local bank, which offers low interest loans, backed by the Utopia Clean Water State Revolving Fund (SRF)

### Reducing Red Tape and Administrative Costs by Providing SRF Loans Through Local Banks

Fortunately for Farmer Brown, his SWCD agent, and the bank, no SRF paperwork will be involved if Brown applies for a loan. SRF has backed the loans with a CD purchase at the local bank. All the banker needs from Farmer Brown is an NRCS certificate for a farm management plan and decent credit.

Mr. Brown decides to go the whole route, and things work out. His credit restored with an up-front easement pay-out, Brown gets his low-interest loan. His conservation tillage equipment works great, and he spends less time, money, fuel and fertilizer on his beans. Amazingly, after his farm becomes a stop on the State Farm Bureau's water quality tour, he gets a call from the Clean Water Network asking if they can have a look next spring.

## **FARM #2 – Large Scale Farms Confront TMDLs**

Further downstate, the Big Creek Growers Co-op has different problems. These ten farmers have combined into an efficient farming machine. They share the costs of precision farming equipment, consultants and a business agent, who keeps operating costs low. Unlike many of their neighbors, the Co-op's farmers make money growing corn. They've already reduced their fertilizer consumption through precision farming and conservation tillage.

They're worried though, about the potential for new laws and regulations in the Big Creek drainage, which supplies the state capitol's drinking water. The TMDL process has begun on Big Creek, and there is a great deal of uncertainty about how to meet water quality standards. Pollutants from corn and small livestock operations on Big Creek are believed to be responsible for an increase in nitrogen loading to Capitol City's drinking water. The Co-op is afraid that new laws and regulation to protect Big Creek and Capital City's water supply may force them to make expensive changes to the finely-tuned precision farming practices they've adopted.

### The Army Corps of Engineers Pays to Prevent Sedimentation

A new on-site stormwater treatment concept for the watershed, co-sponsored and funded by the Army Corps and the Capitol City Water Supply Commission, might help the Co-op reduce its exposure to future regulation. Through the efforts of the local Congressman, the Army Corps has an appropriation to reduce sedimentation and pollution throughout the Utopia River watershed, which includes Little River, to help protect Corps locks, dams and levees. Limiting sedimentation also will reduce the need for dredging.

### A City Avoids Water Treatment Costs by Financing BMPs

Capitol City also is providing support for the Little River Project as a way to avoid further filtration of its drinking water supply. The City can save millions of dollars annually if it does not have to purchase and operate additional filtration equipment. Capitol City is financing its efforts through community development block grant (CDBG) funds and loans from the Safe Drinking Water SRF. It has pooled funding from these two sources to help finance efforts to reduce stormwater and agricultural nonpoint source pollution. This program helps landowners implement BMPs on their property.

The Corps and the City want to use agricultural tile systems to collect runoff and deliver it to artificial wetlands the Corps will build to provide treatment. The Corps has funding to provide up to 60% of the cost to construct these wetlands. In the Corps authorizing legislation, these constructed wetlands are excluded from consideration as mitigation for wetlands destroyed elsewhere, and are considered only to be nonpoint control systems.

The problem is, the Corps can construct wetlands only for public entities. Fortunately, the flexibility of the new Combined CRP would allow the SWCD to purchase an easement from the Co-op for a small parcel on which an artificial wetland could be built. With a public interest thus created on a few acres of Co-op land, the Corps could contribute their cost share.

This treatment idea looks good to the Co-op because it wouldn't require much acreage and would reduce polluted runoff from their operation to very low levels. Unlike Farmer Brown, the Co-op isn't too

interested in easements or CCRP contracts. They're making money and want to keep as much acreage in production as they can.

#### Capital City and the Clean Water SRF Help Meet the Local Match

The Capitol City Water Supply Commission will also help the Co-op by picking up half the cost of the 40 percent non-federal funds required to match the Corps dollars. The Co-op can borrow its portion of the project costs through the new Clean Water SRF agriculture loan program administered by a local bank. All that's required of the Co-op is a certificate from NRCS that approves the wetland engineering plan, and good credit. The Co-op decides to go for it, and gets their loan easily. Soon the eco-tourists are calling at the Co-op after a stop at Mr. Brown's Farm.

The Co-op is still concerned that, despite their efforts, they'll be required to make even more expensive investments to reduce potential run-off. In particular, the Co-op is concerned that they will have to pay for the wrongdoings of the livestock operations on Big Creek, which, in their opinion, are the real polluters. In the low hills above the Co-op's farms lives their worst nightmare: Farmer Austin Powers.

### **FARM #3 – Helping a Ne'er-Do-Well Clean Up His Animal Farm**

Farmer Powers can't raise corn on his mangy-looking place, not that he hasn't tried that and other more exotic crops. He's broke, his barn is collapsing, and the 150 cattle he's got left live pretty much under the few willows still growing on upper Big Creek. The physical and environmental damage caused by Powers' livestock undermines all the good work his downstream neighbors have accomplished.

#### Using SRF Arbitrage to Finance a State NPS Hardship Program

Fortunately, Utopia has created a new program that can help Powers clean up his operation. Congress has changed the Clean Water Act and Safe Drinking Water Act to allow states to engage in limited arbitrage with their SRF collateral reserves. Previously, SRFs earnings on reserves could not exceed the interest rate on the bonds to which they were pledged as collateral.

While only states that use their SRF grants as bond collateral can capture arbitrage earnings, Utopia is one of those states. Utopia has decided to use its arbitrage earnings to create a 75 percent grant program for hardship situations where landowners cannot afford the full cost of BMPs or septic system upgrades. In Farmer Powers' case, this means fencing and bridging to keep his cattle out of the creek. All he needs is an NRCS approval for a farm management plan. As the SWCD agent visits Powers to help him fill out his application, he notices that cesspool breakout is streaming slowly into Big Creek from the old Powers home place. He suggests that Powers replace the cesspool with a septic system, seeing as how his kids play around the creek all day.

#### A Nominal NPS Tax Supports Whole Farm Management

The agent also refers Powers to the state's new whole farm management plan service, provided by the University's Extension. Under the service, the Extension will come to Powers' farm and develop a site specific, whole farm management plan. The state funds the Extension's service through a nominal tax on pesticides, fertilizer, fungicides and herbicides.

#### Capital City and the SRF Help Another Farmer Meet the Local Match

Powers may qualify for additional government funding beyond the hardship grant he'll get to cover 75 percent of the cost of the fencing/bridging/septic upgrade project. Capitol City will pay for half of the remaining 25 percent non-federal costs, just as they did for the Co-op. This would bring Powers out-of-pocket expenses down to 12.5 percent of the total package, a sum he can afford to finance through the Clean Water SRF ag loan program, available through his local bank.

Powers decides to go for this program and also chooses to capitalize his CCRP easement payments. With his up-front pay-out, he almost gets out of debt. In a few years willows, alders and sedges disguise the scars on his creek bed, and hunters are asking about buying hunting rights.

APPENDIX C

**Case Study – Syracuse, New York**

State:	New York
Project Name:	Skaneateles Watershed Program
Watershed/Region:	Syracuse water supply
Type of Nonpoint Source Pollution:	Nutrients, pathogens and sediment primarily from farms in the surrounding area
Lead Funding Program/Agency:	Onondaga Soil and Water Conservation District
Other Participating Programs:	City of Syracuse, Cooperative Extension, local land trust
Revenue Sources:	The City of Syracuse; N.Y. State Agriculture NPS Abatement and Control Program; EPA Grants. Are applying for CREP special project for ~300 acres.
Project Description:	The City of Syracuse, NY, is trying to avoid having to construct a filtration plant for its water supply. The plant has been estimated to cost \$60 million to build and \$3-4 million annually to operate. The program aims to protect the city's drinking water by (1) helping farmers develop and implement whole farm plans for their farms, (2) promoting land conservation programs on non-farm land, and (3) educating watershed residents so they can protect water quality on their own. The city provides 100 percent of the cost of best management practices associated with the whole farm plan. The program has an annual budget of less than \$700,000. Local land trust helps acquire permanent easements. Forty-seven of the watershed's fifty-five farms (accounting for 96% of farm acreage) participate.
Contact(s):	Ms. Lee Macbeth (315) 473-2634 (City of Syracuse) Jeff Carmichael (315) 677-4630 (Onondaga Soil & Water Conservation District)

## Case Study – Minnesota

State:	Minnesota
Project Name:	Minnesota Agricultural BMP Loan Program
Watershed/Region:	Statewide
Type of Nonpoint Source Pollution:	Agricultural: feedlot runoff, agricultural chemical runoff, septic systems
Lead Funding Program/Agency:	MN Public Facilities Authority (Clean Water SRF)
Other Participating Programs:	MN Department of Agriculture, MN Pollution Control Agency, county government, local banks
Revenue Sources:	CWA SRF (\$27 million); MN general revenue (\$13 million)
Project Description:	<p>Minnesota’s SRF agency, the MN Public Facilities Authority (MN-PFA), provides funding to every county in the state to finance a CWA county revolving loan fund. In turn, the counties enlist local banks to serve as fiscal agents for the loans. The banks perform credit analysis, manage the loans and serve to make the MN-PFA invisible to the borrower.</p> <p>The loans from the MN county revolving loan funds are targeted to help farmers implement BMPs consistent with county Comprehensive Water Plans. Farmers borrow from the county revolving loan fund to finance the local cost share for state and federal BMP programs, such as EQIP and Section 319. The loans generally carry a 3 percent interest rate, as opposed to the 9-12 percent rate charged by the commercial credit market.</p> <p>State and county agriculture programs help educate farmers about the program and provide technical assistance. Since 1995, the program has issued 2200 loans worth \$25 million. Of that amount, \$11 million has been provided for agricultural waste handling, \$9 million for conservation tillage and \$4 million for septic system upgrades.</p>
Contact(s):	Paul Burns (651) 296-1488 (MN Department of Agriculture )

## Case Study – Toledo, Ohio

State:	Ohio
Project Name:	Toledo Harbor Sediment Reduction Demonstration Project
Watershed/Region:	Lake Erie Tributaries – Maumee River Basin
Type of Nonpoint Source Pollution:	Sediment from Agriculture
Lead Funding Program/Agency:	Toledo Port Authority
Other Participating Programs:	Corps of Engineers, State of Ohio, Natural Resources Conservation Service (Buffer Initiative), United States Geological Survey, U.S. Fish & Wildlife Service
Revenue Sources:	Corps of Engineers (\$750,000), State of Ohio (\$2 million)
Project Description:	<p>The Corps of Engineers annually dredges 800,000 yards of material from the Port of Toledo and the Maumee River. Dredging is required to remove sediment eroding off 4.3 million acres in basin, 80 percent of which is in agricultural production.</p> <p>The Maumee River Basin is not classified as highly erodible by the USDA, meaning it does not qualify for federal agriculture programs that could promote conservation tillage. The Corps stepped forward with \$750,000 to fund conservation tillage programs through county extension services within the Maumee River Basin. The Corps hopes that increased use of conservation tillage will decrease the need for dredging.</p> <p>Subsequently, NRCS created its Buffer Initiative, making CRP and other funds available for the Maumee River Basin. The State of Ohio has appropriated \$2 million to provide the local match for NRCS’s Buffer Initiative along all tributaries feeding into Lake Erie. The Maumee River is by far the largest tributary.</p>
Contact(s):	John Loftus (419) 243-8251 (Toledo Port Authority) Steve Davis (419) 222-0614 (NRCS)

## Case Study – Maryland

State:	Maryland
Project Name:	Maryland Conservation Reserve Enhancement Program
Watershed/Region:	Statewide
Type of Nonpoint Source Pollution:	Agricultural: poultry litter runoff, nurseries
Lead Funding Program/Agency:	Conservation Reserve Program (FSA)
Other Participating Programs:	MD Department of Agriculture, Ducks Unlimited, Chesapeake Bay Foundation, Future Harvest
Revenue Sources:	CREP (FSA), Maryland General Revenue, private sector grants
Project Description:	<p>The Maryland Department of Agriculture Conservation Reserve Enhancement Program incorporates several innovative elements. Like several other states including Illinois and Minnesota, Maryland has appropriated state funds to add to CREP contract payments in order to secure permanent conservation easements.</p> <p>FSA provides farmers who enroll in the program 50 percent of the cost of planting buffers, stabilizing highly erodible land, or restoring wetlands on CREP land. Maryland provides a 37.5 percent cost share for implementation cost for all projects except wetlands restoration. Additional cost shares of 7.5 percent to 25 percent come from the private sector. The Chesapeake Bay Foundation (an environmental group, not a grantor) and Ducks Unlimited have provided \$5 million for grants to farmers for implementation costs not covered by USDA or the state. Ducks Unlimited also provides some technical outreach.</p> <p>Another private non-profit participant is Future Harvest, which provides in-kind services to help educate and reach out to farmers. Future Harvest analyzed agricultural land data to help create a direct-mail outreach brochure that promotes the MD CREP. This program currently is being tested in three counties.</p> <p>MD CREP has also reduced its easement transaction costs by employing quantitative easement descriptions rather than surveyed descriptions. That is, easements are defined in relation to the watercourse (i.e. “50’ on either side of Oyster Creek”), wherever it may shift on an individual’s property. This not only saves program dollars that might have been spent on surveys, it is a better legal tool to protect dynamic watercourses.</p>
Contact(s):	Louise Lawrence (410) 841-5873 (MD Department of Agriculture )

## Case Study – West Virginia

State:	West Virginia
Project Name:	West Virginia Agricultural SRF loan program
Watershed/Region:	Upper Potomac
Type of Nonpoint Source Pollution:	Poultry litter, feedlot runoff
Lead Funding Program/Agency:	West Virginia Water Development Authority
Other Participating Programs:	NRCS, West Virginia Department of Agriculture
Revenue Sources:	West Virginia Clean Water SRF; EQIP
Project Description:	<p>In co-ordination with the West Virginia Department of Agriculture, the West Virginia SRF has developed a loan program for implementation of agricultural BMPs. SRF loans are focused in areas of water quality concern designated by NRCS, such as the upper branches of the Potomac watershed. These SRF loans have been used most often to meet farmers' portion of EQIP cost share projects for poultry litter handling equipment. Farmers must have approval from the WVDA' Soil Conservation Service for their BMP plan to qualify for SRF loans.</p> <p>Like the Ohio and Minnesota programs, SRF makes loans to farmers through local banks, and relies on agricultural agencies to publicize the program. Loan repayments return to the SRF, rather than remaining in county-based, sub-state SRFs as in Minnesota.</p>
Contact(s):	Lance Tabor (304) 558-2204 (WV Department of Agriculture)

APPENDIX D

PROGRAM <i>Agency</i>	DESCRIPTION	ELIGIBLE RECIPIENTS	COST SHARE (Federal/Local)
National Nonpoint Source Program (Sec. 319) <i>EPA</i>	Provides grants for technical assistance, financial assistance, education, training, technology transfer and demonstration projects. Funds also support monitoring efforts to assess the success of specific nonpoint source implementation projects.	Allocated to states on formula basis. States allocate grants on project basis.	60/40
Clean Water State Revolving Loan Fund (SRF) <i>EPA</i>	EPA provides grants to states to capitalize state loan funds. The states use these funds to issue below market-rate loans to fund water quality activities. Repayments of loans also capitalize the fund. The combination of annual EPA grants and loan repayment increases SRF size each year. States may further increase the funds available for loans by using money in the SRF as collateral for issuing bonds. While traditionally used to build or improve wastewater treatment plants, loans may also be used to control agricultural, rural and urban runoff; fund estuary improvement projects and address wet weather flow control, including stormwater overflows.	Local governments, private individuals, citizens' groups, non-profits and other. State restrictions may apply.	Initial grants require an 80/20 state match
Drinking Water SRF <i>EPA</i>	Similar to the Clean Water SRF but on a smaller scale. Loans can be made for source water protection, including the purchase of easements, planting buffer strips and other efforts to reduce NPS pollution.	State & County Governments, Municipalities and Towns	87.5/12.5
Environmental Quality Incentives Program (EQIP) <i>NRCS</i>	EQIP offers financial, educational, and technical help to install or implement structural, vegetative, and management practices called for in 5- to 10-year contracts for most agricultural land uses. EQIP works primarily in priority areas where significant natural resource problems exist. In general, priority areas are defined as watersheds, regions, or areas of special environmental sensitivity or having significant soil, water, or related natural resource concerns. EQIP offers 5- to 10-year contracts that provide incentive payments and cost sharing for conservation practices called for in the site-specific plan.	Persons who are engaged in livestock or agricultural production	75/25
Conservation Reserve Program (CRP) <i>NRCS/FSA</i>	Provides farmers with (1) an annual rental payment for the term of a multiyear contract for taking sensitive land out of production and (2) cost-sharing benefits to apply necessary conservation measures. Goal is to remove highly erodible cropland and or other environmentally sensitive acreage from production and apply conservation measures to reduce and control erosion and water quality impacts.	Persons who are engaged in livestock or agricultural production	50/50

Conservation Reserve Enhancement Program (CREP) <i>NRCS/FSA</i>	A state-federal conservation partnership program targeted to address specific nationally significant water quality, soil erosion and wildlife habitat issues related to agricultural use. Provides financial incentives for farmers and ranchers to remove land from agricultural production for 10-15 years.	Farmers and ranchers within targeted watershed.	State provides significant cost share, ~20% of project cost
Wetlands Reserve Program (WRP) <i>NRCS</i>	WRP offers landowners the choice of three options as a way to help restore and protect wetlands: (1) permanent easements, (2) 30-year easements and (3) restoration cost-share agreements of a minimum 10-year duration. Under WRP, the landowner and NRCS develop a plan for the restoration and maintenance of the wetland. NRCS provides funding to restore the wetland while the landowner voluntarily limits future use of the land for the duration of the agreement. The landowner retains private ownership.	Eligible participants include those who own or have control of the land under consideration. With some exceptions, all lands are eligible for WRP.	100/0 or 75/25, (restoration) depending on length of easement
Wildlife Habitat Incentives Program (WHIP) <i>NRCS</i>	Participants agree to prepare and implement a wildlife habitat development plan on land which they own or control. NRCS offers participants technical and financial assistance for the establishment of wildlife habitat development practices. In addition, if the landowner agrees, cooperating State wildlife agencies and nonprofit or private organizations may provide expertise or additional funding to help complete a project.	Eligible participants include those who own or have control of the land under consideration. With some exceptions, all lands are eligible for WHIP.	75/25
Partners for Fish and Wildlife Program <i>USF&amp;WS</i>	Offers technical and financial assistance to private (non-federal) landowners to voluntarily restore wetlands and other fish and wildlife habitats on their land. The program emphasizes the reestablishment of native vegetation and ecological communities for the benefit of fish and wildlife in concert with the needs and desires of private landowners. Primarily focused on the restoration of wetlands, native grasslands, stream banks, riparian areas, and in-stream aquatic habitats.	Private Landowners	50/50

APPENDIX E

Nonpoint Source Finance Project  
October 13 Forum, Chicago

Participants

Karen Bell	EPA Region 5
Debbie Bruce	Illinois DNR
Russ Campbell	WV Soil Conservation Agency
Tom Crane	Great Lakes Commission
Kari Dolan	Nat Wildlife Federation, Northeast
George Dusenbury	Northeast Midwest Institute, DC
Loni Kemp	The Minnesota Project
Lisa Manning	FSA – Illinois
Jan Miller	US Army Corps of Engineers, Chicago District
Rick Mollahan	IL EPA
Mike Musel	FSA – Iowa
Eric Palola	National Wildlife Federation
Duane Sand	Duane Sand Consulting
Max Schnepf	Natural Resources Conservation Service (x15)
Paul Schwartz	Clean Water Action (x105)
Rick Shamblen	Malcom Pirnie, Inc., OH
Greg Smith	Ohio EPA, SRF Director
Jim Smith	Council of Infrastructure Finance Authorities
Roger Stern	Marine Studies Consortium, MA
John Warner	Ohio NRCS
Dov Weitman	Environmental Protection Agency NPS Office
Don Wells	National Association of Conservation Districts
Roger Wolf	Raccoon River Project, IA