Overcoming the Hurdle:

Innovative Approaches to Increase Engagement & Adoption of Conservation Best Management Practices

Ag conservation BMP implementation is critical to achieving our shared water quality (WQ) goals. The ag BMPs in place now are not proving as effective as we had hoped in terms of preventing nutrient & sediment losses from ag lands. Why is this? How can we improve BMP effectiveness & BMP adoption rates?

Below are four scenarios that may help with the following challenges:

- Engaging farmers that have not previously prioritized BMPs (i.e., reluctant adopters).
- Improving adoption of BMPs with high public (WQ) benefits, but low private (on-farm) benefits.
- Implementing BMPs *in* landscapes and *by* farmers that can generate cost-effective reductions with limited budgets (i.e., "Bang-for-the-Buck").

Scenario 1: Expanded Use of Spatial Prioritization (Technical Targeting Tools)

Scenario 2: More Flexible Financial Incentives

Scenario 3: Using Insights from Behavioral Science to Plan Outreach Efforts & Design Conservation Programs

Scenario 4: Rewarding Conservation Professionals for Reducing Nutrient & Sediment Loss from Ag Land

Scenario 1: Expanded Use of Spatial Prioritization (Technical Targeting Tools)

Current Reality:

We have the technological capacity to identify and to treat **critical source areas**. These areas disproportionately contribute to water quality (WQ) degradation. However, soil and water conservation efforts tend to focus on farmers/land managers who walk into field offices rather than proactively engaging farmers/land managers of these high impact areas.

Critical Source Area

Site with a high likelihood of relatively high levels of pollutant delivery to waterways.

Alternative Approach:

Instead of relying primarily on walk-in clients, conservation professionals use precision conservation tools to identify and prioritize--at the watershed, farm, or field level--precise placement of BMPs to more efficiently reduce nutrient and sediment loss into waterways. A number of tool sets now exist¹ and more options are in development.

- Are watershed-level and field-level precision conservation tools used in your office, and if so, how?
- How effective are precision conservation tools at...
 - identifying critical source areas that would benefit from BMPs?
 - o identifying & engaging reluctant BMP adopters in those areas?
- How can precision conservation tools be made more effective in your work with farmers/land managers?
 - o Is awareness, trust & confidence in such tools widespread?
 - If not, what might be improved to develop awareness, trust and/or confidence?

¹ Click <u>here</u> for a non-exhaustive list of precision conservation tools currently available.

Scenario 2: More Flexible Financial Incentives

Current Reality:

Financial incentives help farmers/land managers offset the costs of adopting conservation BMPs. However, the type and timing of financial assistance may not be sufficient to cover costs and encourage participation. Such systems make it difficult to provide incentives for BMPs in critical source areas or to support farmers/land managers in identifying cost-effective BMP options.

Alternative Approach:

"Pay-for-Performance" (P4P) programs are being proposed or piloted in several states in the Bay watershed. P4P programs would compensate farmers/land managers based on the site-level effectiveness of water quality (WQ) BMPs rather than based on the BMP implementation alone. For example, farmers/land managers would receive compensation on a per-pound basis for preventing nutrient and sediment loss. Such payments could incentivize BMP implementation in critical source areas and implementation of BMPs with high public (WQ) benefits, but low private (on-farm) benefits. P4P programs could compensate farmers/land managers for their management time and opportunity costs, potentially providing a profit opportunity if payments are above implementation costs. In addition, it may be possible to structure incentives to scale across a watershed to encourage more land to be enrolled in conservation practices.

- Would a P4P program attract farmers/land managers who have been reluctant BMP adopters?
- Are there other financial incentive program designs that could improve effective participation in critical source areas & among reluctant BMP adopters, particularly over a larger area?

<u>Scenario 3: Using Insights from Behavioral Science to Plan Outreach Efforts & Design Conservation Programs</u>

Current Reality:

Farmer/land manager decisions to implement conservation BMPs are partly influenced by how conservation professionals present options to them.

Alternative Approach:

Behavioral scientists have identified simple, low-cost program modifications that can improve program outcomes (sometimes called "nudges"). We've outlined some of the key ideas below:

- Messengers: Outreach may be more effective when information is communicated by influential "messengers." Work with influential members of the community to deliver information about your program, especially when the information may be new or controversial.
- **Social norms:** Farmers may be more likely to use a conservation practice if they know that others in their social circle also use it. Provide information about how other farmers and land managers are engaging in environmental stewardship.
- Recognition: Farmers may be more willing to use conservation practices if they are
 publicly recognized for their actions through awards, verification programs, and other
 public acknowledgments, including signs that can be displayed on their land.
- Pre-commitment: People are more likely to take an action if they have already precommitted to doing it. Ask farmers to make a public commitment to adopt a BMP or participate in a program, especially if participation requires sustained actions over time.

- Would these outreach approaches engage more farmers/land managers across-the-board, or would they be more effective for certain types of farmers?
 - Which approaches would be most effective for engaging reluctant BMP adopters?
- For which BMPs would these approaches be effective (or ineffective)?
- How would these approaches influence farmer/land manager BMP adoption and maintenance over the long-term?

<u>Scenario 4: Rewarding Conservation Professionals for Reducing Nutrient &</u> Sediment Loss from Ag Land

Current Reality:

Conservation districts have few mechanisms to reward staff members who are particularly effective at reducing nutrient and sediment loss from agricultural land through BMP adoption. It is not uncommon for district offices to invest several years in training staff members only to have them leave for more lucrative positions in other agencies, the private sector, or elsewhere outside the Bay watershed. Similarly, agricultural retailers have few incentives to refer clients to conservation professionals.

Alternative Approach:

Conservation district staff members receive incentives (e.g., bonuses, salary increases, promotions) based on estimated nutrient and sediment loss reductions resulting from BMPs they helped install.

Ag retailers get a commission for referring motivated farmers/land managers to conservation professionals or helping to install conservation practices in critical source areas.

- How would these kinds of rewards change the way you conduct your work?
- What impact would these rewards have on who adopts BMPs & the number, type & location of those BMPs?
- How would these rewards affect your relationships with your colleagues & with farmers/land managers?
- How would these rewards affect the overall technical assistance capacity in the Bay watershed & within different agencies?