



WATER for AGRICULTURE

---

## Mifflin County Local Leadership Committee

---



### ***Interim Project Summary Report 2019-2020***

February 2021



---

## ***MIFFLIN COUNTY LOCAL LEADERSHIP COMMITTEE INTERIM SUMMARY REPORT***

---

### **TABLE OF CONTENTS**

Introduction	2
Background	2
Facilitated Process Design	3
Local Leadership Team	3
Goals, Issues, Priorities, and Objectives	3
Context	5
Public Participation and Engagement	5
Survey Results	6
Projects and Accomplishments to Date	6
Summary and Acknowledgments	7
Additional Information	7

### **Introduction**

This brief report provides a summary of the Water for Agriculture project's Mifflin County Local



Leadership Committee and the ideas, perspectives, goals, priorities, and accomplishments of the group's efforts during the period January 2019 to January 2021. Additional information about this summary and other aspects of the committee's work together are available upon request.

### **Background**

With support from USDA-NIFA, Penn State University in partnership with the Agricultural Research Service, the University of Nebraska-Lincoln, and Arizona State University, the Water for Agriculture project was designed

to:

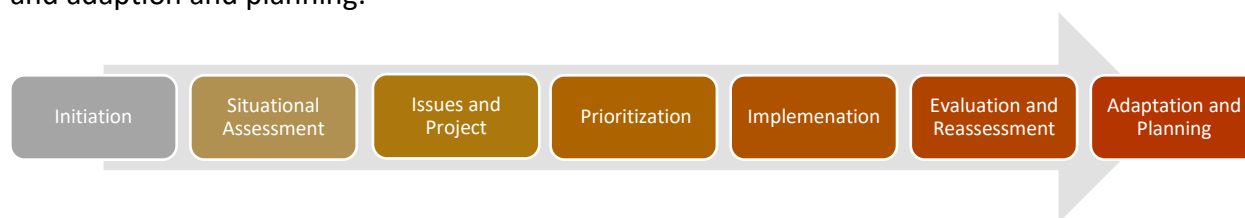
- Better understand, how and under what circumstances local stakeholders can most effectively be engaged in the decisions and programs that affect the water and agriculture issues that matter most to them.



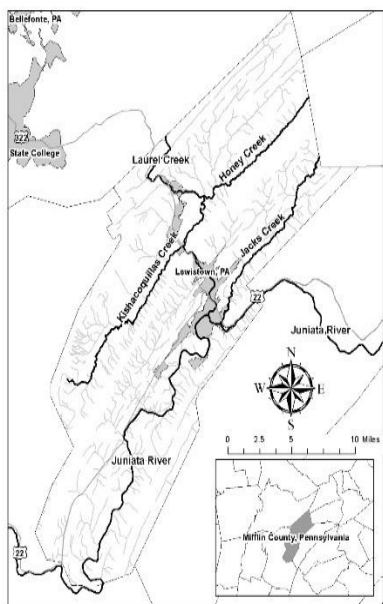
- Assist and support five local leadership committees through a two-year facilitated process that allows them to identify and prioritize the water and agriculture issues they face and develop projects and initiatives to address those priorities.

## Facilitated Process

In order to ensure the plans and priorities the local leadership committee identified were addressed as comprehensively as possible, and that the group's work together was designed to incorporate the perspectives and expertise of everyone at the table the W4Ag project developed a facilitated modified action-planning process. In its summary form this process included a number of key phases – initiation, assessment, issues and project prioritization, implementation, evaluation and assessment and adaption and planning.



While this process is not as linear as the graphic appears and each phase was critical, the situational assessment and project prioritization were the two phases most critical and unique to this process – and the ones frequently lacking from similar initiatives. Of all these phases the group spent the majority of its first year's effort on the 'situational assessment' part of the process exploring, from multiple perspectives, the most critical water and agricultural issues facing the county and what we know about them, the projects and programs that were designed to address these issues, the impacts of these programs, the relevant availability, and/or gaps in the data and information relevant these concerns, and the ideas or initiatives that would best build on previous efforts - and meet future challenges. The results of these discussions, and the projects it catalyzed form the basis of the summary presented here. As of February 2021, the Leadership Committee is primarily focused on implementing the projects it prioritized and developing its strategies for 2021.



**Local Leadership Team** As is the case with in all five of Water for Ag's partnership communities, the engagement process was built around bringing together leaders across the county representative of a wide range of perspectives and expertise. In Mifflin County this included a leadership committee of 16 representatives of farmers, agricultural organizations, local government, local and state agencies, and technical service and education providers. Our goal was to gather as much information as possible about issues 'on the ground', everyone's ideas and perspectives, and how a collaborative approach to addressing water and agricultural issues would be most useful.



## Goals, Issues, Priorities, and Objectives

The list below summarizes the rank ordered ideas and issues the Mifflin County Water for Agriculture Leadership Committee developed at its December 2019 meeting. It represents many of the ideas and recommendations we have discussed over the last year – and prioritizes the short-term issues and concerns we want to address during the coming year. Top two priorities in each category are bolded – and begin to lay the foundation for 2020 activities. A more comprehensive list of additional details is available upon request.

### *Leadership Team Goals (in order of priority)*

- 1. Bringing together community – farm and non-farm alike – to address water quality issues in Mifflin County**
- 2. Make measurable improvements to water quality in the county**
3. Increase resources to help improve water quality
4. Maintain/support these efforts over the long-term
5. Increase efforts to reach hard to reach audiences

### *Most Critical Issues to Address (in order of priority)*

- 1. Better information/education related to sources of impairment. How bad? Where? Farm type?**
- 2. Expand riparian buffers**
3. Education and outreach regarding recommended timing and application of manure.
4. Increase education/information related to sewage and stormwater management
5. Better information regarding risks and benefits of BMPs
6. Education regarding pasture management
7. Improved/more appropriate regulations

### *Desired Program Changes/Goals (in order of priority)*

- 1. Increase financial resources/incentives to help farmer achieve conservation/water quality goals**
- 2. Decrease dirt road and runoff/salt issues**
3. Improved stormwater management
4. Increase acreage of cover cropping - including increasing cost share
5. Increase/improve riparian buffers throughout the county



### *Research and Information Needs (in order of priority)*

- 1. Contribution of salt and related contaminants from roads**
- 2. Better understanding and information regarding the actual sources of stream and waterway impairments**
3. Tool/better way to estimate dollar value (economic) costs due to the losses of nutrients and sediment



4. Improved understanding and impact of riparian buffers
5. Investigating the implications of warming climate on agriculture and water in the County.

## **Context**

The brief overview provided above only begins to highlight the many discussions, ideas, and priorities that emerged from the local leadership committee's work together. While a great deal of success has already been realized through the efforts of farmers, organizations, local governments, and agencies in the county, it is clear that a number of considerations the leadership committee has identified will be important for our, and other initiative's continued success. Some of the most critical include:

1. A cooperative and collaborative effort between the farm and non-farm communities was, and will be, essential to addressing water quality challenges reflective of everyone's needs and concerns
2. Building bridges of mutual respect and open communications with members of the Amish community around water issues is essential and while Mifflin County has a laudable record of doing such, these continued efforts are critical to long-term success
3. Building momentum and creating an environment of continued community engagement related to recreation and stewardship of the county's rivers and streams among all residents is essential
4. On-going education to the agricultural community and general public regarding the importance of riparian buffers on water temperatures and quality will be important
5. A robust awareness and appreciation by all residents of the county, of the economic pressures farmers face is important to ensuring that water quality goals and the efforts to preserve our surface water resources are compatible with agriculture's economic viability
6. To the maximum extent possible, flexibility in funding, regulations, and program requirements should be an important characteristic of the County's strategy to improve and/or protect our water resources
7. It will be important for stormwater improvements to be made to concentrated flow paths including road ditches, driveways, storm drains, crop fields, and residential and industrial properties, and impervious surfaces near streams

## **Public Participation and Engagement**

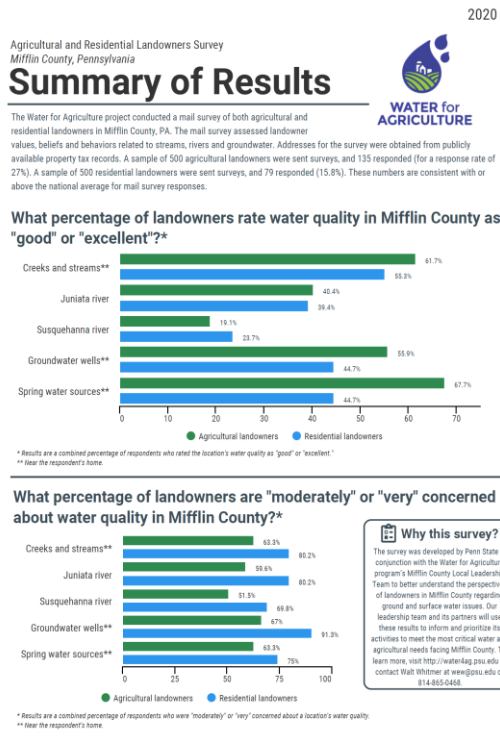
In addition to the in-depth, careful assessment of issues and perspectives, and grounded in recognized engagement principles the project's process included purposeful strategies to ensure the group's efforts included an array of opportunities to gather public input. These included:

- Face to face interviews with 43 farmers, farmer organizations, local government representatives, civic organizations, and technical and educational service providers.
- On-going evaluation and assessment surveys throughout the process
- Two random-sample surveys – one of farmland owners and one of residential non-farm landowners – to gather the public's ideas, perceptions, and perspectives regarding a wide range of water and agricultural related issues. (see below)



## WATER for AGRICULTURE

- A purposeful expectation that local leadership committee members serve as liaisons with their respective organizations and affiliations to provide updates related to group goals and activities and gather perspectives that may inform leadership team perspectives.



### Brief Survey Results

Although a full discussion of results of our two surveys is beyond the intentions of this brief summary report, a few key findings are worth highlighting.

- A majority of both farmers and residents rate the water quality of creeks and streams in the County as either 'good' or 'excellent'. Less than 50% of respondents thought this way about the Juniata River and less than one-quarter felt this way about the Susquehanna River
- Large majorities of both farm and residential landowners were either 'moderately' or 'very concerned' about the water quality of creeks and streams; the Juniata; the Susquehanna; groundwater well; and spring water sources

Importantly, sizable majorities of both agricultural and residential landowners support

the idea that water quality in Mifflin County is important to them and their communities, and that it is important to learn about or take steps to improve current conditions. Specifically, the percentages of respondents who either agreed or strongly agreed with the following statements include:

- 82 % think that it is their personal responsibility to help protect water quality
- 79 % think the quality of life in their community depends on good quality surface and groundwater
- 67 % think that people near them would expect them to protect water quality.
- 51 % would be willing to change their land management practices to improve water quality and quantity
- 42 % are eager to learn more about opportunities to address water quality issues in their communities.

A copy of the summary results is available here: <https://water4ag.psu.edu/files/2020/04/Mifflin-04-03-20-1.pdf> A full report of the survey's detailed results is available upon request.

### Projects and Accomplishments to Date

As outlined above the majority of the leadership committee's first year was devoted to assessing the data, information, and perspectives relevant to water and agricultural issues in the county – and



prioritizing activities and initiatives to address the challenges the group identified.

The onset of the COVID-19 pandemic in March 2020 forced two major changes in our efforts: our meetings and discussions moved to an online environment; and we had to reassess many of our short-term, primarily educational and outreach goals – workshops, field days, in-person outreach, etc. In order to accomplish the goals the committee had established in the previous year, and adjust to the new environment, the group revised its plans and has now developed two fact sheets, undertaken two research projects, and developed web-based educational projects and a video. It is our hope that these products will form the basis of future outreach initiatives.

These include:

- A fact sheet detailing the results an Integrated Farm Systems Modeling project entitled [“Assessing the Benefits and Costs of Cover Cropping in Pa Using a Model-Based Approach”](#) based select Mifflin County farm operations.
- A fact sheet detailing the results of a forage and soil sampling project the leadership team conducted with four area farmer cooperators and assisted by Penn State Extension personnel [Doublecroppingpaper.MifflinWater4Ag-002.pdf \(psu.edu\)](#)
- A web-based Story Map highlighting water and agricultural resources, strategies and challenges in Mifflin County entitled [Water and Agriculture in Mifflin County: A Wealth of Resources Worth Preserving](#)



We are currently also completing a video project highlighting the water and agricultural resources in Mifflin County and the work that is being done to preserve and enhance these resources for all Mifflin County residents. This video is set to be released in May 2021.

### **Summary**

In addition to planning for the return to in-person outreach opportunities, much of the remainder of 2021 will be dedicated to leveraging the experiences, working relationships and information gathered over the last two years to ensure future initiatives – including, but not limited to, the Chesapeake Bay/DEP County Action Planning process.

### **Acknowledgments**

None of the accomplishments, ideas and discussions detailed here would have been possible without the dedication and thoughtfulness of the entire Mifflin County Local Leadership Committee.

### **For Additional Information**

To learn more about any of these issues and project visit <http://water4ag.psu.edu> or contact Walt Whitmer, [wew2@psu.edu](mailto:wew2@psu.edu)