

PRACTITIONER'S GUIDE TO

SUCCESSFUL WATERSHED MANAGEMENT

This practitioner's guide was developed for groups and individuals working towards the common goal of improving the health of their watershed. These groups and individuals include private citizens, nonprofit groups, private industry, federal, state, or local agency staff and many more!

A WATERSHED IS A GEOGRAPHIC AREA ON THE LANDSCAPE THAT WATER FALLS ONTO AND RUNS INTO A COMMON BODY OF WATER, SUCH AS A STREAM, RIVER, LAKE, ESTUARY OR OCEAN.

It is important to understand that our land use and management practices within a watershed impacts the quality and quantity of our water resources. Effective management of natural resources in urban and agricultural lands makes a difference in local, regional, and national water quality as well as the quality of life of those living within the watershed.

The key components laid out in this guide include partnership development, relationship building, constructive leadership, community engagement, and effective communication. These building blocks for successful watershed management provide additional guidance on incorporating local-solutions, building community support and establishing effective partnerships for successful watershed improvement projects.



Partnership Development – Partnerships are an important component for successful watershed management. Partnering with diverse public and private organizations can maximize impacts of conservation efforts by providing opportunities to leverage funding and resources, access to diverse expertise, as well as access to diverse stakeholder groups in and outside of the watershed. While federal, state and local organizations often work together to support watershed improvement efforts, there are opportunities to develop additional partnerships with additional public and private organizations.

Leverage resources

Consistent, coordinated, and diverse technical and financial resources are a necessary component for successful watershed management. When working with partners towards a common goal, combining individual resource contributions can expand the reach and scope of watershed projects. Combined contributions can maximize impacts and work together to achieve watershed improvement goals. Leveraging resources can create a mutual success that each organization can contribute to and take ownership of. To address budget and staffing limitations, organizations can maximize the impact of their resources by leveraging funds to establish partnerships with other public and private groups.

“We leverage partners because that’s how we’re able to expand our dollars a little more. We can’t hire anyone else, but we put money towards [Conservation Districts] or extension. It’s a way we can leverage more without hiring more people, which NRCS can’t do.”

Diverse expertise

In successful partnerships, organizations contribute unique skillsets to a watershed project. Collectively, diverse partnerships can provide technical skills, financial support, and outreach expertise to a watershed project. Working with diverse groups of partners ensures the various needs of a watershed project can be addressed. Building on the idea of leveraged resources, it is important to recruit diverse project partners whose combined expertise can address the technical, financial and outreach components needed to achieve watershed project goals.

“Involvement from agencies- local all the way up to federal all coming together. If you have these issues in the watershed, someone can bring a little small part, I could bring a little small part, you could bring a little small part. If it’s just NRCS, there’s a lot of stuff that needs to be done that they can’t deal with. Bringing more people together helps out a lot.”

In addition to partner expertise, it is also important to consider the flexibility of watershed partners. Often public sector partners, such as federal or state agencies, have a constrained scope of work due to limitations within the agency’s jurisdiction, while local agencies and private partners can have more flexibility. Flexibility is a valuable contribution to watershed projects and can be important to accomplishing watershed goals.

“At the local level you can be creative and flexible as long as you’ve got that political support and your county commissioners are educated to the importance of [watershed improvement] ...there’s a lot of value in that and the local people need to understand that they have that as a strength.”



Access to diverse stakeholders

Project support from producers, landowners and the local community is the foundation to a successful watershed project. Another benefit to working with diverse partners is increased access to diverse groups or individuals who can contribute to project success and grow public support for the project. It is important to deliver watershed related information through a trusted source. Watershed projects with diverse partners can use their existing networks to promote watershed health to a diverse public audience. When reaching out to new stakeholder groups, it is helpful to work with partners who have an established relationship with the group. For example, some watersheds have had success recruiting new producers through partnerships with private sector groups such as, crop advisors, seed or fertilizer retailers, and other agri-businesses.

“There are [private sector] people who sit down with farmers every day, really most of their clients don’t even come in NRCS’s office. That [private sector] person is dealing with them and trying to [get farmers to] come to the NRCS office. That was exciting for us. It’s a unique way to get the farmers from the private sector.”

Relationship Building – Strong working relationships are another key component to successful watershed projects. Conservation staff depend on strong working relationships between landowners and producers to increase voluntary adoption of conservation practices and achieve watershed improvement goals. Building relationships through established networks can promote flexible on-farm solutions and address local concerns while working towards collective watershed goals.

Establish strong working relationships

The strength of local organizations and partners, such as conservation districts, is their established working relationships with landowners and producers in their watershed. These relationships, built on trust and developed over time, influence a landowner or producer’s decision to enroll in NRCS programs or adopt specific practices. Building these relationships requires conservation staff to dedicate time and energy towards one-on-one interactions. Understanding a producer’s operation, on-farm resource concerns and how (or if) conservation practices fit within that operation is important information that can only be gathered through strong working relationships.



“THAT STRONG WORKING RELATIONSHIP LOCALLY IS ESSENTIAL FROM TOP TO BOTTOM IN TERMS OF WATERSHED MANAGEMENT. YOU’VE GOT TO HAVE THAT LOCAL PERSON WORKING THAT HAS RELATIONSHIPS BUILT AND THAT [PRODUCERS] TRUST. I DON’T THINK YOU CAN USE THE WORD LOCAL ENOUGH.”

Acknowledge local concerns

It is important for conservation staff to respect a producer’s knowledge of their operation. Producers understand nuances of their operation and have rationale behind the decisions they make. Acknowledging producer’s expertise gives conservation staff an opportunity to incorporate producer’s knowledge into management plans and work with them to address specific concerns in their operation. A watershed project with goals and objectives that reflects the needs and concerns of the local community will garner more support than a project that has little input from the local community.

“I look to my producers because they know the potential impacts of a change in management. There’s a reason they’ve made decisions on the land. The [producers] have a history with their soil, vegetation, and the way water moves across the land - they are really the experts on the landscape.”

Promote flexible, local solutions

Similar to the importance of including local concerns into watershed improvement projects, it is equally important to use producer’s knowledge to develop local solutions that can be implemented in the watershed. Due to physical variation across the landscape and even



within farm operations, flexibility and access to a suite of conservation practices that address both on-farm and off-farm concerns is important.

“If you lose the flexibility on what a BMP [best management practice] is, then it’s some canned thing that it’s supposed to work on this field, but maybe it doesn’t actually work there, or the producer’s just unwilling to do it because it doesn’t match his overall goals for his management, or maybe it works in wet years but not dry years, or it’s good in dry years but not when you’re getting ten inches of rain in an afternoon.”

Giving the community an opportunity to develop local solutions that address water quality impairments allows them to take ownership of the watershed project and can increase producer buy-in of the project. Maintaining voluntary adoption is another important component to building strong working relationships. Enabling locally derived solutions can be beneficial for producers and the watershed.

“We could embrace locally adopted solutions, opposed to those that are impressed upon us. That’s what is limiting about [regulations]. When [regulatory agencies] decide what you have to do, opposed to when [the local community] identifies the solutions and takes the responsibility... there has to be some authority within the local body to move within the regulations.”



Constructive Leadership – Watershed projects involve many moving parts and require a diverse skill set to address the financial, technical and social needs of the project. To manage these central components, strong leadership from agency staff as well as individuals within the watershed community is needed. It is important for staff and community leaders alike, to have a collaborative mindset that cultivates existing relationships and promotes partnership development at the federal, state, and local level.

Staff leadership (watershed coordinator)

Staff leaders can play the role of a “watershed coordinator.” It is important for the person in this position to have technical expertise as well as a contextual understanding of physical and social components of the watershed. An effective watershed coordinator does not need to conduct all of the technical components of a watershed project, but should understand needs of the watershed and be able to manage or delegate key project components.

“Somebody that’s there to make sure everything is implemented properly. A go-to person...Just somebody that knows the inside-out of everything. An expert.”

An effective watershed coordinator should also understand the past, present, and future trajectory of their community related to watershed health. To establish this contextual understanding, it is beneficial for a watershed leader to be invested in the community and have established working relationships with producers and landowners.

“The watershed coordinator [doesn’t have to be] an overly technocratic position. What’s more important is someone who gets out and goes around listening.”

Community leadership (watershed champion)

Community leaders who represent stakeholder groups inside and outside of the watershed can support

watershed projects by being a liaison between their community and the watershed coordinator. These volunteer-based positions can work within their social networks to increase buy-in, support, and awareness in their specific communities.

“When you have a small farms event, [watershed champions] would know which people in our watershed should go and have the experience and relationship with them to say, ‘Hey, the Conservation District is doing this. Let’s carpool, I’ll pick you all up and we’ll go’...The technical people have so many things that you’re already doing, they don’t always have time to go out and talk with somebody, and that’s what you need to connect [with people].”

Collaborative mindset

A collaborative mindset that promotes partnership development and relationship building is important to secure funding and support from broad audiences at the federal, state, and local level. This essential component to effective leadership in a watershed can help promote goals and objectives as well as develop creative partnerships and valuable collaborations to address watershed project needs.

“Establish a watershed planning group and invite groups of stakeholders together and express the purpose of the group. [Develop a] process for getting input so everybody is heard and is part of developing the plan.

Leadership takes time and energy, and whoever is given that position, whether it's a farmer or someone from extension or NRCS, they need to be granted the time and resources to be able to devote their energy to it."

"While I think it should be locally led...you need the support of broader federal and state level in order to be successful at this point. You have to have the bigger picture involved in other organizations...In addition to financial support, technical and informational assistance that comes from other places is always beneficial."



Community Engagement – Watershed related engagement is another key component for successful watershed management. Effective community engagement informs the public of important information about their watershed, ongoing efforts to improve watershed health and actions they can take to contribute to watershed health. Watershed health has widespread impacts across the landscape and it is important for watershed related engagement to be a consistent, yet tailored message to addresses specific needs of stakeholders and help diverse audiences understand their impacts to their watershed.

Tailored information and delivery

Tailored engagement messages and methods of delivery are important to fully address the needs of diverse stakeholders who impact watershed health. Depending on specific interests, roles in the watershed, sources of information and preference in delivery methods, watershed engagement should be tailored to address specific needs and interests of diverse stakeholders.

"[It's important to] define the different audiences and understand where people are getting their sources of information [from], both in terms of media type and trusted messengers. From there, you can build more targeted messaging [that address] specific things about that audience that might be different than other audiences."

Consistent messaging

While a tailored message is important, community engagement must also have a consistent overarching message. While partnering with diverse groups working towards common goals is beneficial, developing a consistent message is another critical component for effective community engagement. Inconsistent or conflicting messages can create confusion and hinder success of watershed projects.

"We have a lot of different groups putting information out. You want to make sure it's all the same, that one group isn't saying something different than another because the second that counters itself, you've completely alienated somebody and screwed up someone's hard work. Making sure it's the same, coordinated, consistent message is important."

Inclusive Audience

Promoting watershed related information to the broader non-agricultural public as well as the agricultural community is another important aspect of community engagement. A collective watershed improvement effort needs to include both agricultural and non-agricultural communities.

"A lot of times agriculture is picked on, but agriculture is not the only source of erosion problems – If you're doing a project you've got to include something that's non-ag, some non-point source you're addressing so the ag community doesn't feel like they're getting picked on. You've got more credibility if you have a broader program. I think the more diverse a project is, then the more credibility you have and the more participation you'll have."

Engaging with stakeholders outside of targeted watersheds can also contribute to a successful watershed project. Acknowledging that watershed management has impacts on upstream and downstream communities, these stakeholders are also critical for effective community engagement.

“It’s another party out there that is going to be impacted by the decisions made in the watershed. They certainly are somebody that we need to stay in touch with and need to always communicate with. [Education and outreach] doesn’t necessarily mean just to the people in the watershed. That could mean [outside the watershed] as well...Everything we do is going to impact them. So we certainly want them to be as branches to us.”



Effective Communication – The final component for successful watershed management is effective communication. Similar to engagement, watershed related communication needs to be both consistent and tailored. Information should be delivered by trusted sources of information and targeted specific stakeholder groups. Focusing on on-farm benefits has proven to be an effective message for the agricultural community, while highlighting the public value and benefits of a healthy watershed resonates with the broader non-agricultural community.

On-farm benefits of BMP adoption

When communicating watershed related information to landowners and producers, it is important to highlight on-farm impacts and focus on specific benefits producers receive from implementing BMPs. Although many landowners and producers understand the importance of watershed health, their livelihoods depend on profits of their operation, and any change to their operation carries inherent risks and potential consequences. Focusing on the positive on-farm impacts of conservation practices can mitigate economic concerns landowners or producers may have.

“Most people want to do the right thing but they have to weigh economics with conservation. So showing that you don’t have to give up one to have the other, you can meld conservation [and economics] while still meeting a bottom line that’s acceptable.”

Although watershed improvement projects have landscape-scale watershed objectives, it is important to communicate how incremental on-farm improvements can provide on-farm benefits while contributing to landscape-scale improvements in the watershed.

“Take it down to field scale and say, ‘If you lose ten foot off that bank every year, look at how it’s advancing across your property.’ Little things like that... We can promote soil health and all the systems around it, then tie it to economics and cost savings.”

Public value of agriculture and clean water

Public support for watershed projects is necessary for a successful watershed project. To increase public support, it is important for the public to understand benefits they receive from a healthy watershed and to understand the social, economic and environmental contributions of the agricultural community.

“A lot of today’s public did not grow up on a farm. For the public, I think it makes more sense to highlight the different pieces of life that are impacted by farming. They may not care about milk and cows, but they do want that field to snow-shoe across or that spot to hunt. They want their fishing access, you know, so more in their terms.”

Similarly, it is also important for local, state and federal decision makers to understand that their support of agriculture and watershed improvement projects has overarching impacts for constituents in their jurisdiction and watershed health across the nation.

“Legislators and agencies [need to know] that the dollars are extremely important. There’s got to be something in the budget for it...They have an opportunity to help everybody in their district as a representative with some funding.”

Goals are achievable through voluntary action

An important message for landowners, producers and the general public to understand is that watershed health is everyone’s responsibility and that goals set for watershed improvement projects are achievable through voluntary actions. Sharing success of other watersheds shows that time, energy and resources put

into watershed improvement projects can have positive impacts on their operation, in their community, and to local and regional watershed health.

“One of the solutions to this problem is found in what we’re doing in these small watershed efforts where we’re focusing in on technical and financial assistance in small areas. We can show the results and say ‘if we do this, we can have a success.’ As we make that public we can replicate it and get the momentum that’s needed to move it forward throughout the [larger] watershed.”

“The conservation model works very well. Voluntary incentive-based conservation has proven it to be a very successful model here in the state. The message should be that we’ve got goals that can be accomplished. We have opportunities to improve our resources now, and we have assistance from the federal level, state level, and all that.”

This practitioner’s guide was developed in partnership by Purdue University, Conservation Technology Information Center and USDA-National Resources Conservation Service. Information used to guide the development of this document was gathered through small and large group discussions with federal, state, and local conservation staff and watershed stakeholders from diverse watersheds across the US.



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