

**Near-term Actions to Support Environmental Justice in the Section 319
Nonpoint Source Program**

Technical Capacity Workgroup Final Report

June 2022

Table of Contents

1	Executive Summary.....	2
2	Workgroup Description.....	3
3	Workgroup Members	4
4	Current Practices Implemented by Grantees.....	4
4.1	Education and Outreach	5
4.2	Watershed-based Planning.....	8
4.3	319 projects in MS4 areas	13
4.4	Sustainability of Implemented BMPs.....	13
4.5	Technical Assistance and Training	14
5	Program Needs and Suggestions	18
5.1	Short-term Suggestions	18
5.2	Long-term Suggestions	19

List of Tables

Table 1.	Technical Workgroup Members	4
Table 2.	Education and Outreach Best Practices.....	6
Table 3.	Watershed-based Planning Best Practices.....	10
Table 4.	Technical Assistance and Training Best Practices	16

1 Executive Summary

The technical workgroup was organized to address technical capacity gaps preventing disadvantaged communities (DACs) from competing for and managing watershed projects funded by the Section 319 Nonpoint Source (NPS) Program. Topics discussed in detail included watershed-based planning, pollutant issues, 319 projects in municipal separate storm sewer systems (MS4) areas; sustaining operation and maintenance (O&M) of best management practices (BMPs), and technical capacity and training.

A total of 17 workgroup members participated and included representatives from the United States Environmental Protection Agency (EPA) (7), states (8), and Tribes¹ (2). A total of four workgroup meetings occurred between May and June 2022. The workgroup concluded with

¹ EPA recognizes the diversity of terms that Tribal partners use to self-identify, particularly in the context of working with the US federal government and other external partners. For the purposes of this document, Tribe is used as a collective term encompassing federally recognized Tribes, Nations, Pueblos, and other entities

individual meetings between EPA headquarters (HQ) lead and members to discuss report comments.

Outcomes of the workgroup included identification of best practices across topic areas, a description of program needs, and a list of short-term (8) and long-term (15) suggestions for management to consider in efforts to address equity gaps in the NPS program. Key suggestions include:

Short-term suggestions (fiscal year 2023; FY23)

- Clarification of projects and activities where DACs and Tribal entities can be eligible for planning and implementation funding.
- Clarification and examples of sufficient nine minimum element plans for DACs and Tribal communities.

Long-term suggestions

- A pilot for a tiered approach of Watershed-based Plans (WBP) and eligibility for different funding during phases of development, assessment, planning, and implementation.
- A pilot for technical support centers specific to plan development and BMP design that test different scales of approaches.

Beyond report findings, the workgroup format provided a forum to develop relationships and promote collaboration across EPA, states, and Tribes for sharing best practices, lessons learned, and ideas to increase equity.

2 Workgroup Description

The technical workgroup focused on identifying approaches implemented by states and Tribes (grantees) and brainstorming new actions to support disadvantaged communities (DACs) with the science and engineering required to compete for and manage watershed projects funded by Section 319 Nonpoint Source (NPS) Program. Workgroup members met four times collectively between April 11 and June 1, 2022, to discuss technical topics informed by the eight equity listening session held January through February 2022. Technical topics were categorized as follows:

- Watershed-based planning and alternative plans;
- Pollutant issues;
- Urban runoff and 319 projects in municipal separate storm sewer systems (MS4) areas;
- Technical capacity to conduct and sustain operation and maintenance (O&M); and
- Technical resources and training.

To address report comments, individual meetings between the United States Environmental Protection Agency (EPA) workgroup lead and state and Tribal workgroup members occurred the week of June 6, 2022. Work group discussions were synthesized by EPA headquarters (HQ) and summarized in this report to note practices currently implemented by grantees, identify

program needs, and provide suggestions for EPA management when addressing NPS program equity gaps.

3 Workgroup Members

A total of 17 workgroup members participated and included representatives from EPA (7), states (8), and Tribes (2) (Table 1).

Table 1. Technical Workgroup Members

Name	Affiliation	Email Contact
Nia Rivers	Kentucky Division of Water	nrivers@ky.gov
Judy Rondeau	Massachusetts Department of Environmental Protection (MassDEP)	Judith.rondeau@state.ma.us
Eddie Hernandez	Pechanga Band of Indians	ehernandez@perchanga-nsn.gov
Jayshika Ramrakha	EPA Region 10	Ramrakha.jayshika@epa.gov
Leah Clark	Michigan Department of Environment, Great Lakes, and Energy (EGLE)	Clark113@michigan.gov
Brian Fontenot	EPA Region 6	Fontenot.brian@epa.gov
Angela Brown	Indian Department of Environmental Management (IDEM)	abrown@idem.IN.gov
Aseem Kumar	New York State Department of Environmental Conservation (NYSDEC)	aseem.kumar@dec.ny.gov
Mikayla Kerron	Prairie Band Potawatomi Nation	mikaylakerron@pbpnation.org
Steve Hopkins	Iowa Department of Natural Resources (DNR)	stephen.hopkins@dnr.iowa.gov
Greg Sandi	Maryland Department of the Environment	gregorio.sandi@maryland.gov
Amanda Reed	EPA Region 7	Reed.amanda@epa.gov
Robyn Leto	EPA Region 3	Leto.robyn@epa.gov
Vivian Doyle	EPA Region 4	Doyle.vivian@epa.gov
Cynthia Osborn	Minnesota Pollution Control Agency (MPCA)	cynthia.osborn@state.mn.us
Adrienne Donaghue	ORISE Fellow, EPA HQ	Donaghue.adrienne@epa.gov
Cyd Curtis	EPA HQ	Curtis.cynthia@epa.gov

4 Current Practices Implemented by Grantees

State workgroup members noted a variety of actions implemented or underway to target DACs, increase awareness of the NPS program, and provide technical assistance to groups less

equipped with the resources needed to compete for NPS grants. Generally, actions fall under the following themes of education and outreach (E&O), watershed-based planning, 319 projects in MS4 areas, sustainability of implemented best management practices (BMPs), and technical assistance and training. Each theme includes a description of the challenge, a list of the approaches applied, and examples to illustrate each approach. Note that listed practices were compiled by workgroup members and do not represent the entirety of national efforts.

4.1 Education and Outreach

Challenge/impediment: An obstacle to communities engaging with Section 319 result from a lack of awareness of: NPS pollution, available funding, opportunities to plan projects, and the benefits of NPS management to a community. Additionally, NPS priorities for DACs may rank lower compared to other public health concerns.

Workgroup members noted E&O strategies to target communities that lack awareness of the NPS Program, communicate the benefits of BMPs and methods to measure the impact of E&O efforts. Table 2 provides a comprehensive list of E&O practices. Approaches include:

Publish material in multiple languages to expand outreach and overcome language barriers.

The City of Nampa, Idaho implemented activities through the Hispanic Public Outreach Initiative, which is an effort to educate Nampa’s Hispanic community about how to reduce stormwater pollution and encourage participation in stormwater-related events. Permanent bilingual stormwater interpretative signs were installed along the Wilson Creek Pathway.

Communicate NPS benefits through watershed management authorities. Establishment of Watershed Management Authorities (WMA) can be used to communicate the benefits of practices and connect groups. In [Iowa, WMA](#) communicate the advantages of the flood mitigation projects as a part of the [Iowa Watershed Approach](#). Low elevation areas tend to experience more flooding and often include low-income communities.

Apply targeted outreach and engagement by identifying DACs through state specific mapping tools. Multiple states have integrated socioeconomic, environmental, and health data into an interactive mapping platform to screen communities disproportionately impacted. For example, Michigan’s [MiEJScreen](#), modeled after CalEnviroScreen 3.0, calculates a final score for a census tract by multiplying environmental conditions and environmental characteristics.

Utilize social indicator tools or community assessments to identify needs or assess the impact of E&O.

- Indiana utilized social indicators to determine the impact of outreach and education and observed statistical increments in awareness for water quality issues (success story example for [Grassy Creek](#)).
- Iowa’s [Watershed-based Community Assessment](#) document, was funded with 319 funds and prepared by Iowa State University Extension. The objectives of the watershed-based community assessment are to understand the water quality knowledge of the community, determine their concerns, and gauge citizen interest for implementing a watershed improvement project.

Table 2. Education and Outreach Best Practices

Approach	Community/State	Description	Reference/Contact
Bilingual engagement	Nampa, Idaho	Implemented activities through the Hispanic Public Outreach Initiative, which is an effort to educate Nampa’s Hispanic community about how to reduce stormwater pollution and encourage participation in stormwater-related events. Permanent bilingual stormwater interpretative signs were installed along the Wilson Creek Pathway.	Ramrakha.Jayshika@epa.gov
Bilingual engagement	Michigan	Some Michigan grantees create material in multiple languages which can help with engagement.	clarkl13@michigan.gov
Watershed management authorities	Iowa	Watershed management authorities communicated the advantages of the flood mitigation projects. Low elevation areas tend to experience more flooding and these areas also tend to include low-income communities.	stephen.hopkins@dnr.iowa.gov
Water Youth Educational Program	Iowa	Water Rocks! It's an active youth water quality education program that involves videos, songs, skits, etc., which can help educate all youth, regardless of their income or background. Reaching youth is one important way to reach the adults in their lives.	WaterRocks!
State Interactive Mapper	New York	NY's Climate Justice Working Group developed a draft development criteria to identify DACs (purple in map) and ensure they benefit from greener energy, reduced pollution, cleaner air, and economic opportunities.	NY Disadvantage Community Map
State Interactive Mapper	Michigan	MiEJScreen uses percentile scoring based on environmental, health, and socio-economic indicators to measure environmental risk in communities.	MiEJScreen DRAFT
State Interactive Mapper	Massachusetts	The map identifies block groups based on % minority population, income, language isolation, and any combination of those three criteria	Environmental Justice Populations in Massachusetts

Approach	Community/State	Description	Reference/Contact
Social Indicator Surveys	Michigan	The Plaster Creek Stewards curb-cut rain garden program is using SIDMA for social surveys (post-surveys and writeups are pending). Other examples include Rain Garden U.	SIDMA
Social Indicator Surveys	Indian	Indiana used social indicators to determine the impact of outreach and education and have observed statistical increments in awareness for water quality issues.	Add Grassy Creek SS Link once available

4.2 Watershed-based Planning

Challenge/impediment: 319 funding is generally limited to areas with an approved watershed-based plan (WBP). DACs may not have an approved WBP and the time and effort to develop the nine minimum elements of a WBP can be a challenge for some partners. Watershed scale efforts can be limited for Tribes that don't have a strong working relationship with the state.

Discussion regarding watershed-based planning aimed to identify approaches to make technical resources and capacity for watershed-based planning more accessible to DACs. States provided examples of development grants, tools, and watershed planning approaches that impact or support these communities. The workgroup also noted the value of focusing efforts at a smaller scale as a group first gets started on the watershed planning process. Table 3 provides a comprehensive list of watershed-based planning practices. Approaches include:

Leverage development or education grants to build technical capacity.

- Michigan's Department of Environment, Great Lakes, and Energy (EGLE) offers a [Watershed Council Support program](#) to watershed councils and other organizations (included in the 2021 and 2022 budget but future funding is not certain). Individual grants offer up to \$40,000 over one year for capacity building. The scope is not limited to NPS pollutant issues, but NPS has been the focus. Some examples include developing WBPs, creating a full-time position, or providing groups with more money to do equity related work.
- New York offers NPS planning educational grants to help students, low-income, and minority communities ([Environmental Justice Grant Program](#)). For example, a \$25,000 grant in Brooklyn aimed to increase local awareness of NPS through an emphasis on water quality monitoring (samples are sent to an accredited lab).

Utilize a phased approach during the application and watershed-based planning process to assist less experienced grantees and set them up for success.

- Feedback from New Hampshire 319 grantees over the years improved the annual 319 Watershed Assistance Grants competitive process which now includes a Pre-proposal stage to ease applicants into the process. During the Pre-proposal stage only a budget range is selected, and a full budget is developed at the Full Proposal stage. New Hampshire also requires a mandatory call early on with staff NPS Project Managers to discuss project concepts and perform a reality check with potential grantees.
- Kansas utilizes a tiered approach with an emphasis on development. Communities become eligible for a tier of funding as they move through each phase building toward an implementable WBP. The phases include Development (1 year), Assessment (1 year), Planning (1 year), and Implementation. Once a community is complete with the first three phases, their plan is approved and are eligible for implementation².

Develop tools to help build a WBP.

² This phased approach utilized by Kansas was introduced by work group member who formally worked in the NPS Program for the state of Kansas

- Massachusetts developed a [Watershed Plan Tool](#) that provides step by step guidance to develop a WBP. The primary goal was to assist Section 319 grantees lacking technical capacity for the development of the nine minimum elements of a WBP for future implementation projects. A lesson learned was the tool has been used primarily by consultants and additional outreach is needed to reach DACs.
- [Minnesota's 319 small watersheds focus program](#) utilizes a table template to build out the nine minimum elements for a WBP to combat planning fatigue. The small watersheds focus program teams five small watersheds to develop a long-term roadmap for implementation efforts. Selected partners receive four, four-year grant awards that provide a steady funding source and maintain implementation momentum for measurable water quality improvements.

For DACs with an impairment, smaller scale efforts are most effective. Iowa implemented a statewide [beach bacteria total maximum daily load \(TMDL\) \(Addendum #1\)](#). Currently Iowa DNR is working to develop the first beachshed plan (*underdevelopment*). Beachshed plans focus on a smaller area, as opposed to a watershed, which is relevant to equity because beach use is free.

Set aside unspent program funds for WBP development. To provide more technical capacity for watershed-based planning, Maryland is exploring mechanisms to utilize unspent program funds for WBP development.

Leverage watershed management authorities to improve dialogue and management practices across Tribal and state lands. The Iowa River goes through the Meskwaki Nation which is impacted by nutrients and bacteria pollution coming from agriculture and riverbank erosion. As a strategy to deal with upstream sources, the Meskwaki Nation helped organize and facilitate discussions with an Iowa WMA and broke the river into segments to bring together groups with some limited control.

Establishment of Inter-Tribal Councils to foster collaborate with state and federal agencies. The Inter-Tribal Council of Arizona includes a [Tribal Leaders Water Policy Council](#) which is intended to expand Tribal participation in water policy and foster engagement with states and federal bodies. Additionally, the council aims to build capacity by improving accessibility to water management information.

Table 3. Watershed-based Planning Best Practices

Approach	Community/State	Description	Reference/Contact
Watershed Council Support RFP	Department of Environment, Great Lakes, and Energy (EGLE)	Grants to watershed councils and other organizations for up to \$40,000 over one year for capacity building. The scope is not limited to NPS pollutant issues, but NPS has been the focus. Examples include developing WBPs, creating a full-time position, or providing groups with more money to do equity related work.	Watershed Council Support Program
Environmental Justice Grant Program	New York	NPS planning educational grants that provide funding to students, low-income, and minority communities to support water quality monitoring efforts and increase awareness.	Environmental Justice Grant Programs
Tiered Approach to Watershed Based Planning	New Hampshire	Watershed Assistance Grants competitive process which now includes a Pre-proposal stage to ease applicants into the process. Only a budget range is selected during the Pre-proposal stage and a full budget is developed at the Full Proposal stage. New Hampshire requires a mandatory call early on with staff NPS Project Managers to discuss project concepts and perform a reality check with potential grantees.	Pre-proposal application form
Tiered Approach to Watershed Based Planning	Kansas	State applies a tiered approach where communities become eligible for a tier of funding as they move through each phase building toward an implementable WBP. The phases include Development (1 year), Assessment (1 year), Planning (1 year), and Implementation.	reed.amanda@epa.gov

Approach	Community/State	Description	Reference/Contact
Watershed Plan Tool	Massachusetts	Tool provides step by step guidance to develop a WBP. The primary goal was to assist Section 319 grantees lacking technical capacity with the development of nine-element WBP to later conduct implementation projects. Outreach may be important to expand use beyond consultants.	Watershed Plan Tool
Focus on small scale efforts	Iowa	Iowa implemented a statewide beach bacteria total maximum daily load (TMDL). Currently Iowa is working with DNR Parks to develop the first beachshed plan. Beachshed plans focus on a smaller area, as opposed to a watershed, which is relevant to equity because beach use is free.	Beach Bacteria TMDLs
Partnerships with Watershed Management Authorities	Meskwaki Nation	The Iowa River goes through the Meskwaki Nation which is impacted by nutrients and bacteria pollution coming from agriculture and riverbank erosion. As a strategy to deal with upstream sources, Meskwaki Nation helped organize and facilitate watershed planning discussion with a Watershed Management Authority. The river was broken into segments to bring together groups with some limited control.	stephen.hopkins@dnr.iowa.gov
Inter-Tribal Council of Arizona	Tribes in Arizona	Council includes a Tribal Leaders Water Policy Council which is intended to expand Tribal participation in water policy and foster engagement with states and federal bodies. Additionally, the council aims to build capacity by improving accessibility to water management information.	Tribal Leaders Water Quality Council

Approach	Community/State	Description	Reference/Contact
Developing a Mapper that overlays DACs and Areas Missing WBPs	North Carolina	NC overlaid approved WBPs with approved underserved communities. Next step is to include GIS layers with monitoring and TMDL data to determine how to best support those watersheds and local folks develop WBPs.	doyle.vivian@epa.gov
Building Partnerships with Local Knowledge and Expertise	Global	Building partnerships with a local university or larger watershed group helps disseminate knowledge and expand the reach of efforts.	NA
319 Small Watersheds Focus Program	Minnesota Pollution Control Agency	The small watersheds focus program teams five small watershed to develop a long-term roadmap for implementation efforts. Selected partners receive four, four-year grant awards that provides a steady funding source and maintains implementation momentum for measurable water quality improvements.	319 Small Watersheds Focus Program

NA = not applicable

4.3 319 projects in MS4 areas

Challenge/impediment: Communities may not be aware that urban NPS projects are eligible for 319 funds when the project is not a requirement of the permit. Some 319 programs experience challenges securing partners due to multiple funding sources or municipalities pulling out of projects to obtain MS4 credits elsewhere.

Discussion related to this topic included the examples provided below.

Providing planning grants aimed to encourage cooperation between nonpoint source planning projects and regulated MS4 areas. New York offers a [Nonagricultural Nonpoint Source planning and MS4 Mapping Grant](#). The program is a competitive reimbursement grant aimed to prepare nonpoint source projects for construction and application for implementation funding, and to encourage and support cooperation among regulated MS4s to complete mapping of their stormwater system.

4.4 Sustainability of Implemented BMPs

Challenge/impediment: The long-term success of BMPs depends on the resources and capacity to maintain BMPs. O&M is not eligible for 319 funds. There can also be uncertainty about future project implementation.

Workgroup discussion noted examples of landowner agreements, training, and partnerships with counties as approaches for promoting O&M. Discussion related to this topic included the examples provided below.

Including landowner agreements in cost share programs for BMP implementation. The Virginia Conservation Assistance Program provides financial, technical, and educational assistance to property owners installing eligible stormwater control practices. Most installations are eligible for a 75% reimbursement. Landowners are responsible for all maintenance but agree to spot check by the districts of over the 10 year lifespan ([Landowner Agreement](#)).

Sending maintenance materials following a change in homeownership. Michigan observed that maintenance practices slip when there is a change in homeownership. To address, the state sends a maintenance packet to new homeowners and works with the county to target new owner engagement.

In MS4s areas, O&M can be integrated into public works O&M schedules but communication is needed. Maryland observed that if a project is funded in a MS4 area, the practice receives routine O&M because receiving credits on permit is a motivation. Additionally, MS4s within MS4s (i.e., college campus) rely on counties to do the maintenance.

4.5 Technical Assistance and Training

Challenge/impediment: DACs may express an interest in water quality issues but lack technical expertise or resources for selecting BMPs, planning, or implementing projects. Tribes noted that base grant allocations are not sufficient for technical services and staff lack technical knowledge for BMP design and project implementation. States noted the utility of technical staff at the local level and the support from implementation programs (i.e., rain garden installation).

Table 4 provides a comprehensive list of best practices identified for technical assistance and training.

Development of easy-to-use tools for BMP selection and water quality assessment.

- Region 10 helped prepare tools for the Coquille River Watershed—a small mostly rural community that is not an MS4 but has potential to be regulated under the MS4 program in the future. The City has limited resources and lacks technical staff dedicated towards water quality related issues. EPA, the Oregon Department of Environmental Quality (DEQ), and contractors developed tools accessible to users without an engineering background which included [a temperature mapping tool](#), [TMDL low impact development \(LID\) Implementation Tool](#), and a total organic carbon sources assessment and spreadsheet tool.
- Massachusetts developed the [Massachusetts Clean Water Toolkit](#) which offers information on a suite of BMPS for a wide variety of scenarios.

Establish partnered collaborations between communities and subject matter experts to address water quality concerns. Pechanga Band of Indians was a member of the [Santa Margaritas nutrient alternative TMDL](#) workgroup which was a part of the local watershed group that created an alternative TMDL. The relationship connected Pechanga Band of Indians with other agencies adjacent to the reservation and brought in funding from the states for modeling. Modeling components accounted for nutrient loads and land use to assess watershed loads. Additionally, the model provided insight on up-stream and down-stream sources. Another benefit was the workgroup reminded partners that Pechanga Band of Indians is not a part of their jurisdiction. Counties in the past categorized reservation land as open space which is incorrect.

Organize state technical staff to cover local regions and assist with planning efforts.

- The Michigan NPS program assigns a [technical assistance](#) point person to each district. Technical assistance staff are involved with outreach, support, site visits, and development of ideas for competitive proposals. Example of other support activities include collecting and analyzing soil borings.
- Massachusetts developed an approach that funds regional planning agencies as regional NPS coordinators (through 319) to work within their areas to identify projects, write proposals, and manage grants. They partner with local communities to conduct planning

and implementation projects and provide technical expertise that many small towns lack. Additionally, Massachusetts recently began promoting a similar program among the agricultural community in partnership with the Massachusetts Association of Conservation Districts. Funded through 319, MassDEP hires NPS coordinators to work with farmers to develop and implement farm conservation plans.

Streamline application paperwork or host application assistance workgroups. Maryland expressed an interest in reducing application paperwork to attract new applicants. Kentucky is currently working to develop an application assistance workgroup to provide aid to communities unfamiliar with NPS grants. The workgroup would include both in person and virtual components.

Funding engineer circuit writers. Maryland is exploring the idea of funding engineer circuit writers to support communities with less technical experience.

Table 4. Technical Assistance and Training Best Practices

Approach	Community/State	Description	Reference/Contact
Local and university partnerships for BMP design and installation.	Iowa Americorp	Utilizes local resources and partners for BMP design, installation, and monitoring.	https://blackhawkswcd.org/dry-run-creek/
Support from colleges and universities.	College/Underserved Community Partnership Program (CUPP) Region 4	DACs can receive technical assistance from enlisted colleges and universities. Technical support has been provided via student internships, practicums, and capstone projects. Specific examples for 319 include grant writing training and watershed modeling.	CUPP
TMDL Mapping Tool	EPA Region 10	EPA, DEQ, and contractors developed tools accessible to users without an engineering background which included a temperature mapping tool, TMDL low impact development (LID) Implementation Tool, and a total organic carbon sources assessment and spreadsheet tool.	Coquille River Watershed TMDL Mapping Tool
Clean Water Toolkit	Massachusetts	Offers information on a suite of BMPS for a wide variety of NPS scenarios such as agricultural, urban stormwater, and forestry.	Clean Water Toolkit

Approach	Community/State	Description	Reference/Contact
Alternative TMDL Workgroup	Pechanga Band of Luiseño Indians	The workgroup was a part of the local watershed group that created an alternative TMDL. The relationship connected Pechanga Band of Luiseño Indians with other agencies adjacent to the reservation and brought in funding from the states for modeling.	Santa Margaritas nutrient alternative TMDL
Technical Assistance Staff	Michigan	Technical assistance staff are involved with outreach, support, site visits, and development of ideas for competitive proposals. Example of other support activities include collecting and analyzing soil borings.	Michigan NPS staff
Regional NPS coordinators	Massachusetts	Regional NPS coordinators (through 319) work within their areas to identify projects, write proposals, and manage grants. They partner with local communities to conduct planning and implementation projects and provide technical expertise that many small towns lack.	judith.rondeau@state.ma.us
Center of Excellence for Watershed Management (CEWM)	Alabama	Auburn University was designated as a Center of Excellence for Watershed Management in partnership with EPA Region 4 and Alabama Department of Environmental Management. The CEWM sought out stakeholders in need of scientific reporting, engineering support, watershed planning, and other needs. The CEWM worked with both priority watersheds and watersheds in their geographic area of influence.	Williams.Darryl@epa.gov

5 Program Needs and Suggestions

Thematic needs emerged during the technical workgroup discussions related to improving equitable access and participation in the NPS program.

First there is a need across the program to realign priorities that watershed-based planning should match the scale and complexity of the watershed. Smaller scale efforts and communities starting to build capacity don't require a complex watershed-based plan.

Second there is a need to communicate to DACs the state of their local water quality. This can inform priorities, increase awareness, recruit communities to engage, and build local readiness. Communities are effective at organizing efforts on the ground but need technical support from states and EPA for financial reporting and design components. Additionally, EPA and states can lift burdens related to financial reporting, target release of funds to improve the planning process, and streamline technical reporting requirements.

Third workgroup members also noted the need to redefine indicators of success. As an example, when engaging DACs social success and behavioral changes may be the first indicator of change rather than achieving water quality goals.

Lastly, there is a need for increased collaboration with Tribal partners. State WBP are siloed from Tribes, urban Tribes are often overlooked by municipalities, and checkerboard reservation areas make WBPs difficult. Encouraging and emphasizing collaboration and partnerships between states and Tribes helps identify and achieve sustainable solutions for a healthy watershed.

Suggestions that follow were derived to address technical program needs and incorporate best practices previously described that show promise for adoption at the national scale.

5.1 Short-term Suggestions

Short-term suggestions provide actions to be implemented by end of fiscal year 2023 (FY23). Short-term suggestions are categorized specific to watershed-based planning and E&O and include:

E&O

1. EPA and states prioritize bilingual publication and translation of outreach materials to match language of local community.
2. Create and maintain a data base of technical best practices to address equity on the EPA NPS webpage as a resource for states, subgrantee, and Tribes on NPS webpage.

Watershed-based planning

1. Add a new scenario for alternative plans specific to DACs to the NPS Grant Guidelines.

2. Clarification of projects and activities where DACs and Tribal entities can be eligible for planning and implementation funding.
3. Create a fundable project type for planning and implementation grants that provide funds for DACs and Tribes to build partnerships and establish preliminary goals.
4. Clarification and examples of sufficient nine minimum element plans for DACs and Tribal communities.
5. Reevaluate requirements of what would meet the definition of an eligible WBP for Tribes. For example, accepting management or assessment plans.
6. Establish a DAC metric or goal for grantees to consider as part of overall NPS program implementation.
7. Make a list of watershed identified by NWQI Watershed Elements as "project ready" and determine if they overlap with DACs.

5.2 Long-term Suggestions

Long-term suggestions provide actions to be implemented beyond FY23. Long-term suggestion include:

E&O

1. State grantees and EPA coordinate with 106 to do targeted community outreach for priority areas. Specifically for watershed planning, states contact communities and share data to highlight project opportunities.
2. Include DAC and 319 communities as part of the stakeholder process during TMDL development and provide information on watershed concerns and how 319 funds can be leveraged. Bonus points for inviting state revolving fund (SRF) staff to speak at these meetings and make connections.

O&M and 319 in MS4 areas

1. Develop a list or white paper of funding sources available for O&M and approaches to engage with local municipality for support.
2. EPA to write a clarification memo to states on Section 319 eligibility in MS4 areas with a focus on DAC which is not typically a focus in permits.

Watershed-based planning

1. Implement a pilot to test a tiered watershed-based planning approached for DACs and Tribes. Stages include development, assessment, planning, and implementation. Funding is released for each stage.
2. Grantee pilot program: Develop a scaled pilot approach to demonstrate a network of community support to assist in phased development of a WBP that supports communities water quality concerns. This could be achieved through academic

institutions, such as historically black colleges and universities (HBCU) and Hispanic association of Colleges and Universities (HACU), state agencies, or communities with an established watershed approach.

3. Develop an alternative plan template for DACs as a building block to a future WBP long-term. This suggestion can be developed in a pilot. Preliminary ideas include a table approach. EPA will need to determine what is sufficient. The pilot will also consider parallel plan requirements for other funding sources such as U.S. Fish and Wildlife.
4. EPA and state agencies explore more options to provide steady state of funding.

Technical Assistance and Training

1. Develop a training for EPA staff specific to WBP review and a tracking program for WBPs.
2. Development of a WBP builder.
3. Develop a database of example quality assurance project plans (QAPPs) and WBPs categorized based on region, source type, etc.
4. Publish a comprehensive catalog of BMPs that notes information on costs, effectiveness based on pollutant type, and O&M considerations.
5. Work to develop a toolbox on how to engage DACs in NPS efforts.
6. A pilot for technical support centers specific to plan development and BMP design that tests different scales of approaches.
7. EPA Pilot Program for a hotline or office hours to provide technical assistance for communities first applying for an NPS grant. It will be important to account for differences across states and regions.