

U.S. Environmental Protection Agency, Region 9
Drinking Water Tribal Set-Aside Program
2020 Guidelines and Procedures for Applying for Assistance

EPA Region 9 is pleased to issue these guidelines and procedures for applying for assistance from the Drinking Water Tribal Set-Aside (DWTSA) program. This program provides funding for federally recognized tribes within EPA Region 9 for public drinking water system infrastructure. Funds are awarded through direct grants to tribes or interagency agreements with the Indian Health Service. The funding will be used to address the most significant public health threats for public water systems.

Approximately \$7 million of FY20 funds may be available. In addition, projects ranking higher than Health Category 9 may be considered under the anticipated FY21 appropriation. Matching funds are not typically required; however, in cases where commercial entities and/or non-tribal populations receive water from the public water system, EPA may require the tribe to provide a funding contribution proportional to the water demand of the commercial entity and/or non-tribal populations. Similarly, for projects whose costs are correlated with water usage, a funding contribution may be required for water systems using over 150 gallons per capita per day, with the contribution proportional to the amount over 150 gallons per capita per day used. Additionally, given the limited funds available under this program and EPA's goal to maximize the number of projects it can fund, EPA may work with applicants to explore the availability of funding from other federal agencies, tribal or third-party sources to contribute to the total project cost.

This assistance will be awarded under Section 300j-12 of the Safe Drinking Water Act, 42 U.S.C. §1452. The Catalog of Federal Domestic Assistance Number is 66.468.

Important Dates:

November 22, 2019 - EPA must receive proposals by this date, including the proposal form, tribal government endorsement, and preliminary engineering reports (PERs) or planning project proposals with supporting documents. **Proposals received after November 22, 2019 will not be considered for funding.**

E-mail one electronic copy of the proposal and any documentation to:
Karly Ho, ho.karly@epa.gov

[Electronic files exceeding 8MB must either be separated into emails not exceeding 8MB each, or saved on a memory device and mailed.](#)

or

Mail one hard copy of the proposal and any documentation to:
Karly Ho, WTR 4
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

- January 2020 - - - - EPA will notify each applicant of the draft proposal priority and whether the project is selected to continue with the application process.
- March 2020 - - - - - Applicants can submit comments on the draft prioritization. For projects selected to continue with the application process, applicants must submit responses to any EPA comments, and capacity and managerial checklists.
- April-August 2020 - EPA notifies applicants of the final priority list and funding decision, along with guidance letters for projects to be funded by grant.
- May-August 2020 - - Tribe submits grant application, or Indian Health Service submits draft Memorandum of Agreement and signed Project Summary (exact dates will be included in funding decision notification letters).
- September 2020 - - - EPA awards funds for selected projects.

Contents of Guidelines:

Page

I.	Description of Program.....	1
II.	Award Information.....	4
III.	Eligibility Information.....	4
IV.	Step 1: Proposal Submission Information.....	10
V.	Step 2: Comments on Draft Prioritization, Capacity and Managerial Checklists and Final Feasibility Studies.....	13
VI.	Step 3: Grant Application/Interagency Agreement Process.....	14
VII.	Funding Allocation Methodology.....	15
VIII.	Ranking Criteria.....	16
IX.	Award Administration Information.....	18
X.	Agency Contacts.....	18
XI.	References.....	19

Appendix A: Standardized Preliminary Engineering Report Template

Appendix B: Sample Grant and Interagency Agreement Programmatic and Administrative Conditions

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I. Description of Program

EPA Region 9 is pleased to issue these 2020 guidelines and procedures for applying for assistance from the Drinking Water Tribal Set-Aside program. This program provides funding for federally recognized tribes within EPA Region 9 for public water system infrastructure. Funds are awarded through direct grants to tribes or interagency agreements with the Indian Health Service. The funding will be used to address the most significant public health threats posed by inadequate public drinking water system infrastructure. Approximately \$7 million may be available in FY20. In addition, projects ranking higher than Health Category 9 may be considered for anticipated FY21 funds. This assistance will be awarded under Section 300j-12 of the Safe Drinking Water Act, 42 U.S.C. §1452.

A. Program History

The 1996 amendments to the Safe Drinking Water Act (SDWA) provide for a Drinking Water State Revolving Fund. The SDWA contains a provision setting aside 1.5% of the annual appropriation for drinking water systems that serve Indian tribes.¹ In FY10 and subsequent years, EPA's budgets increased the tribal set-aside from 1.5% to 2%, and in FY16 a funding floor of \$20 million was added to the national tribal-set aside. EPA anticipates that future budgets will retain the 2% increase and \$20 million floor.

EPA Headquarters issued national guidelines for this program in 1998 which can be found at http://www.epa.gov/safewater/dwsrf/allotments/tribes/pdf/guidelines_dwsrf_tribal.pdf. The national guidelines gave each EPA region significant flexibility in developing regional funding procedures. EPA Region 9 formed a Regional Tribal Operations Committee (RTOC) DWTSa workgroup with tribal representatives to develop these procedures to meet tribal needs, consistent with the objectives of the SDWA and the national guidelines.

In December 2013, EPA Headquarters issued revisions to the national guidelines that can be found at http://water.epa.gov/grants_funding/dwsrf/allotments/upload/epa816B13015.pdf. These revised national guidelines necessitated some changes to the Region 9 guidelines document. EPA Region 9 amended the guidelines in 2014 in coordination with the RTOC DWTSa workgroup and consultation with Region 9 tribes.

B. What types of projects can be funded through this program?

Infrastructure projects funded through the DWTSa must address the most significant threats to public health associated with public water systems that serve tribal populations. Eligible projects (or portions of projects) must ensure compliance with the National Primary Drinking Water Regulations under 40 CFR Part 141, or otherwise further the health protection objectives of SDWA.² As stated in the national guidelines, eligible infrastructure improvement projects can:

¹ 42 U.S.C. 300j-12(i)(1) 42 U.S.C. 300j-12(i)(1)

² U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 16

- Rehabilitate/develop sources (excluding reservoirs, dams, water rights);
- Install or upgrade treatment facilities;
- Install or upgrade storage facilities, including finished water reservoirs;
- Install or replace transmission and distribution pipes;
- Replace aging infrastructure if replacement is needed to maintain compliance or further the health protection goals of the SDWA;
- Install new transmission, distribution or service lines to connect existing homes to a public water supply;
- Water efficiency projects (e.g., installation of meters);
- Expansion, consolidation or development of a new public water system (limited circumstances, see below); and
- Develop preliminary engineering reports (PERs).

Addendum 99-1 to the national guidelines allows funding for the creation of new community water systems to address existing public health problems caused by unsafe drinking water provided by individual wells or surface water sources. The policy also allows the creation of new regional community water systems which consolidate several existing systems that have technical, financial, or managerial difficulties. Before funding the creation of a new system, EPA must ensure that all of the potentially affected parties have been notified and that the tribe has considered alternative solutions to addressing the problem. According to the national guidelines, new systems may be funded only if the following conditions are met:

- options for connection with adjacent public water systems have been fully explored and deemed unreasonable by the EPA Region;
- upon completion of the project, the entity created must meet the federal definition of a community water system;
- funding is limited to projects where an actual public health problem exists with documented health risks;
- the project must be limited in scope to the specific geographic area affected by the health risk; and
- the project can only be sized to accommodate a reasonable amount of growth expected over the life of the facility - growth cannot be a substantial portion of the project.

DWTSA funding can also be used to develop a preliminary engineering report, and for work to secure rights of way (though DWTSA funds cannot be used to purchase real property).

The national guidelines also allow EPA to consider funding unscheduled “emergency” projects after EPA uses its prioritization method to rank projects for a year.³ Such projects can include those where some type of failure was unanticipated or the result of natural disaster or an emergency and may require immediate attention to protect public health. In these cases, EPA has the authority to fund the emergency project provided it meets the requirements of the Drinking Water Tribal Set Aside Program.

The Water Infrastructure Improvements for the Nation (WIIN) Act provided EPA with the flexibility to utilize DWTSA funding to provide “operations and maintenance training and operator certification services to Indian Tribes.” Eligible recipients of funds for these activities include tribal organizations and intertribal consortia. Funding for operation and maintenance activities is not eligible under this new flexibility. While the WIIN Act does not establish any funding minimums for these activities, a maximum of 30% of the annual DWTSA allocations by region may be used for this purpose⁴. Region 9 has utilized this new flexibility in fiscal years 2017-2019 to fund operator certification training and exam services provided by the Inter-Tribal Council of Arizona and the Navajo Nation EPA. We anticipate utilizing this flexibility in future funding cycles to support critical operations and maintenance training and operator certification services to Tribes.

C. What types of projects cannot be funded through this program?

According to §1452(a)(2), the Safe Drinking Water Act specifically disallows projects for:

- Monitoring;
- Operation and maintenance;
- Projects intended primarily for future growth; and
- Land acquisition (unless the land is integral to the project and is from a willing seller (§1452(k)(1)(A)(i)).

According to §1452(g)(2), the Safe Drinking Water Act specifically disallows projects for:

- Supplementing the Public Water System Supervision Program;
- Administering or providing technical assistance through source water protection programs;
- Developing and implementing a capacity development strategy; and
- Administering an operator certification program.

According to §1452(k), the Safe Drinking Water Act specifically disallows projects for:

- Loans to water systems to acquire land or a conservation easement;
- Loans to any community water system to implement source water protection measures in delineated areas;
- Loans to any community water system to assist them with source water protection;
- Technical or financial assistance to any water system to carry out a capacity development strategy; and

³ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 16

⁴ April 18, 2017 Memo from Anita Thompkins, Director of the Drinking Water Protection Division, Office of Ground Water and Drinking Water: <https://www.epa.gov/tribaldrinkingwater/amendments-drinking-water-infrastructure-grants-program-required-water>

- Implementation of a wellhead protection program.

According to the national guidelines, funding is not allowed for:

- Dams, or rehabilitation of dams;⁵
- Water rights;⁶
- Reservoirs (except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the treatment facility property);⁷
- Projects that serve mainly commercial uses, including livestock watering;
- Projects needed primarily for fire protection;⁸
- Compliance monitoring; and
- Projects for tasks that are considered routine operation and maintenance.

D. Program Link to EPA's Strategic Plan

Projects funded under this program support the strategic measures expressed by Goal 1 (A Cleaner, Healthier Environment), Objective 1.2 (Provide for Clean and Safe Water), of the EPA Strategic Plan for 2018-2022 related to the provision of safe drinking water to tribal communities. The program fits within the EPA Strategic Plan and its long-term performance goal-1.2.2 to reduce the number of community water system out of compliance with health-based standards to 2,700 nationwide by September 30, 2022. In addition, the program will help to increase the number of American Indian and Alaska Native homes provided access to safe drinking water in coordination with other federal agencies.

II. Award Information

EPA intends to award approximately \$7 million in FY20 funding for projects ranging in size from \$30,000 to over \$2 million. In addition, projects ranking higher than Health Category 9 may be considered for anticipated FY21 funds. Over the history of the program, the average cost of funded construction projects is approximately \$600,000. Based on experience from previous years, EPA estimates that eight to twelve construction projects and a four to five planning projects may be selected for funding. Tribes may request that projects be awarded as either a grant to the tribe or an interagency agreement with the Indian Health Service.

EPA reserves the right to partially fund proposals by funding discrete activities, projects, or phases of proposals, and may work with applicants to explore the availability of funding from other federal agencies, tribal, or third-party sources to contribute to the total project cost. Funding for project proposals is not guaranteed and is subject to the availability of funds. EPA is not bound by any estimates in these guidelines and reserves the right to reject all proposals or applications and make no awards.

The national guidelines provide EPA with the authority to transfer funds between the Clean Water Indian Set Aside (CWISA) funds and the DWTSA Programs.⁹ The Office of Ground Water and Drinking Water (OGWDW) and the Office of Wastewater Management (OWM)

⁵ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 16

⁶ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 16

⁷ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 16

⁸ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 16

⁹ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 18

calculate each region's allotment and indicate the maximum amount of funding available for transfer within each EPA region. Any transferred clean water infrastructure funds must be used to fund projects that are related to drinking water and will provide the greatest public health benefit to tribes. The proposed projects to be funded through a transfer must be on IHS's Sanitary Deficiency System list. Any transfers must first be approved by the OGWDW and the OWM.

In accordance with national DWTSA program guidelines to address project cost efficiency, if a project selected for funding has a cost per tribal home served equal to or greater than \$132,000, the EPA Region 9 regional administrator must be notified.¹⁰

III. Eligibility Information

A. Who is eligible to receive funding under this program?

Only federally recognized Indian tribes within EPA Region 9 may submit proposals.¹¹ Funds will be awarded in either grants to tribes or interagency agreements with IHS. Region 9 covers the States of Arizona, California, Hawaii, and Nevada as well as the Pacific Islands of American Samoa, Commonwealth of the Northern Mariana Islands, and Guam.

If a tribe receives a grant, the tribe may issue a contract or subaward using grant funds to carry out the project. In such cases, the tribe must comply with the federal procurement requirements, federal regulations pertaining to subawards, and the EPA Sub award Policy. The tribe is the EPA grant recipient and is ultimately responsible to EPA for proper management of the funds. The plan for the tribe's use of the grant funds must be identified in the grant award document.

B. Which water systems are eligible to receive funding?

1. Only public water systems that are community water systems or non-profit, non-community water systems are eligible to receive funding.¹²
 - A public water system is defined as an entity that supplies water for human consumption and has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. It may include collection, treatment, storage, and distribution facilities.
 - A public water system is classified either as a community water system or a non-community water system. A community water system means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. A non-community water system means any public water system that is not a community water system.
2. The system must serve an Indian tribe.¹³ Funding can be provided to improve any eligible public water system, whether or not it is owned by a tribe, on or off-reservation, or

¹⁰ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 23

¹¹ 42 U.S.C. 300j-12(i)(1)

¹² 42 U.S.C. 300j-12(a)(2)

¹³ 42 U.S.C. 300j-12-(i)(2)

servicing tribal communities living on or off-reservation. Since tribes will be applying for funds on behalf of the water system, EPA will assume that the water system serves a tribe, as required by the SDWA, and the requested improvements are a high tribal priority. In cases where commercial entities and/or non-tribal populations receive water from the public water system, EPA may require the tribe to contribute funds to the project proportional to the water demand of the commercial entity and/or non-tribal populations.

3. Systems that are in significant noncompliance with any requirement of the National Primary Drinking Water Regulations will not be eligible for funding unless the project which is being funded will ensure compliance.¹⁴ Monitoring and reporting requirements must also be met to maintain compliance with the SDWA.
4. Any system to be assisted with DWTSA funding must be operated by adequately trained and certified operators. Please note that public water systems subject to the Surface Water Treatment Rule and community and non-transient non-community water systems subject to the Disinfection/Disinfectant Byproducts Rule must be operated by qualified personnel meeting requirements specified by EPA. EPA determines that a qualified operator is an operator certified at the appropriate level of the water system to be in compliance with the SDWA.
5. Tribes will only receive funding for a project if they can demonstrate that the utility has, or will develop, the technical, financial, and managerial capacity to properly maintain the water system.¹⁵

C. What is capacity and why is it important?

The national guidelines state that the DWTSA program only funds drinking water infrastructure projects at public water systems that have the technical, managerial and financial capacity to ensure compliance with the requirements of the Safe Drinking Water Act per requirements in §1452(a)(3)(A)(i). The investment in physical infrastructure is only one part of ensuring safe drinking water delivery. Lack of proper operation and maintenance may lead to deterioration of the infrastructure and unsanitary conditions. Proper staffing, management, financial planning, and funding are crucial to ensure that operation and maintenance are adequate. Therefore, capacity is a threshold eligibility factor for funding.

EPA characterizes the three elements of technical, financial, and managerial capacity to properly run the water system as follows:

1. **Technical capacity** refers to the physical infrastructure of the water system (i.e. the capability of the system components to provide water that meets the requirements of the SDWA), and the technical knowledge of the system personnel and their ability to use that knowledge to adequately operate the system. Evidence of adequate technical capacity includes:
 - a. Employment of certified operator (as appropriate for system including proposed infrastructure)

¹⁴ 42 U.S.C. 300j-12(a)(2)

¹⁵ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 19

An operator must be certified at the appropriate level to operate the public water system, including the infrastructure proposed in the project. A tribe or the water system serving the tribe must provide copies of the operator's certification prior to award of DWTSA funds. Customers of any public water system need to be provided with an adequate supply of safe, potable drinking water. To attain this, it is essential that public water system operators are trained and certified and that they have knowledge and understanding of the public health reasons for drinking water standards. Without qualified and trained operators, public health cannot be adequately protected.

b. Adequate staff to operate the system

It is important to allow sufficient time for staff to examine the system, conduct preventive maintenance, ensure that conditions remain sanitary, address problems as quickly as possible to avoid a loss of pressure, prevent a lack of water, continue proper operation, etc. This can be done by a variety of methods, but public health and the water system must be priorities of the operator(s).

c. Ability to adequately survey system

Operating a system requires regular inspections of the facilities (including the inside and outside of storage tanks, pump houses, and well heads), flushing gate valves regularly, etc. To achieve this, the operator needs to have access to vehicles when facilities are not located within immediate walking distance.

d. Availability of the tools and measurement devices necessary to perform routine operation and maintenance on the system

Operators must have the ability to address a problem and conduct routine maintenance, such as changing leaky gaskets, flushing valves, fixing chlorinators, and measuring chlorine and fluoride levels.

e. Existence of as-builts

The existence of as-builts allows operators to properly conduct necessary maintenance activities such as flushing the system regularly, locating shut-off gate valves to isolate a water line break, and locating water lines for excavation.

f. Ongoing training and safety programs

Ongoing training allows operators to sharpen their skills and better address system operations. Safety programs are necessary because a water system can be a dangerous place: high voltage areas and confined spaces are present, slippery surfaces exist, high structures must be climbed, and potentially dangerous treatment chemicals must be handled.

2. **Financial capacity** includes the ability of the system to maintain sufficient revenues to cover operation costs and the effective management of those resources to operate the

system. Evidence of adequate financial capacity includes:

- a. Adequate written budget (and process in place) to pay for staff, chemicals, power, maintenance, monitoring

Financial capacity is key to proper operation and maintenance. A written budget is the first step. Though often smaller systems cost more per user than large systems (because of economies of scale), most ground water systems are relatively inexpensive for a necessary utility. Drinking water costs in many areas exceed \$20-\$30 per household connection per month. It is important for communities to make enough funds available to properly operate and maintain the system. Users must also pay their bills to ensure the financial stability of the system. The systems should have procedures in place to encourage prompt customer payment.

- b. Capital replacement plan (or identification of capital replacement needs)

This ensures that money is set-aside from the budget to address expected repairs that happen on a regular basis, such as pump maintenance and replacement, and tank clean-outs. If these are not set aside in the budget, it may lead to a budget shortfall when the items need replacement.

- c. Annual operating budget identified (whether through user charges or general fund) at beginning of year

To ensure continued operation at a reasonable cost, a budget must be developed that shows income, operation and maintenance costs, and short-lived asset reserves. This allows the system to address expenses in a reasonable manner as opposed to expending greater amounts when the unforeseen emergency arises (e.g., a pump due for replacement breaks down over the weekend, creating a need to expedite shipment and pay overtime).

An annual operating budget is also required when a tribe requests funding for preliminary engineering report (PER) development. This operating budget only needs to consider the existing infrastructure under operation by the public water system. Changes to the operating budget that may result from future infrastructure improvements should be reflected in the PER.

- d. Record keeping for budget, use, operations, and equipment

For consistently efficient operations, it is necessary to maintain records to anticipate budget expenses and equipment needs ahead of time.

- e. Drinking water program accounting system

The accounting system for the public water system must have the capability to record, track and report the public water system's revenues and expenses separate from other program activities. Expenses or revenues associated with the utility should be managed in a separate accounting system or tracked through separate line items within the tribe's accounting ledger. Prior to award of DWTSA funds, a written

certification is required from the governing body of the public water system that its accounting system meets these requirements. The ability to track operating funds is an important element in demonstrating a utility's managerial and financial capacity.

3. **Managerial capacity** includes such things as ownership accountability, the ability of management to adequately staff the system with qualified personnel, an understanding of the regulatory requirements involved in operating a water system, and the ability to interact well with customers and regulators. Evidence of adequate managerial capacity includes:

- a. All monitoring required by the SDWA is consistent and up-to-date

While monitoring itself does not correct health problems, it is necessary to determine the quality of water and ensure protection of public health. Though not eligible for funding, monitoring is required by law.

- b. System management

The responsibilities of the managers must be well-defined and in written form. The "checks and balances" on those with responsibility for the system should also be well-defined and in written form (e.g. water board, tribal council review). The division/delegation of responsibility will clearly be more complex with a water utility or larger water system than with a small water system.

- c. Development and implementation of source water protection plan

Source water protection is necessary to ensure that once the water source is developed, it remains safe for human consumption.

EPA will also analyze other forms of capacity when considering project proposals. For example, tribes must demonstrate that they have the ability (either in-house or with the assistance of the IHS or another appropriate agency) to meet EPA's project management requirements and properly oversee the construction project.

D. How does capacity affect eligibility?

It is important to note that a utility's capacity will not affect a project's placement on the funding priority list. EPA will prioritize projects solely using the methodology presented in Section VII. EPA will assess capacity only if a project is high enough on the priority list to be selected to proceed with the funding process. The assessment will include a self-evaluation by the tribe (in the form of capacity checklists) and, if necessary, further analysis by a team of experts to review the utility's technical, managerial, and financial capacity. If EPA determines that a utility does not have adequate capacity to operate and maintain the system, the system owner must agree to take appropriate steps to ensure that the utility develops the appropriate level of capacity. Appropriate steps may include some or all of the following:

- Training and certifying existing system personnel or hiring trained and certified personnel,

- Developing a source water protection plan,
- Developing an infrastructure replacement plan,
- Instituting a long-term program to provide any needed operation and maintenance,
- Conducting an analysis of the system's financial health,
- Developing an annual operating budget and effective accounting system,
- Adopting a rate structure that will provide the system with sufficient resources to adequately maintain and operate the system,
- Establishing a reserve fund to replace infrastructure reaching the end of its useful life, or
- Establishing an entity to manage and operate the system.

Tribes wishing to receive more information about improving the technical, managerial, and financial capacity of their systems, or other project management skills should contact their EPA Program Manager (see Section IX).

E. Are Matching Funds Required?

Matching funds are not typically required; however, in cases where commercial entities and/or non-tribal populations receive water from the public water system, EPA may require the tribe to contribute funds to the project proportional to the water demand of the commercial entity and/or non-tribal populations.

Similarly, for projects whose costs are correlated with water usage, a funding contribution may be required for water systems using over 150 gallons per capita per day, with the contribution proportional to the amount over 150 gallons per capita per day used.

Additionally, given the limited funds available under this program and EPA's goal to maximize the number of projects it can fund, EPA may work with applicants to explore the availability of funding from other federal agencies, tribal or third-party sources to contribute to the total project cost.

IV. Step 1: Proposal Submission Information

To minimize the workload to tribes, the proposal submission process will be divided into three steps. The first step is the submittal of the initial project proposal package including: a) the project form (Attachment 1); b) the tribal government endorsement; and, c) the preliminary engineering report (standardized template in Appendix A), if applicable.

A. Project Proposal Due Date

The tribal government endorsement, the Project Proposal Form, and preliminary engineering report (PER), if applicable, **must be received by November 22, 2020** and submitted to the

following address. **Proposals received after November 22, 2020 will not be considered for funding.**

E-mail one electronic copy of the proposal and any documentation to:
Karly Ho at ho.karly@epa.gov

[Electronic files exceeding 8MB must either be separated into emails not exceeding 8MB each, or saved on a memory device and mailed.](#)

or

Mail one hard copy of the proposal and any documentation to:
Karly Ho, WTR - 4
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

B. Project Proposal Contents

1. **Project Proposal Instructions** - A tribe may submit more than one project proposal under these guidelines and each project proposal will be separately reviewed and considered for funding. Additionally, tribes that submitted a project proposal during a previous funding cycle that did not receive funding can submit, by the proposal deadline, a written request that the project be reconsidered under this round of funding.

The Project Proposal Form is included as Attachment 1. Additional documents may be attached as necessary to ensure that EPA receives complete information to evaluate the project proposals. The project proposal should include completed feasibility studies, preliminary engineering reports, rights-of-way documentation, and environmental documents if available. See below for specific directions.

- a. Service Area Information - list the total population served by the public water system(s), the number of connections, the number and percentage of metered connections, and the per capita, per day water consumption of the water system.
- b. Project Description - give a general description of the overall project and the specific components proposed. Also, describe the problems the project will address including any violation of drinking water standards and any aesthetic water quality problems (e.g., taste, odor, color, clarity).
- c. Project Cost - list each project component by the number of the health problem it addresses. Use the Health Category chart presented in Section VII for the appropriate number. Also note the number of connections that will benefit from each component of the proposed project. For example, for a pipeline rehabilitation project, list the number of connections served by that pipeline. For a treatment plant modification, list the total number of connections served by that treatment plant.
- d. Signature - The form must be signed by a person certifying that the information supplied is accurate.

2. **Tribal Government Endorsement** - The proposal must be submitted with a tribal resolution or a tribal government endorsement of the proposal (i.e., the tribal leader's signature on the letter transmitting the proposal). If requesting reconsideration of a previous project proposal, a tribal government endorsement of the project must be submitted with the request, if not already on file at EPA.

3. **Planning/Preliminary Engineering Report (PER) Projects** - While most of the funds will be awarded to construct water infrastructure projects, EPA recognizes that in some cases tribes have serious concerns about the quality of their drinking water, yet the best solutions have not yet been identified. To address these cases, funds can be requested for the development of a PER. To request funding to complete a PER for a project, applicants must submit a detailed project proposal, a description of the health deficiency that needs to be addressed, a proposed budget and a timeline for completion of the PER. Applications must include a completed project proposal form (Attachment 1) and a tribal government endorsement described in items 1 and 2 above. The outcome of the planning project must be the development of a PER that utilizes the standardized PER template found in Appendix A. Applicants for planning projects are expected to demonstrate the same technical, managerial and financial capacity requirements as applicants for construction projects.

4. **Construction Projects** – To receive consideration for construction funding, a PER that follows a standardized template must be submitted with the project proposal form. The standardized PER makes it easier for tribes to receive funding from more than one federal source and simplifies coordination between federal agencies.

A PER should clearly describe the system’s present situation, analyze alternatives, and propose a specific course of action, from an engineering perspective. The level of effort and depth of analysis required for the PER are proportional to the size and complexity of the proposed project. See Appendix A for a standardized PER template. Include copies of any completed environmental documents, if available.

If EPA determines that a project’s PER is not adequate, EPA may award funds to complete a more comprehensive PER rather than construction funding. Once the project has an adequate PER, the tribe can submit (or resubmit) a proposal for construction funding during the next funding cycle.

To receive consideration for construction funding, the applicant must demonstrate that all necessary rights of way have been or will be secured prior to award of funds. EPA may award funds for work to secure rights of way, though DWTSA funds cannot be used to purchase real property.

5. **Budgets** - For construction project budgeting purposes, the following allowances for tribal administration, contingencies, engineering, inspection and other technical support services are based on the following percentages of estimated construction costs.

Tribal administration.....2.5%
 Contingencies.....5.0%
 Technical support services.....15% (including engineering, inspection and technical

support)

If the engineering, inspection, administration and technical support costs exceed the above allowances, the applicant must provide written documentation to support the increased costs. This approach is consistent with our December 2013 revised national program guidance.¹⁶ Only actual costs incurred under the approved budget will be paid.

For planning project budgeting purposes, project proposals and budgets should identify the entity that will be performing each planning activity. In general, the administrative and technical support costs should be captured in the individual line item costs for each planning activity.

6. **Documents to Support your Proposed Health Category Ranking:** - Your submittal should include documents that support your proposed health category ranking. Examples of such documentation include:
 - a. Water use records that demonstrate a water supply deficiency
 - b. Documentation of water line breaks or water outages in the community
 - c. Lab records that demonstrate an exceedance of a primary or secondary Maximum Contaminant Level
 - d. Photographs that depict a sanitary deficiency or defect in your drinking water infrastructure.

C. Draft Prioritization

EPA will use the information in the proposal package to place projects on a draft priority list using the funding factors described in Section VII. After EPA prioritizes the project proposals received, each tribe will be informed of the health category and numerical score, if applicable, of its proposal(s). EPA will also notify the tribes whether or not they will move forward with step two of the funding process. The number of projects selected to move forward with the funding process will be dependent on the amount of funding available and the costs of the top projects. In **January 2020**, a draft project prioritization letter will be sent to each tribe that submitted a project proposal. Tribes on the fundable portion of the draft priority list will receive capacity and managerial checklists and comments on the PER enclosed with the project prioritization letter.

V. Step 2: Comments on Draft Prioritization, Capacity and Managerial Checklists and Final PERs

Tribal comments on the draft prioritization for all projects will be due in **March 2020**. For projects on the fundable portion of the draft priority list, Tribes must submit the following by **March 2020**: response to any EPA comments, revised PER as necessary, capacity checklist, and managerial checklist.

A. Comments on the Draft Prioritization List

Each tribe will receive a draft ranking for each project proposal submitted. The tribe may submit additional information on the project to support a higher ranking. EPA will consider any additional information provided when finalizing the priority list.

¹⁶ U.S. EPA Final Tribal Set-Aside Guidelines (national), p. 11

B. Capacity Checklist

As part of this second stage of the application process, tribes must submit capacity checklists if their project is on the fundable portion of the draft priority list or if they are submitting additional information for the project to be considered for funding. The SDWA specifies that all water system owners must have the technical, financial, and managerial capacity to properly run their water utilities in order to receive funding. If utilities do not currently have adequate capacity, system owners must make appropriate changes in operation (management, rate structure, maintenance, consolidation, alternative supplies, etc.) to ensure the long-term capability of the system. If a system does not have or will not be able to develop capacity, it is not eligible to receive DWTSA funds.

C. Managerial Checklist

As part of the funding process, the tribe must determine who will manage the funds and who will be responsible for each aspect of construction. Tribes must identify in the managerial checklist who will handle the various aspects of project management, planning, design, plans and specifications review, construction management and inspection. The list identifies the many positions needed to plan or construct a project. These participants are necessary to ensure that program conditions are met and that the treatment works are built correctly and at an appropriate cost. The tribe may have adequate resources internally to ensure that the project is properly managed, or may wish to work with the Indian Health Service or a consulting firm. At the request of a tribe, EPA can transfer funds to the Indian Health Service through an interagency agreement so that the Indian Health Service can implement the project.

D. Preliminary Engineering Report

The tribe must also address any EPA comments on the preliminary engineering report (PER). If the comments are substantial in nature, the PER may need to be revised. If the comments are minor, a brief addendum to the PER addressing each of the comments may suffice.

VI. Step 3: Grant Application/Interagency Agreement Process

Between **April-August 2020**, EPA will notify each applicant of the project's final ranking. Tribes with projects on the fundable portion of the final priority list that meet the capacity threshold eligibility factors will proceed with Step 3, the formal grant application or interagency agreement process. Invitations to submit an application (or Memorandum of Agreement and Project Summary) is not a guarantee of funding. Deadlines must be met and the workplan and budget and grant application, or Interagency Agreement request must be approved by the EPA Project Officer and Grants Specialist. For grants, the EPA Region 9 Grants Management Officer will make the final award determination. For interagency agreements, the EPA Region 10 Grants Management Officer will make the final award determination.

For projects to be funded by grants, guidance letters will be sent out in **April-May 20120**, depending on the availability of funds. These letters will include: 1) the amount of funding available for the project, 2) links to the grant application packet for grant-funded projects, 3) any final comments on the PER, and 4) the date by which the completed grant application must be

submitted to EPA (or, for projects to be funded by interagency agreements, the date by which the Memorandum of Agreement and Project Summaries prepared by Indian Health Service must be submitted to EPA).

A. Grant/IAG Application

For projects funded through a grant, the federal Standard Form 424 (SF-424) grant application, required forms, as well as a workplan and budget must be submitted via grants.gov by **May 2020** or other date established by EPA. For projects funded through interagency agreements, Memorandums of Agreement and Project Summaries prepared by Indian Health Service must be received by EPA in **May 2020** or other date established by EPA.

B. Letter of Commitment

Based on an assessment of tribal capacity, EPA will identify any deficiencies in technical, financial, or managerial capacity that must be corrected during the project period. A letter from the tribal chairperson or a tribal resolution committing to address these deficiencies must be submitted along with the budget, workplan, and grant application.

C. Environmental Results

As part of the grant application process, environmental outputs and outcomes for the project must be identified in the workplan with a plan for measuring and tracking progress towards these goals. In addition, grant conditions concerning the reporting of environmental outputs and outcomes will be included in the award document. See Appendix C for these and other sample grant conditions.

Expected outputs are either a PER to determine a feasible method to address a public health concern, or the design and construction of drinking water infrastructure to provide access to safe water.

Expected outcomes are improved public health protection by providing tribal households with access to safe drinking water which complies with all health-based regulations under the SDWA.

VII. Funding Allocation Methodology

EPA will select projects for funding from a priority list created from a two-step prioritizing process. The national guidelines require that the highest health risks be addressed first. Therefore, in the first step of the prioritizing formula, EPA will categorize proposed projects by the public health problem to be resolved. If a project has more than one component, each component will be placed into one of the following health categories. If funding cannot be provided for all eligible projects within the same health category, further prioritization will occur based on the considerations described in Step 2.

Step One: Health Categories

Higher Priority***	Category 1	Documented waterborne disease outbreak attributable to the water system.
	Category 2	Unfiltered surface water or ground water under the influence of surface water.
	Category 3	Filtered surface water and ground water under the influence of surface water that violates surface water filtration or disinfection regulations.
	Category 4	Significant deficiency or sanitary defect involving sewage, or disinfection facilities that have defects, or uncovered distribution reservoirs, or documented inadequate pressure potentially causing cross-connection contamination, or other major microbial health hazards.
	Category 5*	Water supply deficiency that presents a serious health risk because the water system serves 30 or fewer gallons per person per day, which may include insufficient water supply resulting in water outages occurring for an extended period that could not be corrected through operational improvements.
	Category 6**	Arsenic contamination exceeding the MCL. 6A: 50 ppb and above 6B: 25-49 ppb 6C: 11-24 ppb
	Category 7**	All other chemical contamination (excluding arsenic) exceeding a MCL or action level. 7A: Twice the MCL and above 7B: 1.5 times the MCL and above 7C: Above the MCL
	Category 8*	Water supply deficiency that may include insufficient water supply resulting in water outages occurring for an extended period that could not be corrected through operational improvements. For projects to address insufficient water supply, conservation efforts must be made before funding may be awarded if per capita water consumption is over 150 gallons per person per day, and a funding contribution may be required that is proportional to the amount over 150 gallons per person per day used.
Lower Priority	Category 9**	9A: Systems meeting existing MCLs but not future MCLs or action levels; 9B: Systems currently meeting MCLs, but with recent results approaching an MCL for a chemical contaminant, as determined by EPA; 9C: Systems exceeding the secondary standard for iron or manganese; 9D: Systems that have a system defect, operational defect, or a potential health hazard that are not a significant deficiency or sanitary defect; 9E: Other suggested improvements not addressing a health risk.

* Qualification for Categories 5 and 8 will be based on water supply information requested in the Project Proposal Form including available well capacity, storage capacity, and frequency of documented water outages.

** Categories 6, 7, and 9 have been broken into subcategories. Projects within the subcategory A are highest priority, followed by projects within subcategories B, C, D and E.

*** The order of the categories changed beginning in FY2015, and all categories have been assigned numbers that replace the former letters.

Step Two: Prioritizing System (Maximum Total Points: 42):

Criterion		Points
1) Consolidation		
a) Project consolidates more than two systems		5
b) Project consolidates only two systems		3
2) Secondary Standards		
Project will solve taste, odor, color and/or clarity problems		3
3) Population Served (for consolidation projects, use the population of the system being prioritized in the health category)		
a) Less than 100 people		5
b) 100 to 249 people		4
c) 250 to 499 people		3
d) 500 to 749 people		2
e) 750 to 999 people		1
4) Tribal Population Served		
a) At least 90% of population served is tribal		7
b) 75% to 89% of population served is tribal		4
5) Tribal Ownership		
a) System is tribally owned		5
6) Grant Amount Per Connection		
a) Less than \$2,500 per household		6
b) \$2,500 to \$4,999 per household		5
c) \$5,000 to \$9,999 per household		4
d) \$10,000 to \$19,999 per household		3
e) \$20,000 to \$29,999 per household		2
f) \$30,000 to \$49,999 per household		1
7) Additional Benefits		
a) System has water and/or energy conservation measures		2
b) System has or is implementing source and/or wellhead protection programs		2
c) System has metering and billing by water usage		2
8) Total Estimated Grant Amount		
a) Less than \$200,000		5
b) \$200,000 to \$399,000		4
c) \$400,000 to \$599,000		3
d) \$600,000 to \$799,000		2
e) \$800,000 to \$1,000,000		1

VIII. Award Administration Information

Regulations governing the award and administration of grants can be found at 2 C.F.R. Parts 200 and 1500, and 40 C.F.R. Part 33.

Quarterly Progress Reports are required for all projects. Quarterly reports should describe project activities and provide the EPA Project Officer with information about project development including the status of the timeline and budget for meeting the environmental outputs and outcomes.

Financial Status Reports (FSRs) – For grants, an interim FSR is required annually and a Final FSR must be submitted within 90 days after grants expire.

Terms and Conditions: Examples of Grant Programmatic Conditions and Interagency Agreement Programmatic and Administrative Conditions are included in Appendix B. Sample Grant Administrative Conditions can be found online at <https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-october-1-2018>

Environmental Reviews conducted by IHS under interagency agreements with EPA: For interagency agreements entered into between EPA and IHS, IHS shall be the lead agency in environmental review.

Environmental Reviews conducted by EPA under drinking water infrastructure grants awarded directly to Tribes: Generally speaking, drinking water infrastructure grants awarded directly to Tribes are exempt from the procedural requirements of the National Environmental Policy Act (NEPA) based on the doctrine of functional equivalence. However, EPA may conduct an environmental review of a project funded under a drinking water infrastructure grant under the Agency's Voluntary NEPA Policy. EPA makes the decision to invoke the Voluntary NEPA Policy on a case by case basis. In cases in which EPA conducts a voluntary NEPA analysis, the NEPA process may include public participation, mitigation measures (e.g. monitoring measures), etc. Any voluntary NEPA review must be conducted prior to award of projects for construction; however, a voluntary NEPA analysis can be funded for a planning project with the preparation of an Environmental Information Document.

Federal Cross-Cutting Authorities: For interagency agreements, IHS shall be the lead agency responsible for complying with the Federal cross-cutting authorities (e.g. the National Historic Preservation Act, the Endangered Species Act, etc.). For grants EPA awards directly to Tribes, the recipient must comply with the applicable Federal cross-cutting authorities before the grant is awarded.

Greening Grants Policy: EPA has implemented Grants Policy Issuance (GPI) 17-01, *Sustainability in EPA Assistance Agreements*, (see: https://intranet.epa.gov/ogd/policy/grants_policy_issuance_17_01.pdf), that encourages voluntary efforts to incorporate sustainability practices into EPA grant funded programs and projects. When grant workplans are developed, EPA Project Officers will work with tribal staff to identify potential ways for the tribe to carry out EPA funded work in an environmentally sustainable way. The Policy includes numerous examples of sustainability practices, including environmentally preferable purchasing, green building, green meetings, and alternatives to travel.

IX. Agency Contacts

For general information about this program, please contact:

Karly Ho, WTR 4
Drinking Water Tribal Set-Aside Program Coordinator
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Phone: 415-972-3458
E-mail: ho.karly@epa.gov

To discuss specific information about your water system, please contact your EPA program manager.

Karl Banks, Program Manager (415) 972-3557
Nevada, Owens Valley, Fresno Area, Kaibab Paiute, Hualapai, and Havasupai

Jason Gambatese, Program Manager (415) 972-3571
Sacramento and Ukiah Areas, Riverside and Northern San Diego Counties, Yavapai and Tonto Apache

Karly Ho, Program Manager (415) 972-3458
Tohono O'odham Nation and Yuma Area

Bessie Lee, Program Manager (415) 972-3776
Navajo Nation

Andrew Sallach, Program Manager (415) 972-3503
San Carlos, White Mountain Apache, Northern California

Jeffrey Tsai, Program Manager (415) 972-3459
Phoenix Area, Colorado River (except Yuma), Southern San Diego County, Hopi

X. References

Sections of these guidelines were adopted from materials produced by the following agencies:

California Department of Health Services (Project Selection Criteria - Health Categories)
Rural Community Assistance Corporation (Capacity Checklists)
Indian Health Service (Capacity Checklists)
South Dakota Department of Environment and Natural Resources (Capacity Checklists)
U.S. EPA, Region 8

Appendix A

Preliminary Engineering Report Template

A project submitted for funding must have a completed preliminary engineering report (PER) that follows a standardized template. The standardized PER makes it easier for tribes to receive funding from more than one federal source and simplifies coordination between federal agencies.

A PER should clearly describe the system's present situation, analyze alternatives, and propose a specific course of action, from an engineering perspective. The analysis of alternatives must compare construction costs and operation and maintenance costs.

Additionally, a PER must include a rough calculation of per-capita, treated water demand. One of the following calculation methods may be selected:

1. Actual gallons per residential connection as documented from meter readings / census-reported persons per home
2. Total residential treated water demand / population served
3. Other method as approved by EPA

If this calculation yields a per-capita usage greater than 150 gallons per person per day, then a full analysis of water consumption is required.

The level of effort and depth of analysis required for the PER are proportional to the size and complexity of the proposed project.

The following PER template must be used.



January 16, 2013

INTERAGENCY MEMORANDUM

Attached is a document explaining recommended best practice for the development of Preliminary Engineering Reports in support of funding applications for development of drinking water, wastewater, stormwater, and solid waste systems.

The best practice document was developed cooperatively by:

- [US Department of Agriculture, Rural Development, Rural Utilities Service, Water and Environmental Programs;](#)
- [US Environmental Protection Agency \(EPA\), Office of Water, Office of Ground Water and Drinking Water and Office of Wastewater Management;](#)
- [US Department of Housing and Urban Development \(HUD\), Office of Community Planning and Development;](#)
- [US Department of Health and Human Services, Indian Health Service \(IHS\);](#)
- [Small Communities Water Infrastructure Exchange;](#)

Extensive input from participating state administering agencies was also very important to the development of this document.

Federal agencies that cooperatively developed this document strongly encourage its use by funding agencies as part of the application process or project development. State administered programs are encouraged to adopt this document but are not required to do so, as it is up to a state administering agency's discretion to adopt it, based on the needs of the state administering agency.

A Preliminary Engineering Report (Report) is a planning document required by many state and federal funding agencies as part of the process of obtaining financial assistance for development of drinking water, wastewater, solid waste, and stormwater facilities. The attached Report outline details the requirements that funding agencies have adopted when a Report is required.

In general the Report should include a description of existing facilities and a description of the issues being addressed by the proposed project. It should identify alternatives, present a life cycle cost analysis of technically feasible alternatives and propose a specific course of action. The Report should also include a detailed current cost estimate of the recommended alternative. The attached outline describes these and other sections to be included in the Report.

Projects utilizing direct federal funding also require an environmental review in accordance with the National Environmental Policy Act (NEPA). The Report should indicate that environmental issues were considered as part of the engineering planning and include environmental information pertinent to engineering planning.

For state administered funding programs, a determination of whether the outline applies to a given program or project is made by the state administering agency. When a program or agency adopts this outline, it may adopt a portion or the entire outline as applicable to the program or project in question at the discretion of the agency. Some state and federal funding agencies will not require the Report for every project or may waive portions of the Report that do not apply to their application process, however a Report thoroughly addressing all of the contents of this outline will meet the requirements of most agencies that have adopted this outline.

The detailed outline provides information on what to include in a Report. The level of detail required may also vary according to the complexity of the specific project. Reports should conform substantially to this detailed outline and otherwise be prepared and presented in a professional manner. Many funding agencies require that the document be developed by a Professional Engineer registered in the state or other jurisdiction where the project is to be constructed unless exempt from this requirement. Please check with applicable funding agencies to determine if the agencies require supplementary information beyond the scope of this outline.

Any preliminary design information must be written in accordance with the regulatory requirements of the state or territory where the project will be built.

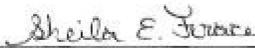
Information provided in the Report may be used to process requests for funding. Completeness and accuracy are therefore essential for timely processing of an application. Please contact the appropriate state or federal funding agencies with any questions about development of the Report and applications for funding as early in the process as practicable.

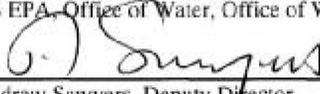
Questions about this document should be referred to the applicable state administering agency, regional office of the applicable federal agency, or to the following federal contacts:

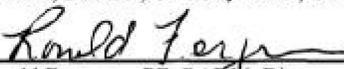
Agency	Contact	Email Address	Phone
USDA/RUS	Benjamin Shuman, PE	ben.shuman@wdc.usda.gov	202-720-1784
EPA/DWSRF	Kirsten Anderer, PE	anderer.kirsten@epa.gov	202-564-3134
EPA/CWSRF	Matt King	king.matt@epa.gov	202-564-2871
HUD	Stephen Rhodside	stephen.m.rhodside@hud.gov	202-708-1322
IHS	Dana Baer, PE	dana.baer@ihs.gov	301-443-1345

Sincerely,

 1/16/13
Jacqueline M. Ponti-Lazaruk, Assistant Administrator
USDA, Rural Development, Rural Utilities Service, Water and Environmental Programs

 01/19/13
Sheila Grace, Acting Deputy Director
US EPA, Office of Water, Office of Wastewater Management

 1/16/13
Andrew Sawyers, Deputy Director
US EPA, Director, Office of Water, Office of Ground Water and Drinking Water

 1/16/13
Ronald Ferguson, PE, RABM, Director
Division of Sanitation Facilities Construction, Indian Health Service

 1-16-13
Stanley Gimont, Director
Office of Block Grant Assistance, US Department of Housing and Urban Development

Attachment

WORKING GROUP CONTRIBUTORS

Federal Agency Partners	
USDA, Rural Development, Rural Utilities Service (Chair)	Benjamin Shuman, PE
EPA, Office of Water, Office of Ground Water and Drinking Water	Kirsten Anderer, PE
EPA, Office of Water, Office of Ground Water and Drinking Water	CAPT David Harvey, PE
EPA, Office of Water, Office of Wastewater Management	Matt King
EPA, Office of Water, Office of Wastewater Management	Joyce Hudson
EPA, Region 1	Carolyn Hayek
EPA, Region 9	Abimbola Odusoga
HUD, Office of Community Planning and Development	Stephen M. Rhodeside
HUD, Office of Community Planning and Development	Eva Fontheim
Indian Health Service	CAPT Dana Baer, PE
Indian Health Service	LCDR Charissa Williar, PE
USDA, Rural Development, Florida State Office	Michael Langston
USDA, Rural Development, Florida State Office	Steve Morris, PE

State Agency and Interagency Partners	
Arizona Water Infrastructure Finance Authority	Dean Moulis, PE
Border Environment Cooperation Commission	Joel Mora, PE
Colorado Department of Local Affairs	Barry Cress
Colorado Department of Public Health & Environment	Michael Beck
Colorado Department of Public Health & Environment	Bret Icenogle, PE
Georgia Office of Community Development	Steed Robinson
Idaho, Department of Environmental Quality	Tim Wendland
Indiana Finance Authority	Emma Kottowski
Indiana Finance Authority	Shelley Love
Indiana Finance Authority	Amanda Rickard, PE
Kentucky Division of Water	Shafiq Amawi
Kentucky Department of Local Government	Jennifer Peters
Louisiana Department of Environmental Quality	Jonathan McFarland, PE
Maine Department of Health and Human Services	Norm Lamie, PE
Minnesota Pollution Control Agency	Amy Douville
Minnesota Pollution Control Agency	Corey Mathisen, PE
Missouri Department of Natural Resources	Cynthia Smith
Montana Department of Commerce	Kate Miller, PE
North Carolina Department of Commerce	Olivia Collier
North Carolina Rural Center	Keith Krzywicki, PE
North Carolina Department of Commerce	Vickie Miller, CPM
Rhode Island Department of Health	Gary Chobanian, PE
Rhode Island Department of Health	Geoffrey Marchant

ABBREVIATIONS

NEPA – National Environmental Policy Act

NPV – Net Present Value

O&M – Operations and Maintenance

OMB – Office of Management and Budget

Report – Preliminary Engineering Report

SPPW – Single Payment Present Worth

USPW – Uniform Series Present Worth

GENERAL OUTLINE OF A PRELIMINARY ENGINEERING REPORT

- 1) PROJECT PLANNING
 - a) Location
 - b) Environmental Resources Present
 - c) Population Trends
 - d) Community Engagement

- 2) EXISTING FACILITIES
 - a) Location Map
 - b) History
 - c) Condition of Existing Facilities
 - d) Financial Status of any Existing Facilities
 - e) Water/Energy/Waste Audits

- 3) NEED FOR PROJECT
 - a) Health, Sanitation, and Security
 - b) Aging Infrastructure
 - c) Reasonable Growth

- 4) ALTERNATIVES CONSIDERED
 - a) Description
 - b) Design Criteria
 - c) Map
 - d) Environmental Impacts
 - e) Land Requirements
 - f) Potential Construction Problems
 - g) Sustainability Considerations
 - i) Water and Energy Efficiency
 - ii) Green Infrastructure
 - iii) Other
 - h) Cost Estimates

- 5) SELECTION OF AN ALTERNATIVE
 - a) Life Cycle Cost Analysis
 - b) Non-Monetary Factors

- 6) PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)
 - a) Preliminary Project Design
 - b) Project Schedule
 - c) Permit Requirements
 - d) Sustainability Considerations
 - i) Water and Energy Efficiency
 - ii) Green Infrastructure

- iii) Other
- e) Total Project Cost Estimate (Engineer's Opinion of Probable Cost)
- f) Annual Operating Budget
 - i) Income
 - ii) Annual O&M Costs
 - iii) Debt Repayments
 - iv) Reserves

7) CONCLUSIONS AND RECOMMENDATIONS

DETAILED OUTLINE OF A PRELIMINARY ENGINEERING REPORT

1) PROJECT PLANNING

Describe the area under consideration. Service may be provided by a combination of central, cluster, and/or centrally managed individual facilities. The description should include information on the following:

- a) Location. Provide scale maps and photographs of the project planning area and any existing service areas. Include legal and natural boundaries and a topographical map of the service area.
- b) Environmental Resources Present. Provide maps, photographs, and/or a narrative description of environmental resources present in the project planning area that affect design of the project. Environmental review information that has already been developed to meet requirements of NEPA or a state equivalent review process can be used here.
- c) Population Trends. Provide U.S. Census or other population data (including references) for the service area for at least the past two decades if available. Population projections for the project planning area and concentrated growth areas should be provided for the project design period. Base projections on historical records with justification from recognized sources.
- d) Community Engagement: Describe the utility's approach used (or proposed for use) to engage the community in the project planning process. The project planning process should help the community develop an understanding of the need for the project, the utility operational service levels required, funding and revenue strategies to meet these requirements, along with other considerations.

2) EXISTING FACILITIES

Describe each part (e.g. processing unit) of the existing facility and include the following information:

- a) Location Map. Provide a map and a schematic process layout of all existing facilities. Identify facilities that are no longer in use or abandoned. Include photographs of existing facilities.
- b) History. Indicate when major system components were constructed, renovated, expanded, or removed from service. Discuss any component failures and the cause for the failure. Provide a history of any applicable violations of regulatory requirements.
- c) Condition of Existing Facilities. Describe present condition; suitability for continued use; adequacy of current facilities; and their conveyance, treatment, storage, and disposal capabilities. Describe the existing capacity of each component. Describe and reference compliance with applicable federal, state, and local laws. Include a brief analysis of overall current energy consumption. Reference an asset management plan if applicable.

- d) Financial Status of any Existing Facilities. (Note: Some agencies require the owner to submit the most recent audit or financial statement as part of the application package.) Provide information regarding current rate schedules, annual O&M cost (with a breakout of current energy costs), other capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. Give status of existing debts and required reserve accounts.
- e) Water/Energy/Waste Audits. If applicable to the project, discuss any water, energy, and/or waste audits which have been conducted and the main outcomes.

3) NEED FOR PROJECT

Describe the needs in the following order of priority:

- a) Health, Sanitation, and Security. Describe concerns and include relevant regulations and correspondence from/to federal and state regulatory agencies. Include copies of such correspondence as an attachment to the Report.
- b) Aging Infrastructure. Describe the concerns and indicate those with the greatest impact. Describe water loss, inflow and infiltration, treatment or storage needs, management adequacy, inefficient designs, and other problems. Describe any safety concerns.
- c) Reasonable Growth. Describe the reasonable growth capacity that is necessary to meet needs during the planning period. Facilities proposed to be constructed to meet future growth needs should generally be supported by additional revenues. Consideration should be given to designing for phased capacity increases. Provide number of new customers committed to this project.

4) ALTERNATIVES CONSIDERED

This section should contain a description of the alternatives that were considered in planning a solution to meet the identified needs. Documentation of alternatives considered is often a Report weakness. Alternative approaches to ownership and management, system design (including resource efficient or green alternatives), and sharing of services, including various forms of partnerships, should be considered. In addition, the following alternatives should be considered, if practicable: building new centralized facilities, optimizing the current facilities (no construction), developing centrally managed decentralized systems, including small cluster or individual systems, and developing an optimum combination of centralized and decentralized systems. Alternatives should be consistent with those considered in the NEPA, or state equivalent, environmental review. Technically infeasible alternatives that were considered should be mentioned briefly along with an explanation of why they are infeasible, but do not require full analysis. For each technically feasible alternative, the description should include the following information:

- a) Description. Describe the facilities associated with every technically feasible alternative. Describe source, conveyance, treatment, storage and distribution

facilities for each alternative. A feasible system may include a combination of centralized and decentralized (on-site or cluster) facilities.

- b) Design Criteria. State the design parameters used for evaluation purposes. These parameters should comply with federal, state, and agency design policies and regulatory requirements.
- c) Map. Provide a schematic layout map to scale and a process diagram if applicable. If applicable, include future expansion of the facility.
- d) Environmental Impacts. Provide information about how the specific alternative may impact the environment. Describe only those unique direct and indirect impacts on floodplains, wetlands, other important land resources, endangered species, historical and archaeological properties, etc., as they relate to each specific alternative evaluated. Include generation and management of residuals and wastes.
- e) Land Requirements. Identify sites and easements required. Further specify whether these properties are currently owned, to be acquired, leased, or have access agreements.
- f) Potential Construction Problems. Discuss concerns such as subsurface rock, high water table, limited access, existing resource or site impairment, or other conditions which may affect cost of construction or operation of facility.
- g) Sustainability Considerations. Sustainable utility management practices include environmental, social, and economic benefits that aid in creating a resilient utility.
 - i) Water and Energy Efficiency. Discuss water reuse, water efficiency, water conservation, energy efficient design (i.e. reduction in electrical demand), and/or renewable generation of energy, and/or minimization of carbon footprint, if applicable to the alternative. Alternatively, discuss the water and energy usage for this option as compared to other alternatives.
 - ii) Green Infrastructure. Discuss aspects of project that preserve or mimic natural processes to manage stormwater, if applicable to the alternative. Address management of runoff volume and peak flows through infiltration, evapotranspiration, and/or harvest and use, if applicable.
 - iii) Other. Discuss any other aspects of sustainability (such as resiliency or operational simplicity) that are incorporated into the alternative, if applicable.
- h) Cost Estimates. Provide cost estimates for each alternative, including a breakdown of the following costs associated with the project: construction, non-construction, and annual O&M costs. A construction contingency should be included as a non-construction cost. Cost estimates should be included with the descriptions of each technically feasible alternative. O&M costs should include a rough breakdown by O&M category (see example below) and not just a value for each alternative. Information from other sources, such as the recipient's accountant or other known technical service providers, can be incorporated to assist in the development of this section. The cost derived will be used in the life cycle cost analysis described in Section 5 a.

Example O&M Cost Estimate	
Personnel (i.e. Salary, Benefits, Payroll Tax, Insurance, Training)	
Administrative Costs (e.g. office supplies, printing, etc.)	
Water Purchase or Waste Treatment Costs	
Insurance	
Energy Cost (Fuel and/or Electrical)	
Process Chemical	
Monitoring & Testing	
Short Lived Asset Maintenance/Replacement*	
Professional Services	
Residuals Disposal	
Miscellaneous	
Total	

* See Appendix A for example list

5) SELECTION OF AN ALTERNATIVE

Selection of an alternative is the process by which data from the previous section, “Alternatives Considered” is analyzed in a systematic manner to identify a recommended alternative. The analysis should include consideration of both life cycle costs and non-monetary factors (i.e. triple bottom line analysis: financial, social, and environmental). If water reuse or conservation, energy efficient design, and/or renewable generation of energy components are included in the proposal provide an explanation of their cost effectiveness in this section.

- a) Life Cycle Cost Analysis. A life cycle present worth cost analysis (an engineering economics technique to evaluate present and future costs for comparison of alternatives) should be completed to compare the technically feasible alternatives. Do not leave out alternatives because of anticipated costs; let the life cycle cost analysis show whether an alternative may have an acceptable cost. This analysis should meet the following requirements and should be repeated for each technically feasible alternative. Several analyses may be required if the project has different aspects, such as one analysis for different types of collection systems and another for different types of treatment.
1. The analysis should convert all costs to present day dollars;
 2. The planning period to be used is recommended to be 20 years, but may be any period determined reasonable by the engineer and concurred on by the state or federal agency;
 3. The discount rate to be used should be the “real” discount rate taken from Appendix C of OMB circular A-94 and found at (www.whitehouse.gov/omb/circulars/a094/a94_appx-c.html);
 4. The total capital cost (construction plus non-construction costs) should be included;

5. Annual O&M costs should be converted to present day dollars using a uniform series present worth (USPW) calculation;
6. The salvage value of the constructed project should be estimated using the anticipated life expectancy of the constructed items using straight line depreciation calculated at the end of the planning period and converted to present day dollars;
7. The present worth of the salvage value should be subtracted from the present worth costs;
8. The net present value (NPV) is then calculated for each technically feasible alternative as the sum of the capital cost (C) plus the present worth of the uniform series of annual O&M (USPW (O&M)) costs minus the single payment present worth of the salvage value (SPPW(S)):

$$NPV = C + USPW (O\&M) - SPPW (S)$$

9. A table showing the capital cost, annual O&M cost, salvage value, present worth of each of these values, and the NPV should be developed for state or federal agency review. All factors (major and minor components), discount rates, and planning periods used should be shown within the table.
 10. Short lived asset costs (See Appendix A for examples) should also be included in the life cycle cost analysis if determined appropriate by the consulting engineer or agency. Life cycles of short lived assets should be tailored to the facilities being constructed and be based on generally accepted design life. Different features in the system may have varied life cycles.
- b) Non-Monetary Factors. Non-monetary factors, including social and environmental aspects (e.g. sustainability considerations, operator training requirements, permit issues, community objections, reduction of greenhouse gas emissions, wetland relocation) should also be considered in determining which alternative is recommended and may be factored into the calculations.

6) PROPOSED PROJECT (RECOMMENDED ALTERNATIVE)

The engineer should include a recommendation for which alternative(s) should be implemented. This section should contain a fully developed description of the proposed project based on the preliminary description under the evaluation of alternatives. Include a schematic for any treatment processes, a layout of the system, and a location map of the proposed facilities. At least the following information should be included as applicable to the specific project:

- a) Preliminary Project Design.
 - i) Drinking Water:

Water Supply. Include requirements for quality and quantity. Describe recommended source, including site and allocation allowed.

Treatment. Describe process in detail (including whether adding, replacing, or rehabilitating a process) and identify location of plant and site of any process discharges. Identify capacity of treatment plant (i.e. Maximum Daily Demand).

Storage. Identify size, type and location.

Pumping Stations. Identify size, type, location and any special power requirements. For rehabilitation projects, include description of components upgraded.

Distribution Layout. Identify general location of new pipe, replacement, or rehabilitation: lengths, sizes and key components.

ii) Wastewater/Reuse:

Collection System/Reclaimed Water System Layout. Identify general location of new pipe, replacement or rehabilitation: lengths, sizes, and key components.

Pumping Stations. Identify size, type, site location, and any special power requirements. For rehabilitation projects, include description of components upgraded.

Storage. Identify size, type, location and frequency of operation.

Treatment. Describe process in detail (including whether adding, replacing, or rehabilitating a process) and identify location of any treatment units and site of any discharges (end use for reclaimed water). Identify capacity of treatment plant (i.e. Average Daily Flow).

iii) Solid Waste:

Collection. Describe process in detail and identify quantities of material (in both volume and weight), length of transport, location and type of transfer facilities, and any special handling requirements.

Storage. If any, describe capacity, type, and site location.

Processing. If any, describe capacity, type, and site location.

Disposal. Describe process in detail and identify permit requirements, quantities of material, recycling processes, location of plant, and site of any process discharges.

iv) Stormwater:

Collection System Layout. Identify general location of new pipe, replacement or rehabilitation: lengths, sizes, and key components.

Pumping Stations. Identify size, type, location, and any special power requirements.

Treatment. Describe treatment process in detail. Identify location of treatment facilities and process discharges. Capacity of treatment process should also be addressed.

Storage. Identify size, type, location and frequency of operation.

Disposal. Describe type of disposal facilities and location.

Green Infrastructure. Provide the following information for green infrastructure alternatives:

- Control Measures Selected. Identify types of control measures selected (e.g., vegetated areas, planter boxes, permeable pavement, rainwater cisterns).
 - Layout: Identify placement of green infrastructure control measures, flow paths, and drainage area for each control measure.
 - Sizing: Identify surface area and water storage volume for each green infrastructure control measure. Where applicable, soil infiltration rate, evapotranspiration rate, and use rate (for rainwater harvesting) should also be addressed.
 - Overflow: Describe overflow structures and locations for conveyance of larger precipitation events.
- b) Project Schedule. Identify proposed dates for submittal and anticipated approval of all required documents, land and easement acquisition, permit applications, advertisement for bids, loan closing, contract award, initiation of construction, substantial completion, final completion, and initiation of operation.
- c) Permit Requirements. Identify any construction, discharge and capacity permits that will/may be required as a result of the project.
- d) Sustainability Considerations (if applicable).
- i) Water and Energy Efficiency. Describe aspects of the proposed project addressing water reuse, water efficiency, and water conservation, energy efficient design, and/or renewable generation of energy, if incorporated into the selected alternative.
 - ii) Green Infrastructure. Describe aspects of project that preserve or mimic natural processes to manage stormwater, if applicable to the selected alternative. Address management of runoff volume and peak flows through infiltration, evapotranspiration, and/or harvest and use, if applicable.
 - iii) Other. Describe other aspects of sustainability (such as resiliency or operational simplicity) that are incorporated into the selected alternative, if incorporated into the selected alternative.
- e) Total Project Cost Estimate (Engineer's Opinion of Probable Cost). Provide an itemized estimate of the project cost based on the stated period of construction. Include construction, land and right-of-ways, legal, engineering, construction program management, funds administration, interest, equipment, construction contingency, refinancing, and other costs associated with the proposed project. The construction subtotal should be separated out from the non-construction costs. The non-construction subtotal should be included and added to the construction

subtotal to establish the total project cost. An appropriate construction contingency should be added as part of the non-construction subtotal. For projects containing both water and waste disposal systems, provide a separate cost estimate for each system as well as a grand total. If applicable, the cost estimate should be itemized to reflect cost sharing including apportionment between funding sources. The engineer may rely on the owner for estimates of cost for items other than construction, equipment, and engineering.

- f) Annual Operating Budget. Provide itemized annual operating budget information. The owner has primary responsibility for the annual operating budget, however, there are other parties that may provide technical assistance. This information will be used to evaluate the financial capacity of the system. The engineer will incorporate information from the owner's accountant and other known technical service providers.
- i) Income. Provide information about all sources of income for the system including a proposed rate schedule. Project income realistically for existing and proposed new users separately, based on existing user billings, water treatment contracts, and other sources of income. In the absence of historic data or other reliable information, for budget purposes, base water use on 100 gallons per capita per day. Water use per residential connection may then be calculated based on the most recent U.S. Census, American Community Survey, or other data for the state or county of the average household size. When large agricultural or commercial users are projected, the Report should identify those users and include facts to substantiate such projections and evaluate the impact of such users on the economic viability of the project.
- ii) Annual O&M Costs. Provide an itemized list by expense category and project costs realistically. Provide projected costs for operating the system as improved. In the absence of other reliable data, base on actual costs of other existing facilities of similar size and complexity. Include facts in the Report to substantiate O&M cost estimates. Include personnel costs, administrative costs, water purchase or treatment costs, accounting and auditing fees, legal fees, interest, utilities, energy costs, insurance, annual repairs and maintenance, monitoring and testing, supplies, chemicals, residuals disposal, office supplies, printing, professional services, and miscellaneous as applicable. Any income from renewable energy generation which is sold back to the electric utility should also be included, if applicable. If applicable, note the operator grade needed.
- iii) Debt Repayments. Describe existing and proposed financing with the estimated amount of annual debt repayments from all sources. All estimates of funding should be based on loans, not grants.
- iv) Reserves. Describe the existing and proposed loan obligation reserve requirements for the following:
- Debt Service Reserve – For specific debt service reserve requirements consult with individual funding sources. If General Obligation bonds are proposed to be used as loan security, this section may be omitted, but this should be clearly stated if it is the case.

Short-Lived Asset Reserve – A table of short lived assets should be included for the system (See Appendix A for examples). The table should include the asset, the expected year of replacement, and the anticipated cost of each. Prepare a recommended annual reserve deposit to fund replacement of short-lived assets, such as pumps, paint, and small equipment. Short-lived assets include those items not covered under O&M, however, this does not include facilities such as a water tank or treatment facility replacement that are usually funded with long-term capital financing.

7. CONCLUSIONS AND RECOMMENDATIONS

Provide any additional findings and recommendations that should be considered in development of the project. This may include recommendations for special studies, highlighting of the need for special coordination, a recommended plan of action to expedite project development, and any other necessary considerations.

Appendix A: Example List of Short-Lived Asset Infrastructure

Estimated Repair, Rehab, Replacement Expenses by Item within up to 20 Years from Installation)	
Drinking Water Utilities	Wastewater Utilities
<p>Source Related</p> <ul style="list-style-type: none"> Pumps Pump Controls Pump Motors Telemetry Intake/ Well screens Water Level Sensors Pressure Transducers 	<p>Treatment Related</p> <ul style="list-style-type: none"> Pump Pump Controls Pump Motors Chemical feed pumps Membrane Filters Fibers Field & Process Instrumentation Equipment UV lamps Centrifuges Aeration blowers Aeration diffusers and nozzles Trickling filters, RBCs, etc. Belt presses & driers Sludge Collecting and Dewatering Equipment Level Sensors Pressure Transducers Pump Controls Back-up power generator Chemical Leak Detection Equipment Flow meters SCADA Systems
<p>Treatment Related</p> <ul style="list-style-type: none"> Chemical feed pumps Altitude Valves Valve Actuators Field & Process Instrumentation Equipment Granular filter media Air compressors & control units Pumps Pump Motors Pump Controls Water Level Sensors Pressure Transducers Sludge Collection & Dewatering UV Lamps Membranes Back-up power generators Chemical Leak Detection Equipment Flow meters SCADA Systems 	<p>Collection System Related</p> <ul style="list-style-type: none"> Pump Pump Controls Pump Motors Trash racks/bar screens Sewer line rodding equipment Air compressors Vaults, lids, and access hatches Security devices and fencing Alarms & Telemetry Chemical Leak Detection Equipment
<p>Distribution System Related</p> <ul style="list-style-type: none"> Residential and Small Commercial Meters Meter boxes Hydrants & Blow offs Pressure reducing valves Cross connection control devices Altitude valves Alarms & Telemetry Vaults, lids, and access hatches Security devices and fencing Storage reservoir painting/patching 	

Appendix B

Sample Grant Programmatic Conditions

A. **Performance Reporting.** The recipient agrees to submit quarterly project performance reports to the EPA Project Officer beginning three months after initiation of the agreement that include information for the following:

1. A comparison of actual accomplishments to the objectives established in the assistance agreement work plan for the period. Where the output of the project can be quantified, a computation of the cost per unit of output must be provided if requested by EPA;
2. The reasons why established goals were not met, if appropriate; and
3. Additional pertinent information, including, when appropriate, analysis and explanation of cost overruns or high unit costs.

Significant developments. Events may occur between the scheduled performance reporting dates that have significant impact upon the supported activity. In such cases, the recipient must inform EPA or subrecipient as soon as the following types of conditions become known:

(1) Problems, delays, or adverse conditions which will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation.

(2) Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

The quarterly progress reports shall also include a written report on all tasks currently in progress and planned for the next quarter. The quarterly reports shall be due thirty (30) days following the end of the quarter. Quarters shall be defined as January-March, April-June, July-September, and October-December.

B. **EPA Access.** EPA, Inspectors General, and the U.S. Government Accountability Office or any of their duly authorized representatives, shall have the right of access to any pertinent books, documents, papers, or other records of grantees and subgrantees which are pertinent to the grant, in order to make audits, examinations, excerpts, and transcripts in accordance with 2 CFR §200.336. The right also includes timely and reasonable access to the recipient's personnel for the purpose of interview and discussion related to such documents.

C. **Procurement.** All procurement actions under this grant must comply with the procurement requirements in 2 CFR Part 200, *Procurement Standards*; 2 CFR Part 1500, and 40 CFR Part 33

Recipient must also ensure that every purchase order or other contract includes any clauses required by Federal statutes, regulations, and Executive Orders pursuant to 2 CFR §200.326.

D. **Toxic and Hazardous Substances.** The recipient shall implement all mitigation measures pursuant to 29 CFR 1926.1101 to minimize asbestos exposure.

- E. **As-builts.** The recipient shall prepare up-to-date “as-builts” of the project and submit copies to the EPA Project Officer upon completion of the project.
- F. **Changes of Scope.** Minor changes in the project work that are consistent with the objectives of the project and within the scope of the grant agreement do not require the execution of a formal grant amendment before the recipient's implementation of the change. However, the amount of the funding provided by the grant agreement may only be increased by a formal grant amendment. The recipient must obtain EPA written approval before implementing changes which alter the project performance standards; change the scope or objectives of the project or substantially alter the design of the project; significantly delay or accelerate the project schedule; substantially alter the facilities plan, design drawings and specifications, or the location, size, capacity, or quality of any major part of the project.
- G. **Budget category changes.** Prior written approval is required for all budget category transfers from non-construction to construction or vice-versa or within such categories, and for requests for no-cost extensions.
- H. **Unforeseeable changes.** The recipient shall notify the EPA Project Officer at any point in time should any significant developments arise, such as those that might alter or delay the project, as soon as the recipient becomes aware of such developments.
- I. **Plan of Operation.** The Recipient shall provide a draft plan of operation covering at least five years for the project(s) funded by this grant. The draft plan of operation shall address development of: operation and maintenance manuals; and an adequate budget for operations, staffing, route maintenance, and replacement costs. The plan of operation must be finalized and implemented (as applicable) prior to the completion of the grant funded projects. A draft plan of operation shall but submitted at 75% of expenditure of grant funds.
- J. **Project Performance Standards: One-Year Report.** On the date one year after the initiation of operation of the project, the recipient shall certify to the EPA Project Officer whether the project meets the project performance standards. If the EPA Project Officer or the recipient concludes that the project does not meet the project performance standards, the recipient shall submit the following: (1) A corrective action report which includes an analysis of the cause of the project's failure to meet the performance standards (including the quantity of infiltration/inflow proposed to be eliminated), and an estimate of the nature, scope and cost of the corrective action necessary to bring the project into compliance; (2) The schedule for undertaking in a timely manner the corrective action necessary to bring the project into compliance; and (3) The scheduled date for certifying to the EPA Project Officer that the project is meeting the project performance standards. The recipient shall take corrective action necessary to bring a project into compliance with the project performance standards at its own expense.
- K. **Applicability.** The recipient agrees that it will expeditiously initiate and complete the project work for which assistance has been awarded under this agreement in a timely manner and in accordance with all applicable provisions of 2 CFR Part 200, and applicable EPA policies. The recipient warrants, represents, and agrees that it and its contractors, subcontractors, employees, and agents will comply with: (1) all applicable provisions of 2 CFR Part 200, and applicable EPA policies; and (2) any special conditions set forth in this assistance agreement or any assistance amendment.

- L. **Archeological Resource.** Should the discovery of a potential archeological or historical resource occur during construction, all work in the area of the find will stop and a qualified archeologist will be called in to evaluate the situation and make recommendations to the EPA Project Officer. The EPA Project Officer will then determine what will be necessary for construction to proceed.
- M. **Termination.** This award may be terminated for failure of the Recipient to make sufficient progress so as to reasonably ensure completion of the project within the project period, including any extensions. The EPA Project Officer will measure sufficient progress by examining the performance required under the workplan in conjunction with the milestone schedule, the time remaining for performance within the project period, and/or the availability of funds necessary to complete the project.
- N. **Cross-Cutting Requirements.** The recipient must comply with federal cross-cutting requirements. These requirements include, but are not limited to the Disadvantaged Business Enterprises requirements found at 40 CFR Part 33; nondiscrimination statutes, including Title VI of the Civil Rights Act of 1964, and EPA's implementing regulations found at 40 C.F.R. Parts 5 and 7; OSHA Worker Health & Safety Standard 29 CFR 1910.120; the Uniform Relocation Act; National Historic Preservation Act; Endangered Species Act; Permits required by Section 404 of the Clean Water Act; Executive Order 11246, Equal Employment Opportunity, and implementing regulations at 41 CFR 60-4; Contract Work Hours and Safety Standards Act, as amended (40 USC 327-333) the Anti-Kickback Act (40 USC 276c); and Section 504 of the Rehabilitation Act of 1973, as implemented by Executive Orders 11914 and 11250.
- O. **Cybersecurity:**
- (a) The recipient agrees that when collecting and managing environmental data under this assistance agreement, it will protect the data by following all applicable Tribal law and policy cybersecurity requirements.
- (b) (1) EPA must ensure that any connections between the recipient's network or information system and EPA networks used by the recipient to transfer data under this agreement, are secure. For purposes of this Section, a connection is defined as a dedicated persistent interface between an Agency IT system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition.
- If the recipient's connections as defined above do not go through the Environmental Information Exchange Network or EPA's Central Data Exchange, the recipient agrees to contact the EPA Project Officer (PO) no later than 90 days after the date of this award and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by EPA's regulatory programs for the submission of reporting and/or compliance data.
- (2) The recipient agrees that any subawards it makes under this agreement will require the subrecipient to comply with the requirements in (b)(1) if the subrecipient's network or information system is connected to EPA networks to transfer data to the Agency using systems other than the Environmental Information Exchange Network or EPA's Central Data Exchange.

The recipient will be in compliance with this condition: by including this requirement in subaward agreements; and during subrecipient monitoring deemed necessary by the recipient under 2 CFR 200.331(d), by inquiring whether the subrecipient has contacted the EPA Project Officer. Nothing in this condition requires the recipient to contact the EPA Project Officer on behalf of a subrecipient or to be involved in the negotiation of an Interconnection Service Agreement between the subrecipient and EPA.

Sample Interagency Agreement Programmatic and Administrative Conditions

Interagency Agreement between the U.S. Environmental Protection Agency and the Indian Health Service for [Tribal Drinking Water Facilities] Construction

I. ADMINISTRATIVE TERMS AND CONDITIONS

This Interagency Agreement (IA) provides for the coordination between the Environmental Protection Agency (EPA) Region 9 Drinking Water Infrastructure Grants – Tribal Set Aside (DWIG-TSA) Program and the Indian Health Service (IHS) Sanitation Facilities Construction Program. This IA applies to funds appropriated to the EPA under section 1452(i) of the Safe Drinking Water Act, which the EPA intends to transfer to the IHS under this IA.

If the actual cost of providing the facilities is less than the amount in the Project Documents, the IHS Area Office and the EPA Region, in consultation with the Tribe, will coordinate the disposition of the remaining funds. The parties may decide to increase the scope or identify another project for funding, or the IHS may return the unused funds to the EPA. Any project changes agreed to by the parties must be reflected in the IA through an amendment prior to expiration of the IA and before allocating funds to a new project, unless the IHS decides to return the funds to the EPA. If the parties cannot come to agreement, the IHS will return the funds to the EPA.

Funds transferred by EPA to the IHS under this IA may only be used in agreements authorized by Indian Sanitation Facilities Act, 42 U.S.C. 2004a. IHS Area Offices may use up to 15 percent of the IA project funds allocated to them to support management and oversight of each project funded by this IA.

The IHS is approved to purchase equipment in accordance with its equipment management policies. The IHS will determine that the equipment is in the best interest of the government and is necessary for the performance of the projects under this IA. Disposition of the equipment will be subject to IHS equipment management policies or as specified in the Project Documents with no further accountability to EPA.

A. Resolution of Disagreements

Should disagreements arise on the interpretation of the provisions of this agreement or amendments and/or revisions thereto, that cannot be resolved at the operating level, the area(s) of disagreement shall be stated in writing by each party and presented to the other party for consideration. If agreement or interpretation is not reached within 30 days, the parties shall forward the written presentation of the disagreement to respective higher officials for appropriate resolution.

If a dispute related to funding remains unresolved for more than 30 calendar days after the parties have engaged in an escalation of the dispute, disputes will be resolved in accordance with

instructions provided in the Treasury Financial Manual (TFM) Volume I, Part 2, Chapter 4700, Appendix 10, available at <http://www.fms.treas.gov/tfm/index.html>.

B. Duration of Agreement and Termination Procedures

This agreement shall continue in effect until IHS or EPA provides written notice of termination, or when a project (or projects) funded under this agreement are completed or are no longer needed for the purpose identified in the Project Documents. Any funds that are obligated up to and on the date of termination will remain obligated to the project(s) identified in this agreement. Notice shall be given to the other party at least 60 days in advance of a termination date.

As per section 4.3.2 of EPA's "Interagency Agreement Policies, Procedures, and Guidance Manual 2008" the total duration of the project period for an IA may not exceed 7 years unless (1) there is statutory or regulatory authorization for a longer period, (2) a signed waiver from an EPA Director, Office of Grants & Debarment (OGD), or designee, granting an exception is obtained, or (3) in the case of an allocation (appropriation) transfer, a shorter period is mandated, i.e., 5 years. This durational limitation includes both the original period of performance and any extensions. The initial determination of the appropriate length of the project period should take this limitation into account. (For example, an IA between IHS and EPA normally has a 5-year term. The IA can be extended upon approval of the parties for up to two more years for a total IA term of 7-years. An IA cannot be extended beyond the 7-year limit unless a waiver is granted by the EPA Director, Office of Grants & Debarment.) To exceed the 7-year policy limitation, a waiver request must be submitted in writing by the appropriate EPA Senior Resource Official to OGD. The OGD Director, or designee, may approve waivers on a class or individual basis because of national security concerns, circumstances of unusual or compelling urgency, unique programmatic considerations, or because the waiver would be in the public interest.

C. Sufficient Progress

EPA expressly reserves the right to terminate the IA for failure to make sufficient progress so as to reasonably ensure completion of the project within the project period (as defined in Section I.B.), including any extensions. EPA will measure sufficient progress by examining the performance required under the Statement of Work, the time remaining for performance, and/or the availability of funds necessary to complete performance. Prior to exercising this right to terminate, EPA will follow the resolution procedures cited Section I.A.

D. Cost Collection upon Cancellation

If the EPA cancels the order, the IHS is authorized to collect costs incurred prior to cancellation of the order plus termination costs, up to the total payment amount provided for under the agreement.

E. IAs with Contracts or Procurement

The IHS will use its administrative policies and procedures including those under the Buy Indian Act provisions for direct federal acquisition, to implement and execute projects funded under this IA.

F. Fiscal and Project Reporting Requirements

The IHS will update its Sanitation Tracking and Reporting System (STARS) quarterly and provide a report in STARS that may be accessed by the EPA. The report will include at minimum, project-specific estimated expenditures and actual milestones achieved to date and will be available to the respective EPA Regional DWIG Program Coordinator and to the EPA Financial Management Center. The STARS will be updated by the 30th day following the end of a quarter, beginning with the first full reporting period after funds are received by the IHS.

G. Audit Findings

If an audit determines that any direct or indirect costs in a project funded under this IA are unallowable, the parties to this IA will be notified immediately following resolution of the audit and the IHS project account will be credited for ineligible costs.

II. PROGRAMMATIC TERMS AND CONDITIONS

A. Authority and Purpose

The activities under this IA are being executed by the EPA pursuant to the Safe Drinking Water Act section 1450 (b), 42 USC 300j-9(b) and 1452(i), 42 USC 300j-12(i). The services and facilities will be provided to the Tribe by the IHS under the Transfer Act, 42 U.S.C. 2001; Indian Sanitation Facilities Act, 42 U.S.C. 2004a; and Title III of Indian Health Care Improvement Act, as amended, 25 U.S.C. 1632.

B. EPA Responsibilities

1. The EPA Regional Office shall designate a representative to coordinate its participation in projects (Regional Program Coordinator). This representative shall formally advise the respective IHS Area Office of this designation.
2. As resources permit the EPA shall provide to the IHS and Tribes technical assistance as needed to successfully meet applicable program requirements.
3. The EPA Regional Office will ensure that the proposed projects are in accordance with the Safe Drinking Water Act, annual national guidance and the Drinking Water Infrastructure Grants Tribal Set-Aside Program Final Guidelines October 1998 and the Addendums.
4. EPA Regional Office will ensure that water collection and analysis methodologies (as applicable) are in accordance with the IHS/EPA jointly developed Quality Assurance Project Plan (QAPP).
5. EPA is responsible for any distribution within the EPA of the final technical and financial report provided to the respective EPA Regional Program Coordinator after the construction phase completion.
6. The EPA will not be a signatory on any Project Summaries or Memorandums of Agreement.

7. Where appropriate, EPA Regions shall provide comments to IHS Area Offices on the design and planning documents associated with projects funded by the IA within 30 days of receiving said documents.
8. EPA Regions shall monitor construction progress with: data from the IHS database, discussions with the IHS Area Offices and field site visits as necessary to ensure the level of expended funds is reasonable given the reported milestone dates. The EPA will consult with the IHS Area Office quarterly to discuss project status.
9. The EPA Regions will participate in the final project inspection, as deemed necessary and resources permitting. At project completion, the EPA Region will review the final technical and financial reports provided by the IHS Area Office and will initiate the necessary EPA close-out process.
10. The EPA Regions will acknowledge and respond to IHS Area invitations to participate in project activities within 10 days of receipt.

C. IHS Responsibilities

1. The IHS shall implement and execute projects funded under this IA using its administrative policies and procedures as described in the Indian Health Manual, Part 5, Chapter 2, Memorandum of Agreement.
2. Project Documents (Project Summary/ Memorandum of Agreement or Arrangements as described in 42 U.S.C. 2004a) will be developed by the IHS Area Office, in consultation with the respective Tribes and respective EPA Regional Office.
3. Unless otherwise stipulated in the project documents, the IHS shall be the lead agency in assuring compliance with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and other applicable Federal requirements only if the EPA funds are deposited in the IHS financial system (UFMS).
4. Quarterly progress reports will be available to EPA through the IHS STARS system as stated in I.F., Fiscal and Project Reporting Requirements. Should the need arise and if the agencies mutually agree, the report may be supplemented.
5. The EPA Regional Office shall be formally notified of and invited to participate in the conceptual design meeting, the final plans and specification review, and the final inspections for projects in which EPA funds are utilized. IHS shall notify the EPA at least 30 business days prior to these events to allow optimal participation. Notification will be by e-mail.
6. As applicable, upon completion of each project under this IA, all rights title and interest to the provided sanitation facilities shall be transferred to the Tribe or to a responsible entity identified by the Tribe in accordance with the Project Documents. Each respective IHS Area Office shall make such arrangements as they determine necessary for the ownership and operation and maintenance of the completed facilities.

7. For each project funded under this IA, a final technical and financial report shall be provided no later than 365 days after construction phase completion to the respective EPA Regional Program Coordinator. Electronic copies of the report shall be provided to the EPA representatives identified above in Fiscal Reporting Requirements.

8. The water sampling umbrella Water Sample Collection and Analysis Quality Assurance Project Plan (QAPP) for Tribal Drinking Water and Wastewater Infrastructure Projects, developed jointly between EPA and IHS, will be implemented by IHS as applicable.

9. For an EPA funded project for a pilot water treatment study or for a specific hydraulic network model calibration, the IHS will prepare an individual project specific Quality Assurance Project Plan (QAPP) in accordance with EPA Guidance for Quality Assurance Project Plans (QA/G-5) (EPA 2001) which can be found at <http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf>. The QAPP must be submitted for review and approval by the EPA OW QA Officer through the EPA IA Project Officer, who must approve D-6 the Quality Assurance procedures or standards in writing. EPA will have 60 calendar days to approve the QAPP submitted by IHS, after that time the QAPP will be considered final.

10. Restrictions on FY17 Funding for Corporations with Unpaid Federal Tax Liabilities and Felony Convictions

This interagency agreement (IA) obligates and transfers or advances EPA funds appropriated under Public Law 115-31 (the Consolidated Appropriations Act, 2017). As a result, this IA is subject to the provisions contained in the Consolidated Appropriations Act, 2017, Public Law 115-31, Division E, Title VII, Sections 745 and 746, regarding unpaid federal tax liabilities and federal felony convictions, which also have been included in prior appropriations acts.

The IHS is also subject to the same sections of the Act, in accordance with Department of Health & Human Services acquisition policies. The IHS will forward to the EPA Award Official, within 45 days, any documentation supporting an award where a written determination was made by the agency debaring and suspending official that suspension or debarment was considered but is not necessary to protect the interests of the Government.

11. Advance Payment for Indian Health Service Interagency Agreements

This Interagency Agreement is handled through Advance Payment and is tracked in IHS' Sanitation Tracking and Reporting System (STARS). Therefore, the reporting instructions in Administrative Condition F, *Fiscal and Project Reporting Requirements*, and Programmatic Condition C, *IHS Responsibilities*, Section 4, should be followed closely.

Financial Inquiries may be emailed to CFC_Fed_Pay@epa.gov or sent to the following address:

**U.S. EPA CFC
ATTN: Elizabeth McGuffey
26 W. ML King Dr.
Cincinnati, OH 45268-7002**