

Region 8 Trash Free Water Tribal Program Handbook

Environmental Protection Agency Region 8



Table of Contents

Section 1 Introduction	3
Why Should We Care About Trash in Our Waterways?	4
Environmental Impacts	4
Social and Economic Impacts	4
How Does Trash get into our Waterways?	5
How Can We Prevent Trash from Entering Our Waterways?	6
What is the Trash Free Waters Program?	6
Section 2 Implementing a TFW Project	6
What is a TFW Project?	6
Identifying an Impacted Waterway	8
Developing and Implementing the Project	9
Step 1. Assemble a Project Team	9
Step 2. Conduct a Situational Assessment	9
Step 3. Community Engagement	11
Step 4. Find Funding Opportunities	11
Step 5. Develop a Project Workplan	12
Step 6. Implementing the Project and Track the Outcomes	12
Publicizing Project Successes	13
Section 3 Funding Opportunities	13
Table 1: Non-Competitive Base Grants That Can Support TFW Initiatives	14
Table 2: Example Competitive Grants That Can Support TFW initiatives	15
Section 4 Helpful Contacts for Trash Free Water Projects	16
Section 5 Trash Free Water Case Studies	16
Case Study #1: Sisseton Wahpeton Oyato (SWO) – Household Refuse Container Project	16
Case Study #2: Mississippi Band of Choctaw Indians – TFW Litter Trap Project	17
Appendix A: Federally Recognized Tribes in Region 8	20
Appendix B: Plastic Bioaccumulation in the Food Web	21
Appendix C: Trash Characterization Tracking Template	22
Appendix D: Trash Free Waters Questionnaire	23
Appendix E: Funding Opportunities for Trash Free Waters Projects	30
Appendix F: TFW Online Funding Directory and Support Websites	41
Appendix G: TFW Tribal Handbook Glossary	43
Notes:	46

Section 1 | Introduction

Trash polluting the environment and waterways affects everyone. For many tribes¹, litter is an ugly and potentially dangerous problem. Ensuring that trash does not escape into the environment can be challenging, especially in rural areas. Causes of litter are often complex and depend on local conditions. However, there are many ways Tribal governments and residents can help prevent trash pollution. We refer to these initiatives as "Trash Free Waters projects." This guide, which was created by EPA's Region 8 Trash Free Waters (TFW) program, is intended to assist Tribal governments, Indigenous communities, and other relevant stakeholders to develop and implement projects that reduce trash in waterways on Tribal lands.

While there is no one-size-fits-all solution to trash pollution, this Handbook provides basic information on project design, implementation, and funding to serve as a starting point for tribes and other partners interested in taking action to reduce escaped trash in their community. This handbook also provides a list of links to additional useful resources and tools as well as contact information for individuals who may be able to provide more information and support. A list of Region 8 tribes can be found in **Appendix** A. Additionally, we understand open dumping is a significant challenge for rural communities that do not have access and resources available to manage trash cost effectively. It is our hope that this handbook will help these communities identify effective solutions that can address their trash management concerns.

Mismanagement of Trash

Escaped Trash



Consequences of Escaped Trash

- Provides a breeding ground for bacteria; can spread diseases
- Attracts pests
- Contains flammable materials; causes fires
- Causes physical and chemical harm to plants and animals
- Degrades waterbodies blocks sunlight and reduces the amount of oxygen available to plants and animals
- Contaminates drinking water and food sources
- Damages boat engines
- Decreases tourism revenue unsightly beaches





















Damage to boat engines

Unsightly on beaches

Attracts pests

chemical harm

Why Should We Care About Trash in Our Waterways?

Environmental Impacts

The accumulation of large pieces of trash on the surface of a waterbody can alter the physical structure of aquatic habitats, potentially harming the organisms that depend on them. The most common threats to wildlife both in aquatic and terrestrial environments include physical hazards from ingestion and entanglement. Animals that become entangled in debris may suffocate or drown.4

- > An estimated 100,000 marine mammals and 1 million seabirds die every year due to plastic debris.
- Municipalities spend more than \$790 million and counties spend \$185 million to clean up trash each year.

Plastic waste is particularly concerning for a variety of reasons. Fish, birds, and other organisms often mistake plastic debris for food. When ingested, plastic debris can accumulate and become lodged in their digestive systems, leading to starvation or other health problems.



Rather than biodegrading, plastic waste often breaks down into tiny pieces known as microplastics (less than 5 mm in size), which are nearly impossible to clean up once they are in the environment. Biodegradable objects can be decomposed by bacteria or other living organisms into innocuous byproducts, unlike plastics that will negatively persist in the environment. Microplastics can contain toxic chemicals or absorb them from the surrounding waters, potentially presenting toxicological risks for those that ingest them. When aquatic organisms eat these plastic particles, microplastics – and the chemicals they carry – can make their way up the food chain. 5 See Appendix B for diagram of plastic bioaccumulation. In fact, researchers have found microplastics in a variety of the

fish and shellfish that people consume. However, there is still insufficient research to fully understand the human and environmental health risks associated with exposure to plastic debris and microplastics.⁶

Social and Economic Impacts

No one likes to see litter in their community. Its presence detracts from the beauty of a landscape or neighborhood. When litter accumulates in or near a community, it can create health and safety risks for those living there. Litter serves as a breeding ground for bacteria and rats/pests that are attracted to the litter can spread diseases. Mismanaged trash may also attract pests, or in the case of flammable materials, cause fires.⁷

Aquatic trash can also have negative impacts on recreation, tourism, and the economy. Once trash escapes into the environment, cleaning it up is expensive, and can also cause damage to boats if the material tangles propellers or clogs vessel intakes.⁸ Aquatic trash can



appearance and quality of life

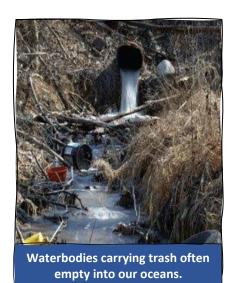
lead to declining fish populations, which might hurt communities that rely on fisheries for subsistence, employment, or supplemental income. This economic burden often falls on local governments and their residents. A 2009 study by Keep America Beautiful found that the U.S. spends about \$11.5 billion per year to clean up litter.

How Does Trash get into our Waterways?

Escaped trash refers to all types of mismanaged man-made materials that have been directly or indirectly, intentionally, or unintentionally, disposed of or abandoned into the environment – this includes litter and floatable debris. Once trash escapes into the environment, it is difficult to clean up.



Most of the trash that ends up in streams, rivers, lakes, and oceans comes from land-based activities. Trash enters waterways in a variety of ways, such as through stormwater systems in urban areas where rain washes litter on the ground into stormwater systems that in some cases lead directly into waterways, and through littering and illegal dumping near or in waterways. Illegal dumping of



household waste may be more common if there is a lack of regular trash pickup services or publicly available dumpsters. Additionally, trash can blow out of overfilled trash bins or off trash collection vehicles. Over time, mismanaged trash in inland areas travels by wind, stormwater conveyances, streams, and rivers far from their original source, much of it ultimately ending up in the marine environment.

The specific causes of trash pollution in a particular region tend to vary depending on the characteristics of the area, including geography, population size, land uses, solid waste management infrastructure and processes, and local policies. For this reason, it is important that an analysis of the root causes of trash pollution in a particular area inform any litter/escaped trash prevention activities. This is discussed in greater detail in the "Implementation" section (Section 2) below.

How Can We Prevent Trash from Entering Our Waterways?

There are a wide range of measures that communities can take to prevent trash pollution, but the suitability of each activity depends on the unique local circumstances and the engagement of the community to work on addressing the causes. Existing strategies to reduce trash pollution include:



- Conducting education and outreach campaigns to reduce littering and illegal dumping;
- Hosting trash clean-up events
- Expanding garbage and/or recycling pickup services;
- Providing secure public and household waste bins;
- Reducing use of single-use plastics;
- Reducing trash in stormwater through street sweeping, trash capture technologies, and other improvements to stormwater and solid waste management practices.

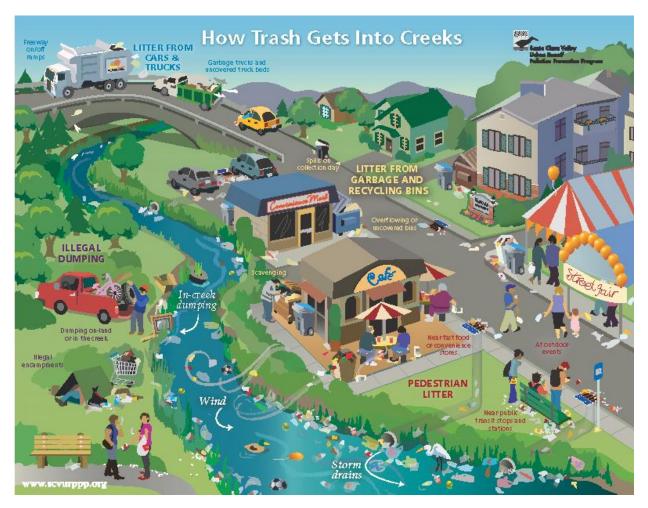
Strategies using messaging for change, or Community-Based Social Marketing (CBSM) can help to determine community-specific behavior challenges (barriers). By figuring out these challenges, planners of an environmental initiative can make a better plan and evaluate outcomes of an environmental initiative. Social science research shows that multiple strategies, in addition to information and education, can help a community reach greater changes in behavior for an improved environment. Read more about the scientific approach to community engagement in step 3 of section 2.

What is the Trash Free Waters Program?

EPA's Trash Free Waters Program is a non-regulatory partnership program within EPA's Office of Water that works with federal, tribal, state, and local governments, businesses, NGOs, and other stakeholders to prevent land-based sources of trash from entering U.S. waters and the ocean. The majority of projects are implemented at the state, regional, or local level and are tailored to the unique needs, challenges, and opportunities in a particular location. At the national level, Trash Free Waters supports research activities and outreach efforts and develops informational tools to help communities across the country to address the problem of trash pollution.

Section 2 | Implementing a TFW Project What is a TFW Project?

The goal of a TFW project is to reduce the amount of trash entering waterways by working with a wide range of stakeholders to implement collaborative solutions that target land-based sources. The figure below illustrates common sources of escaped trash entering waterways.



Source: Santa Clara Valley Urban Runoff Pollution Prevention Program¹⁰

There are many different approaches that can help prevent aquatic trash accumulation that can be tailored to meet specific community needs. Listed below are the primary prevention approaches:

- Source reduction, or reducing waste in the first place, reduces the amount of trash and plastic waste that consumers, and others, put into the environment up front in the system;
- Community engagement, outreach and education projects that educate community members about safe waste disposal practices and involve them in protecting local waterways from trash;
- Solid waste management improvements including improving trash collection services and recycling collection services;
- Trash capture devices designed to catch escaped trash either in streams or prior to entering waterways; and
- Clean-up events that expand community awareness and ownership of the problem, while removing escaped trash from the environment



Source reduction, community engagement approaches, and waste management improvements address the "upstream" release of trash and attempt to reduce the amount of mismanaged trash that ultimately enters the environment and impacts waterways. Additionally, solid waste management improvements, may promote approaches and actions that support environmentally sound waste management through enforceable solid waste regulations, recycling and composting programs, and reduction or elimination of waste. By contrast, "downstream" approaches to reduce the amount of trash released into the environment include trash capture and clean-up event approaches. These recovery approaches are important because they prevent mismanaged trash from lingering or migrating in the environment, but they do not address the sources of trash themselves. If the primary source of escaped trash in your waterbody is unclear, or the types of trash present seem highly varied, then research and monitoring of the waterway will be the first approach needed to begin understanding the problem. The data obtained from this activity will support the selection of the most effective trash mitigation approach(es) for the TFW project. This section of the handbook outlines some suggested steps to develop and carry out a TFW project. These recommended steps are intentionally broad so they can apply to a variety of approaches. They are designed to give Tribal Environmental Directors and other members of the community guidance on how to launch a TFW project. Below are some basic questions that should be considered when deciding on undertaking a TFW project.

Identifying an Impacted Waterway

First, identify a waterway that is consistently or significantly impacted by trash debris, or threatened to be impacted by trash in the future, in a way that degrades water quality. As you are identifying a waterway, consider the following questions to help narrow the focus of the project and identify opportunities.

Questions to consider when thinking about a TFW Project

- 1. Do you know of any problem areas you would like to target?
 - This can be recreational sites (fishing, swimming, etc.), cultural areas, industrial locations (dump sites, businesses, etc. near waterways)
- 2. What are the locations of these target areas?
 - Upstream of the reservation? Near homes or public spaces?
- 3. What solid waste management actions are currently in place within the reservation?
 - (Trash pick-up spots, trash traps in streams, waste bins in recreational areas,
- 4. Are there any funding sources that you currently have, or could apply for, that can support a TFW project?
- 5. Would you like to see educational & outreach opportunities happen to educate the public about trash free waters/ ways to help prevent water pollutant problems?
 - (educational pamphlets, tribal earth day activities, public talks, signs, etc.)

The target area will need to be well defined (e.g. physical location, size of the target area, accessibility, potential hazards, extent of the trash problem, etc.), so that accurate costs and project timelines can be established. See Step #2 – Conduct a situational assessment, and Step #4 - Develop a project proposal and implementation plan in section 2 for further details.

Developing and Implementing the Project

Key steps in developing and implementing a TFW project are listed in the figure below.

The following steps are based on information presented in the International Trash Free Waters Implementation Guide. 11 The first three steps are important to consider before project implementation begins.



Step 1. Assemble a Project Team

Gather Your Supporters. Once an impacted/threatened waterway has been identified, a project team should be assembled. The project team is a foundational component of a TFW project. This team may include tribal government departments (e.g. natural resources/environmental, maintenance/public works, fish and game, etc.), community members and/or stakeholders, and EPA Region 8 staff. Together, this group will identify funding opportunities that best fit the goals of the project, conduct a Situational Assessment, and draft a workplan and grant proposal(s).

Step 2. Conduct a Situational Assessment

Understand the problem. To identify the scope and goals of the project, the project team should consider asking members of the tribal community questions about their experiences with trash pollution in the project area. Questions might include what improvements are needed for waste collection in their community, what efforts (if any) have been completed in the past to reduce trash or improve waste

management locally, what and/or who do they think is the source of the trash and why, and in what ways does trash limit their use and enjoyment of the project area or otherwise negatively affect them. Appendix D provides two example questionnaires that were each developed to gather information about community trash practices and awareness for TFW projects. Additionally, the CBSM approach provides a scientific method for developing questionnaires and focusing on impactful TFW efforts within your community. Read more about CBSM in step 3 of section 2.

Once the goals are identified, a situational assessment should be completed. A Situational Assessment is a process of evaluating the sources, causes, challenges and human and natural impacts of trash in the identified impacted waterway. The team will need to evaluate the project location and document the extent, type, and sources of trash present to identify the project goals. It may be helpful to assemble a



Waste characterization activity

team of volunteers to visually identify hotspots and to characterize trash. During the situational assessment, the team can also identify opportunities to improve waste management and to mitigate trash. It does not need to be comprehensive but serves to better inform the public and stakeholders about the current state of litter in the project area. If the primary source(s) of escaped trash in your waterbody is unclear, or the types of trash present seem highly varied, then research and monitoring of the waterway could be the first approach, instead of a simple situational assessment. Research and monitoring activities can be funded through grants and written up as the primary focus of the workplan in these situations.

In 2021 the EPA released an Escaped Trash Assessment Protocol (ETAP) that provides a methodology for identifying a cleanup site, collecting the escaped trash, and cataloging the trash in a way that produces

reliable data. The EPA released a supporting Excel spreadsheet tool that the team can use to collect data during a situational assessment, which can be found online here. For communities that wish to undertake a more simplified approach to trash assessment, **Appendix C** provides a sample of a 'materials found' checklist developed by the San Juan Bay Estuary Program.

More information about the EPA **Escaped Trash Assessment Protocol and** tool can be found here: https://www.epa.gov/trash-freewaters/epas-escaped-trashassessment-protocol-etap

Once the situational assessment, or research and monitoring activities, are completed the project team should meet to determine which trash prevention approach(es) will best address the problem. Note that a project can consist of a combination of approaches and that TFW projects often include community engagement and outreach efforts, which are an important consideration for many grant applications. Other elements to consider early on are how long the project will take to complete, and ways to define project success. The project team should also brainstorm potential local or regional stakeholders who may support the project (including government members, local or regional business representatives, non-governmental organizations and community leaders, groups and individuals, and local schools).

Information from the situational assessment will be fundamental to developing a project workplan and applying for funding. The EPA regional office has resources to support and inform tribes about the project development process and the criteria that are needed to consider when applying for funding opportunities. The team should contact EPA Region 8 Tribal Affairs Branch for support and help with developing the project (TAB contact information available in Section 4).

Step 3. Community Engagement

Bring Everyone Together. The purpose of this step is to bring together possible stakeholders, including significant local or regional figures and community members, to discuss local trash problems and to prioritize the solutions to address them. This could take the form of a community meeting, virtual event, or series of discussions over a defined period for developing the project, depending on the needs and constraints of participants. The information collected during the Situational Assessment can be used to educate stakeholders and community members within the reservation about the condition of the project area and to discuss the local environmental impacts of escaped trash. After these discussions the team should meet to incorporate community input on the project-based solutions selected for the TFW project. The team should maintain contact with the stakeholders and identify leaders throughout the community to communicate with once the project begins.

Potential partners and stakeholders can include both tribal/intertribal entities and nontribal entities. For example, working with tribal leaders can potentially lead to improved governing policies that support the water quality/trash-free-waters effort and plan, and other tribal agencies may be able to outreach to other demographics that may not be the focus of the tribal water quality program. Nontribal partners can provide access to outside resources and support, for example needs can range from funding, to technical data and meeting space for gatherings. A first step is to make a list of the expertise and resources that will be needed to ensure success of the project. From there, you can plan events, projects, and outreach opportunities using available resources. Some examples of outreach opportunities that have been held within Region 8's tribal lands are annual Earth Day activities and community clean-up days. By hosting a reoccurring event with the community, you can create a sense of togetherness and pride for your lands.

The CBSM, Community-Based Social Marketing, approach can greatly assist with identifying community-specific behavior challenges (barriers) related to an environmental initiative, as well as developing a plan and evaluating the outcomes of an environmental initiative. CBSM incorporates research about human behavior and applies the best strategies for the design and delivery of community programs. CBSM consists of 5 steps, with concentrated effort to change or start a behavior in a group of people by creating motivation and helping them to overcome specific barriers (www.cbsm.com). This marketing method is all about getting people to substitute with a desired behavior in place of an undesired behavior. EPA Region 5 partnered with the Fond du Lac Band of Lake Superior Chippewa to create a CBSM Training Guide and recycling toolkit, which can be found at: https://www.epa.gov/tribal-lands/tribal-community-based-social-marketing-training-guide

Step 4. Find Funding Opportunities

Look for Funding. The team should consider which grants or funding opportunities the project is qualified for based on the information collected from the Situational Assessment. Certain EPA and USDA competitive grants provide significant financial support targeted for longer-term projects. Other funding opportunities provide less financial support and are intended to fund shorter-duration projects. For

more information on funding opportunities, see Section 3. All funding opportunities will be applied for using a project workplan and project proposal. The structure of the project proposal should align with the requirements of the specific funding opportunities to which the team plans to apply.

Step 5. Develop a Project Workplan

Create a plan. The project team uses the information gathered from the Situational Assessment and community engagement activities to draft the project workplan and project proposal for funding. There are many methods of capturing litter before it reaches the environment, and additional trash-capture tools and technologies that are available. The workplan will help map out the specifics of the project in the form of a document, that can be referenced throughout the project's lifespan.

The first step to developing a project workplan plan is to list out the necessary steps and tasks needed to start and complete the project. By having a detailed list of tasks and the steps needed to accomplish each task, the project team can easily show the grantees that your project is ready to be implemented.

Second steps to developing a project workplan is to create a project timeline. A clear project timeline will help guide the project team and to predict budget needs. The timeline should consider the entire lifespan of the proposed project, from securing funds by writing statements of work with project partners to completion and evaluation of success of the project. The timeline should also include key milestones for deliverables or events.

The International TFW
Implementation Guide and other
sources indicate that TFW projects
are often relatively low-cost, lowtech and can be implemented within
a relatively short duration of time –
a year or less. Longer, more complex
projects require greater planning
and resources.

The last element needed in a project workplan are the delegated roles and responsibilities for each project task. Roles and responsibilities for project participants should be clearly defined in the project workplan. The individuals writing the project's workplan may not be the same people executing the work. Ensuring that key responsibilities are assigned early will be essential to the success of the project.

Once the details of the project workplan are defined, the project team can then use the workplan when applying for funding opportunities. A successful grant applicant should have a thorough explanation of how the funds are going to be used. This shows the funding agency that the applicant is ready to receive funds and begin a successful project.

Step 6. Implementing the Project and Track the Outcomes

Turn your plans into actions. Once the project has been funded, it's time for implementation! Each TFW project will have metrics that match its goals. Typically, a TFW project's primary goal will involve reducing the amount of litter in the environment over a specific time-period. As part of the project workplan, it is important to establish realistic project goals with corresponding metrics that will demonstrate a TFW project's effectiveness. Additionally, throughout implementation it may be necessary to reevaluate and update goals should any significant challenges arise.

Continuous monitoring and evaluation of water quality and trash accumulation are helpful to implementing a robust, relevant, and effective TFW project. One way to monitor your project over time is using the Trash Characterization Tracking Template in **Appendix C**, to conduct a trash assessment

before project implementation and after project implementation. The project team can use information from these activities to help identify weak points in project design or implementation and make necessary adjustments to ensure long-term success. It is important to identify metrics that can be tracked during project implementation to identify whether the project is meeting its goals.

Publicizing Project Successes

Acknowledge your accomplishments! Sharing news and updates about the project when milestones are reached will help maintain momentum and give the community and stakeholders the opportunity to weigh in on progress and project goals that may need to be reconsidered, changed, or advanced. In addition, successes from one project can inspire other individuals, local organizations, or tribal governments to create their own projects in the future to address pressing issues related to trash that affect the quality of important water resources.

Section 3 | Funding Opportunities

Tribes have access to a variety of funding opportunities that can be used to support TFW programs on tribal lands. Many of these opportunities are federal, recurring grants that are available to state, local and tribal governments.

The Venn diagram to the right illustrates that preventing aquatic trash can be accomplished using different approaches that fall under multiple categories of federal funding opportunities, including those related to water quality management, solid waste management and residential housing (See example projects and grant opportunities for each category in Table 1 and 2 below). The overlapping regions of

the diagram indicate that there are funding opportunities available for projects in multiple categories. The EPA, U.S. Department of Agriculture (USDA), Department of Interior (DOI), Indian Health Service (IHS) and National Oceanographic and Atmospheric Administration (NOAA) fund water quality projects: the EPA, USDA and IHS provide several opportunities for solid waste management projects; and DOI, USDA and U.S. Department of Housing and Urban Development (HUD) offer grants associated with residential housing. Appendix E provides a list of 26 funding opportunities across these three



categories. Appendix F provides a list of websites that host directories of funding opportunities and other information that may be helpful as you seek out potential funding sources. See Appendix G for a glossary of relevant funding and environmental terms. TFW program activities that can typically be funded by grant programs include (but are not limited to):

• Source Reduction

- Programs to encourage the use of reusable items in place of single-use plastics
- **Community Engagement, Outreach and Education**
 - Outreach (CBSM efforts)
 - o Educational programs or exhibits about trash mitigation
 - Community cleanup events

Research and Monitoring

Solid waste stormwater and watershed monitoring

Solid Waste Management Improvements

- Residential and industrial recycling and trash management
- Providing regular garbage pickup services
- o Installing waste catchment systems in local waters

Trash capture

o Installing litter catchment systems in stormwater runoff

The tables below highlight examples of grants that can support TFW initiatives. A more comprehensive list of funding opportunities for TFW projects on Tribal lands as well as additional details about each of the grant opportunities listed above are provided in Appendix E.

Table 1: Non-Competitive Base Grants That Can Support TFW Initiatives

Grant and Website Link	Funding Category	Description (for more information, see Appendix D).	Average Award Amount in Region 8 ²	Application Timeframe (Workplan Submittal)	Applicable TFW Activities
General Assistance Program (GAP) (EPA) Link to website	А, В, С	This multipurpose program is designed to fund the planning, development, and establishment of environmental protection programs on tribal lands. Among other environmental protection efforts, the grant supports the development and implementation of solid and hazardous waste programs on tribal lands.	\$100,000	February-May, submit proposal to Grants .gov between May-July Award date: September 30, 2021	Source Reduction; Solid Waste Management Improvements; Community Engagement, Outreach and Education
Clean Water Act (CWA) 106 (EPA) Link to website	A	Section 106 grants authorize EPA to provide financial assistance for state/tribal governments to administer programs for the prevention, reduction, and elimination of water pollution.	\$50,000 to \$350,000	February-May, proposal Grants .gov between May-July Award date: September 30, 2021	Solid Waste Management Improvements; Trash Capture, Community Engagement, Outreach and Education
CWA §319 (EPA) Link to website	А	Section 319 grants are designed to reduce nonpoint source (NPS) pollution in state or tribal lands. These grants can help tribal water quality program managers, staff, and other tribal environmental decision makers design and implement effective and successful water quality programs.	\$30,000 or \$50,000	February-May, submit in Grants .gov between May-July Award date: September 30	Trash Capture, Research and Monitoring; Community Engagement, Outreach and Education

¹TFW Project Categories: A - Water Quality Management; B - Residential Housing; C- Solid Waste Management.

² Dependent on multiple factors including the particular workplan activities, the size and maturity of the program, the size of the reservation or prior performance and program improvements made.

Table 2: Example Competitive Grants That Can Support TFW initiatives

Grant and website link	Funding Category ¹	Description (for more information, see Appendix D).	Award Amount Details	Applicable TFW Activities
Multipurpose Grant (EPA) Link to website	A, C	This grant is broad in scope and funds can be put towards environmental projects with topics including: advancing environmental justice through supporting environmental education and outreach programs; Reducing waste in conjunction with watershed heath and management; Funding preexisting programs to manage human pollutants.	between \$10,000 to \$20,000 per eligible program ²	Research and Monitoring; Community Engagement, Outreach and Education
Environmental Justice (EJ) Collaborative Problem-Solving (EJCPS) Cooperative Agreement (EPA) Link to website	С	This program's objective is to support projects based on the EJ Collaborative Problem-Solving Model and its seven elements. The model is intended to assist vulnerable and underserved communities in developing proactive, strategic, and visionary approaches to address their environmental justice issues and achieve community health and sustainability. Successful projects identify a series of goals, unite communities and stakeholders towards achieving these goals, and track progress during and after project implementation.	Approximately \$120,000	Planning; Community Engagement, Outreach, and Education
CWA §319 Tribal Competitive grant Link to website	A	In addition to awarding section 319 base grants (described above), each year the EPA's National NPS Program solicits applications via a national competition from §319-eligible tribes and intertribal consortia to implement on-the-ground projects to manage NPS pollution. Competitive §319 grants may be used to develop and/or implement watershed-based plans and other on-the-ground projects that will result in significant steps towards solving NPS impairments on a watershed-wide basis.	Up to \$100,000	Trash Capture, Research and Monitoring; Community Engagement, Outreach and Education
Rural Utilities Service Solid Waste Management Grants (USDA – Rural Division) Link to website	c	This competitive grant program assists communities through free technical assistance and/or training provided by the grant recipients. Qualified organizations will receive Solid Waste Management grant funds to reduce or eliminate pollution of water resources in rural areas, and improve planning and management of solid waste sites in rural areas. Ster Quality Management; B - Residential Housing; C-S	From \$74,000 to \$900,000, average award of \$200,137	Planning; Equipment; and Solid Waste Management Improvements

¹TFW Project Categories: A - Water Quality Management; B - Residential Housing; C- Solid Waste Management.

 $^{^{2}}$ Tribes delegated federal regulatory authority through a similar manner to a state (TAS) process.

Section 4 | Helpful Contacts for Trash Free Water Projects

There are a number of organizations and agencies that can assist with a Trash Free Waters project within EPA Region 8's jurisdiction. The table below provides webpages to contact a few of these organizations.

Organization/Agency Name	Website for Contact Information
EPA Region 8 Tribal Affairs Branch (TAB) contact list	https://www.epa.gov/tribal/region-8-tribal-
	<u>contacts</u>
EPA Tribal Solid Waste Coordinators	https://www.epa.gov/tribal-
	lands/forms/contact-us-about-tribal-waste-
	management
EPA Trash Free Waters Coordinators and contacts	https://www.epa.gov/trash-free-
	waters/forms/contact-us-about-trash-free-
	waters
Indian Health Services (IHS)	https://www.ihs.gov/dsfc/staff/
Midwest Assistance Program (MAP)	https://www.map-inc.org/contact.html
Rural Community Assistance Corporation (RCAC)	https://www.rcac.org/environmental/water-
	wastewater-solidwaste/

Section 5 | Trash Free Waters Case Studies

Case Study #1: Sisseton Wahpeton Oyato (SWO) – Household Refuse Container Project

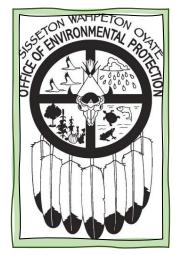
Who: Sisseton Wahpeton Oyate, Lake Traverse Reservation, South Dakota

Funding: Indian Health Service Center, Sisseton SD

Who: SWO Office of Environmental Protection & Indian Health Services Sisseton, SD; R8 EPA Trash Free Waters Program provided technical assistance.

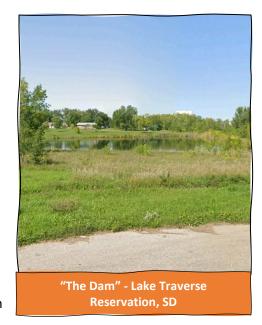
Timeline: June 2020 – ongoing

Background on SWO: The Lake Traverse Reservation is located in the Northeastern part of South Dakota and a small portion of southeastern corner of North Dakota. The reservation boundaries extend across seven counties, two in North Dakota and five in South Dakota. The population of Lake Traverse Reservation is over 12,000, with many more SWO tribal members throughout the United States.



Littered trash is a concern for the people of the Sisseton Wahpeton Oyate (SWO) Tribe located on the Lake Traverse reservation within South Dakota. This issue impacts the tribal members quality of life, and it has become a goal of SWO's Office of Environmental Protection (OEP) to clean up and prevent littered trash on the Lake Traverse Reservation. In the area surrounding tribal housing and the SWO Tribal college, littered trash has become more than an eyesore. The littered trash has become a safety and health concern, attracting feral dogs to the area, and polluting the area in and around an important local waterbody, the Dam, which is used by many tribal members for recreation (walking path) and fishing.

The R8 EPA Trash Free Waters (TFW) program worked with OEP staff to identify the source(s) of littered trash around the Dam so that they could be contained or removed. The R8 TFW program and OEP staff developed an informational survey, designed to collect data from community members who live and work near the Dam. The goal of this survey was to discover where the trash comes from, what type of trash is typically seen, and which trash management improvements are preferred by the community members. As a result of the survey, the OEP staff discovered that much of the littered trash originates from feral dogs and wildlife that dig into the trash bins seeking food, as well as from the area around the public housing and other areas with inadequate trash receptacles.



With this information, OEP staff plans to replace open trash cans near the Dam with animal proof trash bins to stop

access by feral dogs and wild animals. In addition, they will distribute more than 70 household refuse containers and dumpsters to homeowners within the Lake Traverse Reservation to help reduce the quantity of littered trash in the area.

Award Amount: 72 Household Refuse Containers

Pre-implementation planning: OEP and IHS worked together to get homeowners within the Lake Traverse reservation to fill out applications for the household refuse contains. Homeowners had to show proof of home ownership to be eligible for containers. Depending on the size of land that the homeowners owned they could qualify for a 95-gallon curbside rollout bin or a 2 cubic yard dumpster if they owned 2.5+ acres of land.

Implementation process (to date): As of now, 72 homeowners will be receiving household refuse containers, with roughly 40 of those homeowners getting the 2 cubic yard dumpsters. OEP is working on delivering the dumpsters to the homeowners and working with the city trash center to install a trash bin lift onto the garbage trucks for easy collection.

Data collection and project documentation: Before this project residents would pay \$50/month (\$600/year) to rent a trash bin. Through the new refuse container efforts, homeowners will now own their trash bins and pay less expensive trash pick-up fee. Applicants who received a 95-gallon curbside rollout bin will have their trash picked up by the city's current trash collection program. Applicants who received the 2 cubic yard dumpster will pay \$25/pick-up (\$300/year if picked up once a month) once the dumpster is filled. Saving residence \$300 or more per year!

Successes and lessons learned: Having available trash bins for residence decreases the amount of mismanaged trash (e.g. Trash is securely contained from animals and weather, and it deters residents from burying trash or dumping trash in illegal dump sites).

Case Study #2: Mississippi Band of Choctaw Indians – TFW Litter Trap Project

Who: Mississippi Band of Choctaw Indians (MBCI)

Funding: \$200,000 from US Environmental Protection Agency, Trash-Free Waters Grant. Additional EPA funds provided through Section 106 of the Clean Water Act

Timeline: Start 2020 - Present

Summary: With funding from EPA, the Mississippi Band of Choctaw Indians (MBCI) is currently in the process of implementing a trash capture and education project to reduce the amount of trash in their waterways. In October 2020, MCBI began planning for the project, which will consist of three small Bandalong trash traps to be installed in streams on MBCI tribal land. The trash traps will also be used to raise awareness about the community's aquatic trash problem and educate residents and visitors about the importance of keeping trash out of waterways. MBCI will use funding from EPA to purchase and install the trash traps, conduct outreach and education activities, and maintain the trash traps.

Background on MBCI: The Choctaw Indian Reservation covers about 35,000 acres of land in Mississippi. The reservation is not one contiguous block, but instead has about 11,000 tribal members living in eight communities spread out across the state. The reservation has three casinos, six elementary schools, one middle school, and one high school. MBCI communities have curbside solid waste collection through a contract with Waste Management.

Some of the streams and canals that run through MBCI territory tend to have large volumes of trash pollution, which has negative consequences for the surrounding communities and ecosystems. In some cases, trash from nearby cities is carried downstream to the reservation. To address the noticeable aquatic trash problem in the area and clean up the reservation's streams, MBCI's Office of Environmental Protection decided to install trash traps and conduct outreach activities to help prevent aquatic trash in the future.

Pre-implementation planning: MBCl's Tribal Chief Cyrus Ben and Environmental Manager Jerry Cain met with staff from EPA's Region 4 Office to discuss growing areas of pollution and concerns along Kentawka Canal. The canal receives the drainage from Philadelphia, Mississippi and is frequently polluted with trash. Though the project team originally planned for a large trash trap to be installed on Kentawka canal, after further assessment of the area, they determined that the canal was not a suitable location for such infrastructure. The location and certain physical characteristics of the Kentawka canal would have made it very difficult to install, access, and maintain the trash trap.

For this reason, the project team shifted their focus to other areas in the reservation that were impacted by trash and could be more appropriate locations for trash traps. The project team consulted their Nonpoint Source Management plan and worked with partners to determine the best locations to install the trash traps.

The streams that will become the sites of three new small trash traps are more accessible, so the trash traps can be maintained. At about \$20,000 each, the smaller traps are not only more appropriate for the location, but they are also significantly less expensive than the larger trash trap, which would have cost over \$150,000. The additional funds can now be used to cover maintenance costs and conduct outreach and education activities.

The project team selected a highly visible location for one of the trash traps so that people can easily view it. This will also serve as an education center, in which tribal members and visitors can learn about

the problem of aquatic trash and how they can help prevent it. MBCI will use CWA 106 funding to enhance some of the educational aspects of the project.

Implementation process (to date): Currently, the project team has developed a Siting and Installation Bandalong Trap Plan. They have not yet installed the trash traps.

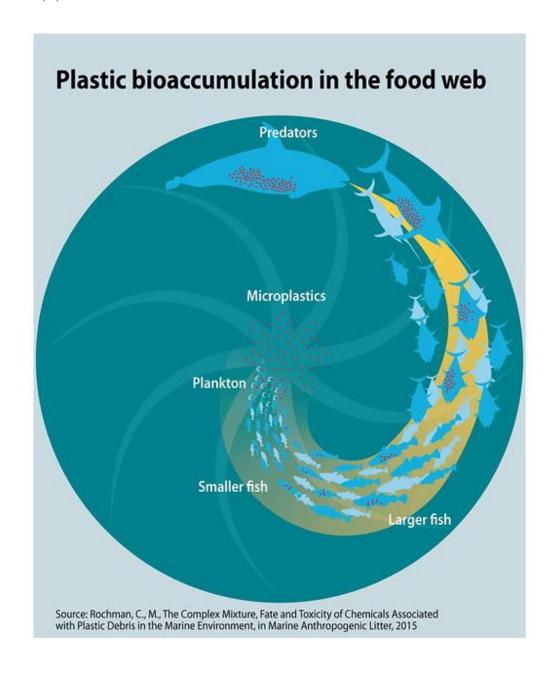
Successes and lessons learned: One lesson that the project team has learned thus far in the project's development is that it is important to do a thorough pre-implementation planning process, but it is also helpful to ensure that work plans, grants, and other planning documents are written in a way that allows for some flexibility when it comes to implementation of the project.

The MBCI team also found that for a project involving installation and maintenance of a Bandalong trash trap, it is helpful to have in-house technical expertise and to make plans for how the device will be maintained after the installation is complete. There are many different types of trash capture devices ¹²some more complex than others. Trash Free Waters project teams should look closely at the options and weigh the costs and benefits of various technologies in order to choose the most appropriate option.

Appendix A: Federally Recognized Tribes in Region 8

Tribe Name	Reservation	State
Assiniboine & Sioux Tribe	Fort Peck Reservation	MT
Blackfeet Tribe	Blackfeet Reservation	MT
Chippewa -Cree Tribe	Rocky Boys Reservation	MT
Crow Creek Sioux Tribe	Crow Creek Reservation	SD
Crow Tribe	Crow Reservation	MT
Cheyenne River Sioux Tribe	Cheyenne River Reservation	SD
Confederated Salish & Kootenai Tribes	Flathead Reservation	MT
Eastern Shoshone Tribe	Wind River Reservation	WY
Flandreau Santee Sioux Tribe	Flandreau Reservation	SD
Gros Ventre and Assiniboine Tribes	Fort Belknap Reservation	MT
Lower Brule Sioux Tribe	Lower Brule Reservation	SD
Little Shell Tribe of Chippewa Indians	NA	MT
Mandan, Hidatsa & Arikara Nation (Three Affiliated Tribes)	Fort Berthold Reservation	ND
Northern Cheyenne Tribe	Northern Cheyenne Reservation	MT
Northern Arapaho Tribe	Wind River Reservation	WY
Northwestern Band of the Shoshone Nation	NA	UT
Oglala Sioux Tribe	Pine Ridge Reservation	SD
Paiute Indian Tribe of Utah	Paiute Reservation	UT
Rosebud Sioux Tribe	Rosebud Reservation	SD
Skull Valley Band of Goshute Indians	Skull Valley Reservation	UT
Spirit Lake Nation	Spirit Lake Reservation	ND
Standing Rock Sioux Tribe	Standing Rock Reservation	SD
Southern Ute Indian Tribe	Southern Ute Reservation	СО
Sisseton-Wahpeton Oyate Tribe	Lake Traverse Reservation	SD
Turtle Mountain Band of Chippewa	Turtle Mountain Reservation	ND
Ute Indian Tribe	Uintah and Ouray Reservation	UT
Ute Mountain Ute Tribe	Ute Mountain Reservation	UT/CO
Yankton Sioux Tribe	Yankton Reservation	SD

Appendix B: Plastic Bioaccumulation in the Food Web



Appendix C: Trash Characterization Tracking Template Adapted from the San Juan Bay Estuary Program TFW Project

(See Trash Free Waters (TFW) International Implementation Guide) 13

Items	Quantity	Total	Items	Quantity	Total
Plastic		Aluminum			
6-packs plastic rings			Aerosol cans		
Personal hygiene products			Beverage cans		
Plastic bags			Construction materials		
Beverage bottles			Pieces and other		
Other plastic bottles			Rubber		
Cigarette butts			Flip flops / Shoes		
Lighters			Tires		
Food packaging			Gloves		
Floatation devices			Masks		
Gloves			Fabric		
Toys			Ropes (non-plastic)		
Fishing materials			Gloves		
Foam containers			Clothing or shoes		
Plastic ropes			Towels		
Drinking straws			Other:		
Caps			Other categories		
Cutlery			Mattresses		
Cups			Construction materials (cement/blocks/iron)		
Pieces and others			Home appliances		
Paper, cardboard			Motor vehicle parts		
Plastic Bags			Other		
Cardboard					
Sheets			Microplastics and pieces		
Napkins			Microplastics >5 mm		
Glass			Pieces 6 mm to 30 mm		
Beverage bottles				-	•
Jars			ППП		тт
Pieces and other:					шш
			Microplastics As Defined by U.S. EPA: < 5mm	1 2	3



Appendix D: Trash Free Waters Questionnaire

Lake Traverse Reservation TFW Questionnaire Example

1.	Do you live near the [INSERT NAME OF IMPACTED WATERBODY HERE]? ☐ Yes ☐ No
	If yes, how many miles from it? O - 4 Miles 5 - 10 Miles 11 - 15Miles 15 - 20 Miles greater than 20 miles Other:
2.	Do you work near the [INSERT NAME OF IMPACTED WATERBODY HERE]? Yes No
	If yes, how many miles from it? O - 4 Miles 5 - 10 Miles 11 - 15Miles 15 - 20 Miles greater than 20 miles Other:
3.	Do you use / visit the [INSERT NAME OF IMPACTED WATERBODY HERE] recreationally? Yes No
	If yes, how often? □ Daily □ Once a week □ Monthly □ Rarely
4.	Do you think the [INSERT NAME OF IMPACTED WATERBODY HERE] is generally clear from trash? Yes No I don't know

5.	Is keeping the [INSERT NAME OF IMPACTED WATERBODY HERE] clean important to your community?
	☐ Yes
	□ No
	☐ I don't know
6.	Do you ever participate in annual clean-up efforts/events around the [INSERT NAME OF IMPACTED WATERBODY HERE]?
	☐ Always
	Occasionally
	Rarely
	□ Never
7.	Do you think the annual clean-up events at the [INSERT NAME OF IMPACTED WATERBODY HERE] are enough to keep it clean?
	Yes
	□ No
	☐ I don't know
8.	What are the main reasons trash is in the [INSERT NAME OF IMPACTED WATERBODY HERE]?
	(Directions: Check <u>all</u> that apply in your opinion)
	[INSERT NAME OF IMPACTED WATERBODY HERE]:
	There are trash bin container problems around the it (examples below):
	Lack of trash containers around the it
	Poor location of trash containers
	☐ Trash containers don't keep trash inside
	There are operation problems with trash management at [INSERT NAME OF IMPACTED
	WATERBODY HERE]
	Trash containers are not emptied often enough; trash is not picked up
	often enough
	☐ Trash containers need repairs
	Trash containers are not conveniently located
	NEARBY NEIGHBORHOOD(S):
	There are trash bin container problems in the NEIGHBORHOOD
	Containers are not used
	Containers are not provided
	 Containers are not designed properly (e.g., no lids, easy to knock over, etc.)

There are operation problems with trash management in **NEIGHBORHOOD**

		Trash is not picked up often enough
		The day or time of trash pick-up is a problem
OTHER:		
<u>Com</u>		awareness
		People are not aware of the trash problem
		People are not worried about the trash problem
		People don't know how the trash problem affects the environment
		People don't know how the trash problem can affect community health
		People throw trash in or around the [INSERT NAME OF IMPACTED WATERBODY HERE]
		WATERBOOT HEREJ
(if yo	ou have d	other main reason(s) that are not listed, write in your answer below)
What do	o vou like	e the most about the current trash collection system already in place?
	•	ck <u>all</u> that apply in your opinion)
(2000.0		<u></u>
	Convenie	nce of the curbside pick-up in the residential neighborhood
		y of curbside pick-up service in the residential neighborhood
	•	of containers for residential trash pick-up
		ntainers around the [INSERT NAME OF IMPACTED WATERBODY HERE] are
	convenie	
 1	Trash con	tainers around the [INSERT NAME OF IMPACTED WATERBODY HERE] are
	There are	often enough
 1		
	NAME OF	often enough
		often enough e choices offered for people to recycle or compost around the [INSERT]
1		often enough e choices offered for people to recycle or compost around the [INSERT]
1		often enough e choices offered for people to recycle or compost around the [INSERT]
1		often enough e choices offered for people to recycle or compost around the [INSERT]
Othe	er:	often enough e choices offered for people to recycle or compost around the [INSERT]
Othe ————————————————————————————————————	er:	often enough choices offered for people to recycle or compost around the [INSERT FIMPACTED WATERBODY HERE]
Othe ————————————————————————————————————	er:	often enough e choices offered for people to recycle or compost around the [INSERT FIMPACTED WATERBODY HERE] nk the community can do to reduce trash in and around the [INSERT]
Othe ————————————————————————————————————	er:	often enough e choices offered for people to recycle or compost around the [INSERT FIMPACTED WATERBODY HERE] nk the community can do to reduce trash in and around the [INSERT]
Othe ————————————————————————————————————	er:	often enough e choices offered for people to recycle or compost around the [INSERT FIMPACTED WATERBODY HERE] nk the community can do to reduce trash in and around the [INSERT]

^{*}Suggest including a map of waterbody identified to better engage survey participants.

Jamaica TFW Questionnaire Example

(Modified from the International TFW Implementation Guide)¹⁴

PROFILE QUESTION

Gender:				
	Male Female Other			
AgeRa	nges:			
	18-35 36-55 56 and over			
Number of Persons in your household:				

KNOWLEDGE AND AWARENESS

What is Solid Waste/Garbage?		
	Yes	No
Food you throw away		
Old Tires		
Used Plastic Bottles		
Old Clothes		
Used Packaging and Containers (Paper, Plastic Bags, Cardboard, Styrofoam)		
Tree branches and grass clippings		
Old Furniture and Appliances		
Old Cell Phones and Electronics		
Sewage		

Which of the environmental concerns listed below do you think are related to poor disposal of garbage in your community?					
	Yes	No			
Water Pollution					
Air Pollution					
Flooding					
Pests					
Mosquitoes					
Food Contamination					
Fires					
Unsightly Natural Areas					

Car	n solid waste/garbage be reused?									
	□ Yes									
	□ No									
If ye	If yes, can you give one example?									
		-								
Doy	ouknowwhat dayyourgarbage is collected?									
	□ Yes									
	□ No									
Hov	w often is your garbage collected?									
	□ Daily									
	□ Weekly									
	☐ Twice weekly ☐ Other									
	☐ Don't know									
ATTITUDES										
	ich of the following do you believe has a role in the management of solid waste in younmunity?	r								
	□ You									
	□ Community Leaders									
	□ The Government/Ministry□ Other:									
	wshould persons respond when garbage is not collected?									
	□ Do nothing□ Protest									
	☐ Take it to a large bin, skip or dump site									
	☐ Call local governmental services									
	☐ Call a group/individual									
	□ Other:									

		Agree	Disa
	I am responsible for managing garbage in my own home		
	People throw garbage on the streets and in the drains and gullies because they have no other means of getting rid of (disposing of) their garbage.		
	All of us should play our part in keeping our community clean		
	Getting involved in Solid waste management can help generate employment for persons in our community		
	Public education about proper garbage management is one way to improve litter and trash in the natural environment.		
ıat	would encourage you to improve your solid waste management practic If we received more assistance from Government If we got jobs, incentives, monies If the collection service was better If we knew more about reuse and recycling	ces?	
	Other:		
AC	TICES		
w (
	do you dispose of your garbage?		
	☐ Dump it		
	□ Dump it□ Bury it		
	☐ Dump it		
hero	□ Dump it□ Bury it□ Put it out to be collected		
herd	□ Dump it □ Bury it □ Put it out to be collected □ Other: □ do you store your garbage before collection? □ In your home		
hero	□ Dump it □ Bury it □ Put it out to be collected □ Other: □ do you store your garbage before collection? □ In your home □ In your yard		
hero	□ Dump it □ Bury it □ Put it out to be collected □ Other: □ do you store your garbage before collection? □ In your home		

Do you reuse any of your solid waste?	
If yes, can you describe what you do?	
Have you ever dumped garbage on the road or in a gully?	
If yes, why?	
If not, why not?	



Appendix E: Funding Opportunities for Trash Free Waters Projects

This appendix identifies 26 funding opportunities (e.g., national grants and loans) that are recurring and available to Tribes.

- 1. 319 Grant Program for States and Territories
- 2. Brownfields Assessment and Cleanup Grant Program
- 3. Environmental Justice Collaborative Problem-Solving (EJCPS) Cooperative Agreement
- 4. **Environmental Justice Small Grant Program**
- 5. Environmental Workforce Development and Job Training Program
- 6. Fisheries and Aquatic Resources Management
- 7. Indian Community Development Block Grant Program
- 8. Indian Environmental General Assistance Program (GAP)
- 9. Indian Health Service (IHS) Sanitation Facilities Construction Program
- 10. Indian Reservation Roads, Inventory High Priority Projects
- 11. Multipurpose Grants to States and Tribes
- 12. Pollution Prevention (P2) Grant Program
- 13. Rural Utilities Service Solid Waste Management Grants
- 14. SEARCH - Special Evaluation Assistance for Rural Communities and Households
- Section 306C Water and Waste Disposal Grants 15.
- 16. Source Reduction Assistance Program
- 17. **Species Recovery Grants to Tribes**
- 18. Superfund State and Indian Tribe Combined Cooperative Agreements (Site-Specific and Core)
- 19. Technical Assistance and Training Grants for Rural Water and Waste System
- 20. Tribal Grants under Section 106 of the Clean Water Act
- 21. U.S. Department of Housing and Urban Development HUD Indian Housing Block Grant **Program**
- 22. U.S. HUD Indian Community Development Block Grant (ICDBG) Program
- 23. U.S. HUD Tribal Housing Activities Loan Guarantee Program (Title VI)
- 24. Water and Waste Disposal Loans and Grants
- 25. Water and Wastewater Predevelopment Planning Grants (PPGs)
- 26. Water Infrastructure Finance and Innovation (WIFIA)

Certain grants are available to tribes through the EPA Treatment as a State (TAS) laws. The EPA maintains a list of federally recognized tribes that have been federally recognized on its website. 15 Appendix A lists these federally recognized tribes in Region 8. Tribes can receive TAS approvals for specific environmental regulatory programs, administrative functions and grant programs. For example, Clean Water Act 106 or 319 grants are two examples of grant programs made available to Region 8 Tribal nations through the TAS laws.

There are three broad types of funding available: direct loans, cooperative agreements and grants.

- **Direct loans** are long-term loans with low interest rates. These loans provide funding that the recipient will eventually pay back over time.
- Grants are financial awards that the recipient is not expected to pay back. Grants may be competitive or non-competitive in nature.
- Cooperative agreements are grants that involve significant engagement between the federal funding agency and the non-federal grant recipient. This involvement usually comes in the form of technical support for program development and/or implementation and is usually provided by the funding agency's regional or local office.

The table on the following pages provides more detailed information about each of the opportunities.



Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
319 Grant Program for States and Territories (EPA)	A	Formula Grant/ Cooperative Agreement	To reduce nonpoint source (NPS) pollution in state or tribal lands. These grants can help tribal water quality program managers, staff, and other tribal environmental decision-makers design and implement effective water quality programs. Under Section 319, states, territories and tribes receive grant money that supports a wide variety of activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects and monitoring to assess the success of specific nonpoint source implementation projects. The funding application process is state-specific.	Grants are awarded through the Treatment in a similar manner as State (TAS) Procedure for Clean Water Act Regulatory Programs.	EPA grant-specific page: https://www.epa.gov/nps/tribal- nonpoint-source-program	Eligible tribes can receive the base grant of 30 or 50K/year,or apply for a competitive grant for up to \$100K/project.
Brownfields Assessment and Cleanup Grant Program (EPA)	C	Discretionary Grant; Cooperative Agreement	Brownfield sites are sites where reuse may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. The goals of the brownfield assessment, revolving loan fund (RLF) and cleanup grants are to provide funding: • To inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites; • To capitalize an RLF and provide subgrants to carry out cleanup activities at brownfield sites; • To carry out cleanup activities at brownfield sites owned by the grant recipient. Awardees can characterize, assess, conduct a range of planning activities, develop site-specific cleanup plans, and conduct community involvement related to brownfield sites. The performance period for these grants is three years.		EPA grant-specific page: https://www.epa.gov/brownfiel ds/brownfields-and-land- revitalization-region- 8#Stories%20from%20Around% 20the%20Region	Up to \$300,000 (up to \$350,000 for a site contaminated by hazardous substances, pollutants or contaminants, and/or petroleum). A coalition of three + eligible applicants can submit one grant proposal for up to \$600,000.
Environmental Justice Collaborative Problem-Solving (EJCPS)	С	Discretionary Grant	Support projects that demonstrate the utility of the seven elements of the EJ Collaborative Problem-Solving Model. This model is a tool developed by the Office of Environmental Justice to assist vulnerable and underserved communities in developing proactive, strategic, and visionary approaches to address their environmental justice issues and achieve	Applicants can respond to the request for applications that is released on the EPA website in the spring of the fiscal year. Around	EPA grant-specific page https://www.epa.gov/environm ental-justice/environmental- justice-collaborative-problem-	Approx. \$120,000

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
Cooperative Agreement (EPA)			community health and sustainability. Collaborative problem- solving builds upon existing community understanding to establish and maintain partnerships capable of producing meaningful environmental and/or public health results.	50 projects are awarded annually. The Catalogue of Federal Domestic Assistance (CFDA) Number for this grant is 66.306.	solving-cooperative-agreement- 0#previous	
Environmental Justice Small Grant Program (EPA)	С	Discretionary Grant	Supports communities dealing with environmental justice concerns through projects that empower and educate communities about environmental/public health issues. Projects identify ways to address these issues at the local level. The long-term goals of the program are to help create self-sustaining, community-based partnerships that will continue to improve local environments in the future. Grant project topics include: • Community outreach and education about exposure to multiple environmental harms and risks. • Projects proposed by small non-profit organizations of 10 or fewer full-time employees (Approximately \$3.6 million - or half the total amount of available funding - is set-aside for non-profit organizations with 10 or fewer full-time employees for the 2021 fiscal year). risks. • COVID-19 impacts and climate disaster resiliency	Applicants can respond to the request for applications that is released on the EPA website in the spring of the fiscal year. Approximately 100 grants are awarded annually.	EPA grant-specific page: https://www.epa.gov/environm entaljustice/environmental- justice-small-grants-program	Approx. \$30,000
Environmental Workforce Development and Job Training Program (EPA)	С	Discretionary Grant; Cooperative Agreement	The Environmental Workforce Development and Job Training Program supports recruitment, training and placement of unemployed and underemployed people, including low-income residents in solid and hazardous waste-impacted communities, with the skills needed to obtain full-time, sustainable employment in solid and hazardous waste cleanup, wastewater treatment, chemical safety, and the environmental field generally. This program promotes the facilitation of activities related to assessment, cleanup or preparation of contaminated sites, including brownfields and Superfund sites, for reuse, while simultaneously building a local workforce with the skills needed to perform remediation	Applicants should respond to the request for applications released annually by the EPA. The EPA provides a thorough selection of application resources on their website.	EPA grant-specific page: https://www.epa.gov/brownfiel ds/environmental-workforce- development-and-job-training- ewdjt- grants#:~:text=Contact%20Us- Environmental%20Workforce% 20Development%20and%20Job %20Training%20(EWDJT)%20Gra nts,by%20the%20presence%20o f%20brownfields.	Up to \$200,000

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
			work that are supportive of environmental protection and environmental health and safety.			
Fisheries and Aquatic Resources Management (DOI – Bureau of Land Management)	A	Discretionary Grant/ Cooperative Agreement	Fund's efforts to improve the health and productivity of public lands by enhancing aquatic habitat productivity, protecting quality and quantity of water resources, restoring watershed and riparian areas, and enhancing partnerships to maximize resources that result in healthier landscapes. This grant funds projects that inventory, monitor, and improve aquatic, riparian, and wetland habitats. The AHM Program maintains close collaboration with awardees to maintain native and nonnative species of economic importance, resident game and nongame species, including special status, anadromous and subsistence species. Supported projects include: • The restoration and maintenance of riparian and wetland areas to improve water quality and; • The development/management of best practices to improve water quality and to monitor water resource conditions and trends to support multiple uses of public lands.	Applicants are required to submit an Environmental Impact Statement and follow the Code of Federal Regulations (CFR) 2 CFR 200.	Federal Grants Wire Page: https://www.federalgrantswire. com/fisheries-and-aquatic- resources- management.html#.YNSZaOhKg 2w	Past partnership projects have ranged from \$10,000 to \$1,000,000. Average amounts approximately \$68,300 or less.
Indian Community Development Block Grant Program (US Department of Housing and Urban Development (HUD))	В	Discretionary Grant	and moderate-income persons in Indian and Alaska Native	The project proposal selection is coordinated by the six ONAP divisions.	Department of Housing and Urban Development Page: https://www.hud.gov/program_offices/public_indian_housing/ih_/grants/icdbg	\$500,000 to \$5,000,000, with average award of \$600,000

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
Indian Environmental General Assistance Program (GAP) (EPA)	А, В, С	Formula Grant	Supports the planning, development and establishment of environmental protection programs and development and implementation of solid and hazardous waste programs on tribal lands. The grant is meant to provide: • Financial assistance to build tribal government capacity to administer environmental regulatory programs that may be delegated by EPA tribal lands; • Financial assistance for tribes to meaningfully participate in environmental program administration by EPA or authorized states, territories, other tribes, or local governments; • Financial assistance for the tribal solid and hazardous waste program development and implementation; • Technical assistance from EPA to Indian tribal governments and intertribal consortia in the development of multimedia programs to address environmental issues on Indian lands.	The EPA provides example templates, guidance documents, and prior training resources on their website to support the application process. Applicants can work with regional coordinators to develop an application package.	EPA Region 8 Tribal Environmental GAP Funding https://www.epa.gov/tribal/regi on-8-tribal-program#gap	From \$75,000 to \$400,000, average award of \$110,000
Indian Health Service (IHS) Sanitation Facilities Construction Program (US Indian Health Services)	A, C	Cooperative Agreement	Supports the mission of the IHS to raise the health status of American Indian and Alaska Native people through the provision of sanitation facilities that help to ensure tribal communities have access to safe drinking water and waste disposal. Technical assistance is provided to support: • Technical consultation and training to improve the operation and maintenance of tribally-owned water supply and waste disposal systems. • Development of multi-agency-funded sanitation projects through interagency coordination, assistance with grant applications, and leveraging of IHS funds. • Provision of water supply and waste disposal facilities and professional engineering design and/or construction services for water supply and waste disposal facilities. • Advocacy for tribes during the development of policies, regulations and programs.	The applicant will need to report the sanitation status and deficiency of the area to the IHS to be considered for funding. Tribes can request assistance at any time the agreement process is not deadline driven.	IHS program page https://www.ihs.gov/phoenix/pr ogramsservices/sanitationfaciliti esconstruction/	

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
Indian Reservation Roads, Inventory High Priority Projects (DOI – Bureau of Indian Affairs)	В	Discretionary Grant	Provides limited routine and preventive maintenance on Bureau of Indian Affairs (BIA) transportation facilities as described below: • highway bridges and drainage structures; • BIA road systems and related road appurtenances such as signs, traffic signals, pavement striping, trail markers and guardrails; • maintenance yards; • boardwalks	This grant is funded following the Catalogue of Federal Domestic Assistance (CFDA) Number 15.033.	DOI Indian Affairs page https://www.bia.gov/programs- services	
Multipurpose Grants to States and Tribes (EPA)	A, C	Formula Grant	For states, territories, and federally recognized tribes to implement high priority activities that assist with the implementation of environmental programs. This grant is broad in scope and may fund activities including: • Advancing environmental justice through supporting environmental education and outreach programs; • Reducing waste in conjunction with watershed heath and management; • Funding preexisting programs to manage human pollutants.	Grants are awarded through the Treatment in a similar manner as State (TAS) Procedure for Clean Water Act Regulatory Programs.	EPA grant-specific page: https://www.epa.gov/grants/uni ted-states-environmental- protection-agency-grant- guidance-multipurpose-grants- states-and	Range: \$50,000 to \$415,000 in FY18 & FY19 funds combined (states) Average: \$314,000 (per state). A total of \$1,500,000 available in the 2021 fiscal year.
Pollution Prevention (P2) Grant Program (EPA)	С	Cooperative Agreement	Supports P2 technical assistance services and/or training for businesses to reduce and/or eliminate pollution from air, water and/or land, including state or community approaches to hazardous materials source reduction.	This grant cycle is two years (the next cycle will be for the 2022 and 2023 fiscal years) and awards individual grants once all legal and admin requirements are satisfied.	EPA Site-Specific Page https://www.epa.gov/p2/grant- programs-pollution-prevention	From \$40k-\$500k in a two-year funding period (or between \$20,000 - \$250,000 incrementally-funded per year). Average award \$80k per year.
Rural Utilities Service Solid Waste Management Grants (USDA)	С	Cooperative Agreement	Qualified organizations receive Solid Waste Management grant funds to reduce or eliminate pollution of water resources in rural areas and improve planning and management of solid waste sites in rural areas. The grant recipients receive technical assistance and/or training to help implement a solid waste management project.	Eligible areas are rural areas and towns with a population of 10,000 or less, with special consideration given to areas with fewer than	USDA grant-specific page https://www.rd.usda.gov/progra ms-services/solid-waste- management-grants	From \$74k to \$900k Average award of \$200,137

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
				5,500 people and lower- income populations.		
SEARCH - Special Evaluation Assistance for Rural Communities and Households (USDA)	А, В, С	Formula Grant	Helps very small, financially distressed rural communities with predevelopment feasibility studies, design and technical assistance on proposed water and waste disposal projects.	Applicants must live rural areas with a population of 2,500 or less and have a median household income below the poverty line.	USDA grant-specific page: https://www.rd.usda.gov/progra ms-services/search-special- evaluation-assistance-rural- communities-and-households	The Secretary may fund up to 100 percent of the eligible grant costs, not to exceed \$30,000.
Section 306C Water and Waste Disposal Grants (USDA)	А, В, С	Direct Loan – If funds are available, a grant may be combined with a loan if necessary to keep user costs reasonable.	To provide water and waste disposal facilities and services to low-income rural communities whose residents face health risks. The loan can fund projects that promote: • Clean and reliable drinking water systems; • Sanitary sewage disposal; • Sanitary solid waste disposal; • Storm water drainage for households and businesses.	Supplies long-term, low interest loans to states and tribes with rural and low-income communities. Applicants are encouraged to reach out to a Rural Development program specialist before attempting to apply.	EPA grant-specific page: https://www.epa.gov/tribal- lands/section-306c-water-and- waste-disposal-grants	(Colonias Grants) \$20,000 to \$8,030,000, with average award of \$2,405,293 in fiscal year 2018; (Native American Tribe grants) \$52,000 to \$2,000,000, with average award of \$1,193,199 in fiscal year 2018
Source Reduction Assistance Program (EPA)	С	Cooperative Agreement	support one or more of the P2 program's National Emphasis	The application for these annual awards opens on the EPA website in early spring.	EPA grant-specific page: https://www.epa.gov/p2/fy- 2020-and-fy-2021-source- reduction-assistance-grant- program-request-applications	From \$20,000-\$260,000 in a two-year funding period. Average award: \$110,000. EPA Regions may opt to offer lower award caps.
Species Recovery Grants to Tribes (NOAA)	A	Discretionary Grant	Supports tribally-led management, research, monitoring, and outreach activities that have direct conservation benefits for listed species under the Endangered Species Act. Recently	This opportunity offers annual grants to those	NOAA grant-specific site	Up to \$100,000

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
			delisted species, proposed, and candidate species are also eligible. Supports the reduction of waste and waste management for the health of the species/ecosystem.	who apply through the NOAA application site.	https://www.fisheries.noaa.gov/ national/funded-species- recovery-grants-tribes-proposals	
Superfund State and Indian Tribe Combined Cooperative Agreements (Site- Specific and Core) (EPA)	С	Discretionary Grant	 involvement and provide funds for projects concerning: Site characterization activities at potential or confirmed hazardous waste sites; Undertake response planning at sites on the National Priorities List (NPL); 	The grant applications will be evaluated following the 40 CFR 35, Subpart O, 2 CFR 200 and 1500 criteria, and other supporting documentation provided by the Agency.	EPA-specific site: https://www.epa.gov/tribal-lands/land-cleanup-funding-authorities-available-tribal-governments-0#superfund	\$5,000 to \$791,000. Average \$178,483.
Technical Assistance and Training Grants for Rural Water and Waste Systems (USDA)	А, С	Discretionary Grant	Helps qualified, private nonprofits provide technical assistance and training to identify and evaluate solutions to water and waste disposal problems in rural areas, preparation of applications for water and waste disposal loans/grants and improve the operation and maintenance of water and waste facilities in eligible rural areas.	Eligible training and technical assistance recipients are rural areas and towns with populations of 10,000 or less and tribal lands in rural areas. About 35 grants are awarded annually. The total program funding is \$30,000,000.	USDA grant-specific page https://www.rd.usda.gov/progra ms-services/water-waste- disposal-technical-assistance- training-grants	From \$100,000 to \$9,939,370 Average award: \$1,286,404
Tribal Grants under Section 106 of the Clean Water Act (EPA)	A	Formula Grant	The EPA provides financial assistance to states and federally recognized tribes to establish and administer programs for the prevention, reduction, and elimination of water pollution. Priorities for grant funding include: • Implementing monitoring strategies and the statistically-valid surveys to determine water quality status and trends; • Implementing National Pollutant Discharge Elimination System (NPDES) permitting programs; • Fostering a watershed approach, including total maximum	Grants awarded through the Treatment in a similar manner as State (TAS) Procedure for Clean Water Act Regulatory Programs.	EPA grant-specific page: https://www.epa.gov/water-pollution-control-section-106-grants/tribal-grants-under-section-106-clean-water-act	Base Allotment – Provides the Region with \$65,167 per TAS-eligible tribe based on three characteristics of federally recognized tribes in the Region: Land Area Population, and Surface Water Area

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
			daily loads (TMDLs) and watershed plans designed to meet water quality standards; • Updating and supporting water quality standards that complete triennial reviews on time.			
U.S. Department of Housing and Urban Development (HUD) Indian Housing Block Grant Program (HUD)	В	Formula Grant	The Indian Housing Block Grant Program (IHBG) provides a for a range of affordable housing activities on Indian reservations and Indian areas.	The IHBG program allocates formula funding to tribes or tribally designated housing entities for the delivery of a range of affordable housing opportunities and housing-related activities to low- and moderate-income members of Federally recognized Indian tribes, Alaska Native villages, and native Hawaiians.	Department of Housing and Urban Development Page: https://www.hud.gov/programoffices/public_indian_housing/ih/grants/ihbg	Funds appropriated by Congress for the IHBG Program are made available to eligible grant recipients through a formula. Regulations governing the formula can be found at title 24 of the Code of Federal Regulations (CFR) Part 1000, Subpart D.
U.S. HUD Indian Community Development Block Grant (ICDBG) Program (HUD)	В	Discretionary Grant	The program provides eligible grantees with direct grants for use in developing viable Indian and Alaska Native Communities, including decent housing, a suitable living environment and economic opportunities, primarily for lowand moderate-income persons.	Catalogue of Federal Domestic Assistance (CFDA) Number 14.862.	Department of Housing and Urban Development Page: https://www.hud.gov/program offices/public_indian_housing/ih /grants/icdbg	\$500,000 to \$5,000,000, with average award of \$600,000
U.S. HUD Tribal Housing Activities Loan Guarantee Program (Title VI) (HUD)	A, C	Direct Loan	Assists tribes to obtain private financing for affordable housing activities that are eligible under IHBG. These include new or rehabilitated housing, infrastructure, housing assistance and services, crime prevention and safety, architectural and engineering services, financing costs and approved model activities that have included community facilities and warehouses.		Department of Housing and Urban Development Page: https://www.hud.gov/program offices/public indian housing/ih /homeownership/titlevi	

Title / Agency	TFW Project Category *	Grant Type (See glossary)	Purpose	Application Details	Associated Opportunity Page	Typical Award Amount (if applicable)
Water and Waste Disposal Loans and Grants (USDA)	A, C	Discretionary Grant/Direct Loan	Supports projects that increase human amenities, alleviate health hazards and promote the orderly growth of rural areas by meeting the need for new and improved rural water and waste disposal facilities. Funds may finance: • Drinking water sourcing, treatment, storage and distribution; • Sewer collection, transmission, treatment and disposal; • Solid waste collection, disposal and closure; • Storm water collection, transmission and disposal.	Applicants can apply through the Rural Utilities Services application page. The loan and grant amounts based upon the needs of the project. Loans have up to a 40-year payback period.	USDA grant-specific page: https://www.rd.usda.gov/progra ms-services/water-waste- disposal-loan-grant-program	
Water and Wastewater Predevelopment Planning Grants (PPGs) (USDA)	A, C	Discretionary Grant	Funds projects that improve water and wastewater infrastructure by providing long-term, low-cost supplemental credit assistance under customized terms to creditworthy water and wastewater projects of national and regional significance.	At least 25 percent of project funding must come from the applicant or third-party sources.	USDA grant-specific page https://www.rd.usda.gov/progra ms-services/water-waste- disposal-predevelopment- planning-grants	Maximum of \$30,000 or 75 percent of predevelopment planning costs.
Water Infrastructure Finance and Innovation (WIFIA) (EPA)	A	Direct Loan	Funds a wide range of project types including wastewater, stormwater, drinking water, and water recycling projects. The grant is designed to improve water and wastewater infrastructure by providing long-term, low-cost supplemental credit assistance under customized terms to creditworthy water and wastewater projects of national and regional significance.	After a tribe submits a letter of interest, the lender completes eligibility screening. WIFIA loans may have a length of up to 35 years after substantial completion, allowing payment amounts to be smaller throughout the life of the loan. Prospective borrower has up to 1 year to submit their application from the time they are selected.	EPA grant-specific page https://www.epa.gov/wifia	

^{*} TFW Project Categories include: A. Water Quality Management; B. Residential Housing; C. Solid Waste Management



Appendix F: TFW Online Funding Directory and Support Websites

Directory Sites	Description	Link
EPA Consultation and Coordination with Tribes	This website provides the EPA policy on consultation and coordination with tribes and offers consultation procedures specific to each region. The EPA also includes the Tribal Treaty Rights Guidance document, which outlines a process to help navigate treaty rights discussions with tribes during tribal consultations.	https://www.epa.gov/tribal/forms/consultation-and-coordination-tribes
EPA Grants Policy Resources	This EPA Directory provides information about all of the policy and guidance documents, orders, and terms & conditions of a grant. The user can search a particular grant and can filter by applicability to tribes. Three resources are listed as applicable to tribal groups. The site also includes a directory for laws, regulations, and public policy that the user can filter, most applicably by Agency policy reference number, Executive Order number, or citation.	https://www.epa.gov/grants/epa-grants-policy-resources
Grant Terminology	This site, run by Grants.gov, lists the different sorts of grants and explains each of the types of funding sources available.	https://www.grants.gov/learn-grants/grant-terminology.html
Grants.gov	This governmental site hosts a directory of grants and funding opportunities from all governmental agencies. It allows for specific keyword searches and filtering by category, including closing date.	https://www.grants.gov/web/grants/search-grants.html?keywords=Tribal%20waste
Max.gov	This website provides cross-agency online tools and platforms to create collaboration and to streamline data and information sharing. It offers analytical and tools and serves as a repository for governmental information that can be shared across agencies. It is available to federal employees and those with Federal government email addresses, although others may request to use the site.	https://portal.max.gov/portal/home
Tribal Consultation Opportunities Tracking System (TCOTS)	This site (while difficult to navigate) publicizes upcoming and current EPA consultation opportunities for tribal governments. The goal of TCOTS is to provide early notification and transparency on EPA consultations with tribal governments. TCOTS allows users to download, view and sort information, and to submit comments on a tribal consultation.	https://tcots.epa.gov/apex/tcotspub/f?p =106:1:1427832117607::::#:~:text=The% 20Tribal%20Consultation%20Opportuniti es%20Tracking,EPA%20consultations%20 with%20tribal%20governments.
Tribal Grants under Section 106 of the Clean Water Act	This EPA site lists the 106 grants that area available to Tribal groups.	https://www.epa.gov/water-pollution- control-section-106-grants/tribal-grants- under-section-106-clean-water- act#:~:text=For%20tribes%2C%20Section %20106%20grants,members%20and%20 the%20general%20public.

Directory Sites	Description	Link
Tribal Waste Management Funding Resources Directory	This EPA resource provides a simple search directory in order for users to identify funding sources for waste management. The directory can be searched by a variety of criteria, including: funding agency, type of organization (e.g., federally recognized tribes, nonprofit groups), type of assistance sought (grants or loans), and keywords (e.g., waste, integrated waste management plan). Search results list programs by name along with an overview and application deadline.	https://www.epa.gov/tribal-lands/tribal-waste-management-funding-resources-directory



Appendix G: TFW Tribal Handbook Glossary

Anadromous Species Fish that spend portions of their life cycles partially in fresh water and partially

in salt water.

Authorized Statute The authorizing statute is a law that defines the purpose of a grant program,

minimum eligibility and qualifications for applicants to receive the grant, and

often the amount of the grant.

Bioaccumulation Bioaccumulation is the gradual accumulation of substances, such as pesticides

> or other chemicals, in an organism. Bioaccumulation occurs when an organism absorbs a substance at a rate faster than that at which the substance is lost or

eliminated by catabolism and excretion.

Brownfield Site real property where expansion or redevelopment is complicated by the

actual, potential, or perceived presence of environmental contamination.

Catalog of Federal Domestic Assistance

(CFDA)

A catalog that provides a full listing of Federal programs that are available to organizations, government agencies (state, local, tribal), U.S. territories, and individuals who are authorized to do business with the government. A CFDA

program can be a project, service, or activity.

Code of Federal Regulations (CFR) The codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of

the Federal Government. These regulations supply detailed information about opportunities including the rules that guide the award process of certain grants.

Community-Based Social Marketing (CBSM)

A marketing approach used to identify community-specific behavior challenges (barriers) related to an environmental initiative, as well as developing a plan and evaluating the outcomes of an environmental initiative. CBSM consists of 5 steps, with concentrated effort to change or start a behavior in a group of people by creating motivation and helping them to overcome specific barriers.

Direct Loan A loan awarded by the federal government to a group or tribe that meets the

criteria of the award and has adequate credit to take on the loan. Direct loans

are typically long-term loans with low interest rates.

Grant Grants are a governmental tool for funding ideas and projects to provide public

> services, stimulate the economy, and benefit the general public. Grant programs originate from laws, and then are administered by the appropriate federal agency. There are many different kinds of grants, described below.

Block Grant Block grants are distinct from discretionary grants because they generally allow

> the awardee greater autonomy and flexibility to decide how to implement the funding. States or tribes may use the block grant funding to establish a program or to make sub-awards to local organizations to provide the services within

their region. As long as the legislatively defined purpose and parameters are met, the primary block grant recipients may elect how to utilize the funding.

Cooperative Agreement

While very similar to a grant, cooperative agreements are grants that provide for substantial involvement between the Federal awarding agency or pass-through entity and the non-Federal entity in carrying out the activity contemplated by the Federal award.

Discretionary Grant

Also referred to as a project grant, discretionary grants involve a federal agency selecting the awardee (i.e., grant recipient) based on merit and eligibility. The applications are sent to the federal agency for a competitive review process and final funding decision.

Formula Grant

These noncompetitive grants are awarded based on statistical criteria that calculate the amount of funds to be allocated to recipients based on eligibility.

Mandatory Grant

Mandatory grants (also called mandatory agreements) are a type of grant that must be awarded to each eligible applicant (generally a government entity) based on the conditions defined in the authorizing statute. These grants are awarded to any state or tribe that applies and meets the minimum eligibility.

Memorandum of Understanding A document that describes the broad outlines of an agreement that two or more parties have reached. MOUs communicate the mutually accepted expectations of all of the parties involved in a negotiation. While not legally binding, the MOU signals that a binding contract is imminent.

National Pollutant Discharge Elimination System (NPDES) The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA § 307, 318, 402, and 405 of the CWA.

Nonpoint Source

Any dispersed land-based or water-based activity rather than a point source that contributes to water quality degradation, including but not limited to, atmospheric deposition; surface water runoff from agricultural, urban, forest, construction and mining lands; subsurface or underground sources; or discharges from boats or marine vessels not otherwise regulated under the National Pollutant Discharge Elimination System (NPDES) program.

Outstanding National Resource Water

High quality water that constitutes an outstanding Tribal resource due to its extraordinary water quality or ecological values, or where special protection is needed to maintain critical habitat areas.

Pass-through Funding

Federal grants are awarded to state governments or tribes; these groups can then make subawards to other organizations to carry out the public purpose of the grant program within the jurisdiction of the state or tribe.

Performance Partnership Grant (PPG)

PPGs are grant delivery tools that allow states and tribes to combine up to 20 eligible State and Tribal Assistance Grants (STAG) grants into a single grant with a single budget. With PPGs, tribes can:

- 1) Reduce administrative costs through streamlined paperwork and accounting procedures;
- 2) Direct EPA grant funds to priority environmental problems or program needs: and
- 3) Try multi-media approaches and initiatives that were difficult to fund under traditional categorical grants.

Performance Partnership Agreements

Agreements set out jointly-developed priorities and protection strategies and how EPA and the state or tribe will work together to address priority needs.

Permit

A document issued pursuant to Tribal code or federal laws (such as CWA §§ 401, 402 and 404) specifying waste treatment and control requirements or discharge conditions.

Point source

Any discernible, confined or discrete conveyance, including, but not limited to, any pipe, ditch, channel, sewer, tunnel, conduit, well, discrete fissure, container, confined animal feeding operation, vessel, or other floating craft, from which pollutants are or may be discharged.

Pollutant

"Pollutant" is a broad term to describe human waste. It includes dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

Qualified Opportunity Zone

An economically distressed community where new investments, under certain conditions, may be eligible for preferential tax treatment. Localities qualify as QOZs if they have been nominated for that designation by a state, the District of Columbia, or a U.S. territory and that nomination has been certified by the Secretary of the U.S. Treasury via his delegation of authority to the Internal Revenue Service (IRS).

RDApply

An online application intake system that allows you to apply for loans and grants for Rural Utilities Services (RUS) Programs. With RDApply, you can create an application, upload attachments, sign certifications, and draw service areas, to name a few features. Applicants must have a Level 2 eAuthentication Account, which you can gain through the RDApply website prior to submitting applications.

Notes:

https://cleancurrentscoalition.org/wp-content/uploads/2021/06/Plastic-Waste-Capture-in-Rivers Benioff-Ocean-Initiative 2021 reduced.pdf

¹ For the purposes of this document, "tribes" is a collective term that encompasses all Indian Nations, including Tribes, Intertribal Consortia, Nations, Bands, Pueblos, Communities and Native Villages.

² United Nations Education, Scientific and Cultural Organization. Facts and Figures on Marine Pollution. http://www.unesco.org/new/en/natural-sciences/ioc-oceans/focus-areas/rio-20-ocean/blueprint-for-the-futurewe-want/marine-pollution/facts-and-figures-on-marine-pollution/

³ Keep America Beautiful. 2010. Litter in America. LitterinAmerica FactSheet CostsofLittering.pdf (kab.org)

⁴ US EPA Trash Free Waters Program. Plastic Pollution. https://www.epa.gov/trash-free-waters/plastic-pollution

⁵ US EPA Trash Free Waters Program. Plastic Pollution. https://www.epa.gov/trash-free-waters/plastic-pollution

⁶ Foley, C. J., Feiner, Z. S., Malinich, T. D., & Höök, T. O. (2018). A meta-analysis of the effects of exposure to microplastics on fish and aquatic invertebrates. Science of the total environment, 631, 550-559.

⁷ Pennsylvania Department of Transportation. Litter Facts & Myths. https://www.penndot.gov/aboutus/RoadsideBeautification/LitterFacts/Pages/Litter-Facts-and-Myths.aspx

⁸ NOAA Marine Debris Program, https://marinedebris.noaa.gov/discover-issue/impacts

⁹ US EPA. (2021). Escaped Trash Assessment Protocol. https://www.epa.gov/trash-free-waters/best-managementpractices-tools#ETAP

¹⁰ Santa Clara Valley Urban Runoff Pollution Prevention Program https://www.mywatershedwatch.org/resources/for-residents/

¹¹ U.S. Environmental Protection Agency (2020). International Trash Free Waters Implementation Guide. Retrieved from: https://www.epa.gov/sites/default/files/202101/documents/tfw howtoguide 20201228 finalprint 508 final.pdf

¹² Plastic waste capture in rivers An inventory of current technologies (2021).

¹³ U.S. Environmental Protection Agency (2020). *International Trash Free Waters Implementation Guide*. Retrieved from: https://www.epa.gov/sites/default/files/202101/documents/tfw howtoguide 20201228 finalprint 508 final.pdf

¹⁴ https://www.epa.gov/international-cooperation/trash-free-waters-tfw-international-implementation-guide

¹⁵ The EPA list of tribes approved for Treatment as State can be found at the following link: https://www.epa.gov/tribal/tribes-approved-treatment-state-tas