Developing your CWA Section 319 – Nonpoint Source Pollution Control Program

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What is Nonpoint Source Pollution?

Definition of Nonpoint Source (NPS) Pollution

Comes from diffuse sources and is caused by rainfall, snowmelt, or irrigation runs over land or through the ground, picks up pollutants, and deposits them into rivers, lakes, or the ocean or introduces them into ground water.



Major Categories/Sources of NPS Pollution

- Agriculture
- Unrestricted livestock grazing
- Poor siting and design of roads
- Forestry
- Hydromodification

- Urban runoff
- Abandoned mines
- Faulty septic systems
- Construction activities
- Atmospheric deposition





So, how do we address polluted runoff?

Through the implementation of

Best Management Practices & Management Measures

NPS Management Measures and Best Management Practices

Definitions:

- Management measures are the best available, economically achievable measures (categories of BMPs) to control the addition of pollutants to surface and ground water.
- Best management practices (BMPs) are individual actions or structures that can be used alone or in combination to implement the management measures

Types of BMPs

1. **Structural**: on-the-ground, implementation activities

2. Non-structural: education and outreach activities

Alternate Water Sources for Livestock

at Pyramid Lake Paiute Reservation



Channel Stabilization

to reduce high flows and sedimentation at Salt River Pima-Maricopa Indian Community



Clean Water Act (CWA)

Section 319

Provides grants to states, territories, and Tribes to address the water quality problems caused by NPS pollution

Section 518

Authorizes EPA to treat federally recognized Indian Tribes in the same manner as states and extend grants funded through Section 319

CWA Section 319 Grant Facts:

- Tribes must be determined eligible for funding before they can apply.
- Funding is available on an annual basis at the national level through EPA HQ to all eligible tribes.

CWA Section 319 grants typically have one-year project and budget periods.

CWA Section 319 Allowable Grant Program Funded Activities

Implementation of Tribe's NPS Management Programs:

- Implementation of management measures / best management practices in priority watersheds and areas of concern
- Local coordination and planning of watershed projects

CWA Section 319 Allowable Grant Program Funded Activities (cont'd)

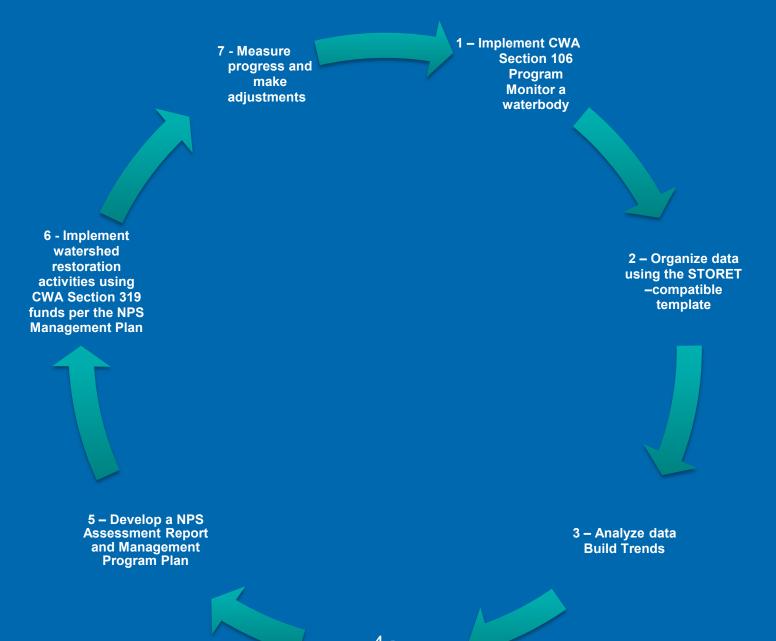
- Information and education outreach
- Pre and post project water quality monitoring for NPS assessments and watershed projects to measure environmental results
- Watershed-Based Plans development and implementation

CWA Section 319 – The Statute

- Before a Tribe can be eligible, CWA 319 requires Tribes to:
 - Prepare an <u>assessment</u> of their NPS pollution issues or concerns
 - Develop a <u>management program</u> to address the identified NPS issues
- Suggest Tribes use Information from the CWA Section <u>106 Program to develop</u> the CWA 319 Program

How do CWA §106 and §319 programs work together?

The Partnership



Prioritize water quality issues

A Partnership: CWA § 106 and § 319

- CWA 106's vital role in CWA 319 program priorities decision making
 - Monitoring determines where water quality degradation is occurring
 - Allows for educated estimation on how to improve
 - Can track project effectiveness

A Partnership: CWA § 106 and § 319

- CWA 106 activities that benefit CWA 319
 - Data collection/analysis
 - Quality Assurance
 - Salary of staff
 - Travel to monitoring sites and trainings
 - Leveraging funding
 - Build external partnerships
 - Regulatory capability

A Partnership: CWA § 106 and § 319

- CWA 319 activities to improve water quality
 - Implementation of on-the-ground activities (Best Management Practices)
 - Planning on watershed basis
 - Building partnerships

EXAMPLE: Using Water Quality Data to Guide Restoration to Address Polluted Runoff

- Restoration activities should reflect what you learned from monitoring
 - Helps you determine which BMP will provide most impact
 - Where in the water body is best to implement project
 - How are you going to show BMP is improving water quality (ie., which pollutant(s) will be addressed?)

Water Quality Monitoring to NPS Project

- Monitoring a creek for 1.5 years
- Data show e. coli numbers high in part of waterway
- Follow-up site visit shows this...



Water Quality Monitoring to NPS Project

- Where do we go from here?
- What is the next step in improving water quality?
- Do we know what is happening upstream?
- Can a BMP be implemented?
 - What kind of BMP?
 - How do you know the BMP is working?

Water Quality Monitoring to NPS Project



- BMP: fencing
- Post project monitoring
- Post-project data vs preproject data
- Data analysis/trends needed for decisions
- Positive environmental results?
 - If no, try something new?

NRCS photo

REMEMBER: CWA Section 319 – The Statute

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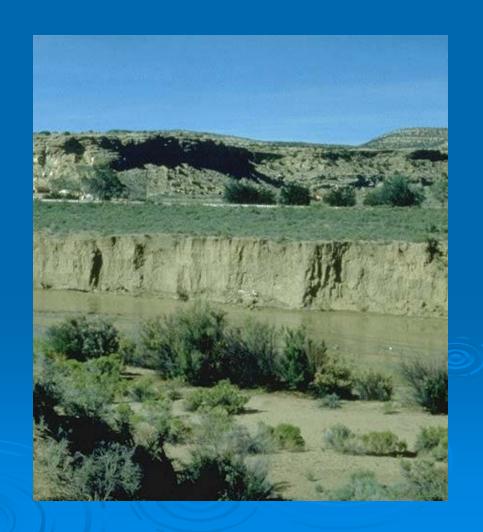
Use Information from the CWA Section 106 Program to develop the CWA 319 Program

NPS Assessment Report and Management Program

- Enables Tribes to identify NPS effects on water quality (ie. Use CWA 106 monitoring data)
- Enables Tribes to determine NPS pollution causes
- Rank NPS affected waterbodies by impairment
- Proposes solutions to address identified NPS
 - Best Management Practices (BMPs)
 - Other Activities

NPS Assessment Report

- > A tool to help identify:
 - Water quality problems
 - Sources of NPS pollution
 - Existing Best Management Practices (BMPs)
 - Programs and methods to control NPS pollution



CWA § 319 vs §106 Assessment Reports

* While both reports are assessments of water quality, there are some differences*

NPS Assessment Report

- Assessment of water quality with a focus on affects of NPS pollution
- Report should be foundation for about 4-5 years of management work
- Revise as needed

Annual Water Quality Assessment Report for the 106 Program

- Overall assessment of all impacts affecting waterways
- Annual assessment of water quality in Indian Country

NPS Assessment Report

- Identification of waters which will not meet standards without the control of NPS pollution
- Identification of the categories and subcategories of NPS pollution that contribute to water quality issues
- Description of how those issues will be controlled using Best Management Practices (BMPs)
- Description of other programs that might be used for controlling NPS pollution

NPS Assessment Report Key Components

- Surface & Ground Water Quality Summary
 - Water Types
 - Water body & Watershed Size
 - Pollution Types
 - Usage Information



NPS Assessment Report Key Components

- Results
 - Major type of biological, physical or WQ parameter measured
 - Nonpoint pollution causes or sources of concern
 - Assessment of overall WQ condition
- Discussion
 - Interpretation of results
 - Identification of the categories of NPS affecting the water bodies

NPS Assessment Report Key Components

- Selection of Best Management Practices
 - Identify how you will choose BMPs to address the NPS issues described
 - Who will be involved

- Existing NPS Control Programs
 - Describe all existing programs that can assist in alleviating NPS issues identified

Nonpoint Source Management Program

- A multiyear strategy document designed to bring NPS pollution under control
- Describes how the Tribe intends to correct or prevent existing or potential NPS problems identified in the Assessment Report
- Identifies reservation-wide and watershedlevel projects to implement management practices for pollution prevention

Nonpoint Source Management Program

- Specifically break down program by each NPS problem area
 - What <u>water quality parameters are affected</u> by the NPS pollution?
 - What <u>BMPs</u> should be used to address the <u>NPS</u> pollution problem? Will the selected BMPs improve the water quality?
 - How much <u>funding</u> is needed to implement selected BMPs?
 - What kind of <u>technical assistance</u> should be used in implementing the BMPs?

Nonpoint Source Management Program

- Management Program Description
 - Describe the NPS pollution categories and subcategories to be addressed
 - Each should have a goal with short and long term objectives
 - Schedule of milestones
 - Elaborate on specific actions to be taken each year
 - Basis for work plans each year
 - Describe polluted runoff issues with clearly identified nonpoint sources

Nonpoint Source Assessment Report and Management Program:

FINAL STEPS (PUBLIC NOTICE)

- Tribes must provide reasonable public notice of their management programs before submitting them to EPA for approval.
- Project officers will determine through discussions with the tribe what is considered "reasonable."
- Public Notice does not have to extend beyond tribal boundaries.
- Provide documentation in or with your NPS Assessment Report and Management Plan

Nonpoint Source Assessment Report and Management Program:

FINAL STEPS

- Submit completed NPS Assessment Report and Management Program Plan to your EPA Project Officer for review and approval
 - Some minor revisions may be required before approval of document
- Recommend revising and updating your NPS
 Assessment Report and Management Plan every
 5 years (or sooner if major development or new
 environmental issues has occurred)
 - Use either CWA 106 funds or CWA 319 base funds

CWA Section 319 - NPSPlanning Handbook

- Use the NPS Planning Handbook as your guide
- Work with yourProject Officer for more assistance

