PLAINS STATES TRIBES GUIDEBOOK OF AGENCIES/COLLEGES PROVIDING ASSISTANCE IN ENVIRONMENTAL AND WATER RESOURCES ISSUES

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INTRODUCTION

This guidebook is intended to provide a resource Tribes may access to determine which federal agencies and other organizations are able to provide assistance in the areas of environment and water resources. This guidebook provides only a summary of information on environmental assistance and related programs available to tribal members and their constituents and includes, but is not limited to, program information on water and natural resources. Tribes are encouraged to contact the appropriate agencies in their respective regions for additional information on assistance programs that may be available from certain agencies or organizations listed within this guidebook. With the cooperation and collaboration of the agencies and organizations listed in this guidebook, the Mni Sose Intertribal Water Rights Coalition is able to distribute this document to its member Tribes and constituents.

COLLABORATING AGENCIES:

Army Corps of Engineers
Bureau of Indian Affairs
Bureau of Reclamation
Environmental Protection Agency
Indian Health Service
Montana State University Northern
Natural Resources Conservation Service

The Coalition will continue to update this guidebook as necessary as additional information becomes available.

About This Manual...

This guidebook is divided into separate sections that represent major areas of resource management. Each area is defined in the following text. In addition, the art and section title appear with the agency logo on the upper right corner of the first page for each program offering assistance. Look for these symbols as you use the Plains States Tribes Manual.

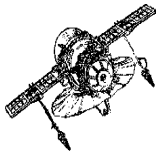
Page numbers are unique for each section and for each agency. The first letter (upper case) is for section, the second letter (lower case) is unique for each agency, and numbers designate individual pages under the letter headings. This numbering system may seem confusing but allows specific program information to be replaced as needed without affecting other pages in the manual.

Abandoned Wells

An abandoned well is a water well, either drilled or dug, that is no longer being utilized. Such a well presents potential safety and aquifer contamination hazards. Proper abandonment procedures need to be utilized to eliminate such hazards. Many states have established proper water well abandonment guidelines and procedures.

Erosion & Sedimentation

Erosion typically involves the undesirable removal of soils from the land surface and water courses. Physical processes involved include wind and water runoff. Erosion if often accelerated with a lack of vegetation management. Soils and stream bed materials removed by erosion can remain suspended for some time resulting in dust clouds and 'murky' streams. Sedimentation occurs when there is a significant reduction in the velocity of water (or wind) and the materials in suspension deposit out. Erosion and sedimentation can result in significant changes to a stream channel.



Geographic Info Systems

A Geographic Information System (GIS) is a tool for collecting, analyzing, processing and presenting spatial data. Numerous types of data can be utilized and presented by a GIS such as geophysical data, natural resources, resource usage, census data, and political boundaries. A GIS has the capability to allow the user to select and combine data according to desired criteria and to present the data either as

maps, graphs, and tables. Typically, a commercial computer software program is used as a basis for a GIS. The software usually has the capabilities for developing a data base for collected data and presenting data in a variety of formats.

Groundwater Quality

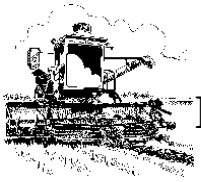
Groundwater Quality is the determination of the physical and chemical characteristics of water obtained from wells and pits. Parameters commonly evaluated are commonly dissolved minerals, temperature, pH, and specific conductivity. Analysis for some parameters are made in the field and others are evaluated in a laboratory. Depending on the source and intended use, the water may also be tested for the presence of organics.

Illegal Dumping

Illegal dumping is the unauthorized disposal of waste on the land, typically in a deserted location. This waste may contain materials which are hazardous to the public and to the environment. Examples of such waste are discarded automobiles, batteries, oils, paints, appliances, common household trash, and industrial by-products.

Management of Consultants

Management of consultants involves meeting with and reviewing study plans and work products provided by consultants for the tribes. Consultants capabilities and study plans are reviewed to assess their adequacy to produce the desired product.



Nonpoint Source Pollution

Nonpoint source pollution generally results on a regional scale from contaminants transported by land runoff, precipitation, atmospheric deposition, drainage, seepage, or hydrologic modification. It includes agricultural storm water discharges and return flows from irrigated agriculture. An example are contaminants produced by fertilizers, pesticides, and herbicides associated with normal agricultural practices. These pollutants can be found in ground and surface water over a relatively large area.

Resource Inventory

An inventory is made to quantify and qualify natural resources. This information can be stored in a data base for future use such as monitoring any degradation of those resources.

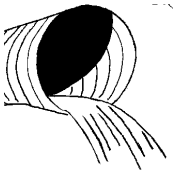
Solid Waste and Landfills

Solid Waste (as defined under the Resource Conservation and Recovery Act) is any garbage, refuse, or sludge. In addition, any solid, liquid, semi-solid, or contained gaseous material which has been discarded, served its intended purpose, or is a manufacturing or mining by-product can be defined as a solid waste (with certain exceptions).

A landfill is a discrete area of land or excavation which used as a repository for solid waste.

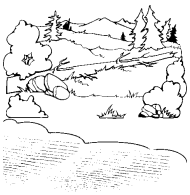
Surface Water Quality

Surface Water Quality is the determination of the physical and chemical characteristics of water obtained from water occurring on the surface of the land. Parameters commonly evaluated are commonly dissolved minerals, temperature, pH, and specific conductivity. Analysis for some parameters are made in the field and others are evaluated in a laboratory. Depending on the source and intended use, the water may also be tested for the presence of organics.



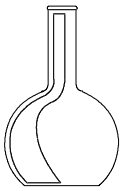
Wastewater Treatment

Wastewater is water returned to the environment after being utilized for domestic, municipal, and industrial purposes. Treatment usually involves routing wastewater through ponds or septic fields to allow for settling and removal of solids and suspended particles. Additional treatment may be required to remove other contaminants as needed.



Water Quality Standards

Water quality standards have been defined consist of statements that describe water quality requirements. They also contain numeric limits for specific physical, chemical, biological or radiological characteristics of water. These statements and numeric limits describe water quality necessary to meet and maintain uses such as public water supply, swimming and other water-based recreation, and the propagation and growth of aquatic life. Standards have been established on both the state and federal level. Some standards are enforceable under state and federal law, while others are only recommendations.



Water Treatment

Water treatment applies to the treatment of either surface or ground water to make the water suitable as a potable supply. Treatment can involve filtration and settling to remove suspended particles, and the addition of chemicals to destroy bacteria and remove high levels of dissolved minerals.

Wetlands

The term wetland means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33CFR 323.2(c), 1984). Wetlands provide a natural mechanism for purifying water and habitat for biota. Wetlands can occur naturally such as next to a stream or lake, or can occur as the result of human activities such as seepage from an irrigation canal.

Flood Control

Flood control refers to the mechanical control of flood waters by use of dams, levees, dikes and other measures. Flood control also includes planning for flood events and the management of flood plains and other land use planning and management techniques that limit potential damage and loss of life.