development of rural housing with septic systems in drainage sub-basins.

Need:

Institute an agreement with the State DEQ to enforce non-point source pollution

Responsibility:

Enforcement: Off-reservation includes Federal, State, and local governments. Management: Federal, State and local agencies Monitoring/maintenance: Tribal

OPTIONS: No Action

2. Legal action against federal, state, local government or individual polluters to enforce Clean Water Act in the Crooked River drainage

3. Government to government agreement for management/enforcement of water quality

4. Through Primacy under the Clean Water Act, adopt stricter water quality standards and enforce (up-stream polluters would be in violation).

JOINT COMMITTEE RECOMMENDS OPTION #4 TO TRIBAL COUNCIL.

ON-RESERVATION WATER QUALITY ISSUES: The EPA and the Tribes have responsibility for water quality in three areas. The first is reducing pollution of surface waters. The second is preventing contamination of groundwater. And third, EPA and tribes implement programs to protect general ground water quality authorized under several different statutes. Authority to implement these programs comes from the following statutes:

-Safe Drinking Water Act ensures that drinking waters are free from harmful contaminants; protects groundwater from contamination by underground injection, and supports State groundwater quality management initiatives.

to change color, reducing clarity and aesthetic quality. In late fall and early winter months algae dies, decreasing the amount of dissolved oxygen available for fish.

Up-stream agricultural practices cause vast amounts of fertilizers to get into the Deschutes River. These chemicals are causing problems with the acid base (Ph levels) in the summer time and adversely effect fish habitat.

The Oregon Dept. of Environmental Quality (DEQ) has the jurisdiction to enforce water quality standards for the waters of the State, but not for the reservation. The Tribes lack jurisdiction over non-trust lands. These jurisdictional boundaries inhibit effective water quality management.

The TRIBE is facing the following offreservation environmental issues:

Watershed Management -Water as a commodity (If reservation water gets put up for sale)

-Need to protect watershed integrity -Sustained yield of water for Deschutes

system -Impacts of hydropower generation

-Riparian area protection/streamside management - Camp Sherman, Metolious River houses with septic systems located along river banks and Paulina ranchers' cattle are not fenced out of streams in the Crooked River drainage.

Water Quality/Quantity

-Drinking Water Standards-Algae produced in up-stream reservoirs moves downstream to the Warm Springs Water Treatment Plant on the Deschutes River.

-Non-point pollution sources (Deschutes River System) include chemical, biological

and erosion. -Minimum flows for water quality are not being met (e.g.: Crooked River) due to irrigation withdrawals.

-Cumulative impacts of agricultural fertilizers/chemicals, and increased -Clean Water Act through the pollution discharge permit system and various programs (e.g.: Clean Lakes), restore and maintain the chemical, physical, and biological integrity of water.

The RESERVATION is facing the following environmental issues:

Watershed Management

-Water as a commodity (If reservation water gets put up for sale)

-Need to protect watershed integrity -Sustained yield of water for Deschutes

-Impacts of hydropower generation -Riparian area protection/streamside management

Water Quality/Quantity

-Drinking Water Standards: Algae produced in up-stream reservoirs moves down to the Warm Springs Water Treatment Plant on the Deschutes River. The algae causes an odor which requires an extra step in treatment to maintain the current standard. Need to inventory existing water systems to assure that lead pipes are not being utilized.

-Natural water standards(lake, rivers, stream, etc.)

Storage reservoirs, etc.

-Non-point pollution sources (within reservation boundaries) include chemical and biological pollutants and erosion.

-Non-point pollution sources (Deschutes River System) includes chemical and biological pollutants and erosion.

-Minimum flows for fisheries not being met (i.e: Sidwalter) due to irrigation withdrawals, cumulative impacts of management activities in watersheds result in reduced flows.

-Some rural homesites are experiencing quality and quantity problems with their wells.

Need: The Tribal Water Code is in effect. However, the provisions use 1977 water quality standards. The Tribal Council is reluctant to amend the Water Code due to the BIA's on not approving Tribal Water Codes until water rights negotiations are completed. Formal amendments to the Water Code are not necessary because the Water Code (Ordinance 45 & Resolution No. 5772) expressly provides that technical updates can be achieved by amending the Implementing Provisions by Council Resolution. Thus there is no need to formally amend the Water Code or get BIA approval.

An additional need exists to clarify the enforcement responsibilities and to eliminate the reluctance to enforce for fear of political repercussions.

Responsibility: Enforcement: EPA Region X plus the Water Control Board and the Watermaster for the Confederated Tribes. Monitoring/management: EPA, BIA, IHS and Tribe.

OPTIONS:

1. No Action

2. Memorandums of Understanding (MOU)

- Tribe/Federal/State/Local 3. Technical update of Implementing

Provisions

4. Primacy

5. Centralize enforcement, monitoring, and management capacity.

JOINT COMMITTEE RECOMMENDS OPTION #'s 2-5.

3. IMPLEMENTATION OF TRIBAL LAWS: The Tribal Council intends to sustain environmental health services and to consolidate environmental enforcement. The IHS position of Environmental Health Officer is contracted under the provisions of PL 93-638. The Tribe intends to redesign of this and the BIA Environmental Coordinator positions to enforce tribal and federal environmental laws. Analysis of the "Primacy" designation by EPA and of all federal and tribal enforcement regulations will be accomplished before consolidation can be defined.

Once consolidated environmental enforcement is defined, a new office can be established. By combining IHS, BIA and Tribal funds the Tribe will be able to establish and maintain an enforcement office.

The approach for establishing an environmental office includes the environmental team's findings concerning enforcement of water quality, hazardous waste, solid waste, zoning, injection wells, air quality, herbicides and pesticides. The "Primacy" issue is key to the design of this enforcement office. The Tribe plans to use the Environmental Team to analyze existing laws and "Primacy" to recommend to Tribal Council how best to design its environmental enforcement capability.

Under the current situation responsibility for protection of the environment is spread throughout various departments in the tribal structure resulting in overlaps and gaps in enforcement. The respective roles of the competing governments and agencies (tribal, federal, and state) are uncoordinated and undefined.

OPTIONS:

1. Government-to-Government agreement to coordinate effective management

2. Centralize responsibility/authority in one office

3. Clarify existing enforcement responsibilities

JOINT COMMITTEE RECOMMENDS #'s 1-3.

OTHER RELATED WATER QUALITY ISSUES:

A. Soils-Forest/Range lands

ISSUE STATEMENT: Soils of the reservation are highly erodible. In upland areas, poor range management practices have caused shifts in vegetation from desirable to undesirable species, leading to sheet erosion and soil losses. This lowers productivity and creates sedimentation in streams. Valley soils consisting of clays and clay loams have experienced gully erosion. This destroys productive land and lowers the water table. The sedimentation causes damage to the fishery spawning beds and damages the gills of the fish in periods of high erosion.

Uncontrolled grazing has contributed to degraded riparian habitat along streams, resulting in fewer fish. Over-grazing problems require strict application of sound range management policies and restoration of deteriorated units.

Forest management activities, including road construction, landings, skid trails and water hole access, also contribute to surface erosion and increased turbidity and sedimentation. These activities can compact the soil and diminish its ability to absorb and retain water. This can destabilize even flow patterns and lead to seasonal in-stream water shortages and higher peak flows which can erode the stream channels. Erosion of stream channels also increases turbidity and sedimentation and destruction of natural fish habitat. Loss of trees in riparian zones leads to increased water temperatures from the reduction of shade.

BIA regulates forest management activities through the exercise of its contractual powers with WSFPI. Regulation and enforcement authority is shared among BIA and WSFPI timber sale officers (TSO's) which can result in lack of coordination of management and enforcement.

- Existing Soil Survey being carried out by SCS

Implement Management Plans and rehabilitation projects, including:

Forest Management Plan

Streamside Management Plan Water Code Range & Agriculture Plan Land Use Code - Ordinance 56

The BIA and Tribe will use the NEPA Process and Integrated Resource Management Plan as a basis for communication, implementation and accountability for restoration projects, monitoring and enforcement to:

1) Halt the deterioration of rangelands by controlling livestock grazing.

2) Improve range management and develop specific plans for each range management unit.

3) Review open range practices that have led to under-use of the summer range and overuse of the winter range.

4) Provide for range improvement through seeding of forage plants, better soils analysis, better livestock controls, completion of the drift fence between Badger Creek and the Warm Springs River and better range rider patrols.

5) Control off-road vehicle use and out-ofseason road use on rangelands.

6) Maintain scenic attributes of rangelands.

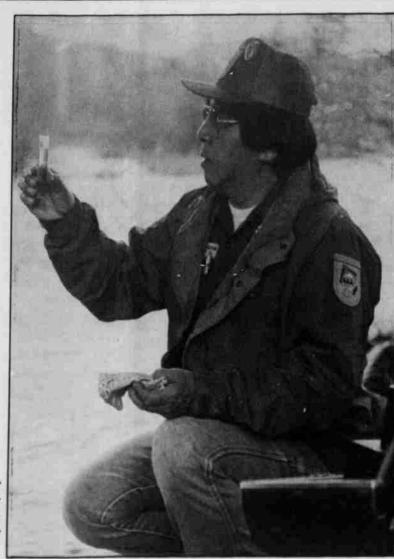
7) Protect root digging places.

8) Prevent the over-harvest of forest lands and protect the water quantity by enforcing the provisions of Ord. 45 - Water Code. 9) Continue to improve forest management practices including the use of designated skid trails, line pulling, limiting the number of landings, cut & fill road banks, use ditch

blocks, and continue road rehabilitation. 10) Develop and institute water hole management practices.

Responsibility: Management/monitoring: Tribal/BIA Branch of Forestry, Timber Committee Tribal Natural Resources and USDA-SCS based upon IRMP and the NEPA Process:

-Environmental Impact



Warm Springs water technician Richard Craig tests quality of water in Shitike Creek on a regular basis.