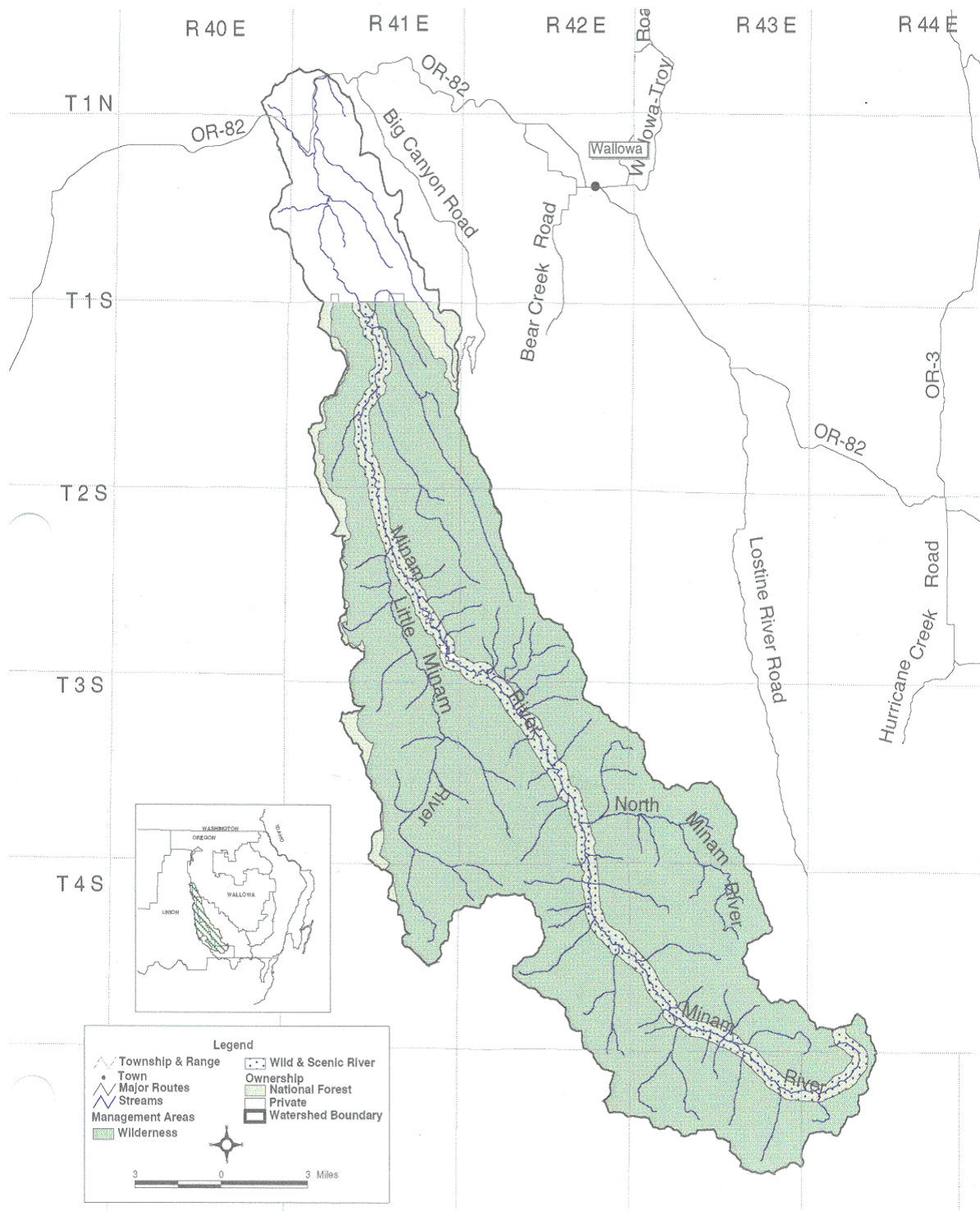


Minam Watershed

(1 Reach)



MINAM RIVER⁸

The Minam River was analyzed in one reach since most of its length is within the Eagle Cap Wilderness; some private lands are adjacent to the stream near the mouth of the Minam River. The Minam River rises in the Eagle Cap Wilderness and flows about 42 miles to join the Wallowa River near the town of Minam. It crosses the border between Union and Wallowa Counties several times.

For the most part, the Minam is not currently impacted by resource use. Historically, splash dams were used for a couple of years in the 1920's. Recreational uses of the Minam drainage include a recreational trail, which crosses the river several times, Minam Lodge, Red's Horse Ranch, and airplane landing strips on private ground in the middle of the wilderness.

The maximum streamflow measured at the USGS gauging station was 6,260 cfs on June 16, 1974. Minimum discharge was measured at 10 cfs on December 6, 1972, during a freeze. Extensive water quality sampling has been made at the gauging site.

Redds are counted in three separate index areas totaling 15 miles on the Little Minam River, the Lower Minam River, and the upper Minam River. A total of 176 spring/summer chinook redds were counted on the Minam in 1964, but only 19 were counted in 1992.

Although fall chinook have been observed spawning in the Minam River, the numbers have been low. The most recent observation was in 1988.

Water Quantity

Tree Density (Medium Priority).--*Dense thickets of trees resulting from past fire suppression prevent much of the rain and snow from reaching the ground, and consequently the moisture is lost to the drainage through evaporation or sublimation.*

Tree density is increasing due to Douglas-fir bark beetle and fir engraver beetle along with the eastside screen prohibiting the removal of trees greater than 21 inches in diameter on national forest land. Maintenance of healthy watershed conditions, by reducing fuel loads as mentioned below under fuel density, will provide an optimal, sustainable supply of water. Healthy watershed and forest conditions will also supply the water at the optimal times for salmon through snowpack melt and groundwater recharge and release.

NOTE: Since the original plan was completed in 1993, a Wildland Fire Use Program has been completed for the Eagle Cap Wilderness. Several wildfires have been managed for resource benefits under this program. Also, prescribed fire has been introduced into the area to control fuel densities.

⁸See also Watershed Management - Approaches to Implementing Solutions

Water Quality

Temperature (Low Priority).--*High temperatures (above 70°F) have been recorded at the USGS stream gauging/water quality site near the Minam's confluence with the Wallowa. Stream width, shallow water, and lack of shade contribute to the problem.*

Provide riparian shading by preserving and/or planting riparian vegetation to preserve cool water temperatures. Redevelop width depth ratios that fit this channel type.

Excess Fine Sediments (High Priority).--*Logging roads and recreational use of these roads on the lowest reaches of the Minam contribute sediment to the river.*

Work on road design and maintenance to avoid quick runoff that entrains sediment. Limit dust on roads with lignosulfonate, water, chip seal or asphalt. Relocate roads to better sites if necessary to limit sediment.

Do not use roads or ground skidding when wet. Use of roads and skid trails when dry or frozen minimizes soil disturbance, vegetation disturbance, and compaction of clay rich soils. Skid trails should be water barred and/or revegetated. Recreational use of roads, trails, and campgrounds should be managed to avoid sediment input. Prevent bank erosion and degradation by livestock through physical or electric fencing of the riparian area. Use watering corridors or alternative water source to supply stock water. Avoid excess peak flows by keeping enough watershed vegetation to slow runoff and promote groundwater recharge.

Fuel Density (Low Priority).--*Excessive fuel density in this watershed is presently a high risk for a catastrophic fire, such as the Tanner Gulch Fire, that would probably result in severe water quality problems. Past fire suppression practices have contributed to the risk of fire.*

Prescribed burning in the wilderness, done judiciously, can help reduce the fuel levels and provide fire breaks to prevent large uncontrollable fires. In some cases, especially in riparian areas, fuel rearrangement (piling or putting the fuels near the ground to facilitate rotting, judiciously placing fuels to protect streambank, or placing large woody debris in stream to add to stream structure) may be preferable to burning in order to keep the organic material as part of the ecosystem, preserve shade, and prevent sedimentation. Well managed grazing also helps to reduce light "flash" fuels.

NOTE: Since the original plan was completed in 1993, a Wildland Fire Use Program has been completed for the Eagle Cap Wilderness. Several wildfires have been managed for resource benefits under this program. Also, prescribed fire has been introduced into the area to control fuel densities.

Herbicides/Pesticides (High Priority).—See Countywide Issues

Stream Structure

Ice Flows (Low Priority).--*Ice flows occur during many winters. Ice flows scour the streambed and destroy stream structure.*

Preserve riparian conifers to provide thermal cover and preserve larger trees on the bank which may break up or slow ice flows. Look into dynamiting smaller ice flows before they get bad.

Substrate

Physical Barriers (Low Priority).--*Large log jams can provide a physical barrier to fish.*

Fish can get through many log jams, but jams should be monitored and if they are actually providing a barrier, enough material should be removed to provide passage.

Dredging/Mining (Low Priority).--*Spawning gravel is limited on most of the Minam because of steep gradients. Some gravel has been removed from the spawning area to gravel one of the air strips.*

Stop the removal of needed spawning gravel. Allow permitted gravel removal (and gold panning) from July 1 to August 15 when there are no anadromous fish spawning or eggs in the gravel.

Habitat Requirements

No problems or enhancement measures were identified.

