

Resource	NRCS Resource Concern	Examples of Tribal Resource Concerns	Examples of Potential solutions	crop	pasture	forest	range	other
Soil Erosion	Concentrated flow erosion	forest road runoff, into ditches and streams	install cross drains, ditch cleanout on access road, ditch sediment traps, punch out to forest floors, better rock surfaces on roads, suspend hauling during rainy periods					
	Excessive Bank Erosion from streams, shoreline and water Conveyance channels	Excessive Bank Erosion from streams, shoreline and water conveyance channels; channel instability	riparian planting, stream bank stabilization - for example large woody debris, wider RMZ for Harvesting areas	x	x	x	x	
	Sheet, rill, & wind erosion	typically not a concern in Western WA on crop lands but a problem on access roads	planting and/or seeding or cross drains etc.			x		x
Soil Quality Degradation	Organic matter depletion	slash burning on forest lands, wildfire on forest lands	slash management alternatives, develop practices that reduce the 'fuel ladder' and use other abatement such as thinning			x		x
	Compaction	surface ponding or runoff, for example: using equipment or having livestock on the land at the wrong time of the year compaction from logging, forest roads	Seasonal exclusion of equipment or livestock from saturated soils; minimize impact by focusing routes to minimize roads	x	x	x	x	x
	Subsidence	for example: where the land settles causing a problem for restoration						
Excess / Insufficient Water	Inefficient use of irrigation water	affected tributaries flowing into fish bearing streams; effects of water sources on fish habitat; illegal water withdrawal for irrigation	irrigation water management well vs. using surface water	x	x		x	

Resource	NRCS Resource Concern	Examples of Tribal Resource Concerns	Examples of Potential solutions	crop	pasture	forest	range	other
Water Quality Degradation	Elevated water temperature and low dissolved oxygen	lack of riparian planting for temperature excess ground water pumping, lack of LWD in channels that help create deeper pools and access to colder ground water	large woody debris helps with deeper pools to lower water temperature	x	x	x	x	x
	Excess nutrients in surface and ground waters	animals in the water, over application of nutrients ground water or surface water excess nutrients affecting pH balance in water and/or dissolved oxygen levels	fencing, nutrient management, alternative watering source, increasing rmz by purchasing easement	x	x	x	x	
	Excessive salts in surface waters and ground waters	aquatic mixing zones; point source/non-point source, fresh and saltwater	more efficient irrigation water management, holding ponds, filter strips		x	x		x
	Pesticides transported to surface and ground waters	pesticides in surface and ground water	pest management and buffer zones	x	x	x	x	x
	Excess pathogens and chemicals from manure, bio-solids or compost applications.	<i>see excess nutrients above</i>		x	x	x	x	
	Petroleum, heavy metals and other pollutants transported to receiving waters	Petroleum, heavy metals and other pollutants transported to waters; Storm water runoff, and impervious areas and effects on stream flows; under drains in ag lands, significant source of pollutants; refuse from Japan	holding ponds, filter strips, low impact development practices; constructed wetlands; filtration systems	x	x	x	x	
	river systems ecologically broke and un able to naturally restore themselves	unstable stream/river channels. Depleted side channel spawning habitats. Nutrient poor streams	engineered log jams to begin to help stabilize stream channels. Reforest in new stable floodplain sites to promote future large woody debris; carcass placement projects (nutrients for fish)	x	x	x	x	x
	Excessive sediment in surface waters	aquatic habitat quality	buffers to control sediment, stream complexity to sort sediment, control access of suspended soils in water accessing streams. See soil erosion above	x	x	x	x	x

Resource	NRCS Resource Concern	Examples of Tribal Resource Concerns	Examples of Potential solutions	crop	pasture	forest	range	other
Degraded Plant Condition	Undesirable plant productivity and health	lack of riparian planting for temperature; fine sediment inputs	planting, prairie and forest stand management,	x	x	x	x	x
		culturally relevant plant communities	habitat restoration, convert hardwood to conifer	x	x	x	x	x
		forest health	growth rate; control stocking levels i.e. pre-commercial thinning			x		
		pesticide use in culturally sensitive areas	use targeted pest control	x	x	x	x	
	Excessive plant pest pressure	invasive noxious weeds, both on land and in the water	removal of invasive species	x	x	x	x	x
	Wildfire hazard, excessive biomass accumulation	forest health	fuels reduction			x	x	x
Inadequate Habitat For Fish, Shellfish And Wildlife	Habitat degradation	Bank Armoring bad for fish habitat	engineered log jams, large woody debris	x	x	x	xx	x
		habitat degradation for culturally sensitive fish and wildlife; loss of in stream complexity	prairie and riparian restoration, habitat improvement for wildlife for example management for deer, elk, turkey habitat	x	x	x	x	x
		invasive species in riparian zones and stream channels	riparian restoration; purchase more riparian area adjacent to streams beyond administrative riparian management zone set-asides	x	x	x	x	x
		fish barriers in roads degrading connectivity within streams	replace culverts/bridges that are a stream blockage for fish passage	x	x	x	x	x
Livestock Production Limitation	Inadequate feed and forage		grazing management systems					
	Inadequate livestock shelter		windbreaks, etc.					
	Inadequate Livestock Water		water troughs and pipelines					

Resource	NRCS Resource Concern	Examples of Tribal Resource Concerns	Examples of Potential solutions	crop	pasture	forest	range	other
Air Quality Impacts	Emissions of particulate matter (PM) and PM precursors							
	Emissions of Ozone Precursors							
	Objectionable Odors							
	Emission of greenhouse gases (GHGs)							
Inefficient Energy Use	Inefficient use of energy in the Farm Operation increases dependence on non-renewable energy sources that can be addressed through improved energy efficiency and the use of on-farm renewable energy sources	fish hatcheries/shellfish operations inefficient use of outdated pumps, motors, freezers, etc.	evaluation through conservation activity plans; update equipment, solar power, wind power,					x
	Inefficient use of energy in field operations increases dependence on non-renewable energy sources that can be addressed through improved efficiency and the use of on-farm renewable energy sources.							
Special Environmental Concerns	Federally threatened and endangered species	habitat decline	restore and protect habitat	x	x	x	x	x
	Federal species of concern and declining species							
		refuse from Japan				x		x
additional comments	<ul style="list-style-type: none"> • Access to stream habitat through fish friendly road structures. Propose metrics for this in terms of ACRES of stream basin that is accessed by replacing road structure barrier. • Road impounded wetlands where there are no structures for water to move through. Some of the worst roads are old railroad grades. • Make RMZ's wider than the minimal required RMZ's by using WRP? To contract these lands from willing owners and establish conifer on them or save the existing conifer in ecologically necessary RMZ area. • Figure out how to get out of Flood Plain Harvesting. • More LWD placement in streams to enhance current habitat. 							

rmz = riparian management zones