

Technical Guide to Monitor Selected Conditions Related to Wilderness Character, DRAFT May 2006

Quality of Wilderness	Monitoring Question	Indicator	Measure
Untrammeled – wilderness is essentially unhindered and free from modern human control or manipulation	What are the trends of actions that control or manipulate the "community of life" in wilderness?	Agency actions that control or manipulate plant communities, animal populations, soils, water-bodies or natural disturbance processes	# of actions to manage:
			-- Vegetation
			-- Fish, wildlife, insects, and disease
			-- Soil and water
			-- Fire
			% of natural fire starts that are not managed as wildland fire use
# of lakes and other water bodies stocked with fish			

Quality of Wilderness	Monitoring Question	Indicator	Measure
<p>Natural – wilderness ecological systems are substantially free from the effects of modern civilization</p>	<p>What are the trends of human threats to natural conditions?</p>	<p>Pollutants that degrade air quality and air quality related values such as plants, animals, soil, and water</p>	Ozone exposure statistic N100 – episodic ozone concentrations affecting sensitive plants
			Ozone exposure statistic W126 – chronic ozone concentrations affecting sensitive plants
			Concentration of sulfur in wet deposition
			Concentration of nitrogen in wet deposition
		<p>Developments that degrade the free-flowing condition of rivers and streams</p>	# of dams inside wilderness
		<p>Non-indigenous species that alter natural plant and animal communities</p>	% of wilderness acres (in categories) with invasive plant species that are not indigenous to the wilderness
	<p>What are the trends of selected biophysical conditions and processes sensitive to human threats?</p>	<p>Visual air quality</p>	# of non-plant species (i.e., wildlife, livestock, fish, invertebrates, pathogens, or fungi) of concern that are not indigenous to the wilderness
			# of acres of active grazing allotments
		<p>Indigenous ecosystems, plant communities, and plant and animal species that have been extirpated</p>	Average sum of anthropogenic fine nitrate and sulfate
			Average deciview

Quality of Wilderness	Monitoring Question	Indicator	Measure
Undeveloped – Wilderness is essentially without permanent improvements or modern human occupation	What are the trends of physical evidence of modern human occupation or modification?	Physical evidence of development	Index of physical development -- Buildings -- System trails & major trail features -- Dams & instream structures -- Roads -- Utility infrastructure -- Mines -- Fixed instrumentation sites
	What are the status and trends of the use of motorized equipment and mechanical transport?	Mechanical transport and motorized equipment use authorizations	# of mechanical transport use days authorized
	What are the status and trends of inholdings?	Inholdings	# of acres of inholdings
			# of motorized equipment use days authorized

Quality of Wilderness	Monitoring Question	Indicator	Measure
Outstanding opportunities for solitude or a primitive and unconfined type of recreation – Wilderness provides outstanding opportunities for people to experience solitude or primitive and unconfined recreation, including the values of inspiration and physical and mental challenge.	What are the status and trends of outstanding opportunities for solitude?	Remote, trailless wilderness	# of acres of wilderness away from access and travel routes
		Wilderness visitation (note: only one of the measures is used, in order, as data are available)	# of parties visiting a wilderness during the primary use season
			# of adult wilderness users residing in the service area
			# of NVUM annual wilderness visits per region
	What are the status and trends of outstanding opportunities for primitive recreation?	Recreation facilities	Index of recreation facilities
		Trail development level	# of trail miles in developed condition classes (classes 3 to 5)
	What are the status and trends of outstanding opportunities for unconfined recreation?	Management restrictions on visitor behavior	Index of restrictions on visitor behavior