

# Checklist of Resource Concerns

## FOREST

MAY 2014

<b>CLIENT</b>		<b>LOCATION</b>	
<b>PLANNER</b>		<b>MODIFIERS</b>	Irrigated <input type="checkbox"/>
<b>LAND UNITS</b>		FARM No.	Wildlife <input type="checkbox"/>
<b>DATE</b>		TRACT No.	Grazed <input type="checkbox"/>

This check sheet is designed to assist planners and clients in identifying resource concerns during the planning process. The planning criteria in Section III of the eFOTG sets the minimum level of treatment needed. If a screening question is NO, this indicates no resource concern exists and no assessment is required. If a screening question is YES, the assessment must be completed to evaluate if there is a resource concern. If the Assessment is YES, Planning Criteria is met. If the Assessment is NO, the Planning Criteria is not met and a Resource Concern exists.

Where Ecological Site Descriptions are not available, the planner will use Web Soil Survey as a primary reference for information and comparison. However, the planner may also use USFS Habitat Types or plant associations, or WA DNR's Draft Field Guide of Washington Ecosystems for comparison and support.

**Forest** - Land on which the primary vegetation is tree cover (climax, natural or introduced plant community) and use is primarily for production of wood products and/or non-timber forest products.

Resource Concern	Screening Questions  No = Met Screening (Not a Resource Concern) YES = Needs to be Assessed  <i>Suggested soils reports are italicized</i>	YES or NO or NA (Not Applicable)	Assessment Tools (check all that were used)	Assessment Level Required to Meet Planning Criteria  YES = Meets Planning Criteria  NO = Resource Concern	YES or NO or NA (Not Applicable)
<b>SOILS RESOURCES</b>					
<b>1. SOIL EROSION: Sheet, rill and wind</b>	Is soil surface organic residue cover less than 80% or is there a forest road?  <i>Physical Properties, Hazard of Erosion On &amp; / Off Road / Trail</i>	<input type="checkbox"/>	Visual inspection	Is the site stable and without visible signs of erosion?	<input type="checkbox"/>
		<input type="checkbox"/>	Forest Roads Inventory Tool		<input type="checkbox"/>
<b>2. SOIL EROSION: Concentrated flow erosion</b>	Are classic gullies present?  <i>Physical Properties, Map Unit Descriptions (MUD), Hazard of Erosion On &amp; / Off Road / Trail</i>	<input type="checkbox"/>	Field measurements	Is classic gully management adequate to stop the progression of head cutting and widening and are offsite impacts minimized by vegetation and/or structures?	<input type="checkbox"/>
		<input type="checkbox"/>	Visual Inspection		<input type="checkbox"/>
		<input type="checkbox"/>	Forest Roads Inventory Tool		<input type="checkbox"/>

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<p><b>3.SOIL EROSION: Excessive bank erosion from streams, shorelines or water conveyance channels</b></p>	<p>Are streams or shoreline on or adjacent to site?</p> <p>Is bank erosion from streams, shorelines or conveyance channels present?</p> <p><i>Map Unit Descriptions (MUD)</i></p>		<p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p>	<p>For shorelines and water conveyance channels: Are banks stable or commensurate with normal geomorphological processes?</p> <p><b>AND</b> <b>For streambanks;</b> Is SVAP2 bank condition element score greater than or equal to 7?</p> <p><b>OR</b> If present, is bank erosion caused by upstream land use and beyond the client's control?</p>	
<p><b>4. SOIL QUALITY DEGRADATION: Subsidence</b></p>	<p>Are there Histisol soils present exhibiting subsidence?</p> <p><i>Hydric Soils, Soil Features</i></p>		<p><input type="checkbox"/> Visual Inspection</p> <p><input type="checkbox"/> Field measurements</p>	<p>Is subsidence adequately managed to meet the client's objectives?</p>	
<p><b>5. SOIL QUALITY DEGRADATION: Compaction</b></p>	<p>Is soil compaction a problem? <b>OR</b> Do activities cause soil compaction problems?</p> <p><i>Compaction Resistance</i></p>		<p><input type="checkbox"/> Observation of Soil and Plant Condition</p> <p><input type="checkbox"/> Soil Compaction Tester</p>	<p>Is compaction managed to meet Client's production and management objectives?</p>	
<p><b>6. SOIL QUALITY DEGRADATION: Organic matter depletion</b></p>	<p>Is soil organic matter depletion a problem? <b>OR</b> Do activities cause soil organic matter depletion?</p> <p><i>Physical Properties</i></p>		<p><input type="checkbox"/> Forestland Health Assessment</p> <p><input type="checkbox"/> Ecological Site Descriptions</p> <p><input type="checkbox"/> Soil Test</p>	<p>Does ground cover meet state criteria specific to ecological site?</p> <p><b>OR</b> Is soil organic matter managed to meet Client objectives?</p>	

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<b>WATER RESOURCES</b>					
<b>8. EXCESS WATER:</b> Ponding, flooding, seasonal high water table, seeps and drifted snow	Is <b>excess</b> water a problem? <b>OR</b> Do activities cause ponding/flooding problems? <i>Map Unit Descriptions (MUD), Water Features</i>		<input type="checkbox"/> Visual Inspection  <input type="checkbox"/> Forest Roads Inventory Tool	Is excess water managed to meet Client's objectives?	
<b>9. INSUFFICIENT WATER:</b> Inefficient moisture management	Is Moisture Management a problem? <b>OR</b> Do activities cause inefficient moisture management?		<input type="checkbox"/> Forest Roads Inventory Tool  <input type="checkbox"/> Topographic Map  <input type="checkbox"/> Observation of Soil and Plant Condition	Are runoff and evapotranspiration levels minimized to meet Client's management objectives?	
<b>10. INSUFFICIENT WATER:</b> Inefficient use of irrigation water	Is the Planned Land Unit (PLU) irrigated?  <i>(Irrigated modifier)</i>		<input type="checkbox"/> Farm Irrigation Rating Index (FIRI) WA 2014	Is the Irrigation System efficiency greater than or equal to 85%? <b>OR</b> Less than 10% water savings meets Planning Criteria and is not a resource concern.	
	<b>AND</b> Is there a stream present ?		<input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)	<b>AND</b> Are SVAP2 hydrologic alteration element and barriers to fish movement element scores greater than or equal to 7?	
<b>11. WATER QUALITY DEGRADATION:</b> Excess nutrients in surface and groundwater	Are organic or inorganic nutrients applied? <b>OR</b> Is the Planned Land Unit (PLU) grazed?  <b>OR</b> Are there confined livestock areas?		<input type="checkbox"/> Nutrient Budget  <input type="checkbox"/> Washington Water Quality Technical Note 1  <input type="checkbox"/> 303d Listing or Maps  <input type="checkbox"/> Soil Test  <input type="checkbox"/> Plant Tissue Test	Are nutrients applied, based on a soil test, tissue tests or nutrient budget?  <b>AND</b> Are conservation practices and management in place to minimize offsite impacts?	
	<b>OR</b> Is there a water course on or adjacent to the site with State Agency identified nutrient impairment? (Washington Department of Ecology 303d listed for nutrients)		<input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)	<b>AND</b> Is SVAP2 nutrient enrichment element score greater than or equal to 7?	

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<p><b>12. WATER QUALITY DEGRADATION: Pesticides transported to surface and groundwaters</b></p>	<p>Are pest control chemicals applied?</p> <p><b>OR</b></p> <p>Is there a water course on or adjacent to the site with State Agency identified pesticides impairment? (Washington Department of Ecology 303d listed for pesticides)</p>		<p><input type="checkbox"/> 303d Listing or Maps</p> <p><input type="checkbox"/> Windows Pesticide Screening Tool (WinPST)</p> <p><input type="checkbox"/> Washington Water Quality Technical Note 1</p> <p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p>	<p>Are pesticides stored, handled, disposed and managed to prevent runoff, spills, leaks and leaching?</p> <p><b>AND</b></p> <p>Are conservation practices and management in place to minimize offsite impacts?</p> <p><b>AND</b></p> <p>Is SVAP2 water appearance element score greater than or equal to 7?</p>	
<p><b>13. WATER QUALITY DEGRADATION: Excess pathogens and chemicals from manure, biosolids or compost applications</b></p>	<p>Is manure, biosolids or compost applied on the land? (potential sources of pathogens or pharmaceuticals)</p> <p><b>OR</b></p> <p>Is there a water course on or adjacent to the site with State Agency identified fecal coliform impairment? (Washington Department of Ecology 303d listed for fecal coliform)</p>		<p><input type="checkbox"/> 303d Listing or Maps</p> <p><input type="checkbox"/> Washington Water Quality Technical Note 1</p> <p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p>	<p>Are organic materials applied, stored, and/or handled to mitigate negative impacts to water sources?</p> <p><b>AND</b></p> <p>Are SVAP2 water appearance element and manure or human waste element scores greater than or equal to 7?</p>	
<p><b>14. WATER QUALITY DEGRADATION: Excessive salts in surface and groundwater</b></p>	<p>Is salt concentration a limiting factor?</p> <p><b>OR</b></p> <p>Is there a water course on or adjacent to the site with State Agency identified pH impairment? (Washington Department of Ecology 303d listed for pH)</p> <p><i>Chemical Properties</i></p>		<p><input type="checkbox"/> 303d Listing or Maps</p> <p><input type="checkbox"/> Washington Water Quality Technical Note 1</p> <p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p>	<p>Are salt concentrations managed to mitigate off-site transport to surface or ground waters?</p> <p><b>AND</b></p> <p>Is SVAP2 salinity element score greater than or equal to 6?</p>	

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<p><b>15. WATER QUALITY DEGRADATION: Petroleum, heavy metals and other pollutants transported to receiving waters</b></p>	<p>Do activities present the potential for contamination?</p> <p><b>OR</b></p> <p>Is there a water course on or adjacent to the site with State Agency identified heavy metals impairment? (Washington Department of Ecology 303d listed for heavy metals)</p>		<p><input type="checkbox"/> Forest Roads Inventory Tool</p> <p><input type="checkbox"/> Washington Water Quality Technical Note 1</p> <p><input type="checkbox"/> 303d Listing or Maps</p> <p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p>	<p>Are petroleum, heavy metals or other potential pollutants stored and handled to avoid runoff or leaching?</p> <p><b>AND</b></p> <p>Is SVAP2 water appearance element score greater than or equal to 7?</p>	
<p><b>16. WATER QUALITY DEGRADATION: Excessive sediment in surface waters</b></p>	<p>Are there untreated sources of erosion?</p> <p><b>OR</b></p> <p>Are streams or shoreline on or adjacent to site?</p> <p><b>OR</b></p> <p>Is there a water course on or adjacent to the site with State Agency identified sediment impairment? (Washington Department of Ecology 303d listed for sediment)</p>		<p><input type="checkbox"/> Forest Roads Inventory Tool</p> <p><input type="checkbox"/> Washington Water Quality Technical Note 1</p> <p><input type="checkbox"/> 303d Listing or Maps</p> <p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p> <p><input type="checkbox"/> Water Erosion Prediction Project (WEPP) optional</p>	<p>Do upslope treatment and buffer practices address concentrated flows to water bodies?</p> <p><b>AND</b></p> <p>Are heavy use areas stable?</p> <p><b>AND</b></p> <p>SVAP2 - bank condition greater than or equal to 7?</p>	
<p><b>17. WATER QUALITY DEGRADATION: Elevated water temperature</b></p>	<p>Is there a water course on or adjacent to the site with State Agency identified temperature impairment? (Department of Ecology 303d listed for temperature)</p>		<p><input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)</p> <p><input type="checkbox"/> 303d Listing or Maps</p>	<p>Is SVAP2 - riparian area quality element score greater than or equal to 7?</p> <p><b>AND</b></p> <p>Is SVAP2 - riparian area quantity element score greater than or equal to 7?</p> <p><b>AND</b></p> <p>Is SVAP2 - canopy cover element score greater than or equal to 7?</p> <p><b>OR</b></p> <p>Are existing practices in place to address water temperature?</p>	

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<b>PLANT RESOURCES</b>					
<b>18. DEGRADED PLANT CONDITION: Undesirable plant productivity and health</b>	Are there plant production or health concerns?  <i>Forest Productivity, Forest Vegetation Classification, Plant Composition</i>		<input type="checkbox"/> Forest Inventory Plots & Transects  <input type="checkbox"/> Forestry Technical Note 10  <input type="checkbox"/> Ecological Site Descriptions  <input type="checkbox"/> Forestland Health Assessment	Are forest species adapted to the site?  <b>AND</b>  Do composition and stand density meet Client's objectives and production goals?	
<b>19. DEGRADED PLANT CONDITION: Inadequate structure and composition</b>	Will changes to the plant community structure or composition better support the desired ecological functions and intended land use?  <b>OR</b> Are there invasive, non-native, or noxious plant species present or could they become established if the plant community is disturbed?		<input type="checkbox"/> Ecological Site Descriptions  <input type="checkbox"/> Forest Inventory Plots & Transects  <input type="checkbox"/> Forestland Health Assessment  <input type="checkbox"/> County Noxious Weed Lists	Do plant communities contain adequate diversity, composition and structure to support desired ecological functions?  <b>OR</b> Are invasive, non-native or noxious plant species managed to meet client objectives?	
<b>20. DEGRADED PLANT CONDITION: Excessive plant pest pressure</b>	Is plant productivity limited from pest pressure?		<input type="checkbox"/> County Noxious Weed Lists  <input type="checkbox"/> Forest Inventory Plots & Transects  <input type="checkbox"/> Windows Pesticide Screening Tool (WinPST)  <input type="checkbox"/> Forestland Health Assessment	Is pest damage to plants below economic or environmental thresholds or client-identified criteria?  <b>AND</b> Are plant pests, including noxious and invasive species managed to meet client objectives?	
<b>21. DEGRADED PLANT CONDITION: Wildfire hazard, excessive biomass accumulation</b>	Is wildfire hazard a concern?		<input type="checkbox"/> USFS Photo Series - Fuels  <input type="checkbox"/> Forest Inventory Plots & Transects  <input type="checkbox"/> Forestry Technical Note 10  <input type="checkbox"/> Forestland Health Assessment	Are fuel loads and fuel ladders managed to provide defensible space and meet client objectives?	
<b>23. LIVESTOCK PRODUCTION LIMITATION: Inadequate feed and forage</b>	Client is actively grazing animals. ( <i>Grazing Modifier</i> )  <i>Range Productivity, Range Vegetation Classification, Plant Composition</i>		<input type="checkbox"/> Pasture & Range Inventory & Assessments  <input type="checkbox"/> Livestock Forge Balance Worksheet	Are livestock forage, roughage and supplemental nutritional requirements addressed?	

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<b>24. LIVESTOCK PRODUCTION LIMITATION: Inadequate livestock shelter</b>	Client is actively grazing animals. ( <i>Grazing Modifier</i> )	<div style="background-color: #e0e0e0; height: 10px; width: 100%;"></div> <div style="background-color: #ffff00; height: 10px; width: 100%;"></div> <div style="background-color: #c0c0c0; height: 10px; width: 100%;"></div>	<input type="checkbox"/> Visual Inspection	Do artificial or natural shelters meet animal health needs and client objectives?	<div style="background-color: #e0e0e0; height: 10px; width: 100%;"></div> <div style="background-color: #ffff00; height: 10px; width: 100%;"></div> <div style="background-color: #c0c0c0; height: 10px; width: 100%;"></div>
<b>25. LIVESTOCK PRODUCTION LIMITATION: Inadequate livestock water</b>	Client is actively grazing animals. ( <i>Grazing Modifier</i> )	<div style="background-color: #e0e0e0; height: 10px; width: 100%;"></div> <div style="background-color: #ffff00; height: 10px; width: 100%;"></div> <div style="background-color: #c0c0c0; height: 10px; width: 100%;"></div>	<input type="checkbox"/> Washington Engineering Technical Note 19: Water Requirements-Beef Cattle	Is water of acceptable quality and quantity adequately distributed to meet animal needs?	<div style="background-color: #e0e0e0; height: 10px; width: 100%;"></div> <div style="background-color: #ffff00; height: 10px; width: 100%;"></div> <div style="background-color: #c0c0c0; height: 10px; width: 100%;"></div>
<b>AND</b> Is there a stream present ?		<div style="background-color: #e0e0e0; height: 10px; width: 100%;"></div> <div style="background-color: #ffff00; height: 10px; width: 100%;"></div> <div style="background-color: #c0c0c0; height: 10px; width: 100%;"></div>	<input type="checkbox"/> Washington Water Quality Technical Note 1  <input type="checkbox"/> Stream Visual Assessment Protocol Version 2 (SVAP 2)	<b>AND</b> Are SVAP2 water appearance element and manure or human waste element scores greater than or equal to 8?	<div style="background-color: #e0e0e0; height: 10px; width: 100%;"></div> <div style="background-color: #ffff00; height: 10px; width: 100%;"></div> <div style="background-color: #c0c0c0; height: 10px; width: 100%;"></div>

Notes: