

ALASKA Resource Concerns List Matrix

May 2015

Resource Concerns Matrix identifying tools need to complete inventory by landuse ALL tools marked with an " X " WILL be used

Resource Inventory TOOLS		CROPLAND	PASTURE	RANGE	FOREST	LANDSCAPE	FARMSTEAD
		Land use					
Soil Resources							
1. SOIL EROSION: Sheet, rill and wind	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	X	X				
	Wind Erosion Prediction System (WEPS)	X	X				
	RHA-Rangeland Health Assessment			X			
	Visual Inspection	X	X	X	X		
	Forest Roads Inventory Tool				X		
2. SOIL EROSION: Concentrated flow erosion	Field Measurements	X	X	X	X		X
	Visual Inspection	X	X	X	X		X
	Forest Roads Inventory Tool				X		
3. SOIL EROSION: Excessive bank erosion from streams, shorelines or water conveyance channels	Stream Visual Assessment Protocol Version 2 (SVAP 2)	X	X	X	X		X
	PCS-Pasture Condition Score		X				
4. SOIL QUALITY DEGRADATION: Subsidence	Visual Inspection	X	X	X	X	x	X
5. SOIL QUALITY DEGRADATION: Compaction	Soil Compaction Tester	X	X		X		X
	Observation of soil and plant condition	X	X	X	X		
	PCS-Pasture Condition Score		X				X
	RHA-Rangeland Health Assessment			X			
6. SOIL QUALITY DEGRADATION: Organic matter depletion	Soil Test	X	X	X	X		
	Wind Erosion Prediction System (WEPS)	X					
	Observation of soil and plant condition	X					
	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	X	X				
	PCS-Pasture Condition Score		X				
	RHA-Rangeland Health Assessment			X			
	Forest Health Assessment				X		
Ecological Site Descriptions				X			
7. SOIL QUALITY DEGRADATION: Concentration of Salts or other chemicals	Soil Test	X	X	X	X		
	Visual Inspection	X	X	X	X		
Water Resources							
8. EXCESS WATER: Ponding, flooding, seasonal high water table, seeps and drifted snow	Visual Inspection	x	x	X	x		x

	Web Soil Survey	x	x	X	X		
	Forest Roads Inventory Tool				X		X
9. INSUFFICIENT WATER: Inefficient moisture management	Visual Inspection	X	X	X	X	x	X
	PCS-Pasture Condition Score		X				
	RHA-Rangeland Health Assessment			X			
	Forest Roads Inventory Tool				X		
	Topographic map				X		
10. INSUFFICIENT WATER: Inefficient use of irrigation water	Irrigation Water Management Worksheet	x	x	x	x		x
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x

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11. WATER QUALITY DEGRADATION: Excess nutrients in surface and groundwater	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	x					x
	Wind Erosion Prediction System (WEPS)	x					
	303d Listing or Maps	x	x	x	x		x
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
	Nutrient budget	X	x	x	x		
	PCS-Pasture Condition Score		x				
	Soil Test	X	X	x	x		
	Plant Tissue Test			x	x		
							x
12. WATER QUALITY DEGRADATION: Pesticides transported to surface and groundwaters	Windows Pesticide Screening Tool (WinPST)	x	x	x	x		x
	303d Listing or Maps	x	x	x	x		x
	Revised Universal Soil Loss Equation Version 2	x					
	Wind Erosion Prediction System (WEPS)	x					
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
13. WATER QUALITY DEGRADATION: Excess pathogens and chemicals from manure, biosolids or compost applications	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	x	X				
	303d Listing or Maps	x	x	x	x		x
	Wind Erosion Prediction System (WEPS)	x					
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
14. WATER QUALITY DEGRADATION: Excessive salts in surface and groundwater	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	x					
	303d Listing or Maps	x	x	x	x		x
	Wind Erosion Prediction System (WEPS)	x					
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
15. WATER QUALITY DEGRADATION: Petroleum, heavy metals and other pollutants transported to receiving waters	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	x					

Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
303d Listing or Maps	x	x	x	x		x
Forest Roads Inventory Tool				x		

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16. WATER QUALITY DEGRADATION: Excessive sediment in surface waters	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	x	x				x
	303d Listing or Maps	x	x	x	x		x
	Wind Erosion Prediction System (WEPS)	x	x				x
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
	RHA-Rangeland Health Assessment			x			
	Forest Roads Inventory Tool				x		
17. WATER QUALITY DEGRADATION: Elevated water temperature	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x	x		x
	303d Listing or Maps	x	x	x	x		x
Plant Resources							
18. DEGRADED PLANT CONDITION: Undesirable plant productivity and health	Wind Erosion Prediction System (WEPS)	x					
	Visual Inspection	x	x	x			
	Crop Tolerance Table (National Agronomy Manual Table 502-1)	x					
	PCS-Pasture Condition Score		x				
	Rangeland Trend Worksheet			x			
	Similarity Index			x			
	RHA-Rangeland Health Assessment			x			
	Forest inventory plots				x		
	Transect forms				x		
	Ecological Site Descriptions				x		
	19. DEGRADED PLANT CONDITION: Inadequate structure and composition	Visual Inspection	x				
Forage Suitability Groups, If Available			x				
State Noxious Weed List			x	x	x		x
Ecological Site Descriptions				x	x		
RHA-Rangeland Health Assessment				x			
PCS-Pasture Condition Score							
Forest Health Assessment					x		
Forest Inventory Plots and Transects					x		
20. DEGRADED PLANT CONDITION: Excessive plant pest pressure	Visual Inspection	x	x	x			x
	State Noxious Weed List	x	x	x	x		x
	PCS-Pasture Condition Score		x				x
	Forest Inventory Plots and Transects				x		x

	Windows Pesticide Screening Tool (WinPST)				X		
	RHA-Rangeland Health Assessment			X			x
21. DEGRADED PLANT CONDITION: Wildfire hazard, excessive biomass accumulation	Visual Inspection	x	x	x			
	Forest Inventory Plots and Transects				x		
	RHA-Rangeland Health Assessment						x

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Animal Resources							
22A. INADEQUATE HABITAT FOR FISH AND WILDLIFE- Habitat degradation (Aquatic)	Alaska Wildlife Habitat Evaluation Guide (WHEG)	X	X	X	X	X	X
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	X	X	X	X	X	X
	A species - specific Wildlife Habitat Assessment Tool	X	X	X	X	X	X
22T. INADEQUATE HABITAT FOR FISH AND WILDLIFE- Habitat degradation (Terrestrial)	Alaska Wildlife Habitat Evaluation Guide (WHEG)	X	X	X	X	X	X
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	X	X	X	X	X	X
	A species - specific Wildlife Habitat Assessment Tool	X	X	X	X	X	
23. LIVESTOCK PRODUCTION LIMITATION: Inadequate feed and forage	Pasture & Range Inventory & Assessments		X	X	X		
	Livestock Forage Balance Worksheet	X	X	X	X		X
24. LIVESTOCK PRODUCTION LIMITATION: Inadequate livestock shelter	Visual Inspection	X	X	X	X		X
25. LIVESTOCK PRODUCTION LIMITATION: Inadequate livestock water	Washington Engineering Technical Note 19: Water Requirements- Beef Cattle	X	X	X	X		X
	Stream Visual Assessment Protocol Version 2 (SVAP 2)				X		X
26. INEFFICIENT ENERGY USE: Equipment and facilities	National NRCS energy estimator tools					X	X
	USDA approved energy audit					X	X
Energy Resources							
27. INEFFICIENT ENERGY USE: Farming/ Ranching practices and field operations	Revised Universal Soil Loss Equation Version 2 (RUSLE2)	X	X			X	
	Wind Erosion Prediction System (WEPS)	X	X			X	
	Visual Inspection	X	X			X	
	National NRCS energy estimator tools	X	X	X		X	X
	USDA approved energy audit	X	X	X		X	X
	Conservation on the Farm Checklist			X			
Air Resources							
28. AIR QUALITY IMPACTS: Emissions of Particulate Matter (PM) and PM precursors	Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and General Land Management	X	X	X		X	X
	Wind Erosion Prediction System (WEPS)	X	X			X	

29. AIR QUALITY IMPACTS: Emissions of Greenhouse Gases (GHGs)	Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and General Land Management	x	x	x		x	x
	Wind Erosion Prediction System (WEPS)	x	x				
	Stream Visual Assessment Protocol Version 2 (SVAP 2)					x	x
30. AIR QUALITY IMPACTS: Emissions of Ozone Precursors	Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and General Land Management	x	x	x		x	x
	Stream Visual Assessment Protocol Version 2 (SVAP 2)	x	x	x			x
31. AIR QUALITY IMPACTS: Objectionable odors	Agricultural Air Quality Conservation Measures Reference Guide for Cropping Systems and General Land Management	x	x	x		x	x
	Stream Visual Assessment Protocol Version 2 (SVAP 2)					x	