

Resource Assessment Worksheet (Optional)

Attach to Conservation Assistance Notes

Cooperator _____
 Tract/Field No. _____

Date _____
 Planner _____

Land Use/Land Cover [†]	Grazed	Irrigated	Wildlife
Associated Ag Land	_____	_____	_____
Crop	_____	_____	_____
Designated Protected Area	_____	_____	_____
Developed Land	_____	_____	_____
Farmsteads	_____	_____	_____
Forest	_____	_____	_____
Other Rural Land	_____	_____	_____
Pasture	_____	_____	_____
Range	_____	_____	_____
Water	_____	_____	_____

- Resource Assessments Completed [‡]**
- _____ Client input / planner observation
 - _____ CO IWM 449 FIRI 2014.1
 - _____ Colorado Nitrogen Leaching Index
 - _____ Colorado Phosphorus Runoff Index
 - _____ Crop Tolerance to Blowing Soil, NAM Table 502-1
 - _____ Ecological Site Descriptions (CO eFOTG, Section II)
 - _____ Field measurement - aerial extent
 - _____ Inventory plots and transect analyses
 - _____ Livestock Forage-Animal Balance
 - _____ National Air Quality Site Assessment Tool (NAQSAT)
 - _____ NRCS Energy Estimator Tools
 - _____ Animal Housing _____ Irrigation _____ Nitrogen _____ Tillage
 - _____ Nutrient budget (Nutrient Management 590 Job Sheet)
 - _____ Observation of soil and/or plant condition
 - _____ Pasture Condition Score (PCS)
 - _____ Proper Functioning Condition (PFC)
 - _____ Lentic (wetland) _____ Lotic (riparian area)
 - _____ Rangeland Health Assessment (RHA)
 - _____ Revised Universal Soil Loss Equation (RUSLE2)
 - _____ Similarity Index Worksheet
 - _____ Soil diagnostic evaluations
 - _____ Soil volume x bulk density calculation
 - _____ Species-specific habitat assessment tools
 - _____ Surface Irrigation Soil Loss (SISL) model
 - _____ Stream Visual Assessment Protocol (SVAP2)
 - _____ USDA approved Energy Audit
 - _____ Visual Inspection
 - _____ Water Availability Resource Inventory
 - _____ Water Quality Sampling and Analysis
 - _____ Wind Erosion Prediction System (WEPS)
 - _____ WIN-PST/ Pesticide Mitigation Worksheet

- Identified Resource Concerns [‡]**
- SOIL EROSION**
- _____ 1. Sheet and rill, wind, or irrigation-Induced
 - _____ 2. Classic or ephemeral gulley concentrated flow
 - _____ 3. Excessive bank erosion from streams, shorelines or water conveyance channels
- SOIL QUALITY DEGRADATION**
- _____ 4. Subsidence
 - _____ 5. Compaction
 - _____ 6. Organic matter depletion
 - _____ 7. Concentration of salts or other chemicals
- EXCESS/INSUFFICIENT WATER**
- _____ 8. Excess (Ponding, flooding, seasonal high water table, seeps, and drifted snow)
 - _____ 9. Insufficient (Inefficient moisture management)
 - _____ 10. Insufficient (Inefficient use of irrigation water)
- WATER QUALITY DEGRADATION**
- _____ 11. Excess nutrients in surface and groundwaters
 - _____ 12. Pesticide transport to surface and groundwater
 - _____ 13. Excess pathogens / chemicals from manure, bio-solids or compost applications
 - _____ 14. Excessive salts in surface and groundwater
 - _____ 15. Petroleum, heavy metals, and other pollutants transported to receiving waters
 - _____ 16. Excessive sediment in surface waters
 - _____ 17. Elevated water temperature
- DEGRADED PLANT CONDITION**
- _____ 18. Undesirable plant productivity and health
 - _____ 19. Inadequate structure and composition
 - _____ 20. Excessive plant pest pressure
 - _____ 21. Wildfire hazard, excess biomass accumulation
- INADEQUATE HABITAT FOR FISH AND WILDLIFE**
- _____ 22. Habitat degradation
- LIVESTOCK PRODUCTION LIMITATION**
- _____ 23. Inadequate livestock water
 - _____ 24. Inadequate feed and forage
 - _____ 25. Inadequate livestock shelter
- INEFFICIENT ENERGY USE**
- _____ 26. Equipment and facilities
 - _____ 27. Farming/ranching practices and field operations
- AIR QUALITY IMPACTS**
- _____ 28. Particulate Matter (PM) & PM Precursor Emissions
 - _____ 29. Emissions of Greenhouse Gases (GHGs)
 - _____ 30. Emissions of Ozone Precursors
 - _____ 31. Objectionable odors

[†] See National Planning Procedures Handbook Circular 180-14-1 for revised Land Use Designations and Modifiers

[‡] See National and State Resource Concerns and Planning Criteria (Colorado eFOTG, Section III, Resource Planning Criteria) for Resource Assessments that are required by Resource Concern and Land Use/Land Cover designation.

Land Use/Land Cover [†] and Resource Assessments [‡]

Associated Ag Land	Land Use/Land Cover [†]												Resource Assessments [‡]
	Crop	Designated Protected Area	Developed Land	Farmsteads	Forest	Other Rural Land	Pasture	Range	Water	Grazed	Irrigated	Wildlife	
X	X	X	X	X	X	X	X	X	X	X			Client input / planner observation
X	X	X	X	X	X	X	X	X			X		CO IWM 449 FIRI 2014.1
	X						X						Colorado Nitrogen Leaching Index
	X						X						Colorado Phosphorus Runoff Index
X	X	X	X	X		X							Crop Tolerance to Blowing Soil
X		X			X		X	X	X				Ecological Site Descriptions
X	X	X	X	X	X	X	X	X					Field measurement - aerial extent
X	X	X	X	X	X	X	X	X	X				Inventory plots and transect analyses
X	X	X	X	X	X	X	X	X		X			Livestock Forage-Animal Balance
				X									National Air Quality Site Assessment Tool
X	X	X	X	X	X	X	X	X	X				NRCS Energy Estimator Tools
X	X	X	X	X	X	X	X	X	X				Nutrient budget
X	X	X			X	X		X					Observation of soil and/or plant condition
							X						Pasture Condition Score (PCS)
X	X	X	X	X	X	X	X	X	X				Proper Functioning Condition (PFC)
								X					Rangeland Health Assessment (RHA)
X	X	X	X	X		X	X						Revised Universal Soil Loss Equation (RUSLE2)
								X					Similarity Index Worksheet
X	X			X			X	X					Soil diagnostic evaluations
X	X	X	X	X	X	X	X	X					Soil volume x bulk density calculation
								X				X	Species-specific habitat assessment tools
	X	X	X	X		X	X						Surface Irrigation Soil Loss (SISL) model
X	X	X	X	X	X	X	X	X	X				Stream Visual Assessment Protocol (SVAP2)
X	X	X	X	X	X	X	X	X	X				USDA approved Energy Audit
					X								Visual Inspection
										X			Water Availability Resource Inventory
										X			Water Quality Sampling and Analysis
X	X	X	X	X		X	X						Wind Erosion Prediction System (WEPS)
X	X	X	X	X	X	X	X	X	X				WIN-PST / Pesticide Mitigation Worksheet

[†] See National Planning Procedures Handbook Circular 180-14-1 for revised Land Use Designations and Modifiers

[‡] See National and State Resource Concerns and Planning Criteria (Colorado eFOTG, Section III, Resource Planning Criteria) for Resource Assessments that may be required by Resource Concern and Land Use/Land Cover designation.

Resource Assessments	Client input / planner observation	Colorado IWM 449 FIRI 2014.1	Colorado Nitrogen Leaching Index	Colorado Phosphorus Runoff Index	Crop Tolerance to Blowing Soil	Ecological Site Descriptions	Field measurement - aerial extent calc	Inventory plots and transect analyses	Livestock Forage-Animal Balance	National Air Quality Site Assessment	NRCS Energy Estimator	Nutrient budget	Observation, soil and/or plant	Pasture Condition Score (PCS)	Proper Functioning Condition (PFC)	Rangeland Health Assessment (RHA)	Revised Universal Soil Loss Eq. (RUSLE2)	Similarity Index Worksheet	Soil diagnostic evaluations	Soil loss volume x bulk density	Species-specific habitat assessmt	Surface Irrigation Soil Loss (SISL) model	Stream Visual Assessmt Protocol	USDA approved Energy Audit	Visual Inspection	Water Availability Resource Inventory	Water Quality Sampling and Analysis	Wind Erosion Prediction System	WIN-PST / CO-Pesticide Mitigation	
1. SOIL EROSION - Sheet and rill, wind and/or irrigation-induced																X	X			X		X							X	
2. SOIL EROSION - Concentrated flow							X													X										
3. SOIL EROSION - Excessive bank erosion from stream banks or conveyance channels														X	X								X							
4. SOIL QUALITY DEGRADATION - Subsidence	X																													
5. SOIL QUALITY DEGRADATION - Compaction	X												X	X		X														
6. SOIL QUALITY DEGRADATION - Organic matter depletion	X													X		X	X											X		
7. SOIL QUALITY DEGRADATION - Concentration of salts or other chemicals																			X											
8. EXCESS WATER - Ponding, flooding, high water table, seeps, drifted snow	X																													
9. INSUFFICIENT WATER - Inefficient moisture management	X													X		X														
10. INSUFFICIENT WATER - Inefficient use of irrigation water		X																												
11. WATER QUALITY DEGRADATION - Excess nutrients	X		X	X							X		X																	
12. WATER QUALITY DEGRADATION - Pesticides in surface and	X																													X
13. WATER QUALITY DEGRADATION - Pathogens, manure, biosolids or compost	X		X	X																										
14. WATER QUALITY DEGRADATION - Excessive salts, surface/groundwater	X																													
15. WATER QUALITY DEGRADATION - Petroleum, heavy metals, other pollutants	X																													
16. WATER QUALITY DEGRADATION - Excessive sediment in surface waters	X														X	X	X			X		X	X						X	
17. WATER QUALITY DEGRADATION - Elevated water temperature	X														X								X							
18. DEGRADED PLANT CONDITION - Undesirable plant productivity and health	X				X			X						X		X		X												
19. DEGRADED PLANT CONDITION - Inadequate structure/composition						X		X								X		X												
20. DEGRADED PLANT CONDITION - Excessive plant pest pressure	X							X						X		X														
21. DEGRADED PLANT CONDITION - Wildfire hazard, excessive biomass accumulation	X							X																						
22. INADEQUATE HABITAT FOR FISH AND WILDLIFE - Habitat degradation															X						X	X								
23. LIVESTOCK PRODUCTION LIMITATION - Inadequate	X								X																					
24. LIVESTOCK PRODUCTION LIMITATION - Inadequate shelter	X																													
25. LIVESTOCK PRODUCTION LIMITATION - Inadequate water	X																									X	X			
26. INEFFICIENT ENERGY USE - Equipment and facilities	X										X													X						
27. INEFFICIENT ENERGY USE - Farming / ranching practices and field operations	X										X													X						
28. AIR QUALITY IMPACTS - Emissions of particulate matter (PM) and PM precursors	X									X																				
29. AIR QUALITY IMPACTS - Emissions of greenhouse gasses (GHGs)	X									X																				
30. AIR QUALITY IMPACTS - Emissions of ozone precursors	X									X																				
31. AIR QUALITY IMPACTS - Objectionable odors	X									X																				