Lotic Ecological State Documentation FormSite DescriptionPage 1									Page 1
General Information	Observer	Date	e Feature Name/ID			Reach Ranch/All Code/ID Code,			Pasture Code/ID
Information									
	Feature	Flow ¹			(Chec	Substrate ⁶ (Check if present; rank in ord dominance)		Surrounding Topography ¹	
			ermittent		🗆 Sa	□ Silt □ Sand		□ Canyon □ Broad Valley ² □ Narrow Valley ²	
Reach Description		predomi	Is the system predominately sprin		ng-fed? Gravel			□ Other	
	To the second bases				Bedrock		Claure1		
	Evidence of beave		Flow regulation fea						
Comment and	Active Past		□ Other □ None □		Jnknow	Jnknown		2-4% □ >4%	
Current and recent past	Complete in advance based on conversations with the land manager. Livestock class, timing, duration, utilization, rotation, and season of use:							ning, duration,	
grazing regime:									
Assessment									
Reach & Survey Area									
Justification									
Miles	Reach Miles:					eyed Mi	es:		
Vegetation (Immediately	Native Woody	-	Native Herbaceous Riparian Species ⁷ (e.g., sedges & rushes)		Pseudo-riparian Species (e.g., reed canary grass)		Upland ³ species (e.g., sagebrush, juniper, red-top, Kentucky bluegrass)		Other Invasive
adjacent to channel)	Riparian Species								weeds upland and riparian)
Check one for each vegetation group	Abundant Common Trace Not present Not expected ⁴	Abunda Commo	Abundant Abundant Common Common		ion 🗆 C		☐ Abundant ☐ Common ☐ Trace ☐ Not present] Abundant] Common] Trace] Not present
Record									
dominant streamside									
species									
Bare Ground	Are large areas of	bare ground	present?	ı.	□ Ye	s 🗆 No)		
Photo Point Location(s)	Datum:								
Native, feral,	If woody species are	present, is the	ere evidence	of over			proper grazing	-	
or domestic ungulate use						lates, e.g., bank/vegetation trampling and shearing?			
	Dam failure Improper irrigation management Recreation								
Foreseeable Risk Factors ⁵	 Degraded uplands (juniper/IAGs) Drought Free-roaming hors 	ical channe ngulates							
Footnotes	 □ Free-roaming horses/burros □ Plant disease □ Other								

Lotic Ecologica	al State Documenta	ation Form	Determine ecostate and assess apparent trend Page 2
Factors to consider while determining	1. Evidence of incision	□ Positive	 Streambanks⁸ are low-angled so stream can dissipate energy (during high flows) across the floodplain⁹ by spreading beyond its banks No headcut(s) present in channel or headcut migration has ceased due to bedrock or another stable feature Obligate riparian vegetation extends beyond the streambank indicating water table is within 30 cm of the ground surface
ecostate and apparent trend		□ Negative	 Active headcut(s) present in channel (if present, channel is or will soon be incised) Streambanks are steep or vertical (e.g., driving a vehicle across would be difficult) causing stream energy (during high flows) to be confined within the channel Reduced water table (at base flow) that may be causing: Native obligate riparian vegetation primarily present directly adjacent to the stream Native riparian vegetation beyond the streambank appears to be stressed (e.g., browning, curling stems, reduced flowering) Only facultative herbaceous riparian species (e.g., Baltic rush, scouring rush [equisetum spp.]) present beyond the streambanks
		□ Inconclusive	Indicators above are inconclusive
	Justification/ observations:		
	2. Streambank stability	D Positive	 Streambanks have minimal or no signs of erosion (slumping, sloughing, or fracturing), <i>specifically in channel segments between meander bends</i> Ground cover along streambank is predominately stabilizing native riparian species
		□ Negative	 Streambanks are eroding in the <i>channel segments between meander bends</i> (bank slumping, shearing, or sloughing, where sections of the bank separate, topple and/or slide into the stream) Evidence of bank fractures, deep lateral cracks in the soil near the stream edge Excessive bare ground observed Ground cover along streambank is dominated by upland species Large amounts of exposed roots (especially herbaceous) evident along banks in areas other than the outside bends (where erosion is expected)
		□ Inconclusive	□ Indicators above are inconclusive
	Justification/ observations:		
	3. Evidence of regular overbank flow at least twice every three years.	□ Positive	 Fresh deposits of fine sediments on the floodplain Vegetation matted down or lying flat from overbank flow or by deposition of sediment Recent flow debris piled up on upstream side of trees, shrubs, or fences (e.g., fine debris like algae, leaves, grasses versus coarse materials like sticks and branches that may persist >1 year following an outlier flood event)
		□ Negative	□ Lack of or very few of the indicators mentioned above (e.g., no flow debris present or the only flow debris present are coarse materials or debris found several feet above the ground (indicating rare and/or extreme flood events)
		Inconclusive	Indicators above are inconclusive
	Justification/ observations:		

Lotic Ecologica	al State Document	ation Form	Determine ecostate and assess apparent trend Page 3
	4. Evidence of recruitment of	D Positive	☐ Multiple age classes of woody riparian species: sapling, young, and mature plants of the same species
Factors to consider while determining Ecostate and Apparent Trend	young and sapling woody riparian species	□ Negative □ Inconclusive	 Mature woody riparian species kept at or below browse height or in a mushroom shape if mature woody riparian species are taller than browse height No evidence of recruitment (young, e.g., small plants with small diameter stems) Evidence of excessive browsing by ungulates (native/non-native) Woody riparian vegetation not expected in the system Indicators above are inconclusive
	Justification/ observations:		
	5. Presence of multiple species of native riparian vegetation	D Positive	Multiple native riparian species (herbaceous and/or woody) present (not including those only occurring in trace amounts)
		□ Negative	 Less than 3 native riparian species present in greater than trace amounts Lack of woody vegetation where it should be present (e.g., known to occur elsewhere in the system)
	Justification/ observations:		
	6. Native riparian vegetation expansion and ratio to stream width	D Positive	 Dying or decline in upland species in or adjacent to the riparian zone¹⁰ Evidence of new native riparian growth along the upland edges of the riparian zone¹⁰ (e.g., young willow shoots emerging within upland species community) or growing into the water's edge
		□ Negative	 Upland vegetation is established near the streambanks and shows vigor Upland vegetation recruitment is occurring (e.g., small sagebrush in the riparian zone¹⁰) Stream channel is wider than adjacent riparian zone
		□ Inconclusive	Indicators above are inconclusive
	Justification/ observations:		
	7. Point bar formation and vegetation	D Positive	 Point bar formation is occurring on the inside of meander bends Point bar profiles gently slope downward from floodplain toward stream center, with increasing riparian vegetation cover outward from water line Establishment of riparian vegetation in recent deposits on the point bar
		□ Negative	 Lack of indicators mentioned above Presence of midchannel sediment deposits (e.g., large piles suffocating vegetation) If point bars are present, they are steeply inclined, suggesting erosion Presence of upland species on point bars
	Justification/ observations:		

Threats 6 with special focus on: and 7 with special focus on: Based on Dominance by pseudoriparian species Lowered water table Excessive bare ground Ecostate (check one) Headcut(s) present Functional Channel Degraded Vegetation Impaired Impaired Functional Recovering	Lotic Ecological State Documentation Form				Determine ecostate and assess apparent trend Page 4					
Ecostate Ecostate (check one) Functional Channel Impaired Degraded Vegetation Impaired Recovering Functional (historically incised) Observed Apparent Trend • Cansider Factors 1-7 above • Place a mark on the scale below relative to your apparent trend determinationOR • Check not apparent or stable boxes, if applicable Upward Downward • Observed apparent • Stable Vegetation and Rationale Support your observed apparent trend. (Explain what you saw during site visit that informer apparent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Potential Conservation Measures Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos	Threats Based on factors/visual	Consider "negative" 6 with special focus Dominance by Excessive bare	2, 4, 5, and Consider "negative" boxes checked for Factors 1, 2, 3, 6 and 7 with special focus on: Lowered water table Lack of access to floodplain							
Ecostate Functional Channel Impaired Degraded Vegetation Impaired Recovering Recovering Impaired Observed Apparent Trend Consider Factors 1-7 above Place a mark on the scale below relative to your apparent trend determinationOR Check not apparent or stable boxes, if applicable Downward Downward Check not apparent or stable boxes, if applicable Upward Downward Stable Observed Apparent Trend and Rationale Support your observed apparent trend. (Explain what you saw during site visit that informe apparent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Potential Conservation Measures Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos										
Observed Apparent Trend and Rationale Rationale Support your observed apparent trend. (Explain what you saw during site visit that informed opporent trend; as applicable. Dotential Conservation Support your observed apparent trend. (Explain what you saw during site visit that informed opporent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos	Ecostate		Channel			Vegetation	Recovering Functional (historically			
Strong moderate weak weak moderate strong Observed Apparent Trend and Rationale Support your observed apparent trend. (Explain what you saw during site visit that informed apparent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Rationale Rationale Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Potential Conservation Measures Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos		Observed Apparent Trend • Consider Factors 1-7 above • Place a mark on the scale below relative to your apparent trend determinationOR • Check not apparent or stable boxes, if applicable								
Observed Apparent Trend and Rationale Support your observed apparent trend. (Explain what you saw during site visit that informed apparent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Rationale Rationale Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Potential Conservation Measures Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos							Jownward			
Observed Apparent Trend and Rationale Support your observed apparent trend. (Explain what you saw during site visit that informed apparent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Rationale Rationale Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Potential Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos		strong	moderate weak			weak modera	te strong			
Apparent Trend and Rationale Support your observed apparent trend. (Explain what you saw during site visit that informed apparent trend; as applicable, discuss anticipated status/progression of stream condition, e. early/late impairment or recovery.) Rationale Rationale Based on the risk factors and threats observed, what are your recommendations to maintain or improve the site with what urgency? (e.g., address headcut, trespass grazing—high urgency; improve upland conditions – lower urgency) Potential Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos			🗆 Not a	pparent	[□ Stable				
Potential Conservation Measures Additional notes on landscape context, local management, flow regulation features, other concerns beyond thos	Apparent Trend and	Rationale	apparent trend; as applica early/late impairment or r	ble, discuss a ecovery.)	nticipated	status/progression of s	tream condition, e.g.,			
	Conservation	with what urgency?								
					flow regula	ition features, other co	ncerns beyond those			
Additional Notes			ited, notewortny Observatio							