

Sprague River Subbasin Conservation Activities for Irrigated Pasture and Hayland

Current Conditions

Total Irrigated Pasture/Hayland
 Typical Management Unit/Ownership
 Total Flood Irrigated Pasture/Hayland
 Total Sprinkler Irrigated Pasture/Hayland
 Total Sub Irrigated Pasture/Hayland
 Existing Diversion (OWRD)

	Total acres	Riparian/ Wetland Potential
Total Irrigated Pasture/Hayland	66,650	4,822
Typical Management Unit/Ownership	500	40
Total Flood Irrigated Pasture/Hayland	42,614	4,398
Total Sprinkler Irrigated Pasture/Hayland	15,307	215
Total Sub Irrigated Pasture/Hayland	8,729	209
Existing Diversion (OWRD)	140	

Current Conditions for Irrigated Pasture and Hayland

Irrigated Pasture & Hayland		Quantity		Costs		Effects				Implementation			
	Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Demand	Water Storage	Fish Habitat	WQ	EQIP	WHIP	CREP	Other
BM1	Flood Irrigation	Ac.	42,614			-3	-/+	-2	-3				
	Diversion - pump, well or gravity	ea.	170		\$221,593								
	Delivery System ditch	ft.	852,280		\$1,705								
	Fence-Boundary	mi.	341		\$40,909								
BM2	Sprinkler Irrigation	Ac.	15,307			+1	0	-1	+1				
	Diversion - pump	ea.	61		\$220,421								
	Delivery System - Pipeline	ft.	153,070		\$30,614								
	Irrigation System - Sprinkler	no.	61		\$79,351								
	Fence-Boundary	mi.	122		\$14,695								
BM3	Sub Irrigated Wet Meadow	Ac.	8,729			0	0	-/+	-/+				
	Sub Irrigated Wet Meadow	Ac.	8,729		\$0								
	Fence-Boundary	mi.	70		\$8,380								

Desire/Estimated Participation Rates

Proposed Practice Changes	Rate	Acres	Proposed Practice Changes	Rate	Acres
Flood BM1 to Flood RMS1	45%	18,068	Flood BM1 to Riparian Pasture RMS4	56%	2,463
Flood BM1 to Sprinkler RMS2	11%	4,417	Sprinkler BM2 to Riparian Pasture RMS4	56%	120
Sprinkler BM2 to Sprinkler RMS2	56%	8,504	Sub Irrig BM3 to Riparian Pasture RMS4	56%	117
Sub Irrig BM3 to Sub Irrig RMS3	56%	4,823			

Future Conditions	Total	BM	RMS
Total Flood Irrigated Pasture/Hayland	35,734	17,666	18,068
Total Sprinkler Irrigated Pasture/Hayland	19,603	6,682	12,921
Total Sub Irrigated Pasture/Hayland	8,612	3,789	4,823
Total Conversion to Riparian Pasture RMS	2,700	0	2,700
Total Acres	66,650	28,138	38,512

Future Conditions for Irrigated Pasture and Hayland													
Irrigated Pasture & Hayland		Quantity		Costs		Effects				Implementation			
	Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Demand	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
BM1	Flood Irrigation	Ac.	17,666			-3	-/+	-2	-3				
	Diversion - pump,well or gravity	ea.	71		\$91,866								
	Delivery System ditch	ft.	353,330		\$707								
	Fence-Boundary	mi.	141		\$16,960								
BM2	Sprinkler Irrigation	Ac.	6,682			+1	0	-1	+1				
	Diversion - pump	ea.	27		\$96,222								
	Delivery System - Pipeline	ft.	66,821		\$13,364								
	Irrigation System - Sprinkler	no.	27		\$34,640								
	Fence-Boundary	mi.	53		\$6,415								
BM3	Sub Irrigated Wet Meadow	Ac.	3,789			0	0	+1	+1				
	Sub Irrigated Wet Meadow	Ac.	3,789		\$0								
	Fence-Boundary	mi.	30		\$3,638								
RMS1	Flood Irrigation	ac.	18,068			+2	+1	+2	+2				
	Screened Diversion	ea.	36	\$1,843,843	\$216,816					X	X		X
	Delivery System - Pipeline	ft.	18,068	\$180,680	\$3,614					X			
	Land Leveling/Smoothing	%/ac.	7,227	\$1,987,480	\$99,374					X			
	Irrigation Water Management	%/ac.	18,068	\$0	\$90,340					X			
	Tailwater Recovery	ea.	72	\$578,176	\$17,345					X			
	Pasture & Hayland Planting	%/ac.	10,841	\$325,224	\$16,261					X			
	Heavy Use Area	ac.	361	\$1,445,440	\$43,363					X			
	Pest Management	%/ac.	18,068	\$0	\$28,909					X			
	Nutrient Management	%/ac.	18,068	\$0	\$36,136					X			
	Prescribed Grazing	%/ac.	16,261	\$0	\$97,567					X			
	Forage Harvest Management	%/ac.	7,227	\$0	\$14,454					X			
	Livestock Watering System	ea	36	\$180,680	\$3,614					X			
	Fence - Cross	mi.	108	\$650,448	\$13,009					X			
	Fence-Boundary	mi.	145	\$0	\$17,345					X			

Future Conditions for Irrigated Pasture and Hayland													
Irrigated Pasture & Hayland		Quantity		Costs		Effects				Implementation			
	Practices	Unit	Quantity	Additional Investment Cost	Annual O&M and Mngt. Cost	Water Demand	Water Storage	Habitat	WQ	EQIP	WHIP	CREP	Other
RMS2	Sprinkler Irrigated		12,921			+3	+1	+2	+2				
	Screened Diversion	ea.	26	\$1,395,286	\$155,053					X	X		X
	Delivery System -pipeline	ft.	129,211	\$429,622	\$25,842					X			
	Irrigation system-wheel line-1/2 n	no.	155	\$5,543,641	\$200,949					X			
	Irrigation Water Management	%	12,921	\$0.00	\$64,606					X			
	Land Smoothing	%	5,168	\$516,845	\$25,842					X			
	Pasture & Hayland Planting	%	7,753	\$232,580	\$2,326					X			
	Heavy Use Area	ac.	258	\$1,033,690	\$20,674					X			
	Pest Management	%	12,921	\$0	\$20,674					X			
	Nutrient Management	%	5,168	\$0	\$10,337					X			
	Prescribed Grazing	%	11,629	\$0	\$69,774					X			
	Forage Harvest Management	%	5,168	\$0	\$10,337					X			
	Livestock Watering System	ea	26	\$129,211	\$2,584					X			
	Fence - Cross	mi.	78	\$465,160	\$9,303					X			
	Fence-Boundary	mi.	103	\$206,219	\$12,404					X			
RMS3	Sub irrigated Wet Meadows		4,823			0	+1	+1	+1				
	Pasture & Hayland Planting	%	1,929	\$57,872	\$579					X			
	Heavy Use Area	ac	96	\$385,816	\$7,716					X			
	Pest Management	%	4,823	\$0	\$7,716					X			
	Nutrient Management	%	4,823	\$0	\$9,645					X			
	Prescribed Grazing	%	4,823	\$0	\$28,936					X			
	Forage Harvest Management	%	1,929	\$0	\$3,858					X			
	Livestock Watering System	ea	10	\$48,227	\$965					X			
	Fence - Cross	mi.	29	\$173,617	\$3,472					X			
	Fence-Boundary	mi.	39	\$0	\$4,630					X			
RMS4	Riparian Pastures		2,700			+1	+1	+3	+3				
	Livestock Rest/Exclusion	ac	135	\$0	\$29,704					X	X	X	X
	Riparian herbaceous cover	mi.	68	\$1,350,160	\$27,003					X	X	X	X
	Pasture & Hayland Planting	%	1,080	\$32,404	\$324					X			
	Pest Management	%	2,700	\$0	\$4,321					X			
	Nutrient Management	%	2,700	\$0	\$5,401					X			
	Prescribed Grazing	%	2,700	\$0	\$16,202					X			
	Forage Harvest Management	%	1,080	\$0	\$2,160					X			
	Livestock Watering System	ea	5	\$27,003	\$540					X		X	X
	Fence - Temporary	ft	27,003	\$31,054	\$621					X	X	X	X
	Fence - Cross	ft	13,502	\$15,527	\$311					X		X	
Total RMS Costs				\$19,265,906	\$1,482,957								

Potential RMS Effects Summary for Irrigated Hay and Pasture

Cost Items and Programs	Costs	O&M Costs
Non Farm Bill Programs		
Fish Screen Costs (100% CS)	\$3,239,129	\$371,869
Potential Farm Bill Programs		
Annual Management Incentives (3 yrs - Incentive Payments)		\$546,756
Operator Investment (25% Cost Share)	\$4,006,694	
Federal Costs (75% Cost Share)	\$12,020,082	
Total RMS Costs	\$19,265,906	\$1,482,957
Estimated Level of Participation	56%	
Total Acres in RMS System	38,512	
Total Acre Feet of Water Saved Annually	52,537	
Total Annual Forage Production Benefits	\$2,945,000	
Total Annual Pumping Cost Savings @ 0.7cents KWH	\$140,321	
Total Annual Pumping Cost Savings @ 7cents KWH	\$865,326	
Increases infiltration and storage of water in soil profile		
Participating landowners will be in compliance with SB1010 and TMDL		
Improves riparian habitat for ESA endangered suckers & threatened bull trout		
Improves flow and water quality to Upper Klamath Lake		