

Table 1. *Proposed* staged implementation goals and costs of agricultural BMPs by stage for Pigg River.

Assumes one exclusion system averages 2,000 linear feet of stream fencing.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Livestock stream Exclusion	Stream Exclusion with Narrow Width Buffer and Grazing Land Management	SL-6N	system (feet)	\$60,000	1 (2,000)	\$60,000	0	\$0	1 (2,000)	\$60,000
	Stream Exclusion with Wide Width Buffer and Grazing Land Management	SL-6W, SL-6F		\$95,000	4 (8,000)	\$380,000	4 (8,000)	\$380,000	8	\$760,000
	Stream Exclusion with tree planting - CREP	CREP		\$100,000	1 (2,000)	\$100,000	0	\$0	1 (2,000)	\$100,000
	Exclusion fence maintenance (10 yrs)	CCI-SE-1, CCI-SL-6N-CCI-SL-6W	feet	\$5.50	821	\$4,516	821	\$4,516	1642	\$9,032
Pasture	Extension of watering system	SL-7	system (acres)	\$13,000	1 (40)	\$13,000	1 (40)	\$13,000	2 (80)	\$26,000
	Pasture management	NRCS-CSP, SL-10	acres	\$150	173	\$25,950	389	\$58,350	562	\$84,300
	Afforestation of erodible pasture	FR-1		\$3,000	0	\$0	42	\$126,000	42	\$126,000
	Permanent vegetation on critical areas	SL-11		\$2,000	0	\$0	0.86	\$1,720	0.86	\$1,720
	Sediment retention, erosion or water control structure	WP-1	acres treated	\$4,000	0	\$0	0	\$0	0	\$0
Cropland	Continuous no till	SL-15A	acres	\$100	0	\$0	176	\$17,600	176	\$17,600
	Cover crops	SL-8B, SL-8H, SL-8M		\$75	0	\$0	176	\$13,200	176	\$13,200
	Conversion from high till to low till	N/A		\$80	0	\$0	0	\$0	0	\$0
	Long term vegetation on cropland	SL-1		\$500	0	\$0	25	\$12,500	25	\$12,500
Hayland	Forest riparian buffers	DOF-RT, FR-3	acres	\$2,000	0	\$0	29	\$58,000	29	\$58,000
	Afforestation of haylands	FR-1		\$3,000	0	\$0	0.6	\$1,800	0.6	\$1,800
TOTAL ESTIMATED COST						\$585,466		\$673,686		\$1,259,152

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 2. *Proposed* staged implementation goals and costs of urban and residential BMPs by stage for Pigg River.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Residential stormwater	Erosion & sediment controls on transitional areas	N/A	acres treated	\$500	4	\$2,000	0	\$0	4	\$2,000
	Raingardens	RG	system	\$3,000	0	\$0	1	\$3,000	1	\$3,000
	Forest riparian buffers	N/A	acres	\$1,750	0	\$0	0	\$0	0	\$0
TOTAL ESTIMATED COST						\$2,000		\$3,000		\$5,000

Table 3. *Proposed* staged implementation goals and costs of streambank restoration BMPs by stage for Pigg River.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Streambank	Streambank stabilization	WP-2A	feet	\$750	650	\$487,500	0	\$0	650	\$487,500
TOTAL ESTIMATED COST						\$487,500		\$0		\$487,500

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 4. *Proposed* staged implementation goals and costs of agricultural BMPs by stage for Poplar Branch.

Assumes one exclusion system averages 2,000 linear feet of stream fencing.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Livestock stream Exclusion	Stream Exclusion with Narrow Width Buffer and Grazing Land Management	SL-6N	system (feet)	\$60,000	0	\$0	0	\$0	0	\$0
	Stream Exclusion with Wide Width Buffer and Grazing Land Management	SL-6W, SL-6F		\$95,000	1 (2,000)	\$95,000	0	\$0	1 (2,000)	\$95,000
	Stream Exclusion with tree planting - CREP	CREP		\$100,000	0	\$0	0	\$0	0	\$0
	Exclusion fence maintenance (10 yrs)	CCI-SE-1, CCI-SL-6N-CCI-SL-6W	feet	\$5	22	\$121	22	\$121	44	\$242
Pasture	Extension of watering system	SL-7	system (acres)	\$13,000	1 (40)	\$13,000	1 (40)	\$13,000	2 (80)	\$26,000
	Pasture management	NRCS-CSP, SL-10	acres	\$150	28	\$4,200	32	\$4,800	60	\$9,000
	Afforestation of erodible pasture	FR-1		\$3,000	4	\$12,000	7	\$21,000	11	\$33,000
	Permanent vegetation on critical areas	SL-11		\$2,000	0.07	\$140	0.07	\$140	0.14	\$280
	Sediment retention, erosion or water control structure	WP-1		acres treated	\$4,000	0	\$0	25	\$100,000	0
Cropland	Forest riparian buffers	DOF-RT, FR-3	acres	\$2,000	6	\$12,000	13	\$26,000	19	\$38,000
	Continuous no-till	SL-15A		\$100	10	\$1,000	14	\$1,400	24	\$2,400
	Cover crops	SL-8B, SL-8H, SL-8M		\$75	10	\$750	14	\$1,050	24	\$1,800
	Conversion from high till to low till	N/A		\$80	5	\$400	0	\$0	5	\$400
	Long term vegetation on cropland	SL-1		\$500	2	\$1,000	0	\$0	2	\$1,000
Hayland	Forest riparian buffers	DOF-RT, FR-3	acres	\$2,000	6	\$12,000	13	\$26,000	19	\$38,000
	Afforestation of haylands	FR-1		\$3,000	0.1	\$300	0.1	\$300	0.2	\$600
TOTAL ESTIMATED COST						\$151,911		\$193,811		\$345,722

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 5. *Proposed* staged implementation goals and costs of urban and residential BMPs by stage for Poplar Branch

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Residential stormwater	Erosion & sediment controls on transitional areas	N/A	acres treated	\$500	0	\$0	0	\$0	0	\$0
	Rain gardens	RG	system	\$3,000	0	\$0	1	\$3,000	1	\$3,000
	Forest riparian buffers	N/A	acres	\$1,750	0	\$0	0	\$0	0	\$0
TOTAL ESTIMATED COST						\$0		\$3,000		\$3,000

Table 6. *Proposed* staged implementation goals and costs of streambank restoration BMPs by stage for Poplar Branch.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Streambank	Streambank stabilization	WP-2A	feet	\$750	0	\$0	0	\$0	0	\$0
TOTAL ESTIMATED COST						\$0		\$0		\$0

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 7. *Proposed* staged implementation goals and costs of agricultural BMPs by stage for Fryingspan Creek.

Assumes one exclusion system averages 2,000 linear feet of stream fencing.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Livestock stream Exclusion	Stream Exclusion with Narrow Width Buffer and Grazing Land Management	SL-6N	system (feet)	\$60,000	0 (0)	\$0	0 (0)	\$0	0 (0)	\$0
	Stream Exclusion with Wide Width Buffer and Grazing Land Management	SL-6W, SL-6F		\$95,000	0 (0)	\$0	0 (0)	\$0	0 (0)	\$0
	Stream Exclusion with tree planting - CREP	CREP		\$100,000	0 (0)	\$0	0 (0)	\$0	0 (0)	\$0
	Exclusion fence maintenance (10 yrs)	CCI-SE-1, CCI-SL-6N-CCI-SL-6W	feet	\$5.50	228	\$1,254	228	\$1,254	456	\$2,508
Pasture	Extension of watering system	SL-7	system (acres)	\$13,000	1 (40)	\$13,000	1 (40)	\$13,000	2 (80)	\$26,000
	Pasture management	NRCS-CSP, SL-10	acres	\$150	144	\$21,600	162	\$24,300	306	\$45,900
	Afforestation of erodible pasture	FR-1		\$3,000	32	\$96,000	32	\$96,000	64	\$192,000
	Permanent vegetation on critical areas	SL-11		\$2,000	0.36	\$720	0.36	\$720	0.72	\$1,440
	Sediment retention, erosion or water control structure	WP-1		acres treated	\$4,000	0	\$0	240	\$960,000	240
Cropland	Continuous no till	SL-15A	acres	\$100	0	\$0	57	\$5,700	57	\$5,700
	Cover crops	SL-8B, SL-8H, SL-8M		\$75	26	\$1,950	31	\$2,325	57	\$4,275
	Conversion from high till to low till	N/A		\$80	84	\$6,720	44	\$3,520	128	\$10,240
	Long term vegetation on cropland	SL-1		\$500	1	\$500	1	\$500	2	\$1,000
Hayland	Forest riparian buffers	DOF-RT, FR-3	acres	\$2,000	0	\$0	0	\$0	0	\$0
	Afforestation of haylands	FR-1		\$3,000	0	\$0	0	\$0	0	\$0
TOTAL ESTIMATED COST						\$141,744		\$1,107,319		\$1,245,115

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 8. *Proposed* staged implementation goals and costs of urban and residential BMPs by stage for Fryingspan Creek.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Residential stormwater	Erosion & sediment controls on transitional areas	N/A	acres treated	\$500	6 (2,000)	\$3,000	0 (0)	\$0	6 (2,000)	\$3,000
	Rain gardens	RG	system	\$3,000	0	\$0	3	\$9,000	3	\$9,000
	Forest riparian buffers	N/A	acres	\$1,750	0.1	\$175	0	\$0	0.1	\$175
TOTAL ESTIMATED COST						\$3,175		\$9,000		\$12,175

Table 9. *Proposed* staged implementation goals and costs of streambank restoration BMPs by stage for Fryingspan Creek.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Streambank	Streambank stabilization	WP-2A	feet	\$750	0	\$0	35	\$26,250	35	\$26,250
TOTAL ESTIMATED COST						\$0		\$26,500		\$26,250

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 10. *Proposed* staged implementation goals and costs of agricultural BMPs by stage for Beaverdam Creek.

Assumes one exclusion system averages 2,000 linear feet of stream fencing.

Note: Cropland practices are not needed. There are less than 30 acres of cropland in the watershed.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Livestock stream Exclusion	Stream Exclusion with Narrow Width Buffer and Grazing Land Management	SL-6N	system (feet)	\$60,000	1 (2,000)	\$60,000	1 (2,000)	\$60,000	2 (4,000)	\$120,000
	Stream Exclusion with Wide Width Buffer and Grazing Land Management	SL-6W, SL-6F		\$95,000	18 (36,000)	\$1,710,000	18 (36,000)	\$1,710,000	36 (72,000)	\$3,420,000
	Stream Exclusion with tree planting - CREP	CREP		\$100,000	1 (2,000)	\$100,000	1	\$100,000	2 (4,000)	\$200,000
	Exclusion fence maintenance (10yrs)	CCI-SE-1, CCI-SL-6N- CCI-SL-6W	feet	\$5.50	4,029	\$22,160	4,029	\$22,160	8,058	\$44,320
Pasture	Extension of watering system	SL-7	system (acres)	\$13,000	1 (40)	\$13,000	1 (40)	\$13,000	2 (80)	\$26,000
	Pasture management	NRCS-CSP, SL-10	acres	\$150	813	\$121,950	624	\$93,600	562	\$84,300
	Afforestation of erodible pasture	FR-1		\$3,000	122	\$366,000	653	\$1,959,000	775	\$2,325,000
	Permanent vegetation on critical areas	SL-11		\$2,000	7	\$14,000	7	\$14,000	14	\$28,000
	Animal waste control facility (beef)	WP-4		system	\$100,000	1	\$100,000	1	\$100,000	2
	Barnyard runoff management	WQ-12		\$1,200	20	\$24,000	197	\$236,400	117	\$260,400
	Sediment retention, erosion, or water control structure	WP-1	acres treated	\$4,000	0	\$0	180	\$720,000	180	\$720,000
Hayland	Forest riparian buffers	DOF-RT, FR-3	acres	\$2,000	0	\$0	36	\$72,000	36	\$72,000
	Afforestation of haylands	FR-1		\$3,000	0	\$0	0	\$0	0	\$0
TOTAL ESTIMATED COST						\$2,431,110		\$5,000,160		\$7,255,700

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 11. *Proposed* staged implementation goals and costs of urban and residential BMPs by stage for Beaverdam Creek.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Residential stormwater	Erosion & sediment controls on transitional areas	N/A	acres treated	\$500	0	\$0	0	\$0	0	\$0
	Rain gardens	RG	system	\$3,000	0	\$0	1	\$3,000	1	\$3,000
	Forest riparian buffers	N/A	acres	\$1,750	2	\$3,500	2	\$3,500	4	\$7,000
TOTAL ESTIMATED COST						\$3,500		\$6,500		\$10,000

Table 12. *Proposed* staged implementation goals and costs of streambank restoration BMPs by stage for Beaverdam Creek.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Streambank	Streambank stabilization	WP-2A	feet	\$750	1210	\$907,500	0	\$0	1210	\$907,500
TOTAL ESTIMATED COST						\$907,500		\$0		\$907,500

Sediment reduction goals will be met with Stage 1 and Stage 2 practices.

Table 13. *Proposed* staged implementation goals and costs of septic BMPs by stage for Beaverdam Creek.

BMP Type	Practice	Cost share code	Units	Unit cost	Stage 1		Stage 2		TOTAL	
					Number	Cost	Number	Cost	Number	Cost
Septic	Onsite sewage system repair w/ permit	RB-3	repair	\$7,500	17	\$127,500	16	\$120,000	33	\$247,500
	Full inspection and non-permitted onsite sewage system repair	RB-3M		\$4,875	17	\$82,875	16	\$78,000	33	\$160,875
	Onsite sewage system installation/replacement	RB-4	system	\$12,500	18	\$225,000	17	\$212,500	35	\$437,500
	Onsite sewage system installation.replacement w/pump	RB-4P		\$16,500	18	\$297,000	17	\$280,500	35	\$577,500
	Alternative sewage system	RB-5		\$31,500	19	\$598,500	19	\$598,500	38	\$1,197,000
	Septic tank pump-out	RB-1	pump-out	\$450	278	\$125,100	277	\$124,650	555	\$249,750
TOTAL ESTIMATED COST						\$1,455,975		\$1,414,150		\$2,870,125

Table 14. *Proposed* Overall Summary for BMP implementation costs by stage in all watersheds.

Watershed	Agricultural BMPs		Residential BMPs		Streambank BMPs		Septic BMPs		Costs		
	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2	Stage 1	Stage 2	Total
Pigg River	\$583,466	\$686,686	\$2,000	\$3,000	\$487,500	\$0	-	-	\$1,072,966	\$689,686	\$1,762,652
Poplar Branch	\$151,911	\$193,811	\$0	\$3,000	\$0	\$0	-	-	\$151,911	\$196,811	\$348,722
Fryingpan Creek	\$141,744	\$1,107,319	\$3,175	\$9,000	\$0	\$26,250	-	-	\$144,919	\$1,142,569	\$1,287,488
Beaverdam Creek	\$2,531,110	\$5,400,160	\$3,500	\$6,500	\$907,500	\$0	\$1,455,975	\$1,414,150	\$4,898,085	\$6,820,810	\$11,718,895
Total Estimated Cost	\$3,408,231	\$7,387,976	\$8,675	\$21,500	\$1,395,000	\$26,250	\$1,455,975	\$1,414,150	\$6,267,881	\$8,849,876	\$15,117,757