

**ADVERSE IMPACT
FACTORS FOR RIVERINE SYSTEMS WORKSHEET**

Stream Type Impacted	Ephemeral 0.1			Intermittent 0.4			Perennial-OHWM width		
	<15'	15'-30'	>30'						
Priority Area	Tertiary 0.1			Secondary 0.4			Primary 0.8		
Existing Condition	Functionally Impaired 0.1			Moderately Functional 0.8			Fully Functional 1.6		
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.3		
Activity	Clearing 0.05	Utility Crossing/Bridge Footing 0.15	Below Grade Culvert 0.3	Armor 0.5	Detention 0.75	Morphologic Change 1.5	Impoundment (dam) 2.0	Pipe >100' 2.2	Fill 2.5
Cumulative Linear Impact	<100' 0	100'-200' 0.05	201-500' 0.1	501-1000' 0.2	>1000 linear feet (LF) 0.1 reach 500 LF of impact (example: scaling factor for 5,280 LF of impacts = 1.1)				

Factor	Dominant Impact Type 1 <i>B10</i>	Dominant Impact Type 2 <i>B10</i>	Dominant Impact Type 3 <i>B11</i>	Dominant Impact Type 4 <i>B11</i>	Dominant Impact Type 5 <i>B12</i>
Stream Type Impacted	Intermittent	Intermittent	Intermittent	Intermittent	Intermittent
Priority Area	Tertiary	Tertiary	Tertiary	Tertiary	Tertiary
Existing Condition	Fully Functional	Fully Functional	Fully Functional	Fully Functional	Fully Functional
Duration	Permanent	0.3	Permanent	Permanent	Permanent
Activity	Pipe >100'	2.5	Pipe > 100'	Fill	Pipe >100'
Cumulative Linear Impact	blank 1.9	blank 1.9	blank 1.9	blank 1.9	blank 1.9
Sum of Factors	M = 6.5	6.8	6.5	6.8	6.5
Linear Feet of Stream Impacted in Reach	LF= 512	98	498	102	510
M X LF	3,328.00	666.4	3237	693.6	3315

Total Mitigation Credits Required = (M X LF) = 11240

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Priority Area	Tertiary 0.1			Secondary 0.4			Primary 0.8		
Existing Condition	Functionally Impaired 0.1			Moderately Functional 0.8			Fully Functional 1.6		
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.3		
Activity	Clearing 0.05	Utility Crossing/Bridge Footing 0.15	Below Grade Culvert 0.3	Armor 0.5	Detention 0.75	Morphologic Change 1.5	Impoundment (dam) 2.0	Pipe >100' 2.2	Fill 2.5
Cumulative Linear Impact	<100' 0	100'-200' 0.05	201-500' 0.1	501-1000' 0.2	>1000 linear feet (LF) 0.1 reach 500 LF of impact (example: scaling factor for 5,280 LF of impacts = 1.1)				

Factor	Dominant Impact Type 1 <i>B12</i>	Dominant Impact Type 2 <i>B13</i>	Dominant Impact Type 3 <i>B13</i>	Dominant Impact Type 4 <i>B14</i>	Dominant Impact Type 5 <i>B15</i>
Stream Type Impacted	Intermittent	Intermittent	Intermittent	Perennial < 15'	Intermittent
Priority Area	Tertiary	Tertiary	Tertiary	Tertiary	Tertiary
Existing Condition	Fully Functional	Fully Functional	Fully Functional	Fully Functional	Fully Functional
Duration	Permanent	0.3	Permanent	Permanent	Permanent
Activity	Fill	Pipe >100'	Fill	Fill	Fill
Cumulative Linear Impact	blank 1.9	blank 1.9	blank 1.9	blank 1.9	blank 1.9
Sum of Factors	M = 6.8	6.5	6.8	6.8	6.8
Linear Feet of Stream Impacted in Reach	LF= 170	574	86	380	2470
M X LF	1,156.00	3731	584.8	2584	16796

Total Mitigation Credits Required = (M X LF) = 24851.8

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Existing Condition	Functionally Impaired 0.1			Moderately Functional 0.8			Fully Functional 1.6		
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.3		
Activity	Clearing 0.05	Utility Crossing/Bridge Footing 0.15	Below Grade Culvert 0.3	Armor 0.5	Detention 0.75	Morphologic Change 1.5	Impoundment (dam) 2.0	Pipe >100' 2.2	Fill 2.5
Cumulative Linear Impact	<100' 0	100'-200' 0.05	201-500' 0.1	501-1000' 0.2	>1000 linear feet (LF) 0.1 reach 500 LF of impact (example: scaling factor for 5,280 LF of impacts = 1.1)				

Factor	Dominant Impact Type 1 <i>B16</i>	Dominant Impact Type 2 <i>B16</i>	Dominant Impact Type 3 <i>B17</i>	Dominant Impact Type 4 <i>B17</i>	Dominant Impact Type 5 <i>B18</i>
Stream Type Impacted	Intermittent	Intermittent	Intermittent	Intermittent	Intermittent
Priority Area	Tertiary	Tertiary	Tertiary	Tertiary	Tertiary
Existing Condition	Fully Functional	Fully Functional	Fully Functional	Fully Functional	Fully Functional
Duration	Permanent	0.3	Permanent	Permanent	Permanent
Activity	Pipe >100'	Fill	Pipe > 100'	Fill	Pipe >100'
Cumulative Linear Impact	blank 1.9	blank 1.9	blank 1.9	blank 1.9	blank 1.9
Sum of Factors	M = 6.5	6.8	6.5	6.8	6.5
Linear Feet of Stream Impacted in Reach	LF= 606	99	616	49	514
M X LF	3,939.00	673.2	4004	333.2	3341

Total Mitigation Credits Required = (M X LF) = 12290.4

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Existing Condition	Functionally Impaired 0.1			Moderately Functional 0.8			Fully Functional 1.6		
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.3		
Activity	Clearing 0.05	Utility Crossing/Bridge Footing 0.15	Below Grade Culvert 0.3	Armor 0.5	Detention 0.75	Morphologic Change 1.5	Impoundment (dam) 2.0	Pipe >100' 2.2	Fill 2.5
Cumulative Linear Impact	<100' 0	100'-200' 0.05	201-500' 0.1	501-1000' 0.2	>1000 linear feet (LF) 0.1 reach 500 LF of impact (example: scaling factor for 5,280 LF of impacts = 1.1)				

Factor	Dominant Impact Type 1 <i>B16</i>	Dominant Impact Type 2 <i>B14</i>	Dominant Impact Type 3 <i>B14</i>	Dominant Impact Type 4 <i>B21</i>	Dominant Impact Type 5 <i>B21</i>
Stream Type Impacted	Intermittent	Intermittent	Intermittent	Intermittent	Intermittent
Priority Area	Tertiary	Tertiary	Tertiary	Tertiary	Tertiary
Existing Condition	Fully Functional	Fully Functional	Fully Functional	Fully Functional	Fully Functional
Duration	Permanent	0.3	Permanent	Permanent	Permanent
Activity	Fill	Pipe >100'	Fill	Pipe >100'	Fill
Cumulative Linear Impact	blank 1.9	blank 1.9	blank 1.9	blank 1.9	blank 1.9
Sum of Factors	M = 6.8	6.5	6.8	6.5	6.8
Linear Feet of Stream Impacted in Reach	LF= 91	526	119	486	774
M X LF	618.80	3419	809.2	3159	5263.2

Total Mitigation Credits Required = (M X LF) = 13269.2