

**Maryland Protocol VSA Data Sheet**

2018 Data Collection

Stream: Madison

MS4: City of Goodlettsville

Team: WKU

\*Smaller Total Reach Scores should be considered first for restoration with possible scores ranging from 23 to 138

**Ranking**

Severity: Severe=1 Minor=5

Correctability, Access, Wetland Potential:1=Best 5=Worst

Unknown/Absent=6

Reach: MadisonReach0001		
Coordinates of Reach:		
Begin: 36.376118° N 86.677752° W		
End: 36.372248° N 86.679357° W		
Parameter	Category	Score
Channel Alteration	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Erosion Sites	Severity	2
	Correctability	4
	Access	2
	<b>Total</b>	<b>8</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Fish Barrier	Severity	5
	Correctability	5
	Access	1
	<b>Total</b>	<b>11</b>
Inadequate Buffer	Severity	4
	Correctability	4
	Access	2
	<b>Total</b>	<b>15</b>
Good=low slope, low bank height	Wetland Potential	5
	<b>Total</b>	<b>15</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>94</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0002		
Coordinates of Reach:		
Begin: 36.372248° N 86.679357° W		
End: 36.368974° N 86.682377° W		
Parameter	Category	Score
Channel Alteration	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Erosion Sites	Severity	4
	Correctability	3
	Access	1
	<b>Total</b>	<b>8</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	5
	Correctability	6
	Access	1
	<b>Total</b>	<b>12</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	3
	Correctability	2
	Access	1
	<b>Total</b>	<b>11</b>
Good=low slope, low bank height	Wetland Potential	5
	<b>Total</b>	<b>11</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>109</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0003		
Coordinates of Reach:		
Begin: 36.368974° N 86.682377° W		
End: 36.364725° N 86.683442° W		
Parameter	Category	Score
Channel Alteration	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Erosion Sites	Severity	4
	Correctability	6
	Access	4
	<b>Total</b>	<b>14</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	5.3
	Correctability	6
	Access	2.7
	<b>Total</b>	<b>14</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	1
	Correctability	4
	Access	3
	<b>Total</b>	<b>14</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>14</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>120</b>
Unusual Conditions/Comments:		
Driveway 4wheel Activity 36.36707° N 86.68248° W Does not show a sign of affecting the stream		

Reach: MadisonReach0004		
Coordinates of Reach:		
Begin: 36.364725° N, 86.683442° W		
End: 36.360581° N, 86.684407° W		
Parameter	Category	Score
Channel Alteration	Severity	1
	Correctability	6
	Access	1
	<b>Total</b>	<b>8</b>
Erosion Sites	Severity	3
	Correctability	3
	Access	2
	<b>Total</b>	<b>8</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	1
	<b>Total</b>	<b>13</b>
Pipe Outfall (Average)	Severity	2
	Correctability	6
	Access	1
	<b>Total</b>	<b>9</b>
Fish Barrier	Severity	2
	Correctability	2
	Access	6
	<b>Total</b>	<b>10</b>
Inadequate Buffer	Severity	2
	Correctability	2
	Access	1
	<b>Total</b>	<b>11</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>11</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>83</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0005		
Coordinates of Reach:		
Begin: 36.360581°N, 86.684407°W		
End: 36.356439°N, 86.683796°W		
Parameter	Category	Score
Channel Alteration	Severity	3
	Correctability	6
	Access	1
	<b>Total</b>	<b>10</b>
Erosion Sites	Severity	2
	Correctability	3
	Access	1
	<b>Total</b>	<b>6</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	3
	Correctability	2
	Access	1
	<b>Total</b>	<b>6</b>
Fish Barrier	Severity	1
	Correctability	4
	Access	1
	<b>Total</b>	<b>6</b>
Inadequate Buffer	Severity	1
	Correctability	2
	Access	1
	<b>Total</b>	<b>4</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>10</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>80</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0006		
Coordinates of Reach:		
Begin: 36.356439°N, 86.683796°W		
End: 36.352471°N, 86.684579°W		
Parameter	Category	Score
Channel Alteration	Severity	3
	Correctability	6
	Access	1
	<b>Total</b>	<b>10</b>
Erosion Sites	Severity	2
	Correctability	3
	Access	1
	<b>Total</b>	<b>6</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	2
	Correctability	4
	Access	1
	<b>Total</b>	<b>7</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	1
	Correctability	2
	Access	1
	<b>Total</b>	<b>4</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>10</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>93</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0007		
Coordinates of Reach:		
Begin: 36.352471°N, 86.684579°W		
End: 36.348272°N, 86.684515°W		
Parameter	Category	Score
Channel Alteration	Severity	3
	Correctability	6
	Access	1
	<b>Total</b>	<b>10</b>
Erosion Sites	Severity	2
	Correctability	3
	Access	1
	<b>Total</b>	<b>6</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	1
	Correctability	3
	Access	1
	<b>Total</b>	<b>5</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	2
	Correctability	3
	Access	1
	<b>Total</b>	<b>6</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>12</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>93</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0008		
Coordinates of Reach:		
Begin: 36.348272°N, 86.684515°W		
End: 36.344719°N, 86.681974°W		
Parameter	Category	Score
Channel Alteration	Severity	3
	Correctability	6
	Access	1
	<b>Total</b>	<b>10</b>
Erosion Sites	Severity	2
	Correctability	3
	Access	1
	<b>Total</b>	<b>6</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	1
	Correctability	3
	Access	1
	<b>Total</b>	<b>5</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	2
	Correctability	3
	Access	1
	<b>Total</b>	<b>6</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>12</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>93</b>
Unusual Conditions/Comments:		

Category	Score
Severity	4
Correctability	6
Access	1
<b>Total</b>	<b>11</b>
Severity	2
Correctability	3
Access	2
<b>Total</b>	<b>7</b>
Severity	6
Correctability	2
Access	1
<b>Total</b>	<b>9</b>
Severity	3
Correctability	5
Access	1
<b>Total</b>	<b>9</b>
Severity	6
Correctability	6
Access	6
<b>Total</b>	<b>18</b>
Severity	2
Correctability	2
Access	2
Wetland Potential	6
<b>Total</b>	<b>12</b>
Severity	6
<b>Total</b>	<b>6</b>
Severity	6
Correctability	6
Access	6
<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>	<b>90</b>

Reach: MadisonReach0009			
Coordinates of Reach:			
Begin: 36.344719°N, 86.681974°W			
End: 36.340662°N, 86.681765°W			
Parameter	Category	Score	
Channel Alteration	Severity	6	
	Correctability	6	
	Access	6	
<b>Total</b>	<b>Total</b>	<b>18</b>	
Erosion Sites	Severity	2	
	Correctability	5	
	Access	3	
<b>Total</b>	<b>Total</b>	<b>10</b>	
Exposed Pipe	Severity	4	
	Correctability	6	
	Access	2	
<b>Total</b>	<b>Total</b>	<b>12</b>	
Pipe Outfall (Average)	Severity	4	
	Correctability	5	
	Access	1	
<b>Total</b>	<b>Total</b>	<b>10</b>	
Fish Barrier	Severity	6	
	Correctability	6	
	Access	6	
<b>Total</b>	<b>Total</b>	<b>18</b>	
Inadequate Buffer	Severity	2	
	Correctability	3	
	Access	2	
Good=low slope, low bank height	Wetland Potential	6	
<b>Total</b>	<b>Total</b>	<b>13</b>	
In or Near Stream Construction	Severity	6	
<b>Total</b>	<b>Total</b>	<b>6</b>	
Trash Dumping	Severity	6	
	Correctability	6	
	Access	6	
<b>Total</b>	<b>Total</b>	<b>18</b>	
<b>Total Reach Score:</b>	<b>Total Reach Score:</b>	<b>105</b>	
Unusual Conditions/Comments:			

Reach: MadisonReach0010		
Coordinates of Reach:		
Begin: 36.340662°N, 86.681765°W		
End: 36.336707°N, 86.679939°W		
Parameter	Category	Score
Channel Alteration	Severity	1
	Correctability	6
	Access	1
<b>Total</b>	<b>Total</b>	<b>8</b>
Erosion Sites	Severity	3
	Correctability	4
	Access	1
<b>Total</b>	<b>Total</b>	<b>8</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	1
	Correctability	4
	Access	1
<b>Total</b>	<b>Total</b>	<b>6</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	3
	Correctability	6
	Access	1
Good=low slope, low bank height	Wetland Potential	6
<b>Total</b>	<b>Total</b>	<b>16</b>
In or Near Stream Construction	Severity	6
<b>Total</b>	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>	<b>Total Reach Score:</b>	<b>98</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0011		
Coordinates of Reach:		
Begin: 36.336707°N, 86.679939°W		
End: 36.332508°N, 86.679203°W		
Parameter	Category	Score
Channel Alteration	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
Erosion Sites	Severity	3
	Correctability	6
	Access	2
<b>Total</b>	<b>Total</b>	<b>11</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	2
	Correctability	4
	Access	2
Good=low slope, low bank height	Wetland Potential	6
<b>Total</b>	<b>Total</b>	<b>14</b>
In or Near Stream Construction	Severity	6
<b>Total</b>	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
<b>Total</b>	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>	<b>Total Reach Score:</b>	<b>121</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0012		
Coordinates of Reach:		
Begin: 36.332508°N, 86.679203°W		
End: 36.329073°N, 86.677551°W		
Parameter	Category	Score
Channel Alteration	Severity	2
	Correctability	6
	Access	1
	<b>Total</b>	<b>9</b>
Erosion Sites	Severity	3
	Correctability	4
	Access	2
	<b>Total</b>	<b>9</b>
Exposed Pipe	Severity	3
	Correctability	4
	Access	2
	<b>Total</b>	<b>9</b>
Pipe Outfall (Average)	Severity	4
	Correctability	5
	Access	1
	<b>Total</b>	<b>10</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	2
	Correctability	4
	Access	2
	<b>Total</b>	<b>14</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>14</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>93</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0013		
Coordinates of Reach:		
Begin: 36.329073°N, 86.677551°W		
End: 36.325383°N, 86.677628°W		
Parameter	Category	Score
Channel Alteration	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Erosion Sites	Severity	3
	Correctability	1
	Access	1
	<b>Total</b>	<b>5</b>
Exposed Pipe	Severity	3
	Correctability	2
	Access	1
	<b>Total</b>	<b>6</b>
Pipe Outfall (Average)	Severity	4
	Correctability	4
	Access	2
	<b>Total</b>	<b>10</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	3
	Correctability	1
	Access	1
	<b>Total</b>	<b>11</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>11</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>92</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0014		
Coordinates of Reach:		
Begin: 36.325383°N, 86.677628°W		
End: 36.321285°N, 86.678537°W		
Parameter	Category	Score
Channel Alteration	Severity	3
	Correctability	6
	Access	2
	<b>Total</b>	<b>11</b>
Erosion Sites	Severity	2
	Correctability	2
	Access	1
	<b>Total</b>	<b>5</b>
Exposed Pipe	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Pipe Outfall (Average)	Severity	2
	Correctability	2
	Access	1
	<b>Total</b>	<b>5</b>
Fish Barrier	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
Inadequate Buffer	Severity	3
	Correctability	3
	Access	2
	<b>Total</b>	<b>14</b>
Good=low slope, low bank height	Wetland Potential	6
	<b>Total</b>	<b>14</b>
In or Near Stream Construction	Severity	6
	<b>Total</b>	<b>6</b>
Trash Dumping	Severity	6
	Correctability	6
	Access	6
	<b>Total</b>	<b>18</b>
<b>Total Reach Score:</b>		<b>95</b>
Unusual Conditions/Comments:		

Reach: MadisonReach0015	
Coordinates of Reach:	
Begin: 36.321285°N, 86.678537°W	
End: 36.317272°N, 86.679353°W	
Parameter	Category
Channel Alteration	Severity
	Correctability
	Access
<b>Total</b>	
Erosion Sites	Severity
	Correctability
	Access
<b>Total</b>	
Exposed Pipe	Severity
	Correctability
	Access
<b>Total</b>	
Pipe Outfall (Average)	Severity
	Correctability
	Access
<b>Total</b>	
Fish Barrier	Severity
	Correctability
	Access
<b>Total</b>	
Inadequate Buffer	Severity
	Correctability
	Access
<b>Total</b>	
Good=low slope, low bank height	Wetland Potential
	<b>Total</b>
In or Near Stream Construction	Severity
	<b>Total</b>
Trash Dumping	Severity
	Correctability
	Access
<b>Total</b>	
<b>Total Reach Score:</b>	
Unusual Conditions/Comments:	

