

## **APPENDIX D**

### **BCS Computations for Anne Arundel County Subwatersheds**

<b>Subwatershed UPN1</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.01	4			
WQ2	0.004	1	5	Fair	
LR1	Very Poor	30			
LR2	None	10			
LR3	Present	1			
LR4	Very Poor	30	71	Very Poor	No water = no fish = very poor
HC1	0.3	21			2200 / 7387
HC2	5.4	7			3 / .56
HC3	0.09	3			1300 / 14774
HC4	<0.1	3			shallow crossing
HC5	Partially supporting	21			
HC6	<0.1	2	57	Fair	
LC1	20%	21			
LC2	5.38	10			3/.56
LC3	<.006	1			estimated by eye
LC4	20%	14			No change over current
LC5	65%	2			235/357
LC6	2%	20			6/357
LC7	0%	2	70	Fair	no ag
HY1	None	2			
HY2	Marginal	7	9	Fair	
<b>TOTAL</b>		<b>212</b>	<b>Overall BCS</b>	<b>Fair</b>	

<b>Subwatershed UPN7</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.01	1			
WQ2	0.001	1	2	Good	
LR1	Very Poor	30			
LR2	None	10			
LR3	Present	1			
LR4	Good by default	3	44	Poor	all first order, Good HC group score
HC1	none	3			
HC2	none	1			
HC3	none	3			
HC4	none	3			at road crossing
HC5	Partially Supporting	21			
HC6	none	2	33	Good	
LC1	<10%	2			
LC2	none	1			
LC3	<.006	2			estimated by eye
LC4	<10%	2			
LC5	100%	2			
LC6	100%	2			
LC7	0%	2	13	Good	
HY1	0%	2			
HY2	Marginal	7	9	Fair	
<b>TOTAL</b>		<b>101</b>	<b>Overall BCS</b>	<b>Fair</b>	

<b>Subwatershed UPS1</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	1.14	10			
WQ2	0.004	1	<b>11</b>	<i>Fair</i>	
LR1	Poor	21			
LR2	none	10			
LR3	None	10			
LR4	Very Poor	30	<b>71</b>	<i>Very Poor</i>	
HC1	0.34	30			11600/35161
HC2	6.5	7			
HC3	0	3			No problems moderate or greater.
HC4	0.44	30			15481/35161
HC5	Non supporting	30			At break between high and moderate.
HC6	0.01	2	<b>102</b>	<i>Poor</i>	300/35161
LC1	11%	12			
LC2	1.94	4			3/1.54
LC3	0.003	2			46743/18332963, Poor data
LC4	13.50%	8			
LC5	none	20			
LC6	10.40%	20			103/988
LC7	30%	12	<b>78</b>	<i>Poor</i>	
HY1	none	2			
HY2	Poor	10	<b>12</b>	<i>Fair</i>	
<b>TOTAL</b>		<b>274</b>	<b>Overall BCS</b>	<b>Poor</b>	

<b>Subwatershed UPS3</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.24	4			
WQ2	0.0023	1	5	Fair	
LR1	Fair	12			
LR2	0 reaches	10			
LR3	1 area	1			
LR4	Very Poor	10	33	Fair	
HC1	0.12	12			
HC2	none	1			
HC3	none	3			
HC4	none	3			
HC5	Partially Supporting	21			
HC6	none	2	42	Fair	
LC1	4.3% IC	2			
LC2	7.1	10			
LC3	0.0025	10			
LC4	all RA, current imperv 5%	1			
LC5	57.3	1			
LC6	44%	8			
LC7	21%	8	40	Fair	
HY1	0	2			
HY2	12.4	4	6	Good	
<b>TOTAL</b>		<b>126</b>	<b>Overall BCS</b>	<b>Fair</b>	

<b>Subwatershed UPS4</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.195	4			
WQ2	0.0075	4	<b>8</b>	<i>Fair</i>	
LR1	Very Poor	30			
LR2	No anad.fish	10			
LR3	1	1			
LR4	Very Poor	10	<b>51</b>	<i>Poor</i>	
HC1	0.17	12			5000 feet erosion / 29145 feet stream
HC2	0.49	1			
HC3	0.31	30			18400 feet / 58290 feet stream (both banks)
HC4	0.86	30			26645 feet hab lost / 29145 feet available
HC5	Partially supporting	21			
HC6	0.08	2	<b>96</b>	<i>Poor</i>	2200 feet / 29145
LC1	1.8% imperv	3			
LC2	4.55	10			9 crossings / 1.98 sq mi
LC3	0.004	4			43770 / 10873958
LC4	5% imperv.	1			
LC5	6.50%	10			
LC6	14%	20			176 acres / 1266 acres
LC7	54%	20	<b>68</b>	<i>Fair</i>	
HY1	0	1			no dev land in FP
HY2	Marginal	7	<b>8</b>	<i>Fair</i>	
<b>TOTAL</b>		<b>231</b>	<b>Overall BCS</b>	<b>Poor</b>	

<b>Subwatershed UPS6</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	1.03	10			
WQ2	0.008	4	<b>14</b>	<i>Poor</i>	
LR1	Poor	21			
LR2	No useage	10			
LR3	none	10			
LR4	Very Poor	10	<b>51</b>	<i>Poor</i>	
HC1	0.41	30			5400 / 13312
HC2	2.15	4			2/.93
HC3	0.1	12			2700/26624
HC4	1	30			DNR (2002b) indicates a major blockage 75 m ds of watershed
HC5	Partially Supporting	21			
HC6	none	2	<b>99</b>	<i>Poor</i>	
LC1	2%	2			Estimated from corrected land use. Had to create forest coverage
LC2	3.19	10			3/.94
LC3	0.007	4			36526 / 5248218
LC4	5%	1			
LC5	0%	10			
LC6	0%	20			
LC7	56%	20	<b>67</b>	<i>Fair</i>	
HY1	0%	2			
HY2	Suboptimal	4	<b>6</b>	<i>Good</i>	
<b>TOTAL</b>		<b>237</b>	<b>Overall BCS</b>	<b>Poor</b>	

<b>Subwatershed UPS9</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.375	7			
WQ2	0.0486	10	17	Poor	
LR1	Poor	21			
LR2	0%	10			
LR3	none	10			
LR4	ND	3	44	Poor	ND = HC group score
HC1	0.09	1			14800 / 164179
HC2	0.31	1			2 / 6.41
HC3	0.01	1			4700 / 328358
HC4	0.1	3			16494 / 164179
HC5	Partially Supporting	21			
HC6	<0.1	2	29	Good	none rated >= moderate
LC1	1.40%	2			
LC2	2.65	7			17 / 6.41
LC3	0.005	1			
LC4	<10%	1			
LC5	24%	4			1.51 / 6.41
LC6	24%	12			
LC7	38%	20	47	Fair	
HY1	3.80%	8			8.57/227.5
HY2	Marginal	7	15	Fair	
<b>TOTAL</b>		<b>152</b>	<b>Overall BCS</b>	<b>Fair</b>	

<b>Subwatershed UPS10</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.83	10			
WQ2	0.007	4	<b>14</b>	<i>Poor</i>	
LR1	Poor	21			
LR2	None	10			Large pond inline ds of ws boundary.
LR3	1	1			One present
LR4	Very Poor	10	<b>42</b>	<i>Poor</i>	
HC1	0.16	12			1700/10456
HC2	10	7			5/.49
HC3	0	3			None are moderate or greater in severity.
HC4	>.3	30			Large pond inline ds of ws boundary.
HC5	Non supporting	30			
HC6	0	2	<b>84</b>	<i>Poor</i>	None meeting criteria.
LC1	13%	8			
LC2	8.69	10			4/.46
LC3	0.007	4			31034/4332714
LC4	15%	4			
LC5	17%	7			55/315
LC6	<30%	20			
LC7	22%	8	<b>61</b>	<i>Fair</i>	
HY1	4.60%	8			Road crossings only
HY2	Marginal	7	<b>15</b>	<i>Fair</i>	
<b>TOTAL</b>		<b>216</b>	<b>Overall BCS</b>	<b>Fair</b>	

<b>Subwatershed UPS11</b>					
<b>Metric</b>	<b>Computation Value</b>	<b>Individual Metric Score</b>	<b>Metric Group Score</b>	<b>Quality Rating</b>	<b>Notes</b>
WQ1	0.27	4			
WQ2	0.005	4	8	Fair	
LR1	Very Poor	30			
LR2	None	10			
LR3	Yes	1			
LR4	Very Poor	10	51	Poor	
HC1	0	3			None meet criteria of metric.
HC2	10 per sq mi	7			2/.20
HC3	0	3			None meet criteria of metric.
HC4	0.55	30			2833/5123
HC5	Non Supporting	30			
HC6	0	2	75	Fair	None observed
LC1	15%	8			
LC2	5	10			1/.2
LC3	0.008	4			17655/2359744
LC4	17%	4			
LC5	69.00%	1			
LC6	0%	20			
LC7	7%	2	49	Fair	
HY1	0	2			
HY2	Marginal	7	9	Fair	
<b>TOTAL</b>		<b>192</b>	<b>Overall BCS</b>	<b>Fair</b>	