







# Riparian Habitat Condition Assessment

## Forest Park

Report Date: 4/12/2007

Reach ID: rFP\*182

Survey date: 8/10/06 Length: 124 feet along Balch Canyon

EPA Rapid Assessment Scores	Supplemental Information	Management Issues						
<table border="1"> <tr><td>Epifaunal Substrate/ Available Cover:</td><td>13 /20</td></tr> </table>	Epifaunal Substrate/ Available Cover:	13 /20	Vegetative Stream Shading Left Bank: 35% Right Bank: 65%					
Epifaunal Substrate/ Available Cover:	13 /20							
<table border="1"> <tr><td>Pool Substrate Characterization: (low gradient)</td><td>5 /20</td></tr> </table>	Pool Substrate Characterization: (low gradient)	5 /20	Riparian Vegetative Buffer Width Left Bank: 3 m. Right Bank: 8 m.					
Pool Substrate Characterization: (low gradient)	5 /20							
<table border="1"> <tr><td>Pool Variability: (low gradient)</td><td>1 /20</td></tr> </table>	Pool Variability: (low gradient)	1 /20	Bank Slope Left Bank: Steep Right Bank: Steep					
Pool Variability: (low gradient)	1 /20							
<table border="1"> <tr><td>Sediment Deposition:</td><td>10 /20</td></tr> </table>	Sediment Deposition:	10 /20	Large Woody Debris count					
Sediment Deposition:	10 /20							
<table border="1"> <tr><td>Channel Flow Status:</td><td>2 /20</td></tr> </table>	Channel Flow Status:	2 /20	Small (diameter 10 cm. to 30 cm.) 10					
Channel Flow Status:	2 /20							
<table border="1"> <tr><td>Channel Alteration:</td><td>3 /20</td></tr> </table>	Channel Alteration:	3 /20	Medium (diameter 30 cm. to 60 cm.) 0					
Channel Alteration:	3 /20							
<table border="1"> <tr><td>Channel Sinuosity: (low gradient)</td><td>5 /20</td></tr> </table>	Channel Sinuosity: (low gradient)	5 /20	Large (diameter >60 cm.) 0					
Channel Sinuosity: (low gradient)	5 /20							
<table border="1"> <tr><td>Bank Stability</td><td></td></tr> <tr><td>  Left Bank:</td><td>6 /10</td></tr> <tr><td>  Right Bank:</td><td>3 /10</td></tr> </table>	Bank Stability		Left Bank:	6 /10	Right Bank:	3 /10	Has LWD been placed? no	
Bank Stability								
Left Bank:	6 /10							
Right Bank:	3 /10							
<table border="1"> <tr><td>Vegetative Protection</td><td></td></tr> <tr><td>  Left Bank:</td><td>2 /10</td></tr> <tr><td>  Right Bank:</td><td>4 /10</td></tr> </table>	Vegetative Protection		Left Bank:	2 /10	Right Bank:	4 /10		
Vegetative Protection								
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<table border="1"> <tr><td>Riparian Vegetation Zone Width</td><td></td></tr> <tr><td>  Left Bank:</td><td>1 /10</td></tr> <tr><td>  Right Bank:</td><td>4 /10</td></tr> </table>	Riparian Vegetation Zone Width		Left Bank:	1 /10	Right Bank:	4 /10		
Riparian Vegetation Zone Width								
Left Bank:	1 /10							
Right Bank:	4 /10							
<table border="1"> <tr><td><b>Total Score:</b></td><td><b>59 /200</b></td></tr> <tr><td><b>Overall Condition:</b></td><td>Poor</td></tr> </table>	<b>Total Score:</b>	<b>59 /200</b>	<b>Overall Condition:</b>	Poor	<b>Field Notes</b> endpoint-narrow constraint- no lwd- no fish spotted-			
<b>Total Score:</b>	<b>59 /200</b>							
<b>Overall Condition:</b>	Poor							

















# Riparian Habitat Condition Assessment

## Macleay Park

Report Date: 4/12/2007

Reach ID: rMAC\*128

Survey date: 8/7/06 Length: 819 feet along Balch Canyon

EPA Rapid Assessment Scores	Supplemental Information	Management Issues						
<table border="1"> <tr><td>Epifaunal Substrate/ Available Cover:</td><td>11 /20</td></tr> </table>	Epifaunal Substrate/ Available Cover:	11 /20	Vegetative Stream Shading Left Bank: 70% Right Bank: 70%	Hardscape				
Epifaunal Substrate/ Available Cover:	11 /20							
<table border="1"> <tr><td>Embeddedness:</td><td>12 /20</td></tr> <tr><td colspan="2"><i>(high gradient)</i></td></tr> </table>	Embeddedness:	12 /20	<i>(high gradient)</i>		Riparian Vegetative Buffer Width Left Bank: 6 m. Right Bank: 12 m.			
Embeddedness:	12 /20							
<i>(high gradient)</i>								
<table border="1"> <tr><td>Velocity/Depth Regimes:</td><td>9 /20</td></tr> <tr><td colspan="2"><i>(high gradient)</i></td></tr> </table>	Velocity/Depth Regimes:	9 /20	<i>(high gradient)</i>		Bank Slope Left Bank: Steep Right Bank: Steep			
Velocity/Depth Regimes:	9 /20							
<i>(high gradient)</i>								
<table border="1"> <tr><td>Sediment Deposition:</td><td>13 /20</td></tr> </table>	Sediment Deposition:	13 /20	Large Woody Debris count Small ( <i>diameter 10 cm. to 30 cm.</i> ) <div style="text-align: right;">11</div>					
Sediment Deposition:	13 /20							
<table border="1"> <tr><td>Channel Flow Status:</td><td>7 /20</td></tr> </table>	Channel Flow Status:	7 /20	Medium ( <i>diameter 30 cm. to 60 cm.</i> ) <div style="text-align: right;">7</div>					
Channel Flow Status:	7 /20							
<table border="1"> <tr><td>Channel Alteration:</td><td>9 /20</td></tr> </table>	Channel Alteration:	9 /20	Large ( <i>diameter &gt;60 cm.</i> ) <div style="text-align: right;">2</div>					
Channel Alteration:	9 /20							
<table border="1"> <tr><td>Frequency of Riffles or Bends:</td><td>14 /20</td></tr> <tr><td colspan="2"><i>(high gradient)</i></td></tr> </table>	Frequency of Riffles or Bends:	14 /20	<i>(high gradient)</i>		Has LWD been placed? <div style="text-align: right;">not recorded</div>			
Frequency of Riffles or Bends:	14 /20							
<i>(high gradient)</i>								
<table border="1"> <tr><td>Bank Stability</td><td></td></tr> <tr><td>  Left Bank:</td><td>7 /10</td></tr> <tr><td>  Right Bank:</td><td>5 /10</td></tr> </table>	Bank Stability		Left Bank:	7 /10	Right Bank:	5 /10		
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<table border="1"> <tr><td>Riparian Vegetation Zone Width</td><td></td></tr> <tr><td>  Left Bank:</td><td>2 /10</td></tr> <tr><td>  Right Bank:</td><td>10 /10</td></tr> </table>	Riparian Vegetation Zone Width		Left Bank:	2 /10	Right Bank:	10 /10		
Riparian Vegetation Zone Width								
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Right Bank:	10 /10							
<table border="1"> <tr><td><b>Total Score:</b></td><td><b>111 /200</b></td></tr> <tr><td><b>Overall Condition:</b></td><td>Fair</td></tr> </table>	<b>Total Score:</b>	<b>111 /200</b>	<b>Overall Condition:</b>	Fair	<b>Field Notes</b> endpoint- revegetation restoration -			
<b>Total Score:</b>	<b>111 /200</b>							
<b>Overall Condition:</b>	Fair							





**Riparian Habitat Condition Assessment**

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**Macleay Park**

Report Date: 4/12/2007

Reach ID: **rMAC\*130**

Survey date: 8/7/06 Length: 371 feet along Balch Canyon

<p><b>EPA Rapid Assessment Scores</b></p> <table border="1"> <tr> <td>Epifaunal Substrate/ Available Cover:</td> <td>14 /20</td> </tr> <tr> <td>Embeddedness: <i>(high gradient)</i></td> <td>12 /20</td> </tr> <tr> <td>Velocity/Depth Regimes: <i>(high gradient)</i></td> <td>9 /20</td> </tr> <tr> <td>Sediment Deposition:</td> <td>11 /20</td> </tr> <tr> <td>Channel Flow Status:</td> <td>7 /20</td> </tr> <tr> <td>Channel Alteration:</td> <td>11 /20</td> </tr> <tr> <td>Frequency of Riffles or Bends: <i>(high gradient)</i></td> <td>11 /20</td> </tr> <tr> <td>Bank Stability</td> <td></td> </tr> <tr> <td>    Left Bank:</td> <td>4 /10</td> </tr> <tr> <td>    Right Bank:</td> <td>6 /10</td> </tr> <tr> <td>Vegetative Protection</td> <td></td> </tr> <tr> <td>    Left Bank:</td> <td>2 /10</td> </tr> <tr> <td>    Right Bank:</td> <td>4 /10</td> </tr> <tr> <td>Riparian Vegetation Zone Width</td> <td></td> </tr> <tr> <td>    Left Bank:</td> <td>3 /10</td> </tr> <tr> <td>    Right Bank:</td> <td>10 /10</td> </tr> <tr> <td><b>Total Score:</b></td> <td><b>104 /200</b></td> </tr> <tr> <td><b>Overall Condition:</b></td> <td>Fair</td> </tr> </table>	Epifaunal Substrate/ Available Cover:	14 /20	Embeddedness: <i>(high gradient)</i>	12 /20	Velocity/Depth Regimes: <i>(high gradient)</i>	9 /20	Sediment Deposition:	11 /20	Channel Flow Status:	7 /20	Channel Alteration:	11 /20	Frequency of Riffles or Bends: <i>(high gradient)</i>	11 /20	Bank Stability		Left Bank:	4 /10	Right Bank:	6 /10	Vegetative Protection		Left Bank:	2 /10	Right Bank:	4 /10	Riparian Vegetation Zone Width		Left Bank:	3 /10	Right Bank:	10 /10	<b>Total Score:</b>	<b>104 /200</b>	<b>Overall Condition:</b>	Fair	<p><b>Supplemental Information</b></p> <p>Vegetative Stream Shading</p> <p>Left Bank: 80%</p> <p>Right Bank: 80%</p> <p>Riparian Vegetative Buffer Width</p> <p>Left Bank: 5 m.</p> <p>Right Bank: 12 m.</p> <p>Bank Slope</p> <p>Left Bank: Steep</p> <p>Right Bank: Steep</p> <p>Large Woody Debris count</p> <p>Small <i>(diameter 10 cm. to 30 cm.)</i></p> <p>24</p> <p>Medium <i>(diameter 30 cm. to 60 cm.)</i></p> <p>14</p> <p>Large <i>(diameter &gt;60 cm.)</i></p> <p>6</p> <p>Has LWD been placed?</p> <p>not recorded</p>	<p><b>Management Issues</b></p>
Epifaunal Substrate/ Available Cover:	14 /20																																					
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<b>Total Score:</b>	<b>104 /200</b>																																					
<b>Overall Condition:</b>	Fair																																					
<p><b>Field Notes</b></p> <p>endpoint- restoration veg work- trout spotted - undercut banks - plunge pools</p>																																						







# Riparian Habitat Condition Assessment

**Macleay Park**

Report Date: 4/12/2007

Reach ID: **rMAC\*150** Survey date: 8/8/06 Length: 435 feet along Balch Canyon

EPA Rapid Assessment Scores	Supplemental Information	Management Issues
Epifaunal Substrate/ Available Cover: 13 /20	Vegetative Stream Shading Left Bank: 65% Right Bank: 75%	Erosion
Embeddedness: 15 /20 <i>(high gradient)</i>	Riparian Vegetative Buffer Width Left Bank: 3 m. Right Bank: 10 m.	
Velocity/Depth Regimes: 14 /20 <i>(high gradient)</i>	Bank Slope Left Bank: Steep Right Bank: Steep	
Sediment Deposition: 12 /20	Large Woody Debris count Small ( <i>diameter 10 cm. to 30 cm.</i> ) 24	
Channel Flow Status: 8 /20	Medium ( <i>diameter 30 cm. to 60 cm.</i> ) 15	
Channel Alteration: 10 /20	Large ( <i>diameter &gt;60 cm.</i> ) 8	
Frequency of Riffles or Bends: 12 /20 <i>(high gradient)</i>	Has LWD been placed? yes	
Bank Stability Left Bank: 4 /10 Right Bank: 5 /10	<b>Field Notes</b> endpoint- pool	
Vegetative Protection Left Bank: 5 /10 Right Bank: 4 /10		
Riparian Vegetation Zone Width Left Bank: 2 /10 Right Bank: 10 /10		
<b>Total Score: 114 /200</b> <b>Overall Condition:</b> Fair		





## Riparian Habitat Condition Assessment

**Macleay Park**

Report Date: 4/12/2007

**Reach ID: rMAC\*160**

Survey date: 8/9/06 Length: 561 feet along Balch Canyon

EPA Rapid Assessment Scores	Supplemental Information	Management Issues
Epifaunal Substrate/ Available Cover: 15 /20	Vegetative Stream Shading Left Bank: 80% Right Bank: 85%	Erosion Stream Bank Erosion
Embeddedness: 13 /20 <i>(high gradient)</i>	Riparian Vegetative Buffer Width Left Bank: 3 m. Right Bank: 10 m.	
Velocity/Depth Regimes: 14 /20 <i>(high gradient)</i>	Bank Slope Left Bank: Steep Right Bank: Steep	
Sediment Deposition: 12 /20	Large Woody Debris count Small ( <i>diameter 10 cm. to 30 cm.</i> ) 15	
Channel Flow Status: 9 /20	Medium ( <i>diameter 30 cm. to 60 cm.</i> ) 13	
Channel Alteration: 12 /20	Large ( <i>diameter &gt;60 cm.</i> ) 6	
Frequency of Riffles or Bends: 15 /20 <i>(high gradient)</i>	Has LWD been placed? yes	
Bank Stability Left Bank: 5 /10 Right Bank: 6 /10		
Vegetative Protection Left Bank: 5 /10 Right Bank: 7 /10		
Riparian Vegetation Zone Width Left Bank: 2 /10 Right Bank: 10 /10		
<b>Total Score: 125 /200</b> <b>Overall Condition:</b> Good	<b>Field Notes</b> endpoint @ pool- saw 20+ cm trout in various pools	





## Riparian Habitat Condition Assessment

### Macleay Park

Report Date: 4/12/2007

Reach ID: rMAC\*164

Survey date: 8/9/06 Length: 262 feet along Balch Canyon

EPA Rapid Assessment Scores	Supplemental Information	Management Issues						
<table border="1"> <tr><td>Epifaunal Substrate/ Available Cover:</td><td>13 /20</td></tr> </table>	Epifaunal Substrate/ Available Cover:	13 /20	Vegetative Stream Shading Left Bank: 65% Right Bank: 75%					
Epifaunal Substrate/ Available Cover:	13 /20							
<table border="1"> <tr><td>Embeddedness:</td><td>13 /20</td></tr> <tr><td><i>(high gradient)</i></td><td></td></tr> </table>	Embeddedness:	13 /20	<i>(high gradient)</i>		Riparian Vegetative Buffer Width Left Bank: 2 m. Right Bank: 10 m.			
Embeddedness:	13 /20							
<i>(high gradient)</i>								
<table border="1"> <tr><td>Velocity/Depth Regimes:</td><td>14 /20</td></tr> <tr><td><i>(high gradient)</i></td><td></td></tr> </table>	Velocity/Depth Regimes:	14 /20	<i>(high gradient)</i>		Bank Slope Left Bank: Steep Right Bank: Steep			
Velocity/Depth Regimes:	14 /20							
<i>(high gradient)</i>								
<table border="1"> <tr><td>Sediment Deposition:</td><td>14 /20</td></tr> </table>	Sediment Deposition:	14 /20	Large Woody Debris count					
Sediment Deposition:	14 /20							
<table border="1"> <tr><td>Channel Flow Status:</td><td>9 /20</td></tr> </table>	Channel Flow Status:	9 /20	Small ( <i>diameter 10 cm. to 30 cm.</i> ) 18					
Channel Flow Status:	9 /20							
<table border="1"> <tr><td>Channel Alteration:</td><td>12 /20</td></tr> </table>	Channel Alteration:	12 /20	Medium ( <i>diameter 30 cm. to 60 cm.</i> ) 12					
Channel Alteration:	12 /20							
<table border="1"> <tr><td>Frequency of Riffles or Bends:</td><td>13 /20</td></tr> <tr><td><i>(high gradient)</i></td><td></td></tr> </table>	Frequency of Riffles or Bends:	13 /20	<i>(high gradient)</i>		Large ( <i>diameter &gt;60 cm.</i> ) 5			
Frequency of Riffles or Bends:	13 /20							
<i>(high gradient)</i>								
<table border="1"> <tr><td>Bank Stability</td><td></td></tr> <tr><td>Left Bank:</td><td>6 /10</td></tr> <tr><td>Right Bank:</td><td>5 /10</td></tr> </table>	Bank Stability		Left Bank:	6 /10	Right Bank:	5 /10	Has LWD been placed? yes	
Bank Stability								
Left Bank:	6 /10							
Right Bank:	5 /10							
<table border="1"> <tr><td>Vegetative Protection</td><td></td></tr> <tr><td>Left Bank:</td><td>5 /10</td></tr> <tr><td>Right Bank:</td><td>4 /10</td></tr> </table>	Vegetative Protection		Left Bank:	5 /10	Right Bank:	4 /10		
Vegetative Protection								
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Right Bank:	4 /10							
<table border="1"> <tr><td>Riparian Vegetation Zone Width</td><td></td></tr> <tr><td>Left Bank:</td><td>2 /10</td></tr> <tr><td>Right Bank:</td><td>10 /10</td></tr> </table>	Riparian Vegetation Zone Width		Left Bank:	2 /10	Right Bank:	10 /10		
Riparian Vegetation Zone Width								
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Right Bank:	10 /10							
<table border="1"> <tr><td><b>Total Score:</b></td><td><b>120 /200</b></td></tr> <tr><td><b>Overall Condition:</b></td><td>Fair</td></tr> </table>	<b>Total Score:</b>	<b>120 /200</b>	<b>Overall Condition:</b>	Fair	<b>Field Notes</b> endpoint @ pool-fish present - narrow constraint			
<b>Total Score:</b>	<b>120 /200</b>							
<b>Overall Condition:</b>	Fair							





## Riparian Habitat Condition Assessment

**Macleay Park**

Report Date: 4/12/2007

**Reach ID: rMAC\*168**

Survey date: 8/9/06 Length: 239 feet along Balch Canyon

EPA Rapid Assessment Scores	Supplemental Information	Management Issues
Epifaunal Substrate/ Available Cover:      14 /20	Vegetative Stream Shading Left Bank:                80% Right Bank:               90%	
Embeddedness:      15 /20 <i>(high gradient)</i>	Riparian Vegetative Buffer Width Left Bank:               4 m. Right Bank:               10 m.	
Velocity/Depth Regimes:                14 /20 <i>(high gradient)</i>	Bank Slope Left Bank:                Steep Right Bank:               Steep	
Sediment Deposition:            10 /20	Large Woody Debris count Small <i>(diameter 10 cm. to 30 cm.)</i> 30	
Channel Flow Status:                   9 /20	Medium <i>(diameter 30 cm. to 60 cm.)</i> 5	
Channel Alteration:             13 /20	Large <i>(diameter &gt;60 cm.)</i> 12	
Frequency of Riffles or Bends:      14 /20 <i>(high gradient)</i>	Has LWD been placed? yes	
Bank Stability Left Bank:              4 /10 Right Bank:             6 /10	<b>Field Notes</b> endpoint- deep pool with trout in it-rock outcrops on rt bank	
Vegetative Protection Left Bank:              4 /10 Right Bank:             6 /10		
Riparian Vegetation Zone Width Left Bank:              3 /10 Right Bank:             10 /10		
<b>Total Score:            122 /200</b> <b>Overall Condition:</b> Good		





## Riparian Habitat Condition Assessment

**Macleay Park**

Report Date: 4/12/2007

**Reach ID: rMAC\*172**

Survey date: 8/9/06 Length: 326 feet along Balch Canyon

EPA Rapid Assessment Scores	
Epifaunal Substrate/ Available Cover:	15 /20
Embeddedness: <i>(high gradient)</i>	12 /20
Velocity/Depth Regimes: <i>(high gradient)</i>	14 /20
Sediment Deposition:	12 /20
Channel Flow Status:	8 /20
Channel Alteration:	10 /20
Frequency of Riffles or Bends: <i>(high gradient)</i>	15 /20
Bank Stability	
Left Bank:	3 /10
Right Bank:	6 /10
Vegetative Protection	
Left Bank:	3 /10
Right Bank:	6 /10
Riparian Vegetation Zone Width	
Left Bank:	2 /10
Right Bank:	10 /10
<b>Total Score:</b>	<b>116 /200</b>
<b>Overall Condition:</b>	Fair

Supplemental Information	
Vegetative Stream Shading	
Left Bank:	70%
Right Bank:	80%
Riparian Vegetative Buffer Width	
Left Bank:	2 m.
Right Bank:	10 m.
Bank Slope	
Left Bank:	Steep
Right Bank:	Steep
Large Woody Debris count	
Small ( <i>diameter 10 cm. to 30 cm.</i> )	21
Medium ( <i>diameter 30 cm. to 60 cm.</i> )	19
Large ( <i>diameter &gt;60 cm.</i> )	7
Has LWD been placed?	yes

Management Issues

Field Notes
endpoint- audobon society's gate just upstream- fishh, rock outcrop, narrow constraint

