

## Appendix B – Habitat Assessment Data

**Table B-1: Physical metrics habitat assessment scores for sites along the mainstem of the Sturgeo River, collected from August 29<sup>th</sup> to September 20<sup>th</sup>, 2017.**

Station Name	Transect #	Shading		Macrophyte		Bank Undercutting				Organic Substrate		Habitat Diversity	
		% Cover	Score	% Cover	Score	Left	Score	Right	Score	% Cover	Score	Observation	Score
M1	1	26-50	3	1-25	2	25-50	2	<25	1	100	1	G	3
	2	26-50	3	1-25	2	25-50	2	25-50	2	100	1	F	2
	3	6-25	2	1-25	2	<25	1	<25	1	20	4	F	2
<b>Total Scores</b>			<b>8</b>		<b>6</b>		<b>5</b>		<b>4</b>		<b>6</b>		<b>7</b>
M2	1	6-25	2	1-25	2	<25	1	<25	1	60	2	F	2
	2	0-5	1	26-50	4	0	1	0	1	40	3	F	2
	3	6-25	2	1-25	2	0	1	>75	4	92	1	F	2
<b>Total Scores</b>			<b>5</b>		<b>8</b>		<b>3</b>		<b>6</b>		<b>6</b>		<b>6</b>
M3	1	0-5	1	76-100	1	0	1	0	1	60	2	F	2
	2	0-5	1	1-25	2	25-50	2	<25	1	70	2	F	2
	3	0-5	1	76-100	1	<25	1	0	1	80	1	F	2
<b>Total Scores</b>			<b>3</b>		<b>4</b>		<b>4</b>		<b>3</b>		<b>5</b>		<b>6</b>
M4	1	6-25	2	51-75	3	0	1	0	1	47.5	3	G	3
	2	6-26	2	51-75	3	0	1	0	1	50	3	G	3
	3	6-27	2	51-75	3	<25	1	<25	1	45	3	G	3
<b>Total Scores</b>			<b>6</b>		<b>9</b>		<b>3</b>		<b>3</b>		<b>9</b>		<b>9</b>
M5	1	0-5	1	51-75	3	25-50	2	<25	1	75	2	P	1
	2	0-5	1	76-100	1	51-75	3	25-50	2	80	1	F	2
	3	0-5	1	51-75	3	25-50	2	<25	1	60	2	P	1
<b>Total Scores</b>			<b>3</b>		<b>7</b>		<b>7</b>		<b>4</b>		<b>5</b>		<b>4</b>

Station Name	Transect #	Shading		Macrophyte		Bank Undercutting				Organic Substrate		Habitat Diversity	
		% Cover	Score	% Cover	Score	Left	Score	Right	Score	% Cover	Score	Observation	Score
M6	1	0-5	1	1-25	2	0	1	0	1	40	3	P	1
	2	0-5	1	1-25	2	0	1	0	1	50	3	P	1
	3	0-5	1	1-25	2	0	1	0	1	40	3	P	1
<b>Total Scores</b>			<b>3</b>		<b>6</b>		<b>3</b>		<b>3</b>		<b>9</b>		<b>3</b>
M7	1	26-50	3	1-25	2	<25	1	51-75	3	90	1	G	3
	2	26-50	3	1-25	2	25-50	2	51-75	3	75	2	G	3
	3	6-25	2	1-25	2	0	1	0	1	85	1	F	2
<b>Total Scores</b>			<b>8</b>		<b>6</b>		<b>4</b>		<b>7</b>		<b>4</b>		<b>8</b>
M8	1	6-25	2	51-75	3	0	1	0	1	60	2	G	3
	2	6-25	2	51-75	3	0	1	0	1	50	3	F	2
	3	6-25	2	51-75	3	0	1	0	1	50	3	G	3
<b>Total Scores</b>			<b>6</b>		<b>9</b>		<b>3</b>		<b>3</b>		<b>8</b>		<b>8</b>
M9	1	6-25	2	76-100	1	0	1	0	1	80	1	F	2
	2	6-25	2	76-100	1	0	1	0	1	80	1	F	2
	3	6-25	2	76-100	1	0	1	0	1	80	1	F	2
<b>Total Scores</b>			<b>6</b>		<b>3</b>		<b>3</b>		<b>3</b>		<b>3</b>		<b>6</b>
M10	1	0-5	1	1-25	2	0	1	0	1	45	3	G	3
	2	0-5	1	26-50	4	0	1	0	1	45	3	G	3
	3	0-5	1	51-75	3	0	1	0	1	40	3	G	3
<b>Total Scores</b>			<b>3</b>		<b>9</b>		<b>3</b>		<b>3</b>		<b>9</b>		<b>9</b>

Station Name	Transect #	Shading		Macrophyte		Bank Undercutting				Organic Substrate		Habitat Diversity	
		% Cover	Score	% Cover	Score	Left	Score	Right	Score	% Cover	Score	Observation	Score
M11	1	0-5	1	1-25	2	<25	1	0	1	60	2	F	2
	2	6-25	2	1-25	2	<25	1	0	1	70	2	F	2
	3	6-25	2	76-100	1	<25	1	<25	1	40	3	F	2
<b>Total Scores</b>			<b>5</b>		<b>5</b>		<b>3</b>		<b>3</b>		<b>7</b>		<b>6</b>
M12	1	6-25	2	1-25	2	0	1	0	1	30	3	E	4
	2	0-5	1	51-75	3	0	1	0	1	35	3	E	4
	3	0-5	1	1-25	2	<25	1	0	1	0	4	E	4
<b>Total Scores</b>			<b>4</b>		<b>7</b>		<b>3</b>		<b>3</b>		<b>10</b>		<b>12</b>

**Table B-2: Chemical metrics habitat assessment scores for sites on the mainstem of the Sturgeon River, collected in August 2017.**

Station Name	Dissolved Oxygen (mg/L)	Score	Total Phosphorus (mg/L)	Score	Total Nitrogen (mg/L)	Score
1	3.75	1	0.32	1	2.2	1
2	6.98	3	0.29	1	2.2	1
3	0.98	1	0.46	1	4.2	1
4	6.29	2	0.17	2	1.3	3
5	9.39	3	0.13	2	1.3	3
6	15.69	3	0.091	3	1.9	2
7	7.86	3	0.066	3	1.4	2
8	6.62	3	0.094	3	1.3	3
9	6.36	3	0.12	2	3.7	1
10	5.7	2	0.26	2	1.8	2
11	6.89	3	0.19	2	1.7	2
12	7.02	3	0.15	2	1.3	3

**Table B-3: Bank stability results from the habitat assessment at sites on the mainstem of the Sturgeon River, collected from August 29<sup>th</sup> to September 20<sup>th</sup>, 2017.**

Station Name	Transect #	Bank Stability Observation	
		Left (d/s)	Right (d/s)
M1	1	Low	Low
	2	Moderate	Moderate
	3	Low	Low
M2	1	Moderate	Stable
	2	Moderate	Moderate
	3	Moderate	Moderate
M3	1	Moderate	Moderate
	2	Moderate	Moderate
	3	Moderate	Moderate
M4	1	Moderate	Stable
	2	Moderate	Stable
	3	Stable	Stable
M5	1	Low	Moderate
	2	Moderate	Moderate
	3	Moderate	Moderate
M6	1	Unstable	Unstable
	2	Unstable	Unstable
	3	Unstable	Low
M7	1	Moderate	Moderate
	2	Stable	Moderate
	3	Moderate	Moderate
M8	1	Stable	Stable
	2	Moderate	Moderate
	3	Moderate	Moderate
M9	1	Stable	Stable
	2	Stable	Stable
	3	Stable	Stable
M10	1	Stable	Moderate
	2	Stable	Moderate
	3	Stable	Stable
M11	1	Stable	Moderate
	2	Stable	Moderate
	3	Stable	Stable
M12	1	Stable	Stable
	2	Low	Moderate
	3	Low	Stable

\*stable = > 90% of the bank is vegetated  
 \*moderate = 50-90% of the bank is vegetated  
 \*low stability = <50% of the bank is covered with vegetation  
 \*unstable = <25% of the bank is exposed and massive bank slumping is occurring

**Table B-4: Habitat assessment metrics not included in the health assessment scoring. Collected at mainstem sites on the Sturgeon River between August 29<sup>th</sup> and September 20<sup>th</sup>, 2017.**

Station Name	Transect #	Streamside Vegetation (%)			Bottom Type	Substrate Embeddedness (%)	Periphyton Coverage (1, 2, 3, 4, 5)
		grasses	shrubs	trees			
M1	1	80	20	0	VS	100	-
	2	80	20	0	VS	100	-
	3	90	10	0	S	51-75	2
M2	1	90	10	0	VS	>75	-
	2	99	0	1	H/VS	51-75	-
	3	90	5	5	S/VS	>75	-
M3	1	100	0	0	VS	51-75	2
	2	100	0	0	VS	100	-
	3	100	0	0	VS	>75	1
M4	1	90	10	0	NW	51-75	-
	2	80	0	20	S	100	-
	3	80	0	20	S	100	-
M5	1	100	0	0	VS	>75	-
	2	100	0	0	VS	>75	-
	3	90	10	0	VS	100	-
M6	1	100	0	0	S	>75	-
	2	100	0	0	VS	>75	-
	3	100	0	0	S	100	-
M7	1	25	75	0	NW	>75	-
	2	20	80	0	NW	>75	-
	3	30	70	0	NW	51-75	-
M8	1	40	60	0	VS	>75	-
	2	70	30	0	H/S	>75	-
	3	80	20	0	S	>75	-
M9	1	100	0	0	VS	100	-
	2	100	0	0	VS	>75	-
	3	100	0	0	VS	>75	-
M10	1	90	10	0	NW	>75	-
	2	90	10	0	NW	>75	-
	3	85	15	0	NW	-	-
M11	1	90	10	0	S	0	1
	2	100	0	0	S	100	-
	3	85	10	5	S	>75	-
M12	1	85	15	0	H	<25	2
	2	95	5	0	H	<25	2
	3	100	0	0	H	25-50	2