

Master Data Sheet  
2015 Fall  
Site D

	4mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Total
Transect 1 (2-3m)	64.4	4.78	200.4	14.86	733.7	54.4	330.3	24.5	19.5	1.45	1348.3
Transect 1 (5-6m)	8.5	0.58	80.1	5.48	1119.3	76.6	250.1	17.1	2.5	0.17	1460.5
Transect 2 (2-3m)	7.6	0.79	127.6	13.3	541.6	56.3	278.8	29.0	7.2	0.75	962.8
Transect 2 (5-6 m)	6.1	0.5	137.8	11.2	871.5	70.8	211.6	17.2	4.5	0.37	1231.5
Transect 3 (2-3m)	35.5	2.2	131.9	8.16	1148.9	71.2	296.0	18.3	3.9	0.24	1616.2
Transect 3 (5-6m)	74.4	5.97	234.2	18.8	703.9	56.5	228.5	18.3	4.4	0.35	1245.4

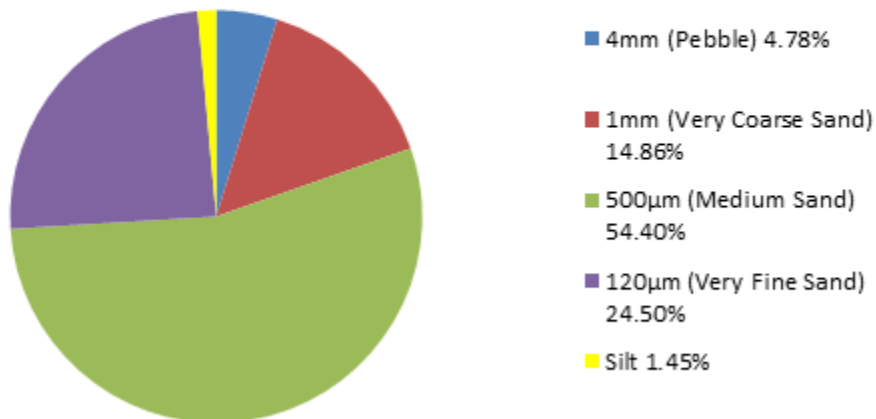
Transect	Distance from Bank (m)	Feature	Potassium	pH	Nitrogen	Phosphorus
1	2-3	Bed	Medium	6.5	Trace	Low
1	5-6	Bed	High	7.0	Trace	Low
2	2-3	Bed	Medium/Low	7.0	Trace	Low
2	5-6	Bed	Medium/High	6.5	Trace	Low
3	2-3	Bed	Medium	7.0	Trace	Low
3	5-6	Bed	Medium/Low	7.0	Trace	Low

1 Corbicula clam was found in Transect 2, 5-6 m.

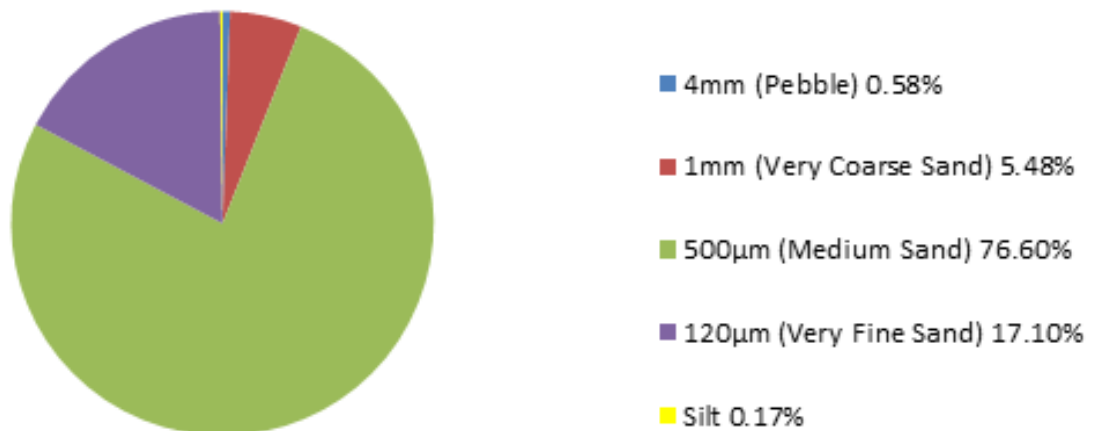
# Site D-1 Fall 2015

	4mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Total
Transect 1 (2-3m)	64.4	4.78	200.4	14.86	733.7	54.4	330.3	24.5	19.5	1.45	1348.3
Transect 1 (5-6m)	8.5	0.58	80.1	5.48	1119.3	76.6	250.1	17.1	2.5	0.17	1460.5

## Composition of Sediments at Site D, Transect 1, 2-3m (Fall 2015)



## Composition of Sediments at Site D, Transect 1, 5-6m (Fall 2015)



Transect	Distance from Bank (m)	Feature	Potassium	pH	Nitrogen	Phosphorus
1	2-3	Bed	Medium	6.5	Trace	Low
1	5-6	Bed	High	7.0	Trace	Low

**Sediment Composition:**

The amount of pebbles found in the sample collected 2-3m from the bank has increased since last year, which is good for organism that live within the spaces of these pebbles, however the amount of pebbles found in the sample collected 5-6m from the bank has remained relatively constant. The amount of silt found 2-3m from the bank is alarming however, as silt can interfere with the aquatic animals' ability to breathe.

**Chemical Analysis:**

Trace and low levels of nitrogen and phosphorus respectively is a positive sign because it is indicative of a lower chance for cultural eutrophication to occur. However, it would be more beneficial for plant life in the creek if more nitrogen was present because it is essential for plant growth. Medium amounts of potassium were found 2-3m from the bank, which is healthy, however high amounts of potassium were found 5-6 m from the bank, which indicates high amounts of pollution. Lastly, pH of the sediments taken 2-3 m from the bank was 6.5, and pH of the sediments taken 5-6 m from the bed was 7. A pH of 6.5 and is more acidic than is healthy.

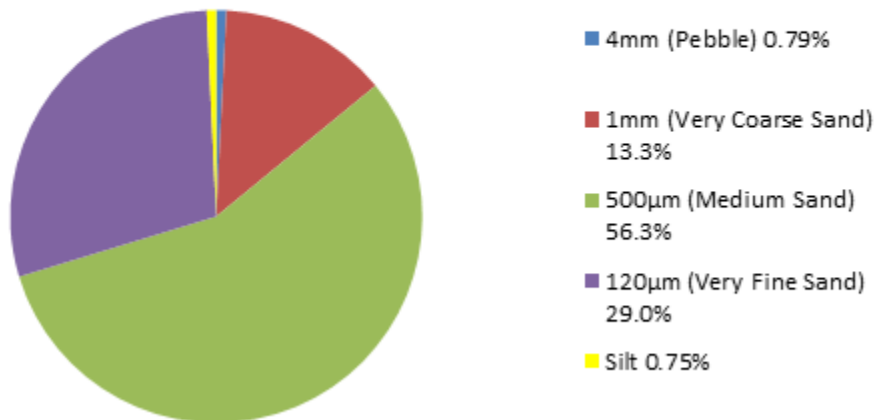
***Corbicula:***

No *Corbicula* shells were found in Transect 1, which indicates a lack of invasive species

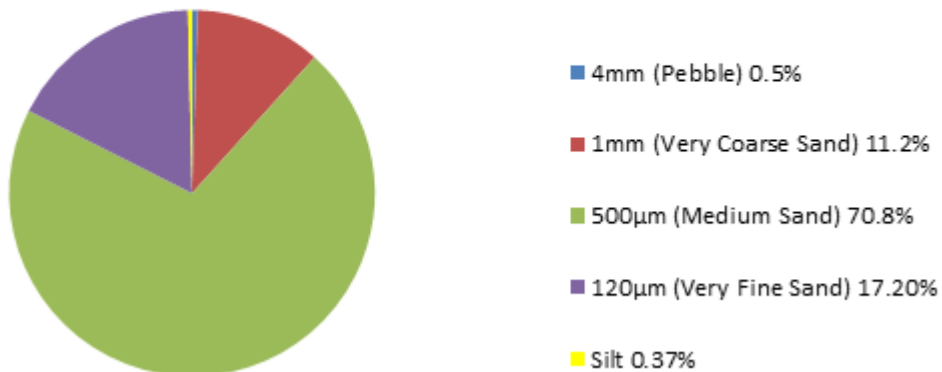
## Site D-2 Fall 2015

Sample #	4mm		1mm		500 micrometers		120 micrometers		Silt		Total
	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	
Transect 2 (2-3m)	7.6	0.79	127.6	13.3	541.6	56.3	278.8	29.0	7.2	0.75	962.8
Transect 2 (5-6 m)	6.1	0.5	137.8	11.2	871.5	70.8	211.6	17.2	4.5	0.37	1231.5

### Composition of Sediments at Site D, Transect 2, 2-3m (Fall 2015)



### Composition of Sediments at Site D, Transect 2, 5-6m (Fall 2015)



Transect	Distance from Bank (m)	Feature	Potassium	pH	Nitrogen	Phosphorus
2	2-3	Bed	Medium/Low	7.0	Trace	Low
2	5-6	Bed	Medium/High	6.5	Trace	Low

**Sediment Composition:**

The very low amount of pebbles found in both samples is problematic, as some organisms can live within the spaces between the pebbles. Silt levels remain low, which is good as excess silt can interfere with the abilities of aquatic animals to breathe.

**Chemical Analysis:**

Trace and low levels of nitrogen and phosphorus respectively is a positive sign because it is indicative of a lower chance for cultural eutrophication to occur. However, it would be more beneficial for plant life in the creek if more nitrogen was present because it is essential for plant growth. Medium/Low amounts of potassium were found 2-3m from the bank, which is healthy, however Medium/High amounts of potassium were found 5-6 m from the bank, which indicates some pollution. Lastly, pH of the sediments taken 2-3 m from the bank was 7, and pH of the sediments taken 5-6 m from the bed was 6.5. A pH of 6.5 and 7 is more acidic than is healthy.

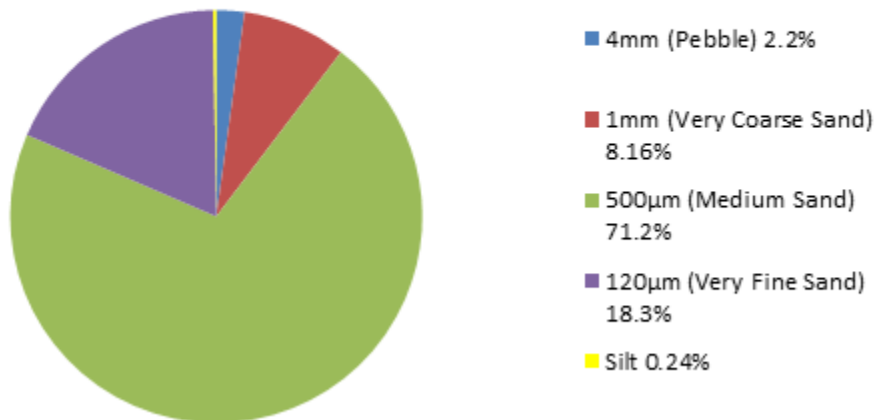
***Corbicula:***

One corbicula was found 5-6m from the bank in Transect 2. Corbicula is an invasive species.

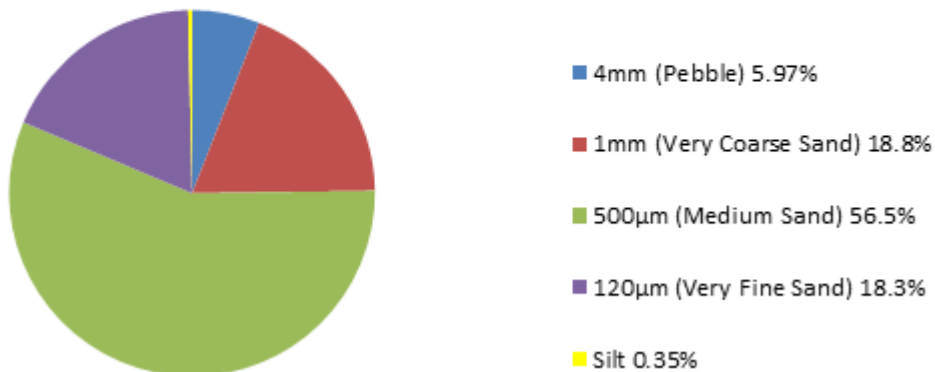
# Site D-3 Fall 2015

	4mm		1mm		500 micrometers		120 micrometers		Silt		
Sample #	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Mass (g)	% of total	Total
Transect 3 (2-3m)	35.5	2.2	131.9	8.16	1148.9	71.2	296.0	18.3	3.9	0.24	1616.2
Transect 3 (5-6m)	74.4	5.97	234.2	18.8	703.9	56.5	228.5	18.3	4.4	0.35	1245.4

## Composition of Sediments at Site D, Transect 3, 2-3m (Fall 2015)



## Composition of Sediments at Site D, Transect 3, 5-6m (Fall 2015)



Transect	Distance from Bank (m)	Feature	Potassium	pH	Nitrogen	Phosphorus
3	2-3	Bed	Medium	7.0	Trace	Low
3	5-6	Bed	Medium/Low	7.0	Trace	Low

**Sediment Composition:**

The amount of pebbles found in both samples has increased from the samples from last year, indicating an improvement in the health of the creek as organisms can live between the pebbles. Silt levels have also decreased, which is a good sign for the creek, as excess silt can interfere with aquatic animal's ability to breathe.

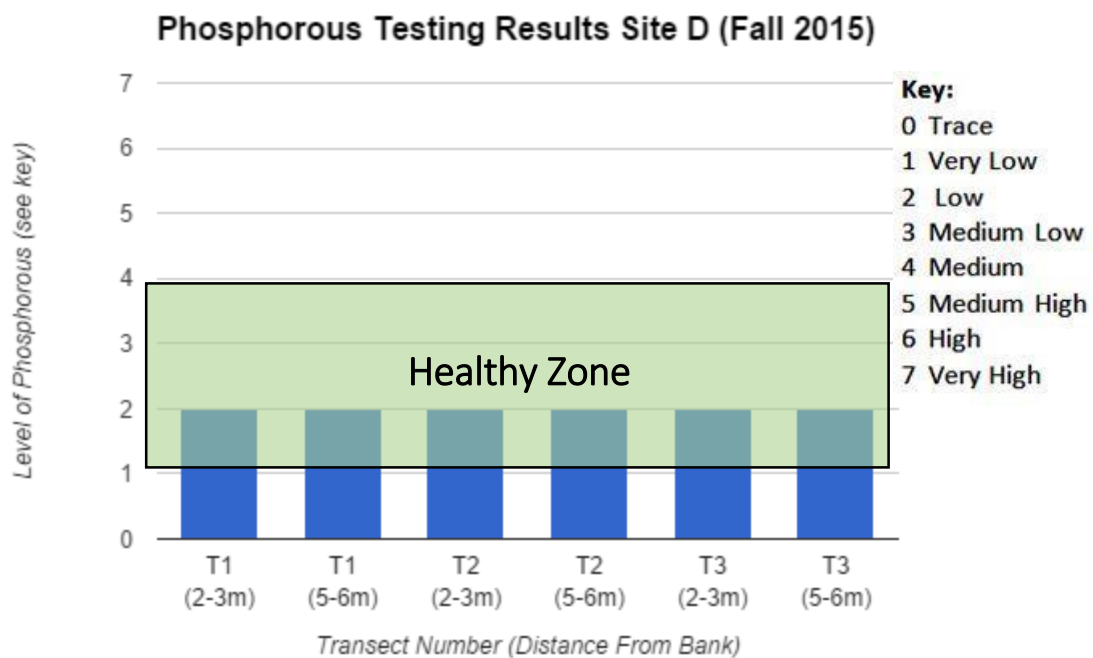
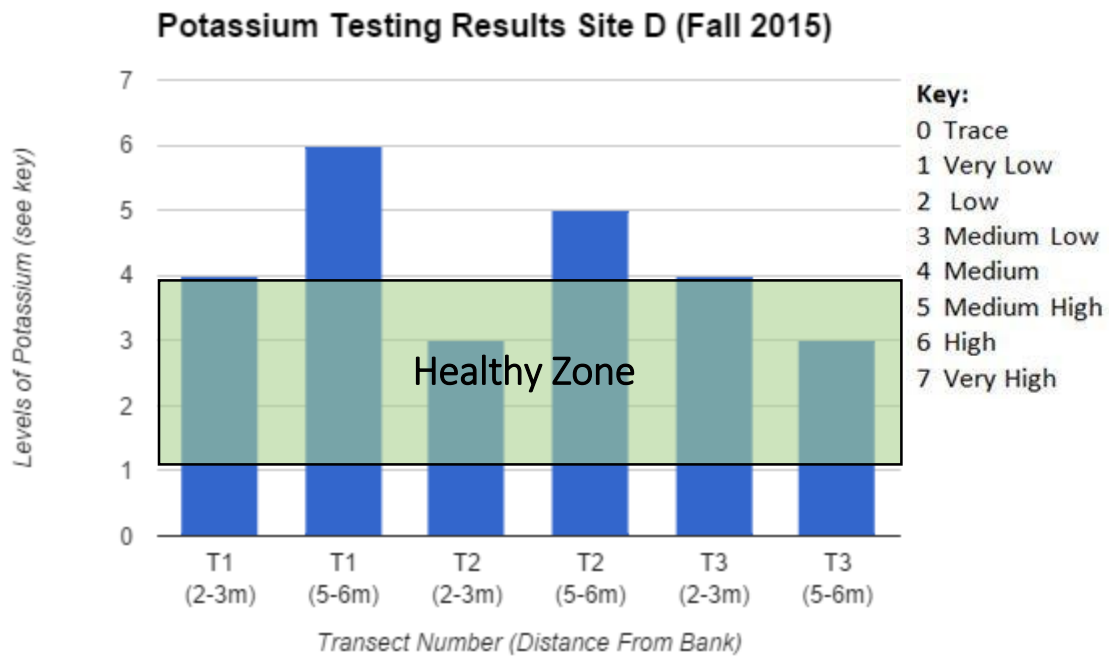
**Chemical Analysis:**

Trace and low levels of nitrogen and phosphorus respectively is a positive sign because it is indicative of a lower chance for cultural eutrophication to occur. However, it would be more beneficial for plant life in the creek if more nitrogen was present because it is essential for plant growth. Medium amounts of potassium were found 2-3m from the bank and Medium/Low amounts of potassium were found 5-6 m from the bank which is healthy. Lastly, pH of the sediments taken 2-3 m from the bank and pH of the sediments taken 5-6 m from the bed was 7. A pH of 7 and is more acidic than is healthy.

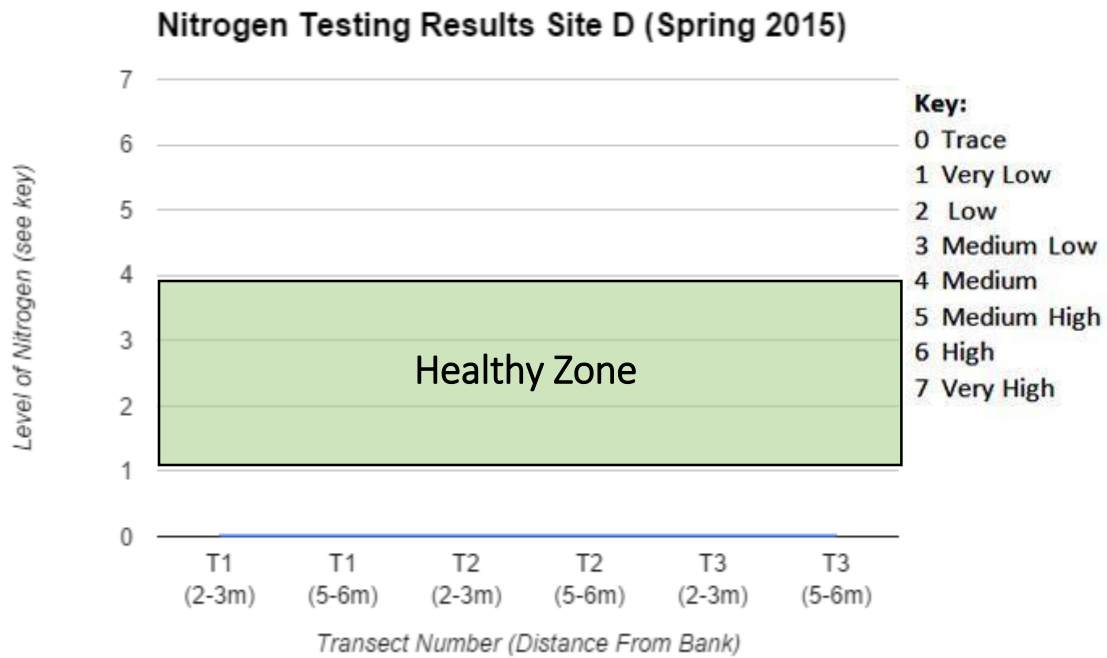
***Corbicula:***

No *Corbicula* shells were found in Transect 3, which indicates a lack of invasive species

## Chemical Testing Graphs







-All transects showed trace amounts of nitrogen. All below healthy levels of nitrogen.

