

Bushland Education Garden Project

Annual Progress Report

June 2017

Garden Progress To-Date:

We met in January with the landscape architect to finalize the plans for the landscape. During this time, our architect suggested we add a bioswale in front of the gym/music room to help divert water away from the school. Bushland elementary struggles with drainage issues and these rooms frequently flood. The bioswale will help give water off the roof a place to drain and will overflow (using drainage pipe) to the street. The added bonus is that the bioswale will also slow down much of the water that has caused flooding in the streets.

On Friday, April 21st, (through Sunday, April 23rd) we began removal of existing sod, removed an existing diseased tree, and cut and shaped the bioswale. During this process, we had 11 total volunteers (4 Bushland students and 7 adults).

The next weekend April 28th -30th, we continued sod removal, soil improvement, and installed the walk paths. We hit a snag with the weather on this weekend due to the cold and wet conditions. We pushed through and discovered that the drainage around the front porch needed to be addressed too, so we added a few bioswales in this area to help drain off the water. This weekend we had several students and parents stay on Friday to help rake and continue removing grass.

Thursday, May 18th – Sunday, May 21st, we amended the soil and began planting the main landscape beds. We had students from the elementary and middle school help, and this went very quickly. We had 3 adult volunteers and 8 student volunteers.

Thursday, June 1st we had 4 high school volunteers from the football team come over to help set up our benches (900 lbs. each). I think they had more fun attempting to run the forklift. We learned many lessons on this day, the first being boys never grow up... their toys just get bigger. These young men had us worried and in stitches the entire time.

Through the summer we will need to add additional compost and finish the area in front of the gym and music room.

Successes and Set Backs

The bioswale is a success in that, we could successfully prevent further water damage to the school (proved during the weather event on April 30th) while staying in our original budget.

The weather event on April 30th also showed the need for additional bioswales around the front entrance due to flooding. On Friday, May 18th while excavating for these additional bioswales, we uncovered a sheet of metal buried a few inches below the soil that covered the exit hatch of an old abandoned septic system. We had to spend the next few hours backfilling the septic to make the area safe and later filling as the soil settled.

The actual work time we have spent on this project has more than doubled now. The landscaper is continuing the work to finish, and we are jumping in to help as much as possible. It has definitely been an adventure.

Conservation Impacts to the District

During our initial sod removal, our architect discovered that our irrigation system was not functioning properly causing lawn problems. The sprinkler system no longer waters sidewalks and the parking lot, so this is definitely a water win! Our new landscape uses low-water plants that are native to the area and once established will only need monthly watering.

Improvements to the drainage in the front of the school is an enormous impact. Now instead of rainwater causing problems, we can move it away from the foundation to areas where it can be a benefit.

We have also enjoyed many conversations with parents on the plants we are installing. They are excited to see the results this fall, and we are excited to share landscape options that fit the needs of the panhandle.

The greatest impact by far is for our students who have been able to put on a pair of gloves and help. Mostly students worked after school, but on a few occasions, we had students help during the school day. On one occasion the opportunity to help was used as a reward for a boy who had struggled with his behavior over the last few months of school. We look forward to many projects and opportunities this area will provide for our students during this next school year. We plan on using this area as an outdoor classroom, having the students work a combined art/research project to design a book describing the plants in the garden and using this for many other educational outlets.

Budget Expense Report & Remaining Grant Fund Balance

Account Balance (as of 6/27/18) = \$13,123.13

Remaining Balance (as of 6/27/18) = \$408.12

Bushland Elementary										
Estimate										Running Total
Materials							364 bags	bulk		
Compost - top coat	2582	0.083	7.94		1"					
Compost - tilled in	2582	0.16	15		2"	27 cu yd	\$2,002.00	\$1,350.00		
garden Soil Builder	2582	.010	1		1/8"	25 bags	\$193.75	\$193.75		
yum yum mix						1 - 40# bag	\$37.00	\$37.00		
					<u>SOIL AMENDMENTS</u>		<u>\$2,232.75</u>	<u>\$1,580.75</u>		650
granite	850	0.17	5							1156.25
Rock Ranch										350.88
crusher fines	823	0.17	5							
Granite (w/ delivery charge)	1673	0.17	11	1532.1						
Edging (3 in.)	382	439.3		439.3						142.92
										111.24
Bench seating (10 units)	10			2450						2450 P
Rock Edging (circular seating)				250	extra					
Soil (for berms)				250	extra					
Drip (micro-spray system)	1932	483		603.75						410.76 P
										11.88
										43.19
						<u>MATERIALS</u>	<u>5525.1</u>			
Plants	sq ft	spacing		# of plants						
Shasta Daisy, snow lady	155	24		38	4.5	\$171.00				
Hardy Plumba.	233	24		58	4.5	\$261.00				
Speedwell, gc veronica pectinata	99	18		44	4.5	\$198.00				
Catmint jr walker	126	30		20	4.5	\$90.00				
Garillardia, Az sun, bijou, goblin	149	24		37	4.5	\$166.50				
Chocolate Flower	105	24		26	4.5	\$117.00				
Penstemon mix- wrightii, cardina	86	24		21	4.5	\$94.50				
Sand Love Grass	178	36		20	4.5	\$90.00				
Dianthus Gratianopolitanus, x all	113	24		28	4.5	\$126.00				
Blonde Ambition	74	24		18	4.5	\$81.00				
Salvia Greggii, Furmans red, Hotli	143	36		16	8	\$128.00				
Butterfly Bush, tall	3			3	8	\$24.00				
Russian Sage,lacey blue	124	30		19	8	\$152.00				
Columine, coral bells, perennial g	106	30		16	4.5	\$72.00				
Mat Daisy	90	18		40	4.5	\$180.00				
Desert Willow	15 gal					\$150.00				
	1784					<u>PLANTS</u>	<u>\$1,951.00</u>			2123
My labor (if needed)(negotiable)										
Grass Removal	4379	0.6	2627							
Sprinkler work			800							
Design			400							
Soil/rock/plant work			1000							
					<u>LABOR</u>	<u>4827.4</u>				4329

