

FORMAT FOR FINAL REPORT

Name of Grant Recipient SEA-DISC, Sir Francis Drake H.S. Date 6/12/2008

Contact Person Susan L. Fox Telephone 415-945-3600 x4414

1. Accomplishments:

- We restored a 150 meter section of the San Anselmo Creek on Sir Francis Drake High School's property, San Anselmo. The restoration was based on students' survey of the current plant species demographics, soil analysis, and water quality assessment. Approximately 200 native plants replaced the non-natives removed; the area of the previous year was given care also. Wattles were added to reinforce sliding or eroded banks and a set of log steps were added down slope to prevent erosion of the path. Soil Samples were taken and analyzed for nutrient levels prior to compost being added with the plants.
- Water quality data was taken along with Benthic Macroinvertebrate samplings in the Spring. The data was analyzed for PTI, EPT richness, and overall WQI. There was WQ monitoring at the source (Cascade Canyon), and Drake H.S. to help us make better comparisons after the Flood year. The students presented their findings with display boards, which are available to display at any MCSTOPPP function upon request.

2. Products:

- Students generated individual restoration plans which can be used as templates for future restorations.
- Some SEA-DISC interns, using their knowledge learned from our project, aided K-8th students in creek restoration projects (Laura Honda's Class). The juniors made displays on several features of WQ that were studied this year: WQI, BMI, Physical Features, and History of this Watershed.

3. We revegetated the first quarter section of the San Anselmo Creek (closest to Sir Francis Drake) which runs through Drake High. SEA-DISC WQ monitored the San Anselmo Creek, which also runs through Drake and its source the Cascade Canyon Creek. These are both part of the Corte Madera Watershed.

4. Forty students worked directly on the revegetation, and along side Charlie Kennard an adult volunteer from Friends of Corte Madera Creek. Twenty-Eight students participated in WQ monitoring.

5.

- Our school benefited in several ways. First and most importantly the students participating in the project gained a profound understanding of the riparian habitat and the importance of biodiversity. Other students on campus benefited by the exhibition of effort they witnessed SEA-DISC student put

forth towards a community service. As role models for stewardship, SEA-DISC encouraged other students at Drake to participate in community service. As many staff have mentioned, “the creek area appears much nicer” which makes for improved community relationships

- Our Community benefits from this revegetation by having a long term monitoring of the health of the creek. Creeks are not only a resource to the community by increasing property value for aesthetics, they are fundamental parts of the water cycle. With the erosion loss that was occurring property was being lost, and we all know land = \$! This project also adds to the greater community of Marin by improving water quality, and therefore decreasing loss of aquatic biodiversity, not to mention increased native plants leading to stable ecosystems. Steelhead Trout adults were witnessed in both creeks this year. Unfortunately, the trout in the San Anselmo Creek was witnessed out of water at the fish ladder.

6. We encountered a new problem with watering of the creek plants to help them establish this year, due to the school’s renovation. Previous water hook-ups were eliminated and a new one will be added this summer.

7. This project used both water sampling and insect sampling.

- Water sampling was done using several different pieces of equipment. The San Anselmo Creek was monitored using LaMotte Kits and probeware. The San Anselmo Creek was monitored using LaMotte water sampling test kits purchased with previous SEA-DISC moneys and added to with MCSTOPPP moneys in previous years. These kits appear to give more exact numbers, however, following directions is required to get accurate numbers. Several trials were done to ensure valid results. These kits are expensive, as are the refills and replacement pieces. We have received a grant from Buck Institute for Palm Pilots which we used with Probes to do more precise measurement. They have shown to be much better than the kits, and do not use chemicals which are bad for the environment. Aquatic Macro invertebrate sampling has occurred on the San Anselmo Creek (both sites mentioned above) for the seventh year. The protocol from the EPA was used for sampling, Pollution Tolerance Indexing (PTI) and Percent Compassion data. Two scientific display boards were produced on this topic. Drake has shown to be the worst WQ of the two sites.

8. I feel this project was very successful in both repair and education. The vast majority of the plants have survived. The willow wattles have bloomed holding the banks during this long rainy season. This section had good tree canopy, however, had several barren sections which had erosion of varying degrees. The positive affect on our students is easily measurable now. They not only wrote very in-depth plans for recovery, but also final reports on the quality of the creek

9. Press coverage’s (This is still almost impossible to get covered.) however, we publicize it on our website <http://drake.marin.k12.ca.us/academics/seadisc/>

10. Budget follows on next page and receipts are attached.

Request for Payment

Make check out to: Tamalpais Union High School District.
Name of Organization SEA-DISC Drake H.S.
Address 1327 Sir Francis Drake Blvd. San Anselmo Ca 94960
Program Director Sue Fox (SEA-DISC) Carolyn Shearer (Budget) Don Drake
(Principal)
Phone # 415-945-3600 x4414 (Fox)
Total Grant Award Allocated: \$1700.00
This request covers expenses for report period ending: June 2008

ITEM	COST
1. Fairfax Lumber: Water Testing Supplies	\$35.04
2. Fairfax Lumber: Twine	\$23.11
3. 200 Plants (North Coast Natives)	\$ 1118.02
4. Ward's: Soil Texture Kits (4), Measuring Tapes (8), Wash Bottles (3) BMI tests	\$556.91
Total Requested=	\$1733.08

Total Amount of Reimbursement Requested \$1733.08
Funds Remaining in Grant -\$33.08

Certification: I certify to the best of my knowledge and belief that this report is correct and complete and that all outlays and obligations are for the purposes set forth in the services agreement.

Carolyn Shearer
Signature of Finance Officer

6/13/08
Date

MCSTOPPP

THANK YOU FOR SHOPPING AT
FAIRFAX LUMBER & HARDWARE CO.
(415) 453-4410

MERCHANDISE MUST BE RETURNED WITH
RECEIPT AND IN SALEABLE CONDITION
8/29/07 10:03AM AH 05 SALE

70722	1 EA	4.29 EA	
TWINE SEINE NYLON2156OLD			4.29
70721	1 EA	4.29 EA	
TWINE SEINE NYLON2756OLD			4.29
75754	1 EA	7.49 EA	
TWINE NYLON SEINE ORANGE			7.49
52158	5 EA	3.29 EA	
DOWEL RAMIN 5/8X48" 25			16.45

SUB-TOTAL: 32.52 TAX: 2.52
TOTAL: 35.04
BC AMT: 35.04
BK CARD#: XXXXXXXXXXXX1071

====> JRNL# A15635 ((====
CUST # *5

THANK YOU STEVEN BLUESTONE
FOR YOUR PATRONAGE

THANK YOU FOR SHOPPING AT
FAIRFAX LUMBER & HARDWARE CO.
(415) 453-4410

MERCHANDISE MUST BE RETURNED WITH
RECEIPT AND IN SALEABLE CONDITION
8/30/07 9:47AM AH 04 SALE

70721	5 EA	4.29 EA	
TWINE SEINE NYLON2756OLD			21.45

SUB-TOTAL: 21.45 TAX: 1.66
TOTAL: 23.11
BC AMT: 23.11

BK CARD#: XXXXXXXXXXXX1071

====> JRNL# A16289 ((====
CUST # *5

THANK YOU STEVEN BLUESTONE
FOR YOUR PATRONAGE



NORTH COAST NATIVE NURSERY

PO Box 660, PETALUMA, CA 94953 707.769.1213 FAX 707.769.1230

WWW.NORTHCOASTNATIVENURSERY.COM

To: Sandy

PLANT MATERIAL ORDER

Oct 23, 2007

Sue Fox

Drake High School/Tamalpais Union School District

P.O. Box 605

Larkspur, CA 94977

Phone 415-945-3600, HS#453-8770 Sandy Fax 415-458-3479 -HS/Sandy

Deliver to: Drake High School 1327 Sir Francis Drake Blvd. San Anselmo, CA 94960

Order # 7-348

Correct quantities shown below

Quan	Latin	Common or Notes	Unit Price	Total
3 D60	<i>Acer macrophyllum</i>	big leaf maple	5.25	15.75
3 D60	<i>Acer negundo var. californicum</i>	box elder	5.25	15.75
1 5 gal	<i>Acer negundo var. californicum</i>	box elder	15.00	15.00
2 3g trpt	<i>Fraxinus latifolia</i>	Oregon ash	13.00	26.00
0 5 gal	<i>Ainus rubra (A. oregona)</i>	red alder		0.00
3 5 gal	<i>Quercus lobata</i>	valley oak	4.50	13.50
8 D40	<i>Baccharis pilularis</i>	coyote brush	4.50	36.00
8 gal	<i>Calycanthus occidentalis</i>	western spicebush	4.50	36.00
8 gal	<i>Ceanothus gloriosus</i>	Mt. Vision ceanothus	4.50	36.00
8 D40	<i>Cornus sericea (= C. stolonifera)</i>	American dogwood	4.50	36.00
8 gal	<i>Corylus cornuta var. californica</i>	California hazelnut	4.50	36.00
8 D40	<i>Holodiscus discolor</i>	creambush, oceanspray	4.50	36.00
8 gal	<i>Lonicera involucrata</i>	twinberry honeysuckle	4.50	36.00
8 D40	<i>Mimulus aurantiacus</i>	sticky monkeyflower	4.50	36.00
8 5 gal	<i>Rhamnus californica</i>	coffeeberry	15.00	120.00
8 gal	<i>Ribes californicum</i>	California gooseberry	4.50	36.00
8 D40	<i>Rosa californica</i>	wild rose	4.50	36.00
8 D40	<i>Physocarpus capitatus</i>	ninebark	4.50	36.00
8 gal	<i>Iris douglasiana</i>	Douglas iris	6.00	48.00
8 lch	<i>Festuca californica</i>	California fescue	2.10	16.80
8 lch	<i>Festuca rubra 'Jughandle'</i>	Jughandle red fescue	2.10	16.80
16 lch	<i>Juncus patens</i>	blue rush	2.10	33.60
8 gal	<i>Polystichum munitum</i>	western sword fern	6.50	52.00
8 gal	<i>Woodwardia fimbriata</i>	giant chain fern	7.00	56.00
8 gal	<i>Aristolochia californica</i>	Dutchman's pipe	4.50	36.00
16 D40	<i>Rubus ursinus (= R. vitifolius)</i>	California blackberry	4.50	72.00
4 D40	<i>Vitis californica</i>	California wild grape	4.50	18.00



NORTH COAST NATIVE NURSERY

PO Box 660, PETALUMA, CA 94953 707.769.1213 FAX 707.769.1230
WWW.NORTHCOASTNATIVENURSERY.COM

PLANT MATERIAL ORDER

Oct 23, 2007

Order # 7-348

Sue Fox

Drake High School/Tamalpais Union School District

P.O. Box 605

Larkspur, CA 94977

Phone 415-945-3600, HS#453-8770 Sandy Fax 415-458-3479 -HS/Sandy

Deliver to: Drake High School 1327 Sir Francis Drake Blvd. San Anselmo, CA 94960

Quan	Latin	Common or Notes	Unit Price	Total
✓ 8 lch	<i>Carex tumulicola = C. divulsa</i>	Berkeley sedge	2.10	16.80

4 *Symphoricarpos albus.*

Charles Kimmel

Plants received by:

Subtotal	968.00
Tax	75.00
Tray Container Deposit	
Shipping	75.00
Total	1118.00

REQ# VENDOR #/NAME DATE S SITE SHIP CO BOARD DESCRIPTION SUBMITTED BY

307527 008675 WARDS SCIENTIFC 05/21/2008 C 0000 0003 0 Garden supplies - SEA-DISC C.Shearer for Sue Fox
P.O. BOX 92912 BUYER: TERMS: FOB:
CONTACT: PO-TYPE: REQ DELIVERY DATE:06/12/2008

()----- ROCHESTER NY 14692

01	4 ea	21W0626 La Motte Soil Texture Kit	54.00	216.00	Y
02	3 ea	18W4116 Wide Mouth Wash Bottle 500ml	4.75	14.25	Y
03	8 ea	15W2540 50-meter measuring tape	29.95	239.60	Y
04	1 ea	estimated shipping charges	47.00	47.00	Y
				SUB TOTAL	516.85
				TAX	40.06
				REQ. TOTAL	556.91

Dale F. Dh
AUTHORIZED SIGNATURE

5/30/08
DATE