Project Status Sheet(Page 1 of 6)

as of 12/31/2016

Funding Provided by the Minnesota Clean Water Land and Legacy Fund

Name: Marine on St. Croix Stormwater Phase 1	Address: Various in Marine
Project I.D #:	Subwatershed:
LGU: Scandia	Board Liaison: Joel Stedman

Background

Problem	Excess nutrients (phosphorus) and sediment to Mill Stream and St. Croix River which is impaired for nutrients (phosphorus)
Origin	Road run-off
Plan Reference	CMSCWD 2010 Management Plan Section II, B. Surface Water Management- Objectives: 1.Maintain or improve the quality and ecological integrity of all water resources in the District 8. Minimize the impacts of storm water runoff. Section IV. H, 1. b. Neighborhood Wide Small Lot Stormwater Management Incentive Program Current Plan Section IV, I, 6
Cost Estimates	$10,000 (2011), $10,000 (2014) Plan Estimate (2010 Plan), $20,000 (2015), $20,000 (2017) Plan Estimate (Current Plan) Grant Application and Workplan Estimate $122,750
CMSCWD Funding	2015 Budget: $30,000 2016 Budget: $30,000 Total: $60,000 Expenses Previous Years: Expenses YTD: $49,242.12 Available: $
Total Grant Funding	CMSCWD $12,275, MOSC $12,275, BWSR Grant $98,200
Partners	BWSR, Marine on St. Croix
Stakeholders	Neighbors, City of Marine, NPS

Actions and Authorizations to date

2014	Included in unsuccessful CWF Grant
2012-2014	Comprehensive Storm Water Management Plan with Marine Approval of Marine Local Water Management Plan (LWP) and MOA
2015	Resolution to Participate in CWF Grant
4/10/15	Grant awarded
4/14/15	City-wide raingarden workshop
4/15/15	Grant Partners meeting
6/17/2015	2nd Grant Partners meeting
7/15/2015	Public Grant Kickoff meeting
8/5-9/16/2015	Individual Property Owners meetings
9/16/2015	3rd Grant Partner meeting a) 24 landowners expressed interest originally b) 23 of 24 visited (Mary Lusher TBD) c) 1 additional land owner added (Gray Property across Wilke per Megan Lapas d) 2 landowners withdrew e) 2 properties unsuitable f) 29 raingarden locations identified on 20 properties thus far
9/30/2015	balance of utilities located and surveyed Outreach to property owners at 200 and 210 6th St. (city representatives Watershed Prioritization i) Sketch Plans of individual practices on lots ii) Determine catchment areas iii) Preliminary phosphorus and sediment reduction loading by individual practice
11/2/2015	IESF survey at Pine and Robert Sts.
11/18/2015	Grant Partners Meeting- City Prioritization and Final Prioritization and Cost Estimates
11/19/2015	Meet with City Maintenance for additional prioritization issues

	Contact BWSR i) Deer Issues ii) Assurances issues
12/1/2015	Prioritization Presentation to Property Owners and City City to confirm interest with those not in attendance on Dec. 1
End of January 2016 to March	Schedule and hold individual design meetings with property owners at Marine City Hall
February-April 2016	Confirm Designs and assurances, final design and bid documents
Febrary	Prepare 40% design for Pine Robert IESF Prepare design options for individual rain gardens
March 2016	Finish 40% design Meetings and design presentations to 7 individual property owners
April 2016	95% design for Pine Robert IESF Individual Raingarden desing
4/15/2016	Meet with City Staff regarding raingarden issues Begin Bid package preparation
May 2016	IESF Specification Preparation Review individual Raingarden designs with property owners
June 2016	Final plans and bidding for IESF and raingarden package
July 2016	Review bids Concept design for BMPs at Mill Stream and Broadway
September 2016	Concept design for BMP at Hwy 95 and Broadway
October-December 2016	Review designs for road BMPs Incorporate Plan set into County Bid set

Date	Transaction Type	Name	Memo/Description	Amount	Balance
06/30/2015	Bill	Washington Conservation Dist/Soil & Water	MOSC Grant Phase 1- Kick off Meeting	227.50	227.50
05/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	626.25	853.75
06/30/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	79.25	933.00
07/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	1,117.58	2,050.58
08/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	934.55	2,985.13
09/30/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	3,125.32	6,110.45
10/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	2,188.48	8,298.93
11/30/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	573.85	8,872.78
12/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	3,605.46	12,478.24
12/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	3,605.46	16,083.70
12/31/2015	Bill	Emmons & Olivier Resources	MOSC Stormwater Implementation Phase 1	905.45	16,989.15
03/31/2016	Bill	Lawson, Marshall, McDonald & Galowitz	Raingarden contracts and assurances	240.00	17,229.15
03/31/2016	Bill	Emmons & Olivier Resources	MOSC Stormwater	3,157.00	20,386.15
04/30/2016	Bill	Emmons & Olivier Resources	MOSC Stormwater	8,213.79	28,599.94
05/31/2016	Bill	Emmons & Olivier Resources	MOSC Stormwater	10,776.93	39,376.87
06/30/2016	Bill	Emmons & Olivier Resources	MOSC Stormwater	2,118.75	41,495.62
07/31/2016	Bill	Emmons & Olivier Resources	MOSC Stormwater	3,135.00	44,630.62
08/31/2016	Bill	Emmons & Olivier Resources	MOSC Stormwater	2,893.50	47,524.12
10/31/2016	Bill	Emmons & Olivier Resources	Marine Stormwater	417.00	47,941.12
11/30/2016	Bill	Emmons & Olivier Resources	Marine Stormwater	432.00	48,373.12
12/31/2016	Bill	Emmons & Olivier Resources	Marine Stormwater	625.75	48,998.87
12/31/2016	Bill	Emmons & Olivier Resources	Marine Stormwater	243.25	49,242.12

Priority	Street Address	Rain Garden ID	Maximum Footprint (SF)	Idealized Footprint (SF)	Idealized Volume (CF)	Individual RG Direct Drainage Area (Acres)	Individual RG TP Load (lbs/year)**	Individual RG TSS Load (Ton/year)**	Upstream BMPs	Upstream Drainage Area (Acres)	1 Inch Runoff Volume From Direct Drainage Area (CF)	Estimated Cost
1	280 6TH	280A	600	600	300	0.35	0.38	0.07	None	0.00	311	$6,000
2	281 6TH	281A	600	600	300	0.58	0.64	0.12	None	0.00	521	$6,000
2	281 6TH	281B	540	540	270	0.34	0.38	0.07	281A	0.58	306	$5,400
1	281 6TH	281C	480	330	165	0.18	0.20	0.04	281A, 281B	0.93	165	$3,300
1	231 6TH	231_6A	720	720	360	0.85	0.94	0.18	281A, 281B, 281C	1.11	758	$7,200
3	200 ROSE	200A	360	150	75	0.08	0.08	0.02	None	0.00	75	$1,500
2	190 ROSE	190A	250	100	50	0.05	0.06	0.01	200A	0.08	52	$1,000
2	170 ROSE	170A	480	300	150	0.16	0.17	0.03	200A, 190A	0.13	149	$3,000
1	170 ROSE	170B	430	430	215	0.30	0.33	0.06	200A, 190A, 170A	0.29	291	$4,300
2	191 ROSE	191A	660	540	270	0.28	0.31	0.06	None	0.00	269	$5,400
3	230 ROSE	230A	105	105	53	0.10	0.11	0.02	None	0.00	93	$1,050
2	231 ROSE	231A	270	270	135	0.42	0.46	0.09	230A	0.10	404	$2,700
1	600 WILKE	600A	995	995	498	1.66	1.82	0.35	230A,231A	0.52	1590	$9,950
3	201 ROSE (ROW)	201A	395	250	125	0.13	0.14	0.03	None	0.00	124	$2,500
3	201 ROSE (ROW)	201B	230	180	90	0.09	0.10	0.02	201A	0.13	89	$1,800
3	201 2ND	201_2A	30	30	15	0.04	0.04	0.01	None	0.00	40	$300
1	260 2ND	260A	1080	1080	540	1.56	1.72	0.33	None	0.00	1718	$10,800
2	260 2ND	260B	720	720	360	0.31	0.34	0.06	None	0.00	338	$7,200
2	300 2ND	300A	425	425	213	1.36	1.50	0.29	None	0.00	1495	$4,250
1	301 ROBERT	301A	390	390	195	1.35	1.48	0.28	None	0.00	946	$3,900
3	340 ROBERT	340A	100	100	50	0.21	0.23	0.04	None	0.00	148	$1,000
3	340 ROBERT	340B	70	70	35	0.02	0.02	0.00	None	0.00	14	$700
3	671 PINE	671A	360	120	60	0.06	0.07	0.01	None	0.00	56	$1,200
2	671 PINE	671B	900	120	60	0.06	0.06	0.01	671A	0.06	51	$1,200

TOTAL **$91,650**

Priority 1 Subtotal $45,450

* Average 1/4 Ac lots in D soils
** TP = 1.1 lb/ac-yr; TSS = 0.21 T/ac-yr (October 27, 2011 BWSR Academy Pollutant Reduction Estimators)
*** Reduction of 65% TP, TSS & Volume if size for 1-inch Runoff Volume; otherwise prorated to that portion of 1-inch event