



Grant All-Detail Report Projects and Practices 2019

Grant Title - Bald Eagle Lake Iron-Enhanced Sand Filter

Grant ID - C19-1980

Organization - Rice Creek WD

Original Awarded Amount	\$392,000.00	Grant Execution Date	4/4/2019
Required Match Amount	\$98,000.00	Original Grant End Date	12/31/2021
Required Match %	25%	Grant Day To Day Contact	Kyle Axtell
Current Awarded Amount	\$392,000.00	Current End Date	12/31/2021

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$392,000.00	\$392,000.00	\$0.00
Total Match Amount	\$98,000.00	\$107,910.78	\$-9,910.78
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$490,000.00	\$499,910.78	\$-9,910.78

**Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.*

Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
IESF Construction	Urban Stormwater Management Practices	Current State Grant	CWF Grant	\$320,000.00	\$320,000.00	10/14/2020	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
IESF Construction	Urban Stormwater Management Practices	Local Fund	RCWD	\$60,000.00	\$45,990.45	11/24/2021	Y
IESF Design & Engineering	Technical/Engineering Assistance	Current State Grant	CWF Grant	\$72,000.00	\$72,000.00	5/27/2020	N
IESF Design & Engineering	Technical/Engineering Assistance	Local Fund	RCWD	\$13,000.00	\$24,095.27	10/28/2020	Y
IESF Education & Outreach	Education/Information	Local Fund	RCWD	\$5,000.00	\$3,629.59	12/31/2021	Y
IESF Project Development	Project Development	Local Fund	RCWD	\$20,000.00	\$34,195.47	12/31/2021	Y

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
712M - Bioretention Basin	1	1	1 COUNT	1 COUNT
155M - Storm Water Retention Basins	1	1	0.3 AC	0.3 AC

Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
IESF Construction	PHOSPHORUS (EST. REDUCTION)	43 LBS/YR	Bald Eagle Lake	Literature Value	RCWD Engineer calculated TP removal
IESF Construction	SEDIMENT (TSS)	1.4 TONS/YR	Bald Eagle Lake	Literature Value	RCWD Engineer calculated TSS removal

Final Indicators Summary

Indicator Name	Total Value	Unit
SEDIMENT (TSS)	1.40	TONS/YR
PHOSPHORUS (EST. REDUCTION)	43.00	LBS/YR

Grant Activity

Grant Activity - IESF Construction

Description	<p>This activity includes the construction of all project components proposed for the Bald Eagle Lake IESF, including the filter system, operational controls and wet pond. This project is expected to produce annual average pollutant reductions of 43 pounds of total phosphorus (TP) and 1.4 tons of total suspended sediments (TSS).</p> <p>The RCWD intends to retain the services of Houston Engineering, Inc. (HEI) as the engineer for this project. HEI serves as the District's regular consulting engineer and has experience with the design of similar systems. RCWD will serve as "Owner" for the construction contract. White Bear Township will serve in an advisory capacity as a project partner during construction. Access to the project site, and project construction itself, will all take place on property owned by White Bear Township.</p>		
Category	URBAN STORMWATER MANAGEMENT PRACTICES		
Start Date	25-Aug-20	End Date	31-Dec-21
Has Rates and Hours?	No		
Actual Results	<p>No construction activity in 2019.</p> <p>2020 Annual Report: Construction began in late August and was complete by mid-October 2020, with no notable problems. The IESF system was tested to be fully operational for four consecutive days in October prior to being shut down for the winter season. We look forward to a full year of operation in 2021 as the native seed mixes germinate and add habitat and aesthetic value to the site.</p> <p>2021 Final Report: EPG Companies assisted RCWD staff with several electrical and programming troubleshooting episodes in 2021. All was working properly at the end of the operating season.</p>		

Activity Action - Bald Eagle Lake IESF			
Practice	712M - Bioretention Basin	Count of Activities	1
Description	Iron-Enhanced Sand Filter on RCD11; removes dissolved phosphorus from runoff flowing through Ramsey County Ditch 11 to Bald Eagle Lake.		
Proposed Size / Units	1.00 COUNT	Lifespan	25 Years
Actual Size/Units	1.00 COUNT	Installed Date	30-Oct-20
Mapped Activities	1 Point(s)	Technical Assistance Provider	Private Consultant

Final Indicator for Bald Eagle Lake IESF			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	43
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	Literature Value
Waterbody	Bald Eagle Lake		
Final Indicator for Bald Eagle Lake IESF			
Indicator Name	SEDIMENT (TSS)	Value	1.4
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	Literature Value
Waterbody	Bald Eagle Lake		

Activity Action - Stormwater Pond			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	Inline wet pond to provide passive treatment for all RCD 11 runoff. Also serves as stable, sediment-free intake for associated iron-enhanced sand filter.		
Proposed Size / Units	0.30 AC	Lifespan	25 Years
Actual Size/Units	0.30 AC	Installed Date	30-Oct-20
Mapped Activities	1 Point(s)	Technical Assistance Provider	Private Consultant

Grant Activity - IESF Design & Engineering

Description

This activity involves working with the District Engineer to expand upon the concept work completed by staff and in the RCD11 IESF Feasibility Recommendations Memo (August 2018). All plan development, permitting, bidding, contract management and construction oversight activities are included here. These activities will all be undertaken by the District Engineer, Houston Engineering, Inc. (HEI) under the direction of RCWD staff.

HEI employs licensed Professional Engineers, has experience with the design of similar systems, and has successfully filled this role many times for the RCWD over the last 8+ years.

It is known that construction of this project will exceed \$175,000 in cost. Contractor selection will be completed via a sealed, competitive bid process, consistent with MN Statute 471.345.

Category

TECHNICAL/ENGINEERING ASSISTANCE

Start Date

8-May-19

End Date

31-Dec-21

Has Rates and Hours?

No

Actual Results

2019 Annual Report: Design work for this project began in May 2019, including a wetland delineation, electrical layouts, and site plan development. Preliminary plans were submitted to the District in November for internal review and comment. We expect to release final plans and specifications for contractor bidding in early 2020.

2020 Annual Report: Final plans were complete in January 2020. After a sealed bid process, Peterson Companies was selected to construct the project on March 25, 2020. Houston Engineering, Inc. completed construction observation with assistance from RCWD staff. A project O&M manual is forthcoming in early 2021.

2021 Final Report: Houston Engineering produced an O&M manual for the project in 2021. It is intended to function as a living document as system modifications are made in the future and as staff gain experience operating the system.

Grant Activity - IESF Education & Outreach

Description	This activity covers the development and implementation of all public education, outreach and communication initiatives for this project including, but not limited to, neighborhood meetings, publications and installation of interpretive signage at the site.		
	Activities will be carried out primarily by RCWD staff, including the Project Manager and Outreach Coordinator with assistance as needed from other project partners, including White Bear Township and the Bald Eagle Area Association.		
Category	EDUCATION/INFORMATION		
Start Date	18-Dec-19	End Date	22-Dec-21
Has Rates and Hours?	Yes		
Actual Results	2019 Annual Report: A landowner information meeting was held on December 18, 2019 at Hugo City Hall, north of the project area. Six local citizens attended the meeting. 2020 Annual Report: A project summary was provided to the Bald Eagle Area Association for dissemination at their annual meeting. The White Bear Press published an article about the project on October 7, 2020. 2021 Final Report: Educational signage was developed for this project in conjunction with Houston Engineering and produced by Vacker Signs. Due to weather considerations, it will be stored and installed in the spring of 2022.		

Grant Activity - IESF Project Development

Description	<p>This activity includes all RCWD staff time devoted to the project, including grant administration and other project development activities. Consulting expenses with the District Engineer and Attorney associated with developing the project are also included here.</p> <p>The RCWD will work immediately to execute an agreement with White Bear Township providing proper assurances of access for construction, operation and maintenance for this project, which will be submitted to BWSR for review prior to execution. The assurances will be executed prior to the expense of any grant funds on the project.</p> <p>Kyle Axtell, RCWD Project Manager, will serve as the lead project manager for this grant.</p>		
Category	PROJECT DEVELOPMENT		
Start Date	4-Apr-19	End Date	31-Dec-21
Has Rates and Hours?	Yes		
Actual Results	<p>2019 Annual Report: A project agreement was executed in June 2019 between the RCWD and White Bear Township governing all aspects of our relationship related to the project, including, financials, construction access, ownership, operations and maintenance. RCWD staff has completed grant project and fiscal tracking activities throughout the year in accordance with BWSR grant policies. Several meetings were held with Township staff to review the project's goals and site limitations and to review the preliminary project plans. District counsel completed a title search on the two Township-owned parcels being utilized for this project.</p> <p>2020 Annual Report: RCWD staff has again completed grant project and fiscal tracking activities throughout the year in accordance with BWSR grant policies. Final plans were completed early 2020 and construction was completed in October. Cleanup, system troubleshooting and project signage will be undertaken next year.</p> <p>2021 Final Report: RCWD staff has completed grant project and fiscal tracking activities throughout the year in accordance with BWSR grant policies, including submittal of the final report. Due to the extreme drought in 2021, system operation was limited (lack of water). Electrical troubleshooting also caused some issues during the year but corrections were made as needed.</p>		

Grant Attachments

Document Name	Document Type	Description
2019 CWF Financial Report 20200103	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2019 Competitive Grant	Grant Agreement	2019 Competitive Grant - Rice Creek WD

Document Name	Document Type	Description
2019 Competitive Grant EXECUTED	Grant Agreement	2019 Competitive Grant - Rice Creek WD
2019 Houston Engineering	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2019 Pioneer Press	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2019 RCWD Staff Time	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2019 Rinke Noonan	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2019 Smith Partners	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2020 CWF Financial Report	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2020 EPG Companies	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2020 Houston Engineering	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2020 MnDNR MPARS Fee	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2020 RCWD Staff Time	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2020 Smith Partners	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2021 CWF Financial Report	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2021 EPG Companies Expense	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2021 Houston Engineering Expenses	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2021 RCWD Staff Time	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
2021 Vacker Signs Expense	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/14/2021
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/29/2021
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/24/2022
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/11/2022
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 04/07/2020
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/11/2022
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 03/29/2021
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 01/03/2020
Application	Workflow Generated	Workflow Generated - Application - 08/30/2018
BEL IESF Bid Package 20200131	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
BEL IESF Plans Only 20200131	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Bald Eagle Lake IESF O&M	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Bald Eagle Lake IESF Record Drawings	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Bald Eagle Lake IESF Signage	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Concept Information Image	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter

Document Name	Document Type	Description
EPG Companies IESF System Engineer Acceptance Docs	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
EPG Companies IESF System Submittal	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Houston Engineering Task Order 2019-009	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Landowner Information Meeting Materials	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Peterson Companies Construction Agreement	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Peterson Companies Notice to Proceed	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Peterson Companies Pay Request 1	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Peterson Companies Pay Request 2	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Peterson Companies Pay Request 3 FINAL	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Preliminary Plan Set - Bald Eagle Lake IESF	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Project Agreement RCWD White Bear Township	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Proof of Landowner Direct Mailing - 660 addresses	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
RCWD Resolution 2019-18	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
RCWD Resolution 2020-03	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
RCWD Resolution 2020-09	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 12/19/2018
grantmap_22134_2018-08-24_04-14-17-PM.jpg	Grant	Bald Eagle Lake Iron-Enhanced Sand Filter