



## Grant All-Detail Report Projects and Practices 2016

**Grant Title** - Moody Lake Wetland Rehabilitation

**Grant ID** - C16-7918

**Organization** - Comfort Lake-Forest Lake WD

Original Awarded Amount	\$429,284.00	Grant Execution Date	3/21/2016
Required Match Amount	\$107,321.00	Original Grant End Date	12/31/2018
Required Match %	25%	Grant Day To Day Contact	Mike Kinney
Current Awarded Amount	\$429,284.00	Current End Date	12/31/2018

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$429,284.00	\$425,363.93	\$3,920.07
Total Match Amount	\$108,093.00	\$106,352.74	\$1,740.26
Total Other Funds	\$0.00	\$0.00	\$0.00
<b>Total</b>	<b>\$537,377.00</b>	<b>\$531,716.67</b>	<b>\$5,660.33</b>

\*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
Effectiveness monitoring	Monitoring/Data Collection	Current State Grant	Moody Lake Wetland Rehabilitation	\$20,000.00	\$11,634.62	12/31/2018	N
Effectiveness monitoring	Monitoring/Data Collection	Federal Funds	Moody Section 319	\$0.00	\$10,997.20	12/31/2017	Y
Effectiveness monitoring	Monitoring/Data Collection	Local Fund	CLFLWD	\$4,291.00			Y

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Project Administration	Administration /Coordination	Current State Grant	Moody Lake Wetland Rehabilitation	\$15,000.00	\$13,167.03	12/31/2018	N
Project Administration	Administration /Coordination	Federal Funds	Moody Section 319	\$0.00	\$1,996.00	12/31/2018	Y
Project Administration	Administration /Coordination	Local Fund	CLFLWD	\$0.00	\$3,739.32	12/31/2018	Y
Wetland Rehabilitation	Wetland Restoration/Cr eation	Current State Grant	Moody Lake Wetland Rehabilitation	\$322,427.00	\$322,427.00	6/30/2018	N
Wetland Rehabilitation	Wetland Restoration/Cr eation	Local Fund	CLFLWD	\$87,573.00	\$36,414.96	2/28/2017	Y
Wetland Rehabilitation Engineering	Technical/Engi neering Assistance	Current State Grant	Moody Lake Wetland Rehabilitation	\$71,857.00	\$78,135.28	12/31/2016	N
Wetland Rehabilitation Engineering	Technical/Engi neering Assistance	Federal Funds	Moody Section 319	\$0.00	\$34,945.36	12/31/2018	Y
Wetland Rehabilitation Engineering	Technical/Engi neering Assistance	Local Fund	CLFLWD	\$16,229.00	\$18,259.90	12/31/2017	Y

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
657 - Wetland Restoration	2	2	6 AC	6 AC

### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
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## Final Indicators Summary

Indicator Name	Total Value	Unit
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### Grant Activity

Grant Activity - Effectiveness monitoring			
Description	<p>The proposed project is an adaptive management, multi-phased approach to implementation of projects necessary to accomplish the project goal of reducing Moody Lake Watershed Phosphorus loadings by 445 lbs/yr. Each phase of winter wetland rehabilitation implementation will be followed by spring and summer monitoring to determine the effectiveness of each implementation phase and whether proceeding to the next phase of implementation is necessary to achieve the phosphorus reduction goal.</p> <p>The effectiveness monitoring activity includes: Staff hours, lab expenses and mileage to conduct two years of effectiveness monitoring following each wetland rehabilitation phase. Mike Majeski (EOR) will have primary responsibility for the monitoring work. Refer to Phase 2, Phase 5 and Phase 7 of the attached detailed Work Plan Text for additional information.</p>		
Category	MONITORING/DATA COLLECTION		
Start Date	1-Feb-17	End Date	31-Dec-18
Has Rates and Hours?	No		
Actual Results	<p>2/1/18 Update: After wetland A/B project construction was complete, project effectiveness monitoring began and continued through the summer months. Results showed a reduction in discharge phosphorus concentrations from 0.63 mg/L pre-excavation to 0.26 mg/L post-excavation. (Note that monitoring expenses are also covered by a Section 319 grant, so only CWF match has been reported for this period.)</p> <p>2/1/19 Update: Project effectiveness monitoring was performed throughout the summer months in 2018. The P load at the outlet of Wetland C was estimated at 240 lb, indicating a 396-pound reduction from the original load. Work on Wetland C is slated to occur in February/March 2019. Work will include removal of sediment buildup and water level management. Work will be done under Section 319 grant which expires 8/31/2020. Wetland C work is expected to bring project to final water quality goal of 445 pounds of phosphorus removal per year.</p>		

## Grant Activity - Project Administration

<b>Description</b>	<p>The proposed project is an adaptive management, multi-phased approach to implementation of projects necessary to accomplish the project goal of reducing Moody Lake Watershed Phosphorus loadings by 445 lbs/yr.</p> <p>This activity includes staff hours to administer BWSR grant dollars and manage landowner agreements. It is estimated that staff will spend 220 hours at \$68/hour on project administration.</p>		
<b>Category</b>	ADMINISTRATION/COORDINATION		
<b>Start Date</b>	23-Mar-16	<b>End Date</b>	31-Dec-18
<b>Has Rates and Hours?</b>	Yes		
<b>Actual Results</b>	<p>1/26/17 Update: Administration for Phase 1: Preconstruction Design and Coordination occurred throughout April-December 2016. Activities included kickoff meeting, land access and activity agreements, stakeholder meetings, landowner coordination, land acquisition/easement agreement and agency coordination. Construction bidding occurred in December 2016.</p> <p>5-23-17 Update: A ground breaking ceremony was coordinated for January 27th with District staff, engineers, contractors, landowners, and press in attendance. Construction was largely completed between February 6th and 16th. District Administrator made several trips to the construction site during this time for coordination purposes. District staff submitted the interim report before February 1st.</p> <p>2/1/18 Update: District Administrator oversaw Wetland A/B site cleanup, project effectiveness monitoring, Wetland C engineering, and Wetland A/B alum spot treatment design during this time period. Frequent meetings and communications with the District Engineer, EOR, occurred during this time period.</p> <p>2/1/19 Update: District staff performed outreach, oversight, financial tracking, and contracting assistance for the Wetland A/B alum spot treatments. Outreach materials were sent out to nearby landowners and posted on the District website including: alum treatment fact sheet and CLFLWD project update letter.</p>		

## Grant Activity - Wetland Rehabilitation

<b>Description</b>	<p>The proposed project is an adaptive management, multi-phase approach for implementation of projects that will systematically reduce phosphorus export from three degraded wetlands in the Moody Lake Watershed. The construction portion of Phase 2 of the work plan includes sediment excavation of Wetland A and B, livestock exclusion and buffer strips. The construction portion of Phase 4 of the work plan includes sediment excavation of Wetland C. The construction portion of Phase 6 of the work plan includes alum application of Wetlands A and B.</p> <p>Construction costs for 12 inches of wetland soil excavation, livestock exclusion, grassed waterway, wetland buffer, and spot alum treatments. Refer to Phase 2, Phase 4 and Phase 6 of the attached detailed Work Plan Text for additional information on items included in this grant activity.</p>		
<b>Category</b>	WETLAND RESTORATION/CREATION		
<b>Start Date</b>	31-Jan-17	<b>End Date</b>	31-Dec-18
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>5-23-17 Update: Construction commenced the week of February 6th and after adjusting their crews' schedules, Peterson Companies operated around the clock for the last week of construction out of concern for the pending warming weather. The construction portion of phase 2, the excavation of wetlands A &amp; B, livestock exclusion and install of buffer strips, was largely completed by February 16th. Next steps for this activity will include additional site cleanup and restoration in the coming months.</p> <p>2/1/18 Update: Wetland A/B site restoration and revegetation were completed in 2017. No additional construction activity was completed during this time period. Next phases of construction will occur in 2018.</p> <p>2/1/19 Update: In 2018 Wetland A/B alum spot treatment occurred in June. Work on Wetland C is slated to occur in February/March 2019. Work will include removal of sediment buildup and water level management. Work will be done under Section 319 grant which expires 8/31/2020. Wetland C work is expected to bring project to final water quality goal of 445 pounds of phosphorus removal per year.</p>		

Activity Action - Wetlands A/B Alum			
Practice	657 - Wetland Restoration	Count of Activities	1
Description	Application of alum to Wetland A/B		
Proposed Size / Units	6.00 AC	Lifespan	10 Years
Actual Size/Units	6.00 AC	Installed Date	12-Jun-18
Mapped Activities	1 Polygon(s)		

Activity Action - Wetland A/B Restoration			
Practice	657 - Wetland Restoration	Count of Activities	1
Description	Removal of nutrient-rich sediment layers, installation of wetland buffer strips, and management of livestock access.		
Proposed Size / Units	6.00 AC	Lifespan	25 Years
Actual Size/Units	6.00 AC	Installed Date	18-Apr-17
Mapped Activities	1 Polygon(s)		

## Grant Activity - Wetland Rehabilitation Engineering

<b>Description</b>	<p>The proposed project is an adaptive management, multi-phase approach for implementation of projects that will systematically reduce phosphorus export from three degraded wetlands in the Moody Lake Watershed. Overall project design includes the installation of a grassed buffer, livestock exclusion through acquisition of a conservation easement, excavation of nutrient rich sediment, and alum dosing of wetland sediments to further reduce phosphorus export. This activity will be primarily carried out by District Engineer Emmons &amp; Olivier Resources (EOR) (Project Manager - Jason Naber NDC, design Engineer – Steve Pellinen, P.E.). District legal counsel (Smith Partners) time needed to review contracts and landowner agreements are also included in this grant activity. Tasks include permitting, modeling, design, contract documents, bidding and construction oversight. A registered land surveyor will be contracted to assist with easements and legal descriptions.</p> <p>Refer to Phase 1, Phase 2, Phase 4 and Phase 6 of the attached detailed Work Plan Text for additional information on items included in this grant activity.</p>		
<b>Category</b>	TECHNICAL/ENGINEERING ASSISTANCE		
<b>Start Date</b>	23-Mar-16	<b>End Date</b>	31-Dec-18
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>1-26-17 Update: All tasks in phase 1 of the work plan were completed during the spring and summer of 2016. This included meetings with project stakeholders, completion and execution of easements, and the finalization and approval of wetland delineations. Tasks 4 and 5 under phase 2 were also completed in 2016. A prebid meeting was held on November 29, 2016 and a bid opening was held on December 12, 2016. Task 7 is scheduled to begin with construction in late January-early February.</p> <p>5-23-17 Update: Construction began the week of February 6th, excavation, livestock exclusion and buffer strip install was largely completed by February 16th. EOR engineer and civil technicians made frequent site observation visits during this time to inspect and provide construction oversight.</p> <p>2/1/18 Update: During the Jul-Dec 2017 period, work revolved around Wetland C project engineering and Wetland A/B alum spot treatment design.</p> <p>2/1/19 Update: 2018 activities included Wetland alum design and construction oversight, and legal services for contracting with alum applicator, Clarke Aquatic Services</p>		

## Grant Attachments

Document Name	Document Type	Description
<b>2016 Competitive Grant</b>	Grant Agreement	2016 Competitive Grant - Comfort Lake-Forest Lake WD
<b>2016 Competitive Grant executed</b>	Grant Agreement	2016 Competitive Grant - Comfort Lake-Forest Lake WD
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 03/13/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/29/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 05/01/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 02/01/2019
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/17/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 05/23/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/26/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/17/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/05/2017
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 08/28/2015
<b>BC Worplan comments 03-09-2016</b>	Journal	Journal Dated - 03/10/2016
<b>C16-7918 Reconciliation Checklist</b>	Journal	Journal Dated - 07/31/2018
<b>Easement Template</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Final Financial Report</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Financial Report</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Moody Lake Watershed Loads</b>	Grant	Moody Lake Wetland Rehabilitation
<b>O&amp;M Plan Moody Wetland A/B</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Proposed Activities Map</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Resolution Delegating Signing Authority</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/09/2016
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 12/16/2015
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/10/2016
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 01/29/2019
<b>Work Plan Budget</b>	Grant	Moody Lake Wetland Rehabilitation
<b>Work Plan Text</b>	Grant	Moody Lake Wetland Rehabilitation
<b>grantmap_14631_2015-08-28_01-42-22-PM.jpg</b>	Grant	Moody Lake Wetland Rehabilitation