

Recipient: Marinette, WI  
Report Date: 12-31-2015

Grant Type: Intergovernmental Agreement-WDNR  
For Harbor Dredging

**City of Marinette, Wisconsin – Menekaunee Harbor  
Quarterly Report #14  
Intergovernmental Agreement for Contaminated Sediment Removal  
WDNR PO#: 9BME0000007  
Great Lakes Restoration Initiative Grant  
WDNR PO#: 9DMA0000117 – EPA Grant #: GL-00E01312-0  
Quarter Ending December 31, 2015**

Submitted January 4, 2016

Main Project Contact & Submittal By;  
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Characterization of Grant (#PO-9BME0000007)

This Grant is an intergovernmental Agreement between the Wisconsin Department of Natural Resources (WDNR) and the City of Marinette, Wisconsin. In a cooperative effort with members of the WDNR, the City will utilize this funding to assist in the remediation of the contaminated sediment and restoration of the Menekaunee Harbor basin.

Menekaunee Harbor is an approximate 13 acre natural embayment located near the mouth of the Menominee River which current analysis indicates has accumulated over 56,000 cubic yards of sediment. This sediment accumulation has limited both harbor access and use of the embayment for recreational boating and fishing and the contaminants within the sediment have negatively impacted the aquatic ecosystem and degraded surrounding wetlands.

Historic sediment sampling conducted by both the City, U.S. EPA, and the WDNR has documented an array of contaminants including heavy metals, PAHs, and low-level PCBs. The embayment is a critical feeding and breeding sanctuary for migratory birds and game fish and lies within the Lower Menominee River Area of Concern (AOC), a State, Federal, and internationally recognized restoration priority within the Great Lakes Basin. The City and the WDNR have entered into this agreement to mitigate these concerns and properly address the accumulation of contaminated sediments which threaten the future delisting of the AOC and U.S. EPA Great Lakes Restoration Action Plan.

Project Period: 9/14/2011 – 12/30/2012 A formal request for grant extension was submitted in 2012 and granted by WDNR. The new project period is: 9/14/2011 to 12/31/2015.

LN: 01  
FUND: 495  
AGENCY: 370  
ORG/SUB: WTAD/  
FISCAL YEAR: 16  
APPROPRIATION CODE: T G1

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ACTV: WTZY  
OBJ/SUB: 5100/  
JOB NUM: 96001G16  
VENDER#: M38251  
COMMODITY CODE: 926-94-00-0000

Characterization of Grant (WDNR PO#: 9DMA0000117 – EPA Grant #: GL-00E01312-0)

This Grant is an intergovernmental Agreement between the Wisconsin Department of Natural Resources (WDNR) and the City of Marinette, Wisconsin. In a cooperative effort with members of the U.S. EPA & WDNR, the City will utilize this funding to assist in the remediation of the contaminated sediment and restoration of the Menekaunee Harbor basin.

Sediment quality in the Harbor is degraded, and continuing sediment deposition in the Harbor has a negative impact on the health and functionality of the aquatic ecosystem, including the movement, chemical partitioning, and biological fate of contaminants and nutrients. Much of the Harbor's shoreline protection consists of dilapidated vertical wooden seawalls. Fish and wildlife in the Harbor is degraded by invasive plant species, contaminated sediment and excessive sedimentation.

The purpose of implementing this plan is to restore Menekaunee Harbor by improving sediment quality, providing additional fish and wildlife habitat, and increasing human recreational and economic opportunities around the Harbor. Project completion will result in notable progress towards removing four of the remaining five BUIs in the Menominee River AOC.

A. Marinette Project Characterization

- Historic Information
  - The City established a formal contract with a Ayres & Associates on July 3, 2013, the planning and design commenced shortly thereafter and through close coordination with the U.S. EPA and WDNR Plans and Specifications per prepared for the remediation portion of the Harbor restoration.
  - Plans and specifications for the seawall and dredging design were published and advertised per requirements and bids were received on July 18<sup>th</sup>, 2014. The contractor who was awarded a contract was Severson Environmental Services, Inc.
  - Contractor mobilized to site and began project operations on August 12, 2014.
  - Contractor cleared and grubbed vegetative growth from the existing shorelines around the Harbor.
  - Contractor installed the shore line portion of the proposed sheet pile wall near sections #5 & 6 within the plans. The contractor halted operations after the constructability of the concrete anchor wall was questioned. The contractor proposed utilizing an alternate anchoring system utilizing sheet piles, and this option was discussed and the City and WDNR were in concurrence to utilize this alternate system, and change order #1 was created.
  - Lot #24 containment site was prepared and has received Navigational dredged material.
  - Contractor removed Environmental dredging sediments from within the Harbor.
  - Contractor removed Navigational dredging sediments from within the Harbor.

- For further historical background please view the previous 9 quarterly reports for the planning and design portion of this project.
- QAPP / Sediment Management plan prepared by Ayres & Associates and was finalized by WDNR, City of Marinette, and Robert E. Lee & Associates, Inc. This document was finalized and completed on October 1, 2014 and was signed by all parties.
- Contractor finished all clearing and grubbing vegetative growth and sea walls from the existing shorelines around the Harbor.
- Contractor completed all Environmental dredging sediment removals from within the Harbor and transported this material to Waste Management Landfill in Menominee, Michigan.
- Approximately 27,129 cubic yards of Environmental dredging sediment was removed from the harbor.
- Contractor completed all Navigational dredging sediment removals from within the Harbor and transported this material to Lot #24 containment site.
- Approximately 30,680 cubic yards of Navigational dredging sediment was removed from the harbor.
- Lot #24 containment site was prepared and received Navigational dredged material. The site was left open due to the potential for Lot #24 material being reutilized for beneficial reuse fill after the woody debris is removed, transported, and placed in the harbor. The containment site is planned to be graded to final design grades and capped in the spring of 2015.
- Contractor began to fill the beneficial reuse area by hydraulic dredging, but due to woody debris encountered during hydraulic dredging operations, hydraulic dredging was halted by Severson Environmental. Approximately 7,700 CY were placed in the beneficial reuse area, per Severson survey data, but was not placed to plan grades. Material was stock piled in water near the shore and will be graded and placed to design grades in the spring of 2015. After multiple discussions between DNR, City of Marinette, Robert E. Lee and Associates and Severson, it was determined that the DNR preferred not to have woody debris in the beneficial reuse area and the remaining beneficial reuse material was mechanically removed from the harbor, transported to Lot #24, and stock piled at that site. This work was paid for under the navigational dredging bid item.
- It is the DNR's intention to fill the beneficial reuse area, and discussions between the City of Marinette, DNR, and Robert E. Lee and Associates are ongoing to determine the most beneficial option for filling this area. Different options were discussed with Severson and costs associated with each option were given for consideration by the City and DNR. At the end 2014 construction season it was determined that the City and DNR would determine the preferred option in early 2015 and would notify Severson of the preferred option, so Severson could complete that work in the spring of 2015.
  - Severson did install beneficial reuse fill material that was stockpiled in 2014, within the harbor. The soil was placed to desired elevations that were developed and approved in the spring of 2015.
- The Ledge stone wall portion of harbor shore enhancements was removed due to potential hazards after installation and also for constructability concerns presented by Severson's subcontractor completing this work (MJB). This area was redesign by Robert E. Lee & Associates, which included changing the grading slopes to install rip rap in this area, so the harbor could have a uniform shore line appearance.

- The contractor completed rip rap placement in and around the harbor to near design contours.
- The contractor completed the storm sewer outfall upgrades around the harbor.
- The contractor completed additional grading along the south shore of the beneficial reuse area.
- The contractor completed additional sand fill near Habortown dock area.
- The contractor completed all restoration in and around the harbor.
- Robert E. Lee and Associates assembled a final bid package for the habitat restoration portion of the project.
  - Robert E. Lee and Associates bid this project out to contractors on May 27, 2015 and received one bid from Applied Ecological Services for a base bid amount of \$391,533.55 and awarded alternates for extended maintenance for a total contract award of \$414,034.55.
  - This bid was approved and contract formulation/execution was completed.
- Applied Ecological Services (AES) began working on Restoration portion of this project on August 3, 2015.
- AES completed all debris pick up and site preparation in the subemergent, emergent and shrub carr zones.
- AES completed multiple herbicide treatments throughout the restoration project area, and in all zones.
- AES installed carp fencing at the subemergent and emergent zones.
- AES installed goose fencing on the perimeter of the emergent zone and installed goose grid system.
- AES installed all plantings within the subemergent, emergent and shrub carr zones.
- AES began prepping the wet mesic forest and mesic to wet mesic prairie zones.
- AES installed brush piles per plans and specifications.
- Dredging Project, Lot #24 waste site has been graded, but topsoil capping and restoration still need to be completed.
- Dredging Project, Lot #24 restoration project contractor anticipates beginning work in October, 2015.
- Current Information
  - AES completed all debris pick up throughout the site.
  - AES completed the invasive species control for this growing season.
  - AES installed all carp and goose fencing, including the grid system throughout the emergent zone.
  - AES installed all plantings in all zones that were planned except for 850 plants that were not available this fall, but are available in the spring of 2016. These plants are currently scheduled to be installed in the spring of 2016.
  - AES installed the appropriate seed mixture in all zones per plans and specifications.
  - AES installed all planned structures per plans and specifications, with the exception of the tern boxes, which will be installed in the spring of 2016 and rock piles, which will be installed once there is adequate ice thickness to install the rocks for the piles.
  - Plastic pedestrian fencing was removed and replaced with wooden fencing that was included within the project through change order.

- Additional debris was removed near the pedestrian sidewalk that has accumulated prior to the dredging project and after it, and this area had wood mulch spread over it. Three large stumps could not be removed, but remain to allow for future habitat structure.
- Dredging project, Lot #24 was capped with topsoil and hydro seeded, to complete all items associated with the dredging project.
  - Contractor submitted all required closeout documents and this contract was finalized, and the City began the final payment process on this contract.

B. Project Schedule and Budget Status

Grant (#PO-9BME0000007)

B.1 Schedule/Percent Completed: 100%      B.2 Funds Expended to Date: \$1,747,070.77

Grant (WDNR PO#: 9DMA0000117 – EPA Grant #: GL-00E01312-0)

B.2 Schedule/Percent Completed: 86.93%      B.2 Funds Expended to Date: \$4,438,504.31

2014 Menekaunee Harbor Improvements Project Construction Schedule

B.3 Schedule/Percent Completed: 100%

2015 Menekaunee Harbor Ecological Restoration Project Design Schedule

B.3 Schedule/Percent Completed: 100%

2015 Menekaunee Harbor Ecological Restoration Project Construction Schedule

B.3 Schedule/Percent Completed: 90%

Reporting Summary Checklist

<b>Work Plan Activities</b>	<b>Deliverables</b>	<b>To Be Completed By</b>	<b>Progress (% Complete)</b>
Quarterly Reports (based on 14 quarterlies)	Prepare and Submit Quarterly	Quarterly	(100%)
Process Dredging Construction Pay Requests (Based on 5 pay requests)	Review and Submit Monthly Construction Pay Requests	Monthly	(100%)
Dredging Construction Meeting Minutes	Summary	On-going	(100%)
Closeout Documentation	Final Report, Final Reimbursement Requests	On or before December 2015	(90%)

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C. Budget:

Grant (#PO-9BME0000007)

The total WDNR grant award is \$1,135,596.00\* which is a 65% matching grant of the total expended. The City's match requirement is 35% of the total expended or equivalent to \$611,474.77. Therefore the total allotted dollars for the project are \$1,747,070.77. See attached Grant Expenditure Breakdown.

Grant (WDNR PO#: 9DMA0000117 – EPA Grant #: GL-00E01312-0)

The total WDNR grant award is \$5,105,988.00\* which is a 100% grant of the total expenditure. See attached Grant Expenditure Breakdown.

D. Attachments:

1. Env Repair Fund Grant Expenditure Breakdown
2. GLRI Grant Expenditure Breakdown

**Attachement A to Invoice**

**WDNR REMEDIATION AND REDEVELOPMENT DEPARTMENT**

**GRANT NUMBER 9BME000007**

**MENEKAUNEE HARBOR CONTAINMENT DREDGE PROJECT**

**Date May 27, 2015**

Date	Invoice #	Cost Incurred This Invoice	Job Cost Incurred To date	Cost Incurred to Grant	Cost Incurred to City	Remaining Grant	Remaining City	Current Grant Request	Current City Funds
Original Grant Value - \$1,747,070.77						\$ 1,135,596.00	\$ 611,474.77	-	-
Previously Processed by Others			\$ 361,537.49	\$ 234,999.35	\$ 126,538.12	\$ 900,596.65	\$ 484,936.65	-	-
9/12/2014	Construction #1	\$ 516,179.70	\$ 877,717.19	\$ 570,516.16	\$ 307,201.02	\$ 565,079.85	\$ 304,273.75	-	-
9/16/2014	REL #68172	\$ 54,499.25	\$ 932,216.44	\$ 605,940.67	\$ 326,275.75	\$ 529,655.33	\$ 285,199.02	-	-
7/28/2014	AYRES #154551	\$ 26,966.93	\$ 959,183.37	\$ 623,469.17	\$ 335,714.18	\$ 512,126.83	\$ 275,760.59	-	-
9/5/2014	AYRES #155086	\$ 17,058.60	\$ 976,241.97	\$ 634,557.26	\$ 341,684.69	\$ 501,038.74	\$ 269,790.08	-	-
Partial Construction									
10/15/2014	#2	\$ 643,061.78	\$ 1,619,303.75	\$ 1,052,547.42	\$ 566,756.31	\$ 83,048.58	\$ 44,718.46	-	-
11/18/2014	REL #68513	\$ 65,580.82	\$ 1,684,884.57	\$ 1,095,174.95	\$ 589,709.60	\$ 40,421.05	\$ 21,765.17	-	-
12/19/2014	Partial REL #68606	\$ 4,268.07	\$ 1,689,152.64	\$ 1,097,949.20	\$ 591,203.42	\$ 37,646.80	\$ 20,271.35	-	-
3/27/2015	REL #68974	\$ 2,885.39	\$ 1,692,038.03	\$ 1,099,824.70	\$ 592,213.31	\$ 35,771.30	\$ 19,261.46	-	-
5/20/2015	REL # 69094	\$ 21,224.30	\$ 1,713,262.33	\$ 1,113,620.50	\$ 599,641.82	\$ 21,975.50	\$ 11,832.95	-	-
6/17/2015	REL# 69238	\$ 14,701.50	\$ 1,727,963.83	\$ 1,123,176.47	\$ 604,787.34	\$ 12,419.53	\$ 6,687.43	\$ 9,555.98	\$ 5,145.53
6/17/2015	REL# 69239	\$ 11,336.16	\$ 1,739,299.99	\$ 1,130,544.98	\$ 608,755.00	\$ 5,051.02	\$ 2,719.77	\$ 7,368.50	\$ 3,967.66
Partial Construction									
7/9/2015	#6	\$ 7,770.80	\$ 1,747,070.79	\$ 1,135,596.00	\$ 611,474.78	\$ 0.00	\$ (0.01)	\$ 5,051.02	\$ 2,719.78
Intergovernmental Agreement									
		\$ (500,000.00)	\$ 1,747,070.79	\$ 1,135,596.00	\$ 611,474.78	\$ 500,000.00	\$ 0.00	-	-
Partial Construction									
7/9/2015	#6	\$ 500,000.00	\$ 2,247,070.79	\$ 1,635,596.00	\$ 611,474.78	\$ 0.00	\$ 0.00	\$ 500,000.00	\$ -
<b>Total Request</b>							<b>\$ 521,975.50</b>	<b>\$ 11,832.96</b>	

Percent Complete 100.00%

Attachment A to Invoice

WDNR GLRI GRANT

GRANT NUMBER 9DMA0000117 MENEKAUNEE HARBOR CONTAINMENT DREDGE PROJECT

Date December 8, 2015

EPA GRANT NUMBER GL-00E01312-0

Date	Invoice #	Cost Incurred This Invoice	Job Cost Incurred To date	Cost Incurred to Grant	Remaining Grant	Current Grant Request
Total WDNR Grant Value					\$ 5,105,988.00	
9/12/2014	Construction #1	\$0.00	\$0.00	\$0.00	\$ 5,105,988.00	\$0.00
Processed under RR Env Repair Grant						
Partial						
10/15/2014	Construction #2	\$ 942,121.25	\$ 942,121.25	\$ 942,121.25	\$ 4,163,866.75	\$0.00
10/14/2014	REL-68362	\$ 53,621.72	\$ 995,742.97	\$ 995,742.97	\$ 4,110,245.03	\$0.00
11/12/2014	Construction #3	\$ 1,701,180.62	\$ 2,696,923.59	\$ 2,696,923.59	\$ 2,409,064.41	\$0.00
12/19/2014	Partial REL-68606	\$ 40,848.58	\$ 2,737,772.17	\$ 2,737,772.17	\$ 2,368,215.83	\$0.00
12/19/2014	Construction #4	\$ 1,113,182.27	\$ 3,850,954.44	\$ 3,850,954.44	\$ 1,255,033.56	\$0.00
1/14/2015	Ayres - 156765	\$ 8,647.87	\$ 3,859,602.31	\$ 3,859,602.31	\$ 1,246,385.69	\$0.00
2/17/2015	REL - 68811	\$ 20,398.75	\$ 3,880,001.06	\$ 3,880,001.06	\$ 1,225,986.94	\$0.00
2/17/2015	REL - 68812	\$ 2,393.96	\$ 3,882,395.02	\$ 3,882,395.02	\$ 1,223,592.98	\$0.00
3/27/2015	REL - 68975	\$ 8,669.34	\$ 3,891,064.36	\$ 3,891,064.36	\$ 1,214,923.64	\$0.00
5/7/2015	Construction #5	\$ 67,676.62	\$ 3,958,740.98	\$ 3,958,740.98	\$ 1,147,247.02	\$0.00
5/20/2015	REL - 69095	\$ 18,990.50	\$ 3,977,731.48	\$ 3,977,731.48	\$ 1,128,256.52	\$0.00
Partial						
7/9/2015	Construction #6	\$ 77,779.42	\$ 4,055,510.90	\$ 4,055,510.90	\$ 1,050,477.10	\$0.00
7/9/2015	Construction #7	\$ 75,393.90	\$ 4,130,904.80	\$ 4,130,904.80	\$ 975,083.20	\$0.00
9/10/2015	AES Const #1	\$ 39,742.02	\$ 4,170,646.82	\$ 4,170,646.82	\$ 935,341.18	
8/17/2015	REL-69427	\$ 5,617.60	\$ 4,176,264.42	\$ 4,176,264.42	\$ 929,723.58	
8/17/2015	REL-69428	\$ 4,636.16	\$ 4,180,900.58	\$ 4,180,900.58	\$ 925,087.42	
10/16/2015	REL-69693	\$ 2,803.03	\$ 4,183,703.61	\$ 4,183,703.61	\$ 922,284.39	\$0.00
10/16/2015	REL-69694	\$ 24,550.37	\$ 4,208,253.98	\$ 4,208,253.98	\$ 897,734.02	\$0.00
10/15/2015	AES Const #2	\$ 66,878.75	\$ 4,275,132.73	\$ 4,275,132.73	\$ 830,855.27	\$0.00
11/10/2015	AES Const #3	\$ 59,139.01	\$ 4,334,271.74	\$ 4,334,271.74	\$ 771,716.26	\$0.00
12/4/2015	AES Const #4	\$ 89,632.94	\$ 4,423,904.68	\$ 4,423,904.68	\$ 682,083.32	\$89,632.94
12/4/2015	REL-69931	\$ 4,061.75	\$ 4,427,966.43	\$ 4,427,966.43	\$ 678,021.57	\$4,061.75
12/4/2015	REL-69932	\$ 10,537.88	\$ 4,438,504.31	\$ 4,438,504.31	\$ 667,483.69	\$10,537.88

Total Request **\$104,232.57**

Percent Complete

86.93%