KISMA Keweenaw Invasive Species Management Area

Master Participating Agreement and Supplemental Project Agreement #1 2016 Performance Monitoring Report

16 March 2017

Two agreements between the US Forest Service (Ottawa National Forest) and the Houghton Keweenaw Conservation District.

| Master Agreement | | SPA #1 | |
|--------------------------|---|-------------------------|---|
| Agreement Number: | 12-PA-11090700-010 | Agreement Number: | 12-PA-11090700-014 |
| Cooperator Name: | Houghton Keweenaw Conservation District | Cooperator Name: | Houghton Keweenaw Conservation District |
| Performance Start Date: | 01/01/2014 | Performance Start Date: | 04/24/2012 |
| Performance End Date: | 12/31/2014 | Performance End Date: | 12/31/2014 |
| Report Source: | Cooperator | Report Source: | Cooperator |
| Report Due Date: | 03/31/2016 | Report Due Date: | 03/31/2016 |
| Agreement Start Date: | 3/22/2012 | Agreement Start Date: | 4/24/2012 |
| Expiration Date: | 1/31/2017 | Expiration Date: | 1/31/2017 |

This report includes summary information pertaining to the two USFS agreements. Most work falls under Supplemental Project Agreement (SPA) #1, while the Master Agreement offers general guidelines.

Master Agreement

Commitments from the Houghton Keweenaw Conservation District (HKCD) are listed on pages 2-3 of the Master Agreement. HKCD served as fiscal manager for KISMA, cooperated with KISMA members, exchanged resources, encouraged contribution from other participants, helped manage invasive species, allowed federal agencies to help manage invasive species, mapped many new invasive plant sites, used integrated and safe control methods, and prepared this annual report.

Supplemental Project Agreement #1

Commitments from the HKCD are listed in Modification #1 of SPA #1.

1. Retain coordinator for the KISMA in 2013, 2014, and 2015. Duties will include communicating with KISMA members, planning KISMA meetings, conducting public education on invasive species in Houghton, Keweenaw, and Baraga Counties, writing news releases about KISMA and invasive species, recruiting and supervising KISMA volunteers, and providing botanical expertise on the management of invasive plants. KISMA Coordinator will follow the KISMA annual operating plans to be developed cooperatively with all KISMA members and agreed upon by the HKCD.

Funding allowed the HKCD to continue providing a KISMA Coordinator (Sigrid Resh) in 2016 and through the end of this agreement on 1/31/2017.

The HKCD organized and hosted a KISMA Steering Committee meeting on 5/6/2016 at Michigan Tech. Meeting notes were provided to the USFS on 5/9/2016.

Educational Activities in 2016:

- TIS weeding of spotted knapweed (0.1 acres) with Houghton Middle School 7th grade class (100 students) near Huron. 5/31/16
 Creek behind Walmart in Houghton.
- LSSI Invasive Species Workshop presentation and invasive species site visit to MTU old Theta Tau giant knotweed site (also pointed out invasive periwinkle, Japanese barberry, and nipple wort)—7 participants. 6/16/16
- Invasive species field experience for "global change" teacher workshop to MTU old Theta Tau giant knotweed site —7 participants cut 0.1 acres of giant knotweed and hauled and spread stems to upper driveway to dry in sun. 6/22/16
- Houghton 7th graders on campus for hands-on science--pollinator garden project at Husky Bay. Worked with 100 students to remove knapweed and tansy and plant native shrubs, milk weed, and blue flag iris (0.5 acres). 9/20/16
- Worked with 100 Houghton 6th grade students on dense buckthorn invasive patch (0.5 acres). Used buckthorn baggies and hand-pulled small stems. 11/22/16

2. Act as fiscal agent for GLRI grant funds as detailed in the attached financial plan.

The HKCD accepted and dispersed the USFS/GLRI funds following the financial plan, as detailed in the 2016 invoices (Table 2).

3. Provide invoices to the FS relative to agreement expenditures.

From 1/1/2016 to 1/31/2017 nine invoices have been processed, totaling \$27,838.15 paid to the HKCD. At the end of the agreement \$7,910.71 remained unused. This funding will be deobligated. See Table 1.

Table 1. Invoices under this agreement in 2016 and January 2017.

| Invoice # | Date | Amount | Activity |
|-----------|----------|-------------|--|
| 14 | 1/15/16 | \$2,406.84 | MI DEQ grant application. MI Invasive Species Coalition All Partners Meeting in Gaylord. |
| 15 | 4/7/16 | \$688.78 | 2015 KISMA report. Meetings with Darcy Rutkowski & Ryan Wheeler regarding MISGP proposal. Calls & email KISMA steering committee. Update KISMA contacts. |
| 16 | 6/20/16 | \$3,018.26 | Steering Committee meeting 5/16/16. MISGP pre-proposal. Meeting with KLT. Mapping workshop. TIS weeding with Houghton Middle School 7th grade class. |
| 17 | 8/17/16 | \$3,198.13 | MISGP proposal. Treatments at Ford Center, Chassell dump, and private residences. LSSI Invasive Species Workshop. Teacher workshop Theta Tau knotweed. Training with Janet Marr. |
| 18 | 10/21/16 | \$4,178.98 | MISGP proposal. Houghton 7 th grade class removed tansy & knapweed at Michigan Tech; planted & seeded natives. Decontamination workshop in Baraga. Met with Kearsarge landowners about Japanese knotweed. |
| 19 | 11/18/16 | \$4,144.27 | UMISC Conference in LaCrosse. Ford Center honeysuckle event. Michigan Tech trails mapping & treatment. Giant knotweed stem count. Nara Trail buckthorn work. Met with Chassell homeowner about Jap. knotweed. |
| 20 | 12/13/16 | \$3,286.48 | Prepared USFS-GLRI-CWMA and EPA-GLRI grant proposals. Contacted landowners. MISC meeting in Gaylord. Worked with Houghton 6th grade students on dense buckthorn invasive patch. |
| 21 | 1/23/16 | \$3,736.12 | Prepared USFS-GLRI-CWMA and EPA-GLRI grant proposals. Arranging KISMA fiduciary management through Michigan Tech. Cleaning out HKCD office. |
| 22 | 2/7/17 | \$3,180.29 | Communication regarding new DNR MISG award to KLT/KISMA. Weed crew search. Compilation of native species lists. Cleaning out HKCD office and moving all belongings to Tech office/lab |
| | Total | \$27,838.15 | |

4. Ensure GLRI funds are used only to achieve GLRI grant deliverables and other costs as detailed in the financial plan.

All expenses followed the financial plan.

5. Implement the attached financial plan.

All expenses followed the financial plan.

6. Be responsible for documenting, caring for, and securing any supplies purchased with funds from this agreement.

All supplies purchased in 2016 were documented in the invoices. All remaining tools and supplies purchased under this agreement are now at Michigan Tech and remain overseen by Sigrid Resh.

7. Work with KISMA Coordinator to provide interim reports by October 1 of 2013 and 2014, and a final report by October 1, 2015, and additional reports, as requested by the U.S. Forest Service.

Modifications 1 and 2 extended work under this agreement. The 2013 report was submitted 2/28/2014. The 2014 report was submitted 1/27/2015. The 2015 report was submitted 1/29/16. This is the report for 2016, and the final report.

8. Direct KISMA Coordinator to treat 30 acres of invasive plant infestations: 10 acres in 2013, 10 acres in 2014, and 10 acres in 2015. Acres will count if the KISMA Coordinator or KISMA volunteers under supervision of the KISMA Coordinator participated in the work. [Modification #1]

Modification #2 provided additional funding for 2014, 2015, and 2016, but did not include a new Scope of Work. The original SPA also called for 10 acres to be treated in 2012. As detailed in the 2012 report, 18.2 acres were treated in 2012. As detailed in the 9/24/2013 meeting notes, 22.5 acres were treated in 2013. 12.9 acres were treated in 2014. 12.7 acres were treated in 2015. Table 2 lists all treatments in 2016, 24.5 acres. This gives a final total of 90.8 acres treated under this agreement.

Table 2. Invasive plant control in 2016.

| Event | Date | Acres |
|---|-----------------------------|-------|
| TIS weeding with Houghton Middle School 7th grade class (100 students) near Huron Creek behind Walmart in Houghton. Spotted knapweed. | 5/31/16 | 0.1 |
| Ford Forest in Alberta, MI. Knotweed control. UP RC&D weed crew (4 people) and Sue Trull and FS crew (3 people) and one KBIC weed crew person. Cut and chemical application on gift shop parking lot patch (0.25 acre) and chemical application on knotweed in goutweed patch (0.25 acre) south of gift shop parking lot patch). | 6/7/16 | 0.25 |
| Ford Forest in Alberta, MI. UP RC&D weed crew (4 people) and Sue Trull and FS crew (3 people) and one KBIC weed crew person. Pulled 1 grocery bag of GM | 6/7/16 | 0.5 |
| Ford Forest Center goutweed. | 6/7/16 | 0.25 |
| Chassell dump. Garlic mustard pulling; 7 large garbage bags | 6/7/16 | 2 |
| Laurium, Hancock, and Houghton private residences - garlic mustard pulling, 14 large garbage bags | Several days in June. | 1.5 |
| Old Theta Tau giant knotweed site, teacher workshop | 6/22/16 | 0.1 |
| Invasive species tour and ID training from Janet Marr - 14 stops between Chassell and Eagle River. Pulled about 0.5 acres of wild parsnip. | 7/26/16 | 0.5 |
| Houghton 7th grade class (100 students) came to Michigan Tech campus to weed tansy and spotted knapweed on 0.5 acres of upland and coastal wetland (Husky Bay). We planted 4 native shrubs and seeded milkweed on the upland portion where we are developing a pollinator garden. We seeded blue flag iris in the wetland portion. We removed 8 large bags of invasive species. | 9/20/16 | 0.5 |
| Ford Center exotic honeysuckle with USFS & KBIC. | 10/21/16 | 5.1 |
| Michigan Tech Tolkien Trails. Barberry, buckthorn, honeysuckle, and autumn olive. | 11/2/16 | 13 |
| Michigan Tech Nordic Center common buckthorn. | 11/2/16 | 0.1 |
| Ian cut dead knotweed stems at the base and applied Rifle herbicide. After a KISMA trail event. | 11/2/16 | 0.1 |
| Worked with 100 Houghton 6th grade students on dense buckthorn invasive patch. Used buckthorn baggies. | 11/22/16 | 0.5 |
| . 55 | TOTAL | 24.5 |

Additional invasive plant control work was done by the Upper Peninsula Resource Conservation and Development Council (UPRC&D), under their agreement with the USDA Forest Service (#15-PA-11090700-007).

9. Document 400 hours of volunteer time working on invasive species projects, to be planned with KISMA partners as part of annual operating plans.

HKCD diligently tracked volunteer time with each invoice. Here is a summary.

| Date | Description | Hours | Value |
|----------------|--|-------|----------|
| 1/16 to 4/5/16 | HKCD KISMA Administration – 10 hours @ \$25/hour | 10 | \$250 |
| 1/16 to 4/5/16 | 3 HKCD Board meetings. 5 members (Gina, | 3.75 | \$93.75 |
| | Tom, Mark, Steve, Jim) x 0.25 hours = 1.25 | | |
| | hours x 3. | | |
| 4/6/16 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
| 6/6/16 | \$25/hour | | |
| 4/6/16 to | 2 HKCD Board meetings. 5 members (Gina, | 2.5 | \$62.50 |
| 6/6/16 | Tom, Mark, Steve, Jim) x 0.25 hours = 1.25 | | |
| | hours x 2. | | |
| 6/7/16 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
| 8/15/16 | \$25/hour | | |
| 6/7/16 to | 1 HKCD Board meeting. 5 members (Gina, | 1.25 | \$31.25 |
| 8/15/16 | Tom, Mark, Steve, Jim) x 0.25 hours = 1.25 | | |
| | hours x 1 meeting. | | |
| 8/1/16 | Wild parsnip pull (Janet Marr and friend Emily) | 5 | \$42.50 |
| | @ \$8.50/hour | | |
| 8/15/16 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
| 10/4/16 | \$25/hour | | |
| 8/15/16 to | 2 HKCD Board meetings. 5 members (Gina, | 2.5 | \$62.50 |
| 10/4/16 | Tom, Mark, Steve, Jim) x 0.25 hours = 1.25 | | |
| | hours x 2. | | |
| 9/22/16 | 100 Houghton 7th grade students @ | 67 | \$569.50 |
| | \$8.50/hour for 2/3 hour | | |
| 10/18/16 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
| 11/18/16 | \$25/hour | | |
| 10/18/16 to | 1 HKCD Board meeting. 5 members (Gina, | 1.25 | \$31.25 |
| 11/18/16 | Tom, Mark, Steve, Jim) x 0.25 hours = 1.25 | | |
| | hours x 1 meeting. | | |
| 10/21/16 | Ford Center and Forest honeysuckle removal | 32 | \$272 |
| | (\$8.50 for volunteer). 8 volunteers x 4 hours. | | |
| 11/2/16 | Michigan Tech Main and Tolkien Trail barberrry | 6.5 | \$55.25 |
| | and buckthorn survey and treatment (\$8.50 for | | |
| | volunteer) | | |
| 11/13/16 | City of Houghton Nara Trail buckthorn | 3 | \$25.50 |
| | mapping, pull and root wrench treatments | | |

| 11/18/16 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
|-------------|--|------|-----------|
| 12/9/16 | \$25/hour | | |
| 11/18/16 to | 1 HKCD Board meeting. 5 members (Gina, | 1.25 | \$31.25 |
| 12/9/16 | Tom, Mark, Steve, Jim) x 0.25 hours = 1.25 | | |
| | hours x 1 meeting. | | |
| 11/22/16 | Houghton 6th grade School Forest buckthorn | 30 | \$255 |
| | removal (\$8.50 for volunteer) | | |
| 12/11/16 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
| 1/18/17 | \$25/hour | | |
| 1/19/17 to | HKCD KISMA Administration – 5 hours @ | 5 | \$125 |
| 1/31/17 | \$25/hour | | |
| | TOTAL | 201 | \$2657.25 |

10. For any printing funded by this agreement, work with the U.S. Forest Service to ensure compliance with U.S. Forest Service Handbook 1509.11, 72.11- General Requirements, Section 12 (printing).

The HKCD has not funded any formal printing under this agreement.

Photos from 2016 work are below.



Figure 1. TIS weeding with Houghton Middle School 7th grade class (100 students) near Huron Creek behind Walmart in Houghton.



Figure 2. TIS weeding with Houghton Middle School 7th grade class (100 students) near Huron Creek behind Walmart in Houghton.



Figure 3. Garlic mustard removal from the Chassel Dump.



Figure 4. Giant knotweed cutting the Ford Center.

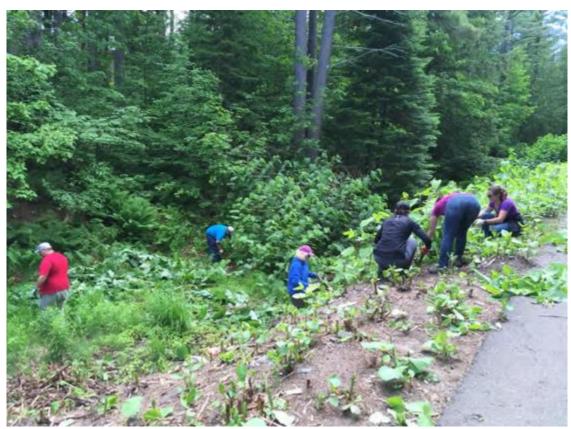


Figure 5. Giant knotweed cutting and hauling at MTU old Theta Tau property by Global Change teacher workshop participants.



Figure 6. Giant knotweed cutting and hauling at MTU old Theta Tau property by Global Change teacher workshop participants.



Figure 7. Cutting and bagging wild parsnip flowers and pulling plants with Janet Marr on invasive species tour of the Keweenaw.





Figure 8. Houghton 7th grade class, science teacher Sarah Geborkoff, at Husky Bay weed-pull and shrub planting on Sep. 20, 2016.



Figure 9. Honeysuckle work at Ford Center with KBIC & USFS. 10/21/16.



Figure 10. Honeysuckle work at Ford Center with KBIC & USFS. 10/21/16.



Figure 11. Counting giant knotweed stems on 11/7/16 after a summer of cutting and covering them. Sage is holding up one of the spindly stems (photographer: Sigrid Resh)



Figure 12. Chad Fortin with an enormous European barberry bush at the Michigan Tech Forest. This is the first documented site of this species in the Upper Peninsula. 11/2/16.



Figure 13. Two of the four groups of Houghton 6th graders learning about glossy buckthorn in their School Forest. 11/22/16.