

**GRAND Learning Network
A Progress Report to the Great Lakes Stewardship
Initiative Staff of the Great Lakes Fishery Trust**

November 26, 2008

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Background

The GRAND Learning Network hub of the Great Lakes Stewardship Initiative received its MSU operating account number, on June 3, 2008, and began formal work on June 12. The first *five months* of this Network have been action-filled, and preliminary impacts of the effort provide encouraging evidence of the importance of place-based pedagogy and community engagement for the development of Great Lakes stewardship at diverse mid-Michigan elementary schools in the Grand River watershed.

Although this Progress Report is not required in the contractual agreement between MSU and GLFT, this is an opportune time to compile details of project activities, participation statistics, and preliminary descriptions of impacts. This Progress Report was offered as a means of communication to M. Whitmore, GLSI by the PI, Shari Dann in conversations in early November 2008, as well as during earlier conversations. This Progress Report will serve as a useful communication tool with hub evaluators, communications staff under contract with GLSI, and the GRAND Learning Network Community Council for their deliberations regarding "next steps" for the Network.

This Progress Report is structured around the following items:

- Measurable outputs and outcomes, as well as activities, as described in the Plan of Work;
- Key questions posed by M. Whitmore, GLSI administrator;
- Schedule of past activities and upcoming events;
- Administrative activities completed for the Network initiative; and reflections on administrative accomplishments and challenges.

Activities, Outputs and Outcomes for Teacher-Leaders

Measureable output and outcomes from grant Plan of Work:

10 Teacher-leaders will increase in their place-based Great Lakes stewardship knowledge (content) and will use new place-based pedagogical techniques.

10 teacher-leaders will increase their knowledge and leadership in place-based Great Lakes stewardship education.

Grant Activities toward these Anticipated Outcomes

- Thurs, June 12 – GRAND Learning Network Teacher-Leaders Gathering (Appendix 1 – Agenda; Appendix 2 – Project goals and expectations as communicated with Teacher-Leaders)
- Thurs Aug 28 – full day Teacher-Leader Kick-off Professional Development (Appendix 3 – Agenda; and powerpoint in separate file)
- Thurs, Sept 17 – Teacher-Leaders meeting: “Artists of the Great Lakes” (Appendix 4 – Working agenda for Network Staff as an example, showing detailed intended outcomes; Appendix 5 – Participant Agenda)
- Sept 23, 25, 30 and Oct 2 – Teacher-Leaders participate in Fishing for the Future of the Great Lakes Professional Development workshop (Appendix 6 – Agenda; Appendix 7 and 8 – Participant handouts operationalizing “Place-Centered Pedagogy” and “Great Lakes Stewardship”)
- Wed, Oct 22 – Teacher-Leaders participate in Louv’s talk at MSU
- Thurs, Nov 13 – Teacher-Leaders participate in GRAND Learning Network Teacher Professional Development Inservice (Appendix 9 – Agenda; Appendix 10 – Sample participant handout from Grand River/Great Lakes watershed session)

Key questions about Teacher-Leaders posed by M. Whitmore:

What do we expect Teacher-Leaders to be able to know? To do? And, how have these expectations been communicated? How has the Network Team supported Teacher-Leaders in achieving these outcomes, especially in forming community partnerships toward place-based pedagogy and community engagement for stewardship?

In order to communicate effectively with Teacher-Leaders, the Network Team collectively prepared the handout presented in Appendix 2. Specific expectations of Teacher Leaders are excerpted from this handout as follows:

Goal #1: Teacher-leaders will be able to move place-based stewardship education forward in their own classrooms, and in other ways beyond their classrooms, in order to strengthen Grand River stewardship and academic opportunities/achievement for the students in their communities.

Teacher-leaders will:

- Meet once per month as members of a GRAND Learning Network
- Will learn new teaching strategies to enhance student learning/achievement
- Will become more comfortable using place-based education to bring community and school together
- Will recruit teachers for ongoing professional development workshops, and a new summer institute at MSU in 2009
- Will help to host a Community Seminar sponsored by this GRAND Learning Network
- Will craft their own teacher-leadership role in their own community-school setting that advances place-based education in a way that fits local needs, school improvement plans, or other ongoing curriculum needs
- Participate in assessment and evaluation activities for the project

Teacher-Leaders were informed in the June and August meetings of their commitment (listed above), and of the commitments of the Network Team in a reciprocal manner, that would consistently provide

at each Teacher-Leader gathering these in return for the Teacher-Leaders' commitment:

- Content rich in Great Lakes and relevant content for their elementary teaching;
- Teaching ideas (place-centered pedagogy and stewardship) that Teacher-Leaders can put into practice immediately in their own classrooms; and, most importantly,
- Leadership content and tools so that Teacher-Leaders can fulfill their roles in recruiting other colleagues to participate in professional development, administrators can understand the initiative, school change can be enacted from within the teacher ranks, and community partners can offer assets for real-world learning that benefits the community and Grand River/Great Lakes watersheds.

Network staff continue to support Teacher-Leaders' use of new place-centered pedagogical techniques, community engagement and stewardship through phone consultations, school site visits, one-to-one consultations/dialogue at professional development sessions, and use of PD feedback form data with each session. Additional support mechanisms are being built into the unique website, which will be completed by January, 2009. Support on the website include: Google map imagery so that schools can upload their own videos and digital images of their learning and work, associated social networking sites (through FLICKR, SchoolTube, Ning.com, and other avenues), a listserve and calendar for district and Network activities, and other features. To view the website which is still under construction, visit: [www. grandlearningnetwork.org](http://www.grandlearningnetwork.org).

Foci/Outcomes for Teacher-Leader Professional Development Activities

Teacher-leader informational meeting

June 12, 2008

- **Purpose:** announce initiative to those who participated in Fall 2007 planning meetings, describe commitment
- **Attending:** 5 of the 7 original (planning grant) Teacher-Leaders
- **Community Partners featured:** Blondie's Restaurant (small entrepreneurs that focus on watershed and community)

Teacher-leader Kick-off Professional Development Day

August 28, 2008

- **Attending:** 11 of the 15 Teacher-Leaders, representing all five targeted school districts: Laingsburg, Bath, Haslett, Lansing and Holt.
- **Community Partners:** Harris Nature Center, Michigan State University Institute of Water Research.
- **FOCI:** In-depth exploration of GLSI and GRAND Learning Network place-centered Learning and Community Engagement for Stewardship Model and project expectations, inquiry regarding the watershed, aquatic macroinvertebrates, general landscape ecology of the watershed, introduction/feedback concerning teacher-friendly GRAND website, input regarding future Teacher-Leader interests and topics for professional development, tools for teacher-leadership (communications tools to meet with school administrators)

Teacher-leader monthly meeting – “Artists of the Great Lakes” exhibit

Sept 17, 2008

- **Attending:** 9 Teacher-Leaders representing the following schools and districts: Laingsburg, Bath, Haslett, Lansing, Holt
- **Community Partners:** Kresge Art Museum, Michigan State University, historical resource partners (book: The Grand- Rivers of Michigan Series)
- **FOCI:** artistic representations of the importance of the Great Lakes to community-based commerce, daily life, transportation systems, industry/economy, climate, and natural resources; historical understanding of the Grand River watershed in the context of Great Lakes history; flood stage observations of the Red Cedar River, and urban stormwater run-off management issues.

Teacher-leader monthly meeting – Richard Louv's talk regarding Last Child in the Woods and the No Child Left Inside Michigan Coalition

October 22, 2008

- **Attending:** 10 Teacher -Leaders representing 4 of the 5 targeted school districts
- **FOCI:** Critical issues in place-based pedagogy; motivation for teacher-leadership within school and community.

Activities, Outputs and Outcomes for Teachers through Professional Development

Measureable output and outcomes from grant Plan of Work:

160 Teachers will increase in their knowledge of the Grand River watershed, ability to use place-based pedagogy, and their inclusion of stewardship in their K-12 teaching

Excerpted from the handout (Appendix 2) provided to participating teachers, the following text describes the specific measurable objectives (what teachers will be able to know and do as a result of their participation), and expectations:

Goal #2: Teachers will increase in their Great Lakes stewardship knowledge and place-based pedagogy, in order to use new approaches to enhance teaching/learning (in the subjects that the teachers cover - science, language arts, social studies, math, other).

To accomplish this goal, teacher-leaders and other teachers (with preference given first to the 5 participating school districts) may choose to participate in the following:

- Professional development workshops
- A new MSU Summer 2009 GRAND Learning Institute, with field based, outdoor instruction and contact with resource people from throughout the region
- Community Seminars (5 during the school year) on watershed- or nature-related topics of importance to the community and school
- Assessment and evaluation activities associated with this initiative

Grant Activities, and FOCI for these Anticipated Outcomes for Teacher Professional Development

Professional Development: Fishing for the Future of the Great Lakes September 23, 25, 30 and October 2, 2008 (14 hours of professional development instruction)

- **Attending:** 13 participants including Teacher-Leaders (5), teachers (4) and community members (4) representing the following school districts: Bath, Haslett and Lansing. Additional districts reached within the watershed: Perry/Shaftsbury Schools.
- **Community Partners featured:** Woldumar Nature Center, Michigan Agriscience teachers, Red Cedar Flyfishers, Michigan Department of Natural Resources Fisheries Division, Looking Glass Community Services (social services agency in rural area of upstream watershed), and diverse additional partners from the Project FISH network
- **FOCI:** aquatic resource ecology, management and issues of the Grand River watershed, especially fisheries resources; marshalling community partners from sportsmen's groups, watershed groups and retailers; aquatic resource recreation. Place-based pedagogy included: group-based learning on fisheries resources of the local region, ethical reasoning (through moral dilemmas, codes of ethics), Great Lakes fish preparation skills to minimize contaminants and an overview of the Great Lakes Fish Advisories, and crafting skills related to Michigan's fisheries (tacklecrafting, unique Great Lakes fly patterns).

GRAND Learning Network Professional Development Inservice Day November 13, 2008 (7 hours of professional development)

- **Attending:** 8 Teacher-Leaders representing 4 of the 5 targeted school districts; an additional 27 teachers from the 5 targeted school districts (teachers were recruited with assistance of Teacher-Leaders and were new to the GRAND Learning Initiative professional development series.) Of these 27 teachers, several represented new, additional districts reached within the watershed St Johns (4 teachers), DeWitt (4 teachers), Okemos (3 teachers). In addition, 3 community partners attended.
- **Grand total attendance:** 38 participants.
- **Community partners featured:** Woldumar Nature Center, Michigan Natural Features Inventory, Michigan Sea Grant Extension, road commissions, greenspace organizations, and diverse additional partners from the Annie's BIG Nature Lesson and Project FISH networks.
- **FOCI:** Grand River and Great Lakes watershed, geology, geography, invasive species of the Great Lakes region, fisheries management and watersheds, stewardship and partnership ideas/contacts, place-centered pedagogical resources (from Sea Grant, MSUE, MNFI), and an overview of the glacial geology and c.1800 vegetation of the Grand River (with an emphasis on the unique geological and ecological aspects of the watershed within the Great Lakes region). Place-centered pedagogical emphases: reflection, inquiry, active-learning. Community engagement

emphases: MNFI, beginning-level awareness of outdoor learning partnerships (expert lessons, cooperators, nature centers) available as assets in the community.

Professional Development outputs and outcomes summary:

- 54 total participants in professional development to date
- 48 teachers (of our 160-person overall goal for the initiative) have already participated, representing all of our 5 target school districts, and 4 additional districts in the watershed.
- 4 Teacher-Leaders have participated in both general professional development sessions, for a total of 21 hours per Teacher-Leader of PD participation; one Teacher-Leader completed a 14-hour general PD workshop; 3 more Teacher-Leaders completed a 7-hour general PD; one Teacher-Leader completed a full-weekend outside PD training, resulting in a total of 9 of the 12 active Teacher-Leaders thus far participating in the sustained PD offerings of the Network initiative.
- Of the 12 active Teacher-Leaders, 9 have participated in at least 2 of the 3 unique Teacher-Leader sessions; 5 have participated in every offering.
- Only three of the 15 Teacher-Leaders could be classified as “inactive” at this point, due to circumstances beyond their control. One has been unable to participate at all, due to scheduling conflicts; two others have participated only once, since they were added to the teacher-leader team late in the project, and since one had surgery this fall. All three of these individuals still express commitment to participate in the future.
- Teacher-Leaders from 4 of the 5 targeted districts already have been able to serve in a leadership role, recruiting other teachers to participate in the professional development series.
- Additional teacher-leadership roles undertaken on the part of this team include: communicating regularly with school administrators, obtaining community partners and support for stewardship projects by youth, attending and recruiting teaching colleagues to attend additional aquatic resource professional development training outside the network (4 teachers attended the Salmon in the Classroom training in November 2008, and are using this partnership program with the MDNR and local angler and watershed community partners), and another attended the Project WILD facilitator training on Aug 22-24, 2008 (and stands ready to assist in a future PD workshop for GRAND Learning Network).

- Impacts are also being noted in the schools beyond those teachers who have attended professional development sessions. A middle school teacher in one of our targeted school district is using the website to teach watershed and Great Lakes geography, by using the interactive Google-map feature and the watershed base maps provided by MNFI.
- The reputation of the initiative in providing content rich professional development and community relationship-building is reportedly growing. Quality content, and the support provided by Network staff to teachers are hallmarks that new and experienced teachers are reporting in these initial stages of the effort. Teacher-Leaders are inviting other colleagues to Network events and PD, thus strengthening relationships for place-based change in school cultures.

Planned work for the next quarter and beyond:

Early through Mid-December – on-line virtual meeting, teacher-leaders

December 15 2008 – Community Council meeting, Lansing

Outcomes from the Council work for the community members include:

10 community members will increase their knowledge and leadership in place-based Great Lakes stewardship education through service on the Teacher-Leader Community Council advising this project

January 20, 2009 – Teacher-Leader PD and Retreat – Curriculum alignment: PLACES and GLCEs. Also: solicit Teacher-Leadership to determine dates/times and focal topics for Mar – May Teacher-Leaders meetings.

January 14 or 21, 2009 – Community Seminar, Haslett

Due to teacher-leader input, December is not a feasible month to expect good participation from community partners or youth as presenters. Since it is important that teacher-leaders be at the forefront of planning and implementing these seminars, we decided to hold the first event in January (and two subsequent seminars in spring, and two more in fall 2009). Input has led our team to decide that youth should be at the forefront of the community seminar presentations, highlighting their stewardship work and learning thus far through this initiative. Network staff are supporting the work of teachers and community partners, with results that have already been noted in Haslett (see video on website). Giving the full fall semester of the school year has allowed both teacher professional development, and student enactment of stewardship projects as well as teacher implementation

of diverse place-centered pedagogies, thus making January a more ideal time to feature, build and recognize the community-school partnerships.

Outcomes for community seminars include:

School-community partnerships for Great Lakes place-based stewardship education featuring the Grand River will be strengthened in 5 school districts (approximately 8 school buildings).

February 19 or 20, 2009 – Professional Development – KATCH the Watershed Stewardship Spirit Winter Workshop –
FOCI: featuring: stewardship manual, Wonders of Wetlands, school grounds watershed projects, activities for stewardship and community partnerships

February 19 or 20, 2009 – Teacher Leader meeting
FOCI: using web-based resources for Great Lakes and Grand River stewardship learning

March 10 and 11, 2009; Fishing for the Future of the Great Lakes Professional Development workshop – open to community partners and teachers (as well as teacher-leaders).

March – Teacher Leader meeting to be scheduled, focus to be determined by teacher leaders, in conjunction with Community Council second meeting

April – Community Seminar, to be scheduled in cooperation with Teacher-Leader team

April – Teacher Leader meeting to be scheduled with consultation with Teacher-Leaders in January/February

May – Community Seminar, to be scheduled in cooperation with Teacher-Leader Team

June 16-19, 2009 -- our selected dates, (pending notification of date selected for Michigan NCLI Summit) – GRAND Learning Institute
FOCI: Watershed data, stormwater management issues, stewardship options which include: rain gardens, storm drain stenciling, wetlands protection. Pedagogical foci include in-depth inquiry methods. Details on student evaluation and commitment to participate will be solicited, as well as detailed lesson plans for the website will be solicited from Institute participants.

Administrative Functions Completed at Grant Initiation

2008

March 4 – All Network team members participated in communications meeting with Pace staff

Fri, April 4 – meeting with Holtschlag, Dann and Eberhardt -- resulting work after the Network staff meetings in May was our 4-theme approach to PD (watersheds, place, community and stewardship) – highlighted at each PD session and every Teacher-Leader meeting

April 21 -- 3 of 4 Network Team members attended full day meeting for grantees

Throughout April – Dann responded to reviewer comments on proposal

Friday, May 2 – Dann met with prospective hub evaluators

May 6 – M. Whitmore notified PI of GLFT Board approval of grant via email. (Although start date for the contract was finally negotiated in mid-June to be 5/6/08, we did not receive the contract until later in May.)

Fri, May 9 – Dann participated in conference call with hub evaluators

May (two full days) – Network team met for planning

June 3 – MSU issued the project account number for full grant start-up

Mon, June 9 – Network team met

Early June – Dann edited hub sheet with Pace and MSUE media representatives

Thurs, June 12 – Network team met with communications staff from Pace to review questions pertaining to communications planning

End of June – Dann met with hub evaluators to begin to review draft evaluation instruments and protocols from GLSI

Throughout July and early August – Dann reviewed drafts of:

- Press release (never received final version of hub press release from Pace after providing editing comments)
- Media release form (never received final version of media release form from Pace after providing editing comments)
- Evaluation instruments and protocols
-

Throughout July – one Network staff member spent considerable hours attempting to convert digital video to manageable size files, and seeking assistance to do so; assistance was not forthcoming from Pace, and our internal technological staff did not have the appropriate software or hardware to edit digital video files. This took until September (and outside assistance) to resolve; meanwhile, we continued taping events as requested by GLSI.

August 9 – Dann participated in call with M. Whitmore

Late August – Network team held weekly staff meetings and weekly consultations via conference call with web designer

Fri, Sept 5 – Dann met with Eberhardt

Tues, September 16 – Dann met with hub evaluators, Lisa and Mary

Sept., and Nov. – Dann participated in additional calls with M. Whitmore

Mon., Nov 17 – Dann met with hub evaluators

Reflections Regarding Administrative Start-Up Accomplishments and Challenges:

Our hub was unlike other hubs in this regard – while the other hubs started earlier, then were asked to interface with evaluators and communications entities, our hub was asked to do this concurrently with the start-up of proposed activities. This created complications, and took an unanticipated amount of the Network Team's attention and time in the first 3 months after receiving our account number internally.

We did not anticipate the amount of time that would be required to respond to multiple grant administrative entities (GLFT for contract signing and budget administration aspects; GLSI/Whitmore for overall grant administration; Pace for communications planning and media relations, and both GLSI and hub evaluators). In addition, we were not aware of the grant requirements for filming and archiving activities (but we do appreciate the technology provided, as well as the opportunity to conduct this important communications). We did not anticipate the technical challenges inherent in the new model high-definition digital video camera that was provided.

Several administrative tasks were more challenging than any of us anticipated, considering the layers of university policy makers and protocols that need to be completed for such simple activities as: photo release forms for minors, IRB protocols for evaluation, press releases crediting multiple partners and the university-required language for inclusivity, intellectual property issues for access to data, etc.). We sense disappointment on the

part of GLSI with these constraints, but these go along with working with a large Land-grant institution.

In spite of these challenges, administrative start-up of the project was conducted and accomplished during the first five months. Only a few tasks remain (issuance of the hub press release, formalization of the photo release) and these should progress in the near future.

Appendix 1 -- Agenda

The GRAND Learning Network: Place-based Great Lakes Stewardship Education for Mid-Michigan

AGENDA June 12, 2008 Teacher-Leader Gathering

- I. Welcome and order breakfast!
- II. Why we're here! Our goals for today
- III. Introductions:
Share a story from the school year or about your summer plans!
- IV. Thank you, and grant update
- V. The GRAND Learning Network - what IS it???
- VI. Calendar visioning
Summer 2008 Teacher-Leader Kick-off Retreat
Choose: Thur - Fri Aug 21-22 or Tues-Wed Aug 26-27
Fall monthly meeting night???

THANKS, and best wishes for outdoor summer fun & reflection & renewal!!!!

Appendix 2 – Participant Handout (Teacher-Leaders and others)

The GRAND Learning Network: Place-Based Great Lakes Stewardship Education for Mid-Michigan 6/12/08

Through this initiative, students, teachers and communities will have tremendous opportunities to enhance learning and grow in our appreciation of our locale. More specifically, 5 school districts will be featured in our first phase; these span from one of the Grand River's headwaters areas and rural communities, through semi-rural and suburban communities, and to the city of Lansing, where a "hub" of rivers all join the Grand. School districts include:

- Laingsburg
- Bath
- Haslett
- Holt
- Lansing

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The Vision

Congratulations - You are now a part of the GRAND Learning Network (Grand River and Nature Discovery Learning Network). Through this initiative, up to two teacher-leaders are selected from each school and will provide the insights to fuel this initiative.

Goal #1: Teacher-leaders will be able to move place-based stewardship education forward in their own classrooms, and in other ways beyond their classrooms, in order to strengthen Grand River stewardship and academic opportunities/achievement for the students in their communities.

Teacher-leaders will:

- Meet once per month as members of a GRAND Learning Network
- Will learn new teaching strategies to enhance student learning/achievement
- Will become more comfortable using place-based education to bring community and school together
- Will recruit teachers for ongoing professional development workshops, and a new summer institute at MSU in 2009
- Will help to host a Community Seminar sponsored by this GRAND Learning Network
- Will craft their own teacher-leadership role in their own community-school setting that advances place-based education in a way that fits local needs, school improvement plans, or other ongoing curriculum needs
- Participate in assessment and evaluation activities for the project

We hope to reach at least 160 teachers from varied backgrounds, in the Grand River Network region, who seek more professional development in place-based education that fosters student learning/achievement.

Goal #2: Teachers will increase in their Great Lakes stewardship knowledge and place-based pedagogy, in order to use new approaches to enhance teaching/learning (in the subjects that the teachers cover – science, language arts, social studies, math, other).

To accomplish this goal, teacher-leaders and other teachers (with preference given first to the 5 participating school districts) may choose to participate in the following:

- Professional development workshops every month, such as:
 - A Curriculum Sampler for Place-Based Great Lakes Stewardship Education in Social Studies, Science, Language Arts, Math and other subjects
 - Annie's BIG Nature Lesson
 - Project FISH
 - Other programs to be identified by teacher-leaders
- A new MSU Summer 2009 GRAND Learning Institute, with field based, outdoor instruction and contact with resource people from throughout the region
- Community Seminars (5 during the school year) on watershed- or nature-related topics of importance to the community and school
- Assessment and evaluation activities associated with this initiative

Our ultimate, and most important goal is this:

Goal #3: To foster appreciation and positive change for learners, families, teachers, schools, communities, and our place located in the heart of the Great Lakes watershed.

As a result of reaching for this goal, students will be given opportunities by motivated, and well-prepared teachers who can enhance students'

- Academic achievement, especially in science and social studies, but also in other subjects and learning areas
- Real-world learning skills to be productive community members
- Sense of belonging and commitment to their communities
- Sense of place and stewardship for our Great Lakes, watersheds, and related resources that make Michigan (and especially the Grand River area) unique

Appendix 3 – Agenda (Working Agenda highlighting specific outcomes and foci for Network Team as they lead the session)



GRAND Learning Network: Teacher-Leader Kick-Off

Thursday, August 28, 2008

Harris Nature Center, 12:30-3:00pm

Michigan State University Campus, 3:30-6:45pm

Goals:

1. Immersion Learning--Getting to Know the Watershed
2. Fun and Useful Strategies for Teaching about the Watershed
3. Logistics about Great Lakes Stewardship Initiative (GLSI) and GRAND Learning Network

12:30 to 3:00 p.m. Harris Nature Center, 3998 VanAtta Road, Okemos, 12:30 p.m.

- Welcome and Introduction to the GRAND Learning Network (Margaret Holtschlag)
- Watershed Walk-N-Talk (Shari Dann)

Walking the Watershed

Journal Activity: Wondering about the Watershed

- Grand River Book Review (Margaret)
- What is the GLSI? What is the GRAND Learning Network? (Shari)

3:00 to 3:30 p.m. Depart for campus in MSU mini-van

3:30 to 5:30 p.m. Red Cedar River, North Side, near Administration Building

- Let's Get Our Feet Wet! (Mark Stephens)

On the banks of the Red Cedar River, MSU Campus

Community Partner: MSU Institute for Water Research

- "Water" we doing, immersing ourselves in the watershed?

Strategies for using the outdoors for teaching

Make-N-Take: Build your own sampling gear

- The Life of the Watershed

5:30 to 6:45 p.m. Wells Hall, Room C112

- Great Lakes Fish Fry Dinner, Celebrating our Connections to the GRAND Learning Network and the Great Lakes

Wells Hall Room WH-C112, MSU Campus

- Teacher Feedback on the draft of the GRAND Learning Network website (Gel Alvarado)
- Community Partners
- Where do we go from here?

Scheduling our Next Meetings



Feedback and Evaluation of the Day

6:45 p.m. Return to Harris Nature Center

We will drive back to Harris Nature Center so that teachers can pick up their cars for the ride home.

Thank you for your participation

Appendix 4 – Agenda (Working Agenda highlighting specific outcomes and foci for Network Team as they lead the session)

 <p>MICHIGAN STATE UNIVERSITY EXTENSION</p>	<p>Grand Learning Network at Kresge Art Museum Michigan State University September 17, 2008 AGENDA</p>	 <p>GREAT LAKES Stewardship Initiative <i>Expanding classrooms. Strengthening communities.</i></p>
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Core Themes for Grand Learning Network:

Watershed---Place---Community---Stewardship

Goals for our Teacher Leadership Meeting:

Content---Strategies for Teaching and Learning---Leadership---Building Community Among our Group

4:00pm: Tour the gallery “Artists of the Great Lakes”

4:30pm: Presentation with Carrie Wolf

Guided tour of Exhibit

Curriculum Materials

5:00pm: At the Red Cedar River—Grand River Watershed information (Mark)

5:30pm: Discussion and Information with Teachers (Shari and Margaret)

Shari: Survey (Pulse) with teachers

Margaret: Curriculum Connections

Questions for Discussion:

1. After viewing this exhibit, how does this exhibit relate to you personally?
2. To your community?
3. To the concerns of the Great Lakes communities?
4. To your curriculum?
5. What more do you want to learn?
6. Who can you work with in the community on what you learned today?
7. Who do you need in the community to do...?

6:00pm: Dinner and Discussion

Using the book *The Grand Rivers of Michigan Series*:

- Jigsaw activity with first half of book—invite teachers to review one of the sections, then introduce their section to the rest of the group.
- For the second half of book: pass out the blank map of Michigan. Invite teachers to take a section of the Grand River and give a virtual tour of the GR for their section of the book.

6:30pm: The Grand Learning Network website

Update on the website

Teachers’ input

7:00pm: Thank you for your participation!

Appendix 5 -- Agenda



GRAND Learning Network: Teacher-Leader September Professional Development

Wednesday, September 17, 2008

Kresge Art Museum, Michigan State University Campus, 4:00 to 7:00 pm

Goals:

1. Immersion Learning--Getting to Know the Great Lakes Watershed
2. Fun and Useful Strategies for Teaching about the Watershed
3. Strategies for teacher-leadership and networking through the GRAND Learning Network

THEMES: COMMUNITY, WATERSHED, Place, Stewardship

4:00 to 5:00 p.m. Arrive, view Great Lakes art exhibit

Reflection & journaling questions:

How does what you see relate to your own history? To your community?

How does the art relate to the concerns of Great Lakes communities in general?

4:30 p.m. Greeted by Cari Wolfe, Education Curator at Kresge Curriculum Connections

5:00 -7:00 p.m. Taking the Pulse.....Evaluating our thoughts since last time

Eat dinner

New Introductions

- Strategies for Place-Centered and Community Engaged Learning
Art in, with and for the community
Grand River – history book
- Community Partners, Community Needs, Community Assets
- Where do we go from here?
Scheduling our Next Meetings, Learning Network Interests and Opportunities
Feedback of the Day

7:00 p.m. Depart

Thank you for your participation!

Appendix 6 -- Agenda



Fishing for the Future of the Great Lakes Professional Development Workshop Agenda

Place Community Watershed Stewardship

Tuesday September 23rd 2008

5:30 Arrival

Introduction (Get acquainted with each other and fishes of the Grand River Watershed)

What Is the Great Lakes Stewardship Initiative? What is the GRAND Learning Network?

Great Lakes aquatic ecology made simple – Thinking like a fish

Great Lakes Fish Management –Go FISH

Fast Food for Fish – Looking at the McDonalds of the underwater world of YOUR backyard

A Fish is a Fish – Using science to understand identification

The Grand River Watershed – What’s the BIG idea!

8:15 Bringing community to the table – Think like a partner be a partner.

(It’s better to be a Partner that Helps, than a Helper that Parts)

Thursday September 25th, 2008

5:30 Arrival/ Review of our first meeting!

Knotting to It learn how frustration is a good thing!

Beads, Blades, Baits, and Bites – You made it now why did we make it

Fooling Fish With Feathers - Tying it all in, literally.

8:15 Community Partners: Who are they and why do they care!

Tuesday September 30th, 2008

5:30 Arrival/Epiphanies over the weekend

It’s not the “Wall Street Journal” but it’s MINE.

Understand a tiny bit about other culture through fish.

The glue to what we do – people and fish of the Great Lakes

If Tackle Could Talk oh what Big Fish tales they would tell.

8:15 Community Partners: Reel ‘em In and see if they are a keeper.

Thursday October 2nd, 2008

5:30 Arrival/Pass the Can ... the hat comes later

Button Pushing Basics – this class is a “Basst”

Incredible Edibles – the in’s and out’s of our Great Lakes Fishes.

It’s All About:

Place Community Watershed Stewardship
..... and Especially Teachers and Kids

8:15 Evaluation – Be Fruitful and Multiply

Appendix 7 – Participant Handout

A Checklist of Starter-Ideas for Place-centered Learning And Community Engagement for Stewardship (Using PLACES for Learning)!

Use this checklist to see which place-centered (or place-based) approaches you have tried or are willing to try with youth/students...

Check here if you have done this activity in the <u>past</u> before this <u>workshop</u>	Place-based effort.....	Check here if you will do this activity in the <u>future</u> , related to watersheds ...
	Connecting with community experts to gain local information	
	Using or adapting lessons or materials to the local place/watershed	
	Searching for and using additional local background information for youths' learning	
	Journaling	
	Nature/watershed observations	
	Building learning & lessons on real issues/needs of the community	
	Bringing together local assets (community donors, businesses, organizations, parent volunteers) to enhance learning	
	Studying local history by doing interviews or using other resources in the community	
	Letting kids spend more "down time" (unstructured) time in nature during learning activities	
	Local or regional (Great Lakes) maps or mapping	
	Creative expression through writing, poetry, art, music	
	Connecting learning to water-related recreation (fishing, boating, etc.)	
	Taking field trips locally for learning	
	Extended stewardship projects to enhance the environment	
	Schoolyard habitat improvement	
	"Adopting" a local area	
	Connecting activities that are "traditional" water-related crafts into learning (activities like flytying, lure-making, etc.)	
	Taking repeated visits to a special location (either at a school yard, a nearby stream, Annie's BIG Nature Lesson, etc.)	
	Inviting local community members into the classroom as resources	
	Team teaching with another teacher or resource person	
	Monitoring a local site (like a stream, or river) for its environmental quality or issues	
	Raising something (like salmon) to learn about habitat locally	
	Getting students involved with local civic issues (studying, learning and writing about them to policy makers)	
	Getting parents involved in learning about local	

	environments/watersheds along with youth	
	Connecting the school or youth with local organizations (sportsmen's groups, watershed groups, nature centers, civic groups, 4-H)	

Are there any other specific strategies you gained through this workshop that you will try to use to enhance learning for youth? If so, explain by jotting your ideas here.....

Appendix 8 – Participant Handout

How would I know a Great Lakes Watershed Steward if I met one???

There are many things a good “steward” can do for the Great Lakes and their smaller watersheds! Here are some ideas.....

If I am a student/youth, I can:

- Do a backyard or schoolyard stewardship project in my watershed.
- Use information I learned in future projects I do.
- Contact people who are community members or scientific experts about water and watersheds to learn more.
- Go and visit river and watershed sites again and again with my family.
- Learn more about nature and water.
- Consider a career in science, nature or related to water.
- Share with others what I learned.
- Do more nature-related fun activities.
- Read more about nature or water in books or on the internet.
- Do a community service project that is good for nature, the environment and my watershed.
- Make better decisions about how much and what types of water I use every day.
- Make better decisions about how I use resources, whether I waste them or not, and what I do with my wastes/trash/garbage.
- Encourage my family to be responsible toward water and the environment.
- Go outdoors to go fishing, boating, walking more often, and encourage my family to do this, too.
- Talk with family members and friends about my interests in nature, water or the Great Lakes.
- Go to a museum, a nature center, a science center or other places to learn more about Great Lakes, water or nature.
- Join or volunteer with a group that cares about the outdoors, water, the environment or the community.
- Get involved when there is a local issue about the environment by learning more and going to meetings or writing decision makers.

If I am a teacher or youth leader, I can:

- Seek and gather locally-specific water, watershed or Great Lakes related scientific information more frequently.
- Build lesson plans and learning experiences for my youth around:
 - Local places and unique features in the watershed or region
 - Community assets, opportunities, partners, needs and issues

Water, fish.
Watersheds
Great Lakes
Place-centered learning (inquiry, reflection, problem-based learning)

If I am a parent and community member, I can:

- Research and get more information about the waterways in my area, and in the Great Lakes region.
- Consider this new, scientific information when I vote, volunteer, join a group, or donate money.
- Travel and visit more sites, and enjoy more water-related recreational opportunities in the Great Lakes region.
- Talk with neighbors, friends, family and others about important Great Lakes and watershed issues.
- Communicate in an informed and responsible manner with decision makers (at the Township, County, and state levels, and with elected officials as well as agencies such as MDNR, MDEQ and many others).
- Think about the decisions I make when I purchase things, use water, and live in my community that can have an impact on my watershed.
- Buy a fishing license, (or a duck hunting stamp) even if you won't use it! Your license monies go toward managing Michigan's watersheds and fisheries for the benefit of us all!
- Take classes to learn more! (Consider MSU Extension, community colleges, nature centers, community education programs!)
- Explore active, outdoor learning in the watershed and unique natural areas of the region! (kayaking, sailing, boating, biking, hiking, walking, fishing, ice fishing, cross-country skiing, rock climbing, etc.)
- Volunteer!!! Consider river clean-up days, "Adopt-A..." programs, nature centers, watershed organizations, sportsmen's groups, environmental groups, "friends" of local parks, land conservancies, or groups that focus on agricultural land protection.

Appendix 9 -- Agenda



AGENDA—November 13, 2008

Professional Development In-Service for GRAND Learning Network Teachers

8:45am: Welcome to Woldumar

9:00am: Introductions and Agenda

*Themes for the Grand Learning Network:
Watershed, Place, Stewardship, Community*

9:15am: Expert Lessons

Group A: Knowing the Great Lakes Invasive Species

Group B: Our Watery Connections: Geology and Geography of the Great Lakes

Group C: Build a Watershed; A Fish is a Fish—Dichotomous Keys; Bass and Blue Gills—Habitats

10:00am: Debriefing 1st Expert Lesson

10:15am: Expert Lessons

Group A: Our Watery Connections: Geology and Geography of the Great Lakes

Group B: Build a Watershed; A Fish is a Fish—Dichotomous Keys; Bass and Blue Gills—Habitats

Group C: Knowing the Great Lakes Invasive Species

11:00am: Debriefing 2nd Expert Lesson

11:15am: Expert Lessons

Group A: Build a Watershed; A Fish is a Fish—Dichotomous Keys; Bass and Blue Gills—Habitats

Group B: Knowing the Great Lakes Invasive Species

Group C: Our Watery Connections: Geology and Geography of the Great Lakes

12:00pm: Debriefing 3rd Expert Lesson

12:15pm: Lunch

1:00pm: Presentation: Suzan Campbell

- Michigan Natural Features Inventory
- Learning about the Heart of the Great Lakes Eco-region
- Consider these questions: (1) What does the Michigan Natural Features Inventory do?
(2) What is unique about the mid-Michigan eco-region?

1:35pm: Group Discovery—County Map Activity (Suzan and Shari)

2:20pm: Two Discussions

- Grand Learning Network Teachers (Shari)
- ABNL—New Partner Teachers (Margaret)

2:30pm: "Exploring the Area" and Parallel Lines Activities (Shari)

3:15pm: Two Minute Survey

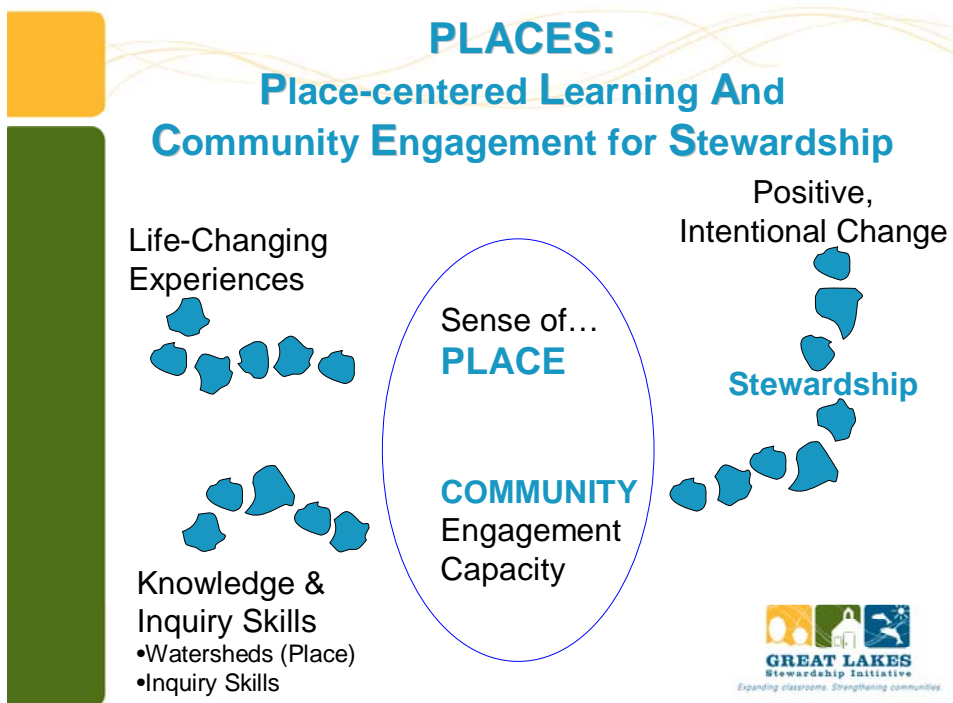
3:30pm: Thank you for your participation!

Appendix 10 – Participant Handout

Our Watery Connections: Geology and Geography of the Grand River Watershed

November 13, 2008
GRAND Learning Network

Shari Dann, Department of Community, Recreation and Resource Studies, MSU
sldann@msu.edu



**We are in mid-Michigan, in a special place, in the heart of the
Great Lakes region, at a special time!**

WATERSHEDS & INQUIRY

- Our Watery Connections
 - How much water in the world? How much is “ours?”
 - Watershed connections
- Exploring the Great Lakes
 - Glacial geology and today’s landforms

PLACE-CENTERED LEARNING

- Delving Deeper through Learning with Maps
 - Scale is important: simple to complex; local to large scale
 - Trace the watershed
 - Scavenger hunt with topographic maps:

Put a sticky note near a place you know!

Find the highest point (hint: brown contour lines)

Find a wetland in a low area

Find an intermittent stream (hint: dashed blue lines)

Trace a tributary!

COMMUNITY ENGAGEMENT

Assets related to geology/geography:

- Farmers
- Soil scientists (Conservation District, others)
- Surveyors
- Well-drillers
- Gravel pit owners and gravel operators
- Parents or community members who work for DEQ, MDOT, etc.
- County road commission (maps, resource people)
- County drain commission (maps, resource people)
- Others????

Issues and opportunities related to geology/geography:

- Fascinating geological sites in your area (eskers? Bogs? The Ledges in Grand Ledge)
- Wetlands or erosion issues on your school land (especially in the headwaters region or along riparian [riverside or stream-side] areas)
- Community awareness and pride in watershed resources
- Siting of gravel or mineral operations
- Road construction and maintenance (and run-off, drainage issues)
- Groundwater quality and quantity
- Stormwater run-off
- Fisheries – effects of land uses on habitat quality

STEWARDSHIP: How can we work with students to “give back?”

Community surveys

Other ideas?:

Watershed studies

Stream, river or wetland restoration and improvement

Soil erosion prevention

Community awareness-building

Appendix 11 – List of Teacher-Leaders

Diana Vernier, Laingsburg Elementary, 5th grade

Zsa Mahon, Murphy Elementary, Haslett School District, 5th grade

Geoff Batten, Ralya Elementary, Haslett School District, 4th grade

Andrea Hartland, Bath Elementary, 3rd grade

Stephanie Knapp, Bath Elementary, 3rd grade

Jan Derksen, Bath Elementary, 2nd grade

Cathie Wood, Bath Elementary, 3rd grade

Joe Cleary, Hope Middle School, Holt School District, 5th grade

Joni Baker, Gier Park Elementary, Lansing School District, 4th grade

Jo Trumble, Lyons Avenue Elementary, Lansing School District, 3rd grade

Lisa Weise, Elementary Science Coordinator, Holt School District

Debbie Mosier, Haslett elementary, retired

Jill Tribell, Dimondale Elementary, Holt School District, 3rd grade

Jodi Streeter, Hope Middle School, Holt School District, 5th grade

Dave Beutel, Laingsburg Elementary, upper elementary science (3rd, 4th, 5th grades)