

2010 Project Abstract

For the Period Ending June 30, 2013

PROJECT TITLE: Engaging Students in Environmental Stewardship through Adventure Learning

PROJECT MANAGER: Nicole Rom

AFFILIATION: Executive Director, Will Steger Foundation

MAILING ADDRESS: 2801 21st Avenue South, Suite 110

CITY/STATE/ZIP: Minneapolis, MN 55407

PHONE: (612) 278-7101

E-MAIL: nicole@willstegerfoundation.org

WEBSITE: www.willstegerfoundation.org and classroom.willstegerfoundation.org

FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2010, Chp. 362, Sec. 2, Subd. 8b

APPROPRIATION AMOUNT: \$250,000.00

Overall Project Outcome and Results

The Will Steger Foundation developed *Engaging Students in Environmental Stewardship through Adventure Learning (MCC)* with the understanding that environmental stewardship begins with a local connection and sense of appreciation, or environmental sensitivity, towards the natural environment. This project's primary audience, educators, have the unique opportunity to lead their students through the environmental education continuum of knowledge, awareness, and skills that lead to an informed and active environmental citizenry.

Climate change is one of the most critical environmental issues of our time and educators have an important role to play in educating their students and providing them the skills to mitigate and adapt to climate change. In order to make the issue relevant and connected to the lives of those reached through our project, we focused specifically on the impacts of climate change on Minnesota's biomes.

Additionally, we wove in stories from Will Steger's life and examples of his own early observations of the natural world and his curiosity of weather and climate. We also tapped into the expertise of many Minnesota scientists and educators in the development of our Grades 3-12 curriculum, online classroom and two public forums and three Summer Institutes for climate change education.

Over the three years of the project we were able to reach and increase the climate literacy of over 5000 educators, members of the public and students via our Summer Institutes for Climate Change Education, year round workshops, conference presentations, school visits, field trips, public forums and our online classroom (classroom.willstegerfoundation.org). The project also resulted in the development of a number of valuable, mutually beneficial, and long-term partnerships. The partnership with the Mississippi River Fund, National Park Foundation and Mississippi National River and Recreation Area resulted in the ability to support 20 student service projects and field trips for over 500 students to enhance their learning on Minnesota's changing climate. *MCC* was recognized in 2012 by Environmental Initiative in the area of environmental education in part due to these important partnerships. A final evaluation report showed overall success for the project in providing a curriculum and training that increased climate literacy, environmental stewardship and educator confidence in teaching about climate change.

Project Results Use and Dissemination

Directions:

1. How has information from your project been used and/or disseminated?

Over 500 formal and informal educators from all four biomes received a copy of the *Minnesota's Changing Climate Curriculum* via three Summer Institutes and customized workshops for school districts and at professional education conferences. The curriculum was used to teach over 10,000 Grades 3-12 students about Minnesota's unique biomes, what makes them unique, how they are

threatened by climate change and what they can do to mitigate the impacts. Additionally, the curriculum has been shared nationally and regionally via the Climate Literacy Network, the Great Lakes Education Collaborative, Green Teacher, Humphrey Institutes Innovations in Education Forum and the North American Association for Environmental Education as a model of place based climate change education.

Additionally, over 1,000 students submitted their observations of Minnesota's biomes during the school year to our online classroom, with at least 2,000 more viewing and/or commenting on their observations.

What communications and outreach activities have been done in relation to your project? For example: have tools or techniques developed through your project been adopted by a group; presentations relating to the project been made; has work pertaining to the project been published?

Minnesota's Changing Climate curriculum has been used as a framework to develop curriculum specifically focused on the Mississippi River and climate change impacts on Wisconsin. Additionally the Minnesota Phenology Network and Minnesota Master Naturalists have used portions of it and endorse its effectiveness for communicating the connection between phenology and climate change. The curriculum has been aligned with the St. Paul Public Schools "power standards" and Minneapolis Public schools elementary STEM standards and used as an example of how to meet those standards. Finally, teachers from Minnesota American Indian reservations that are participating in The CYCLES project, a project of the STEM Center at the University of Minnesota, received training and are using the curriculum in their schools because the place based focus of the curriculum resonates culturally.

The online classroom, created in partnership with Hamline's Center for Global Environmental Education, has been used by educators around the state to learn more about Minnesota's unique biomes, their cultural history and climate change impacts. Finally, the Minnesota Phenology Network has utilized it as the perfect curriculum for connecting individuals with a reason why phenology is important.

Environment and Natural Resources Trust Fund (ENRTF) 2010 Work Program Final Report

Date of Report: August 8, 2013
Date of Next Progress Report: Final Report
Date of Work Program Approval:
Project Completion Date: June 30, 2013

I. PROJECT TITLE: Engaging Students in Environmental Stewardship through Adventure Learning

Project Manager: Nicole Rom
Affiliation: Executive Director, Will Steger Foundation
Mailing Address: 2801 21st Avenue South, Suite 110
City / State / Zip: Minneapolis, MN 55407
Telephone Number: (612) 278-7147
E-mail Address: nicole@willstegerfoundation.org
Fax Number: (612) 278-7101
Web Site Address: www.willstegerfoundation.org

Location: Minnesota Statewide

Total ENRTF Project Budget:	ENRTF Appropriation	\$250,000.00
	Minus Amount Spent:	\$250,000.00
	Equal Balance:	\$0

Legal Citation: M.L. 2010, Chp. 362, Sec. 2, Subd. 8b

Appropriation Language:

\$250,000 is from the trust fund to the commissioner of natural resources for an agreement with the Will Steger Foundation to provide curriculum, teacher training, online learning, and grants to schools on investigating the connection between Minnesota's changing climate and the impacts on ecosystems and natural resources. This appropriation is available until June 30, 2013, by which time the project must be completed and final products delivered.

II. FINAL PROJECT SUMMARY AND RESULTS:

The Will Steger Foundation developed Engaging Students in Environmental Stewardship through Adventure Learning (MCC) with the understanding that environmental stewardship begins with a local connection and sense of appreciation, or environmental sensitivity, towards the natural environment. This project's primary audience, educators, have the unique opportunity to lead their students through the environmental education continuum of knowledge, awareness, and skills that lead to an informed and active environmental citizenry.

Climate change is one of the most critical environmental issues of our time and educators have an important role to play in educating their students and providing them the skills to mitigate and adapt to climate change. In order to make the issue relevant and connected to the lives of those reached through our project, we focused specifically on the impacts of climate change on Minnesota's biomes. Additionally, we wove in stories from Will Steger's life and examples of his own early observations of the natural world and his curiosity of weather and climate. We also tapped into the expertise of many Minnesota scientists and educators in the development of our Grades 3-12 curriculum, online classroom and two public forums and three Summer Institutes for climate change education.

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III. PROGRESS SUMMARY AS OF October 31, 2010:

To support the *Engaging Students in Environmental Stewardship through Adventure Learning* project positions were posted and hired for an Education Program Manager, Videographer, Graphic Designer, Evaluation Team, and project assistant/intern.

Significant effort was put into raising awareness about the project and recruiting classrooms to participate during the 2011-2012 school year. To assist in the effort a number of different materials, both multimedia and paper based tools were developed in collaboration with a Videographer, Webmaster, Graphic Designer, Education Program Manager and Project Assistant. Outreach occurred through our Summer Institute for Climate Change Education, conferences, our website, and established educator networks.

A "teaser lesson" that showcases Will's archived journals from his childhood and later in life was developed and shared via the Summer Institute and in subsequent conference presentations. In addition, an activity was piloted at two conferences that will be used in the final curriculum.

Please note budget amendment request in Section V approved January 26, 2011.

IIIa. PROGRESS SUMMARY AS OF March 31, 2011:

Engaging Students in Environmental Stewardship through Adventure Learning content research and creation have been the focus of this period of time. The first draft of the *Minnesota's Changing Climate* curriculum was researched, written and sent out for review in March. In addition, we hired Hamline's Center for Global Environmental Education (CGEE) to design much of the online classroom and we have worked with them to ensure consistency between the curriculum and the online component. Recruitment and planning for the Summer Institute has continued and we have been pleased with the number of applicants we have (70) with a few months to go (Summer Institute is August 11-12, 2011). Finally, through a unique partnership with the National Park Foundation, Mississippi River Fund and the Mississippi National River and Recreation Area we gained the opportunity to offer \$500 mini grants to metro middle school teachers that attend the Institute. We also applied for a grant from the Donald Weesner Charitable Trust to offer each educator attending the Institute an "Explore Minnesota Biomes" kit that will include equipment and cameras to observe their natural environment.

IIIb. PROGRESS SUMMARY AS OF August 31, 2011:

The *Minnesota's Changing Climate* Grades 3-8 and 9-12 curriculum was finalized and had its first printing. In addition the *Minnesota's Changing Climate* online classroom (classroom.willstegerfoundation.org) was made public including a learning module, curriculum and supporting materials and a social networking feature. The 6th annual Summer Institute for Climate Change Education occurred on August 11 and 12, with over 100 registrants representing all four biomes of Minnesota. Initial evaluation of the project occurred at the Institute.

Please note there is a budget amendment request in Section V approved October 12, 2011.

IIIc. PROGRESS SUMMARY AS OF November 30, 2011:

Minnesota's Changing Climate teacher support began this fall, as well as continued outreach and dissemination of the curriculum. Will Steger made four school visits to recognize those implementing *Minnesota's Changing Climate*. Two more visits are planned for the winter and early spring. The use of the online classroom observations section has been consistent. Initial outreach and planning for Summer Institute 2012 began.

IIId. PROGRESS SUMMARY AS OF April 30, 2012:

We were honored to learn that the *Engaging Students in Environmental Stewardship through Adventure Learning* project was one of three environmental education projects statewide to be nominated for the Environmental Initiative Awards (<http://bit.ly/Kpbfuj>). The online classroom continues to be posted to by students around the state and we were able to offer two additional curriculum trainings. Registration for Summer Institute 2012 continues and we are busy editing a second edition of the curriculum based on educator feedback to be ready for this summer's educator cohort.

Amendment Request Result 1 May 23, 2012:

- Due to an unanticipated demand for school visits and presentations on the curriculum our expenditures were greater than expected in Deliverable 6. Additionally, Deliverable 5, web support for the curriculum, expenditures exceeded our expectations. Based on our needs for the final printing and distribution of the curriculum we request to move \$1822.36 from Deliverable 4, printing and add \$1319.50 to Deliverable 5, web support and \$502.86 to Deliverable 6, curriculum outreach.

Amendment Request Result 2 May 23, 2012:

- Our expenditures for Deliverable 1, Summer Institute 2010, exceeded expectations, but because of unanticipated in kind donations, we under spent for Deliverable 2, Summer Institute 2011. We request to move \$3973.25 from Deliverable 2 to Deliverable 1.

Amendment Request Result 3 May 23, 2012:

- Will Steger's journals became more integral to the curriculum than expected and we exceeded our expenditures in Deliverable 1 by \$375. Looking ahead we have adequate funds to maintain our online program and request to move \$375 from Deliverable 2 to Deliverable 1.

Amendment Approved: June 14, 2012

IIIe. PROGRESS SUMMARY AS OF August 31, 2012

We held our seventh annual Summer Institute for Climate Change Education featuring a newly revised version of *Minnesota's Changing Climate* August 7 and 8. 90 educators attended and evaluation results show overwhelmingly positive reviews, as well as increased knowledge on climate change in Minnesota. We were able to bring Dr. Genie Scott from the National Center for Science Education to speak at both a public forum before the Institute, and at the Institute. The online classroom continued to be utilized and our evaluation team was able to get final curriculum survey results that they are developing into a final report.

IIIe. PROGRESS SUMMARY AS OF March 6, 2013

We continue to support educators using our curriculum through workshops, exhibiting at conferences and the online classroom.

Amendment Request Result 1 March 6, 2013

- We have spent less on travel/mileage than anticipated and request to move a total of \$2722.89 from Deliverables 1 (\$1183.77), 3 (\$1.49) and 4 (\$1537.63) to Deliverable 5, web support, to ensure the online classroom is maintained for the duration of the project. This is reflected in the Attachment A Result 1 with a movement of \$0.97 moved from the supplies line and \$2721.92 from the travel line to Online/Web Support.

Amendment Request Result 2 March 6, 2013

- We request to move \$300 from the line for travel/mileage to the line for online/web support.

Amendment Request Result 3 March 6, 2013

- In the Attachment A we request to move \$1480.25 from the line for travel/mileage to the line for printing. This will enable us to print our last batch of curriculum for distribution to educators.

Amendment Request Result 4 March 6, 2013

- In the Attachment A we request to move \$870.98 from the line for travel/mileage to the line for printing. This will enable us to print our last batch of curriculum for distribution to educators.

Amendment Approved: April 1, 2013

IV. OUTLINE OF PROJECT RESULTS:

RESULT/ACTIVITY 1: Minnesota's Changing Climate Adventure Learning Curriculum for Grades 3-12

Description: An age-appropriate climate change curriculum for grades 3-5; 6-8; 9-12 that is reviewed by Minnesota educators, the Union of Concerned Scientists and the National Education Association. The curriculum will be interdisciplinary and experiential in nature. The curriculum will foster an understanding of Minnesota's diverse ecosystems and develop a sense of place, educate on the basics of climate change and implications for Minnesota, the Midwest and the globe, and ultimately empower student leadership and action on climate change solutions. The curriculum will include an adventure story from polar explorer Will Steger's archives, units on Minnesota's ecosystems and foster skills necessary to be a citizen naturalist – observing and documenting Minnesota's changing climate and investigation implications of a changing climate. The curriculum will reach 10,000 students in grades 3-12 throughout Minnesota schools by 2013.

Amendment Request Result/Activity 1 Approved January 26, 2011:

- In going through the Result 1 budget in the Work Program we noticed that it did not include all of funds included in the budget lines in Attachment A. This is an oversight from the original workplan and we are requesting to add these funds to the **Work Program** to cover supplies, travel expenses, and digitizing service. The budget for these expenses is accounted for in Attachment A.

Summary Budget Information for Result/Activity 1:

<i>Revised ENRTF Budget:</i>		\$91,313.84
	Amount Spent:	\$91,313.84
	Balance:	\$0

Deliverable/Outcome	Completion Date	Budget
1. Research, Development and Revision of Grades 3-12 Minnesota's Changing Climate Curriculum <ul style="list-style-type: none"> • Multidisciplinary curriculum on Minnesota's diverse ecosystems (bogs and fens, prairie, deciduous, coniferous), the impacts of climate change, and lesson planning for student-led action projects • Aligned to MN standards 	June 2013	\$52,827.61

2. Graphic design, and revision – final production of curriculum	June 2013	\$2947.50
3. Archive research for curriculum components	June 2011	\$1437.39
4. Printing and distribution of curriculum	June 2013	\$22,806.59
5. Web support for curriculum, software, evaluation	June 2013	\$9791.89
6. Curriculum outreach	June 2013	\$1,502.86

Result/Activity Completion Date: June 2013

Result 1 Status as of: August 31, 2012

We were able to consolidate teacher feedback and make revisions to MCC curriculum for a second printing. The new version was distributed at the June Minnesota Association for Environmental Education conference (15 teachers), an August and September workshop for St. Paul Schools science teachers (70 teachers) and the Minnesota Independent School Forum conference session (30 teachers). Additionally educators at the 2012 Summer Institute for Climate Change Education received the curriculum (90 teachers), as well as a kit of materials for implementing a number of the activities.

The 2012-2013 school year will focus on supporting teachers using the curriculum and continuing with distribution of the curriculum via training institutes and conferences. A workshop is scheduled for December with teachers that work at schools primarily serving American Indian youth.

Result 1 Status as of: April 30, 2012

We have continued to gather feedback from teachers on the curriculum as we work on editing the curriculum for distribution at Summer Institute 2012. Additionally, teachers who download the curriculum, attend a training or information session on MCC, or attended our Institute receive bi-monthly communications with updates and resources.

The curriculum was distributed at trainings for the Minnesota Science Teacher's Association and the Minnesota Phenology Network's annual meeting. We were able to reach over 250 educators at the MnSTA conference and discuss further partnership opportunities with the Minnesota Phenology Network, focusing on the phenology strand of our curriculum.

Will Steger, our education program manager and education assistant made visits to Proctor Middle School and Hawley Elementary and High School. Will did school assembly presentations at the schools and then classes shared what they had been learning. We were also taken outside to the areas where students were doing their journaling and observations. Through these visits, we were able to document educators increased comfort and confidence with bringing their students outside and important 21st century skills being used by their students. The student's questions and well-developed skills of observation and journaling outdoors were a great testament to what the outcome of teacher training in combination with a well-developed and implemented curriculum can be.

Result 1 Status as of: November 30, 2011

As teachers begin to implement the *Minnesota's Changing Climate* curriculum in their classroom we are gathering feedback and extensions to add to the second edition. Teachers who download the curriculum or attended our Institute receive bi-monthly communications with updates and resources.

Curriculum outreach and distribution continued with presentations at the Minnesota Homeschoolers Association (10 participants), the Friend's School of Minnesota (5 teachers), and Education Minnesota (35 participants in session, 9000 conference attendees).

Will Steger, our education program manager and education assistant made visits to Crosby Farm Park with the Friends School of Minnesota, Salem Hills Elementary, Roseville Middle School and Metro Tech Academy. During the visits Will talked about climate change, his adventures and heard from the students about the work they have been doing around *Minnesota's Changing Climate*. A few schools have created public service announcements about action projects they have or will be implementing. These videos can be watched at: <http://classroom.willstegerfoundation.org/get-social/view-observations-by-others/itemlist/tag/video>.

Result 1 Status as of: August 31, 2011

Late spring and summer consisted of consolidating the Grades 3-8 and 9-12 *Minnesota's Changing Climate* curriculum reviews and editing, sending the curriculum to the designer and finally running the first printing. The curriculum was introduced and distributed to 25 teachers at the Minneapolis Public Schools Elementary Science Institute, 90 participants of the Will Steger Foundation Summer Institute, and 20 teachers at the Minnesota Independent School Forum. Over 90% of educators introduced to the curriculum said that it was useful and engaging and matched their curricular goals. In addition, 84% said that the curriculum meets a need for which they have inadequate resources.

We additionally reached over 100 other educators through presentations at the Midwest Environmental Education Conference in Rochester, and the Minnesota Master Naturalists Conference. The fall will include curriculum distribution via presentations at Education Minnesota, and the Minnesota Homeschoolers Alliance. In addition the curriculum is available free to download from the Will Steger Foundation website, <http://classroom.willstegerfoundation.org>.

The 2011-2012 school year will focus on supporting teachers using the curriculum, making revisions and continuing with distribution of the curriculum via training institutes and conferences.

Result 1 Status as of: March 31, 2011

Winter and spring were focused on research and writing of the curriculum by the Education Program Manager and the Project Assistant. Some coordination with the online classroom development team at CGEE was necessary to maintain connections with the content for both. The curriculum was sent out to a number of curricula, science and climate change experts in Minnesota for review and their comments are being incorporated into the curriculum final draft. The graphic designer designed a few

activities for piloting at conferences and for teachers to use in their classroom, as well as worked on the overall look of the curriculum final. We exhibited at the Minnesota Science Teachers Association Conference and raised awareness about the project with over 200 science teachers from all over the state. The Education Program Manager attended the Minnesota State Science Standards workshop to learn more about aligning the curriculum with state standards and hired a short-term intern from the St. Kate's pre-service STEM program to align the curriculum with science standards.

This spring and summer will be spent finalizing the curriculum, designing and printing it and getting it ready to share at the Summer Institute.

Result 1 Status as of: October 31, 2010

Videographer, graphic designer and project assistant positions were posted and filled. In anticipation of the opportunity to share news of this project at the 2010 Summer Institute for Climate Change Education a "teaser" lesson was developed (see attached). The lesson featured the importance of journaling to connect with the outdoors and included excerpts from Will Steger's journals. The Education Program Manager spent time developing the lesson in collaboration with a graphic designer, an archive researcher, and printer. In addition the lesson and the opportunity to be involved with the project as a whole was posted to our website (<http://www.willstegerfoundation.org/new-minnesotas-changing-climate>) and blog (<http://www.willstegerfoundation.org/climate-lessons>). The lesson was then shared at the Summer Institute for Climate Change Education in August (75 participants) and used as an example at outreach events throughout the fall. Outreach events include; Minneapolis Public School Elementary Science Institute, Minnesota Homeschoolers Alliance, Education Minnesota Professional Conference, Minnesota Naturalists Association, the University of Minnesota STEM Education Program, Humboldt High School, and The Green Schools National Conference. There were a total of 75 teachers involved with piloting potential activities for the curriculum this fall.

Development of the curricular content will continue through the spring with continued support from the project assistant, web team, and archive research. Meeting with the online classroom development team will be important to maintain a theme and consistency of the project.

Result 1 Final Report Summary

The Minnesota's Changing Climate curriculum framework was developed around four important ideas. Recognizing the importance of place in making issues and concepts relevant, the curriculum highlights Minnesota's four biomes and their unique biotic characteristics and encourages educators to take their students outside to explore their biome. Additionally, the curriculum's foundation is climate change science from peer reviewed journals, first person interviews with local scientists and state or federal resources. Knowing that stories and local heroes can inspire hope and change, Will Steger's adventures and lifelong journals are included with each lesson. Finally, climate change education needs to include opportunities for action and environmental stewardship. The final lesson of the curriculum gives students the opportunity to develop their own action projects related to climate change. Educators piloted lessons and were surveyed the first year of implementation and their feedback was used to

revise the curriculum for the second year of implementation. The final evaluation showed that almost all felt that the curriculum was “helpful” or “very helpful” for teaching about climate change and environmental stewardship. Five strengths and three challenges were revealed through the evaluation they were:

Strength 1: The local focus on Minnesota and connections to students’ experiences and the world

Strength 2: The active, hands-on, inquiry-based nature of the curriculum

Strength 3: The clarity of the lessons and teacher guide, including specific content and materials

Strength 4: The ability to adapt the lessons to fit their students and curriculum

Strength 5: There was a lot of support for implementing the curriculum

Challenge 1: Greater differentiation of the curriculum

Challenge 2: Lack of time and other resources

600 Grades 3-12 educators received a copy of and were trained in the Minnesota’s Changing Climate curriculum. Workshops ranged from an hour introduction to the resource to 2-day intensive institutes including activities from the curriculum and content specialists to provide in depth information about the concepts covered in the curriculum. Educators that received training were from each biome in Minnesota; work in urban, suburban and rural settings; are formal and informal educators; and work with students of all demographics. In addition to the curriculum itself, we were able to distribute 150 sets of curriculum kits that included the resources to successfully facilitate a number of the activities in the curriculum. During the 2011-2012 school year Will Steger and Will Steger Foundation education staff made visits to six schools located in all four biomes of Minnesota. Will did a presentation for each entire school and then visited the classroom of the teacher that had attended our Institute to see how they had been implementing the curriculum. 3000 students throughout Minnesota were reached through these school visits. Finally, a \$25,000 grant from Weesner Family Foundation allowed us to distribute 100 biome kits to educators at our 2011 Institute. The kits contained field guides, cameras and other resources to explore outside. In addition to distribution of the kits, the Will Steger Foundation has 5 kits available for educators to borrow for three-week periods. The curriculum can be downloaded for free at <http://classroom.willstegerfoundation.org>. \$25,000 was donated from foundations to support our work on this project and \$39,000 of salary was donated through administrative and support of staff at the Will Steger Foundation.

RESULT/ACTIVITY 2: Institutes for Educators on Climate Change Education

Description: The Institutes for Educators on Climate Change Education are professional development opportunities for Minnesota educators. They are a vehicle for empowering educators by seeking to build their comfort and confidence with the topic of climate change and the lesson plans included in Minnesota’s Changing Climate. The Institutes are designed in collaboration with partners, including the Science Museum of Minnesota, Saint Paul Public Schools and academic institutions. Between 2010-2012, 300 Minnesota educators will be informed and/or trained in Minnesota’s Changing Climate.

Summary Budget Information for Result/Activity 2:**ENRTF Budget:****\$71,613.25****Amount Spent:****\$71,613.25****Balance:****\$0**

Deliverable/Outcome	Completion Date	Budget
1. 2010 Summer Institute – Announce project opportunity	September 2010	\$16,992.36
2. 2011 Institute Workshops– Unveil curriculum and program, train educators	September 2012	\$30,382.75
3. 2012 Institute Workshops– Share successes and challenges, evaluation	June 2013	\$24238.14

Result/Activity Completion Date: June 2013**Result 2 Status as of:** August 31, 2012

Over 90 educators attended the 7th annual Summer Institute for Climate Change Education on August 7 and 8 at the School of Environmental Studies in Apple Valley, MN. This Summer Institute focused on climate science basics, introduced the second edition of the Minnesota's Changing Climate curriculum and provided training on many of the hands-on activities from the Minnesota's Changing Climate curriculum. Educators had the opportunity to hear from Dr. John Abraham, Dr. Eugenie Scott and Will Steger as well as a variety of excellent breakout speakers. The breakout speakers provided skills, resources and excellent information to enrich the use of the Minnesota's Changing Climate curriculum in the classroom. The evening before the Institute began, we co-hosted a public forum with Dr. Genie Scott of the National Center for Science Education at the Humphrey Institute. (250 attendees)

We were able to distribute to each teacher kits with materials needed to implement the curriculum. Evaluation results show increased confidence in teaching about climate change as a result of the Institute and increase climate literacy.

We were able to secure donations of food and teacher goodies from Aveda, General Mills, Valley Natural Foods, Common Roots, French Meadow Café, Kowalskis, The Wedge, Mississippi Market, Birchwood, Peace Coffee, The Jeffers Foundation and Chinook Book. We were also able to continue our partnership with the National Park Foundation, National Park Service and Mississippi River Fund by providing 12 of the metro area teachers with funds to visit the Mississippi with their students at Ft. Snelling State Park.

A recap of the Institute can be viewed at <http://willstegerfoundation.org/summer-institute>.

An institute workshop is scheduled for December with teachers that work at schools primarily serving American Indian youth. An Institute is tentatively planned for June, 2013 to be held at Ft. Snelling State Park.

Result 2 Status as of: April 30, 2012

Summer Institute 2012 outreach and registration began in January. As of May 23, 2012 we have 60 educators from around the state registered. A map showing location of participants can be viewed at: <http://bit.ly/JI1U2s> We have confirmed presentations for

most of the eight breakout sessions and Dr. John Abraham and Will Steger will keynote the two days. The Institute will take place at the School of Environmental Studies in Apple Valley August 7-8.

We have also confirmed Dr. Eugenie Scott as the speaker for our public forum the evening of August 6, at the Humphrey School of Public Affairs (<http://bit.ly/JV5rcD>). Dr. Eugenie Scott is the Executive Director of the National Center for Science Education (NCSE). For the past 30 years NCSE has primarily focused on defending the teaching of evolution in the classroom. In 2012, in response to complaints from teachers that they were coming under fire for teaching global warming and other climate change concepts, NCSE decided to support the teaching of climate change in addition to evolution.

We were able to hire a Summer Institute intern that will begin June 4, 2012.

Additional curriculum trainings were offered at the Minnesota Science Teachers Association conference (40 participants), the Minnesota Phenology Conference (15 participants).

The rest of the spring and summer will be spent planning and implementing the Summer Institute. This will involve finalizing the agenda and speakers, asking for donations of food, and finalizing the plan for 2012-2013 to be shared with the teachers.

Result 2 Status as of: November 30, 2011

The dates of August 7-8, 2012 were set for Summer Institute 2012. Initial outreach began and registration will open late January 2012.

Result 2 Status as of: August 31, 2011

The 2011 Summer Institute for Climate Change Education was held at the School of Environmental Studies in Apple Valley, MN. Over 100 educators from across the state of Minnesota registered, which is the highest number of Summer Institute participants to date. Participants received training on our new Minnesota's Changing Climate curriculum and online classroom and attended a variety of breakout sessions that provided supporting information to enhance the use of the curriculum. Due to a grant from the Donald Weesner Trust we were able to distribute *Explore Minnesota's Biomes Kits*, which contain a digital camera, rain gauge, thermometer, field guides and other tools to help students explore the outdoors. 20 middle school metro teachers are eligible for \$500 action project grants due to the Parks Climate Challenge, collaboration with the National Park Foundation, National Park Service and the Mississippi River Fund. At the conclusion of the Institute, 93% of participants were confident in their ability to implement the curriculum. All Summer Institute participants plan to implement Minnesota's Changing Climate curriculum this school year. We were able to secure donations of food, space and educator giveaways from; The School of Environmental Studies, common roots catering, French Meadow bakery, Kowalski's Markets, Linden Hills Coop, Prairie Restorations Inc, The Jeffers Foundation, Chinook Book, Peace Coffee, Seward Coop, Valley Natural Foods and the Freshwater Society.

A Summer Institute recap video, as well as more details of the Institute are available at: <http://classroom.willstegerfoundation.org/about/summer-institute>. A video that

describes our collaboration with the National Park Foundation through the Parks Climate Challenge is available at: http://www.youtube.com/watch?v=_ge0lrl7Rhq.

A public forum, *Sense of Place in a Changing Climate*, was held the evening of August 11 and had over 200 attendees, including teachers from the Summer Institute. The panel consisted of Don Shelby, J. Drake Hamilton (Fresh Energy), and Will Steger and was moderated by MPR's Mid-morning host, Kerri Miller. The forum can be watched at: <http://www.willstegerfoundation.org/climate-news/item/1292>.

Result 2 Status as of: March 31, 2011

Outreach for the Summer Institute continued and as of June 7, 2011 we had 71 educators signed up from around the state. We will be focusing more on the Aspen Parkland (NW corner) of the state, as this is where we have the most limited involvement. We secured the School of Environmental Studies in Apple Valley, MN for small fee, as a location for our two-day Institute August 11-12, 2011 and began to develop an agenda and invite speakers.

An evening public forum will be included in the Summer Institute and we have finalized the speakers and theme of the forum. The forum will be a panel discussion called, *Sense of Place in a Changing Climate* and will be held at the Town and Country Club in St. Paul. The panel will consist of three Minnesotans discussing their connection to Minnesota, how climate change is impacting their sense of place, and why they are concerned or how this impacts their daily lives. The purpose of the event is to raise awareness about the impacts of climate change on our state's natural resources and what we as citizens can do through the personal stories and "testimony" of prominent Minnesotans. The panel will consist of Don Shelby, J. Drake Hamilton (Fresh Energy), and Will Steger and will be moderated by MPR's Mid-morning host, Kerri Miller.

As a result of a unique partnership with the National Park Foundation, Mississippi River Fund and the Mississippi National River and Recreation Area (National Park Service) we are able to offer \$500 mini-grants to 20 metro middle school teachers that will be doing action projects that specifically mitigate the impacts of climate change on the Mississippi. These teachers will also receive additional training that highlights the national park and climate change.

The spring and summer will be spent planning and implementing the Summer Institute. This will involve finalizing the agenda and speakers, asking for donations of food, and finalizing the plan for 2011-2012 to be shared with the teachers.

Result 2 Status as of: October 31, 2010

An intern and the Education Program Manager put significant energy into planning our 2010 Summer Institute for Climate Change Education that was held on August 12, 2010 at the University of Minnesota, St. Paul Campus. We reached 75 educators in person and via moderated webinar and provided scholarships to 25 educators. Participants engaged with Minnesota's Changing Climate Curriculum through an activity using weather instruments. They also gained a deeper perspective on engaging students on the topic through our keynote speaker, Dr. Naomi Oreskes. The Institute was recorded

and videos are posted to our website (<http://www.willstegerfoundation.org/summer-institute>) for the educators to use in their classroom or further professional development. Outreach materials recruiting educators for the project and Summer Institute 2011 were developed, printed and distributed at the Summer Institute 2010. (See attached) Finally we were able to secure donations from; Aveda, Birchwood Café, Blue Sky Guide, Do It Green Guide, Eureka Recycling, French Meadow Bakery, Linden Hills Cooperative, Orion Magazine, Peace Coffee, Stonyfield Farm, Whole Foods, and Valley Natural Foods. The National Education Association and St. Paul Public Schools provided general support and outreach, and the University of Minnesota – Institute on the Environment & Office of International Programs supported with outreach and facility costs.

The Education Program Manager and Project Assistant will use the spring of 2011 to plan for the Summer Institute 2011 including securing a venue, speakers and recruitment of classrooms.

Result 2 Final Report Summary

Three Will Steger Foundation Institutes for Climate Change Education, three public forums and twenty workshops were conducted during this project. This resulted in the increased climate literacy and environmental stewardship of over 500 formal and informal educators representing over 10,000 students statewide, as well as the increased awareness of over 400 members of the general public through our public forums. Food and supply donations for breakfast, lunch and snacks was secured for 75 attendees in 2010, 100 attendees in 2011 and 100 attendees in 2012 for a value of \$18,000. Speakers and volunteers additionally provided their services in kind in 2010, 2011 and 2012.

Public Forums were held 2010-2012 in conjunction with each Summer Institute to provide an evening option for educators and to raise awareness about Minnesota's changing climate. The Humphrey Institute donated their space for the forums and they featured Dr. Naomi Oreskes, a sense of place panel with Kerri Miller, Don Shelby, Will Steger and J. Drake Hamilton and Dr. Genie Scott. Approximately 250 members of the public and educators attended each forum. Overviews of each of the forums can found at <http://www.willstegerfoundation.org/climate-news/item/1292>, <http://vimeo.com/14809445>, and <http://willstegerfoundation.org/media-room/video-gallery/viewvideo/243/education/summer-institute-2012-genie-scott-ncse>.

Final evaluation of the Institutes showed overwhelming satisfaction with the experience and increased confidence and competence in teaching climate change. Reflecting back on the Summer Institute after implementing the curriculum, most teachers indicated that the Summer Institute had been helpful or very helpful. Approximately 1 in 5 teachers indicated that the institute was very unhelpful; open-ended responses indicate that these teachers would have liked more hands-on activities and more guidance in adapting the curriculum to meet particular instructional demands, such as integrating it into their existing instruction and modifying it for select grade levels and student groups. This feedback was taken into account when planning institutes held the summer of 2013. Returning teachers indicated that the value of the institute extended beyond the opportunities it provided for preparing to teach the MCC curriculum; it also was a place

to share ideas and experiences and gain a sense of renewed purpose with like-minded educators. Recaps of the Institutes can be found at <http://willstegerfoundation.org/summer-institute>.

A partnership with the Mississippi River Fund and the Mississippi National River and Recreation Area and \$20,000 in funding from the National Park Foundation made it possible to provide additional training, mini grants and field trips to a cohort of teachers attending the Institutes in 2011 and 2012. A video that describes our collaboration with the National Park Foundation through the Parks Climate Challenge is available at: <http://www.youtube.com/watch?v=ge0lrI7Rhq>. This collaboration has continued and an Institute featuring the river and the curriculum is being held in August of 2013.

RESULT/ACTIVITY 3: Online-interactive Adventure Learning Classroom

Description: The online-interactive Adventure Learning Classroom will include multimedia resources linked to specific lesson plans in Minnesota's Changing Climate, including expedition videos, audio and video journals and an extensive image gallery. The curriculum will be available on the Will Steger Foundation web site for purchase (hard copy) and free PDF download in the online classroom. The online classroom will also include a social networking feature for educators and their classrooms to build a community of learners. The program will also reach an additional 25,000 visitors via the Will Steger Foundation Web site and through cross-promotion with partners and educational associations newsletters and websites

Summary Budget Information for Result/Activity 3:

ENRTF Budget:

Amount Spent: \$67,079.40
Balance: \$67,079.40
\$0

Deliverable/Outcome	Completion Date	Budget
1. Review Will Steger's archived journals and select up to 10 adventure stories including images, journals and videos	September 2011	\$13,067.35
2. Develop and maintain interactive, online program in conjunction with the curriculum and evaluation tools and digitize archives	June 2013	\$48,507.05
3. Monitor and support online classroom and social networking features	June 2013	\$5,505

Result/Activity Completion Date: June 2013

Result 3 Status as of: August 31, 2012

The online classroom continues to be used by teachers and students. Over 100 observations have been posted during the month of September. They can be viewed at <http://classroom.willstegerfoundation.org/get-social/view-student-submissions/view-observations-by-others>.

We will continue to add to the classroom, and this fall will include a link to the Parks Climate Challenge work that is being done at Ft. Snelling State Park, including long

term weather data that is being collected. That information will be found at <http://classroom.willstegerfoundation.org/about/parks-climate-challenge/parks-climate-challenge-2012>.

Result 3 Status as of: April 30, 2012

The online classroom has continued to be used throughout the school year with over 800 submissions. A page was added for information about Summer Institute 2012 (<http://classroom.willstegerfoundation.org/about/summer-institute/summer-institute-2012>). Through the web portal, students have been able to share observations, photos and action projects, as well as view and comment on other student submissions from around the state. Teachers have used the classroom in a variety of ways, including as homework and a final assessment. One school has posted throughout the entire year and they are using it as a virtual place to reflect back on what they have observed. We will continue to maintain and support the classroom during the 2012-2013 school year.

Result 3 status as of: November 30, 2011

The online classroom's observation sharing section has been highly utilized by classrooms around the state with over 500 student submissions so far this school year. They can be seen at: <http://classroom.willstegerfoundation.org/get-social/view-observations-by-others/>. The curriculum has been downloaded from the website by over 60 educators.

Result 3 Status as of: August 31, 2011

The spring and summer were spent working collaboratively with Hamline's Center for Global Environmental Education to design the learning module portion of the online classroom and with the Technology director to create the social network and other content. The project assistant, Education Program Manager and videographer worked closely selecting and interviewing scientists and Will Steger to include in videos about Minnesota's biomes inserted in the learning module. The online classroom went live for the Summer Institute on August 11 and educators were trained in how to use it including where to download curriculum and how to teach students how to submit their observations of the natural world. It can be viewed at <http://classroom.willstegerfoundation.org>.

The 2011-2012 school year will be focused on outreach around the classroom, updating the classroom, supporting teachers and students that are using it and posting their observations.

Result 3 Status as of: March 31, 2011

After interviews with a number of candidates we selected Hamline's Center for Global Environmental Education to design the online classroom. We have had a number of meetings and planning sessions to finalize content. In collaboration with our videographer, we have been working on the creation of a number of videos that will be included in the classroom. These videos highlight Minnesota's biomes, climate change impacts and Minnesota sense of place. They include interviews with a number of Minnesota scientists and Will Steger. The online classroom will launch at the Summer Institute.

Result 3 Status as of: October 31, 2010

The Education Program Manager began review of the Will Steger archives to select journal entries to include on the site and for the future online classroom. In addition Will Steger was filmed and a few videos developed and posted on our site that give an overview of the project and preview of the content.
(<http://www.willstegerfoundation.org/new-minnesotas-changing-climate>)

Throughout the winter of 2010 and spring of 2011 the Education Project Manager will develop and share a position description for an instructional design and web development team to develop the online classroom portion of this project. Interviews will be conducted in November with the assistance of the project assistant, web designer, and videographer.

Result 3 Final Report Summary

A Minnesota's Changing Climate online classroom (<http://classroom.willstegerfoundation.org/>) was developed by a Webmaster and a contract web design team at Hamline University's Center for Global Environmental Education. The classroom features an entire learning module that is referenced in the curriculum. The learning module introduces all four biomes through videos of scientists and Will Steger, historical journal entries and case studies of climate change impacts. The classroom also gave students from around the state the opportunity to share their observations and action projects. Over the two years this feature was available over 1,000 students posted to the site, <http://classroom.willstegerfoundation.org/get-social/view-student-submissions/view-observations-by-others>. In addition, educators may download the Minnesota's Changing Climate curriculum and worksheets from the site. Teachers used the classroom to help prepare their lessons, and they showed or asked students to look at the videos and still images. Most teachers thought the features they used, especially the image gallery and handouts, were "very helpful." Information about climate change basics and the ability for students to see what other students had posted in the Online Classroom received the lowest ratings, although almost all teachers rated them helpful. We had not anticipated the classroom being used by adults as well as students and this insight will be useful in development of future programming. Since the online classroom was launched in August of 2011 it has had over 9,000 unique visitors with over 16,000 visits.

RESULT/ACTIVITY 4: Evaluation:

Description: The overall evaluation will use both formative and summative approaches and will involve the use of an outside contract evaluator. We will solicit ongoing feedback from educators on the curriculum and Summer Institute; provide an online survey with curriculum download and in-person surveys at the Summer Institute. The overarching goal of the evaluation is to determine to what extent the curriculum empowered student leadership and action on climate change solutions. Evaluation will assess student motivation for learning, skill development and changes in stewardship behavior. We will include in the curriculum a final project that schools will select and

share online; this will provide a concrete way for schools to demonstrate the impact of the curriculum on student learning.

Summary Budget Information for Result/Activity 4:

ENRTF Budget:

\$19,993.51

Amount Spent:

\$19,993.51

Balance:

\$0

Deliverable/Outcome	Completion Date	Budget
1. Curriculum Evaluation	May 2013	\$10,409.79
2. Online Classroom Feedback and Evaluation	May 2013	\$7,133.72
3. Site visits/Travel to schools	May 2013	\$2,450

Result Completion Date: June 2013

Result 4 Status as of: August 31, 2012

Our evaluation team shared the evaluation results from the year-end survey with the teacher's at the Institute. A final report is being developed and will be available next month. Results were helpful in that they showed which lessons were being implemented and how the online classroom was being used. In general, results were positive and teachers that were trained in the curriculum were using at least some of it in their classroom.

Highlights of the initial results include:

- It gives a great picture of how climate change is happening here in Minnesota.
- This curriculum fills a niche that no other curriculum fills. It is relevant, brief, and engaging because it addresses the world around us in MN.
- The graphs and data that were available. I also thought the colored maps were wonderful.
- I valued the observation that was part of the journaling curriculum.

Result 4 Status as of: April 30, 2012

Our outside evaluation team has been contacting teachers and developing the final evaluation throughout the spring. They will present their findings at this Summer's Institute.

Result 4 Status as of: November 30, 2011

Our outside evaluators presented an initial report from the Institute in early September.

Highlights from the report include:

- All respondents reported that they thought the curriculum would be "useful for teaching about climate change" and "useful for teaching about environmental stewardship."
- Most said it would be useful in their teaching (96% agree or strongly agree) and expected that their students will find it engaging
- Most said it matches their curricular goals (91% agree or strongly agree) and thought it is comprehensive (90% agree or strongly agree).
- All said that they would definitely (67%) or likely (33%) implement the curriculum next year. When asked what parts of the curriculum they would were most likely

to implement, each of the first five lessons was selected by 76% to 80% of the respondents. Lesson 6 ("What Can I Do?") was selected by 91%.

Result 4 Status as of: March 31, 2011

We have had a few meetings to discuss evaluation at the Summer Institute and the evaluators have worked on a plan for evaluating the project throughout the 2011-2012 school year.

Result Status as of: October 31, 2010

An evaluator position was posted and an evaluator team was hired. Initial meetings were conducted to create an evaluation plan and the evaluator team attended the Summer Institute.

Result 4 Final Report Summary

An outside evaluation team was able to provide and analyze evaluations from the Summer Institutes of 2011 and 2012, as well as follow up with teachers about their curriculum implementation. The feedback they provided proved invaluable in planning the 2012 Institute and in revision of the curriculum for a second education. The executive summary concluded that overall, "the Will Steger Foundation is on the right track for meeting their project goals. The MCC curriculum is a much-needed and much-appreciated resource for teaching about climate change and promoting environmental stewardship. The annual Summer Institutes provide valuable professional development for teachers, effectively prepares them for implementing the MCC curriculum, and is a supportive community that inspires and refreshes its participants. In general, WSF should keep doing what it's been doing: refining the MCC Curriculum, maintaining its Online Classroom, holding Summer Institutes, and providing teachers with personalized support. The Foundation's close contact and good relationship with its teachers allow it to understand and improve teachers' and students' experience, deepen their understanding of climate change, and promote environmental stewardship. As grant funding draws to a close, WSF should look for ways to sustain close contact with teachers, expand its reach, and codify some of the lessons learned. For example, WSF could take common areas of support and create webinars and other more permanent scaffolds for teachers. Although these resources would not wholly replace personalized just-in-time supports, they could provide support for a larger number of teachers."

V. TOTAL ENRTF PROJECT BUDGET:

Please note. We are requesting to make the budget amendments described below. Budgets in individual categories have been adjusted. Amendment Approved: June 14, 2012

Personnel: \$79,522.76

The Education Program Manager (0.75 % of FTE) will be responsible for coordinating the entire LCCMR project over 3 years. This person will be responsible for the research and development of the grades 3-12 curricula; coordinating with contractors on program development, including the archives, evaluation and online classroom components and integration with the curriculum; Summer Institute program development and execution;

and finally collaborating with relevant partners. This person will reach out to and present at state-based professional education conferences and develop relationships with educators, school districts, and professional education associations. Finally, the Education Program Manager will be responsible for working with schools as they implement the curriculum and online tools and conducting the evaluation.

Education Program Manager Budget Amendment Request Approved October 12, 2011

- In Result 1, Curriculum we request to move \$2240 to the Summer Institute Coordinator Contract line. The Education Program Manager works less than .75 FTE and relies on the Institute Coordinator position to support the revision and distribution of the curriculum for Institutes through the end of the project.
- In Result 2, Summer Institute we request to move \$6260 to the Summer Institute Coordinator Line. The Education Program Manager works less than .75 FTE and relies on the Institute Coordinator position to plan and implement the majority of the Summer Institute 2012.
- In Result 3, Online Adventure Learning, we request to move \$5000 to the Online/Web Support Line. The new online classroom requires technological support in order to implement the project throughout the 2011-2012 school year.
- In Result 3, Online Adventure Learning, we request to move \$2000 to the Archive/Multimedia Support Line. The new online classroom requires the expertise of our videographer to create and add new content during the 2011-2012 school year.
- In Result 4, Evaluation, we request to move \$9000 to the evaluator line. The Education Program Manager hired an outside evaluation team for the sake of objectivity, as well as a lack of time or expertise. This line item was included in the original workplan, but somehow was not included on the spreadsheet. We request to add that line.

Contracts: \$99,560.00

Contracts include the following support services:

Online/Web support: The Will Steger Foundation's Technology Director will develop social networking tools to support the online classroom available on the Will Steger Foundation Web site. The Technology Director will also be responsible for creating new features of displaying the lessons and Will Steger's archives to harness the power and methodology of Adventure Learning.

Online/Web Support Amendment Request Approved October 12, 2011

- In Result 3, Online Adventure Learning, we request to add \$5000 to the Online/Web Support Line from the Education Program Manager line. The new online classroom requires technological support in order to implement the project throughout the 2011-2012 school year.

Archive/Multimedia Support: The Will Steger Foundation's Media Development Director will be responsible for reviewing Will Steger's archives, working collaboratively with the project team (which includes WSF Exec. Director, Educ. Program Manager, Technology Director and Media Development Director) to integrate the archives into the curriculum

and online classroom. The Media Director will also be responsible for producing video stories to support the program and documenting the Summer Institute for future use and dissemination.

Archive Multimedia Support Amendment Request Approved October 12, 2011

- In Result 3, Online Adventure Learning, we request to add \$2000 to the Archive/Multimedia Support Line from the Education Program Manager line. The new online classroom requires the expertise of our videographer to create and add new content during the 2011-2012 school year.

Archive Multimedia Amendment Request Approved January 26, 2011

- Within the Archive/Multimedia Support line we request to decrease Result 1 (Curriculum) and increase Result 2(Summer Institute). We underestimated the amount of multimedia support we would need at the Summer Institute 2010 and consequently overspent in this result.

Digitalization: WSF will work with a third party digitalization service to transfer the archives into an appropriate digital format for use in the curriculum and online classroom.

Summer Institute Coordinator: This short-term contract position (May-August each year) will manage event logistics and on-site coordination, assist with recruiting participants and securing corporate support. This person will also handle communication with speakers and participants in the lead up to the Institute and handle registration. This person will plan Summer Institute committee meetings with relevant partners.

Summer Institute Coordinator Amendment Request Approved October 12, 2011

- In Result 1, Curriculum we request to move \$2240 to the Summer Institute Coordinator Contract line from the Education Program Manager line. The Education Program Manager works less than .75 FTE and relies on the Institute Coordinator position to support the revision and distribution of the curriculum for Institutes through the end of the project.
- In Result 2, Summer Institute we request to move \$6260 to the Summer Institute Coordinator Line from the Education Program Manager line. The Education Program Manager works less than .75 FTE and relies on the Institute Coordinator position to plan and implement the majority of the Summer Institute 2012.

Summer Institute Coordinator Budget Amendment Request Approved January 26, 2011

- We were able to hire one person that is filling the role of project assistant; encompassing both a school year intern and summer institute coordinator. This consolidation into one role has made it much easier for communication, consistency and quality of work. For this reason we request to decrease Result 2: Summer Institute Coordinator.

Graphic Design: This short-term contract position will be responsible for the design of the grades 3-5, 6-8 and 9-12 curriculum. This curriculum will match the look and feel of the Will Steger Foundation's existing climate change education resources.

Graphic Design For Curriculum Budget Amendment Request Approved January 26, 2011

- Within the Graphic Design for Curriculum line we request to decrease Result 1 and increase Results 2, 3, and 4. These costs were incurred from the printing of informational materials that were aligned to all of the results and consequently billed to all of them. The budget manager charged these using the Report Deliverables as a guide, rather than the Attachment A and consequently spent in areas where there was not money available.

Evaluator: This contract position will be responsible for designing and implementing an evaluation of the final curriculum.

Evaluator Budget Amendment Request Approved October 12, 2011

- In Result 4, Evaluation, we request to move \$9000 to evaluator. The Education Program Manager hired an outside evaluation team for the sake of objectivity, as well as a lack of time or expertise. This line item was included in the original workplan, but somehow was not included on the spreadsheet. We request to add that line.

Interns: The Will Steger Foundation will recruit three interns to support the project. Two interns will be responsible for supporting the logistics and coordination of the Summer Institute (2011 and 2012) and will be supervised by the Education Program Manager. The third intern will collaborate with the project team and directly support the Media Development Director with reviewing and selecting the archives.

Interns Budget Amendment Request Approved January 26, 2011

- We were able to hire one person that is filling the role of project assistant; encompassing both a school year intern and summer institute coordinator. This consolidation into one role has made it much easier for communication, consistency and quality of work. For this reason we request to decrease Result 2: Interns.
- As mentioned in the earlier request, we have consolidated the intern and summer institute coordinator positions and therefore need less funds in the intern area and are requesting to decrease Result 3: Interns.

Equipment/Tools/Supplies: \$15,277.23

Supplies include educator packets to be distributed to teachers at the Summer Institute, and web-based tools to support the online classroom and evaluation tools. Additionally, this includes using external webinar support for the Summer Institute to recruit educators that are not able to participate in the Institute in-person.

Travel: \$28,225.00

A portion of the travel will allow the Education Program Manager to attend relevant education conferences in Minnesota to promote the program, to visit participating schools and to conduct the evaluation. This also includes travel reimbursement requests for educators that require it to attend the Institute, as well as Summer Institute speakers.

Travel Expenses in Minnesota Budget Amendment Request Approved January 26, 2011

- We are requesting to increase Result 1: Travel Expenses in Minnesota. This is based on a recognized need for travel funds for the Education Program Manager, Intern and Summer Institute Coordinator to recruit participating classrooms this year, and support classrooms next year statewide.
- Our largest amendment request is an increase of \$10,000 to travel expenses in Result 2: Travel Expenses in Minnesota. We realize this is a large addition, but we significantly underestimated the cost of bringing approximately 50 educators from outstate Minnesota to our Summer Institute 2011 and 2012, paying their mileage and accommodations. We know that this is the only way most of these educators will be able to participate in the project, and statewide involvement is key to the project's success. Our estimates are based on .50 for mileage and \$80 a night for accommodations for approximately 50 educators. (To view our applicants so far see our Google map:
<http://maps.google.com/maps/ms?ie=UTF8&hl=en&msa=0&msid=206495859425893573749.000496d4df90f7f9c714c&ll=46.286224,-93.955078&spn=7.592676,22.565918&z=6>)

Additional Budget Items (printing): \$27,415

Printing: WSF will provide every educator that attends the Institute with a hard-copy version of the curriculum that is relevant to the grade they teach. This will support the printing and dissemination of a minimum of 300 curricula.

Printing Budget Amendment Request Approved January 26, 2011

- We are requesting to decrease Result 1: Printing. Our printing costs for the curriculum were overestimated, and it is assumed we will not need as much money for printing and distribution.
- We are requesting to increase Result 2: Printing. In past years St. Paul Public Schools has been able to provide larger in kind support to offset printing costs and were not able to provide as large a sum this summer. Consequently we overspent in Result 2 on the Printing Line. We have factored printing costs for Summer Institute 2011 into this addition.

Summer Institute Facility Rental: WSF will cooperate with relevant facilities (Science Museum of Minnesota, University of Minnesota) to provide 100 educators with a one-day professional development opportunity. This covers the cost of the facility rental for the Summer Institute result.

Summer Institute Facility Rental Budget Amendment Request Approved January 26, 2011

- We are requesting to decrease Result 2: Summer Institute Facility Rental \$10,500. This is a significant change in the budget, but we were able to secure free facility rental at last year's Institute and have done so again for this year's. Realizing the great need to bring teacher's to the Institute this summer, we request to move the majority of this surplus to Result 2: Travel expenses.

Educator Recruitment: The Education Program Manager will collaborate with education list-serves and associations to publicize the curriculum, online classroom and Summer Institute. This includes the production of flyers and materials to promote the program.

Outreach Educator Recruitment Budget Amendment Request Approved January 26, 2011

- We are requesting to increase Result 1: Outreach/Educator Recruitment. The cost for getting an exhibit table at Education Minnesota, was higher than anticipated, but a very effective tool for outreach and recruitment of teachers. We would like to be able to do this again next fall, as well as exhibit at another local conference, the Midwest Environmental Education Conference.

TOTAL ENRTF PROJECT BUDGET: \$250,000

Explanation of Capital Expenditures Greater Than \$3,500: None

VI. PROJECT STRATEGY:

A. Project Partners:

These partners may collaborate in the development, evaluation and implementation of the project through in-kind cooperation:

Curriculum Development: National Education Association/Education Minnesota, St. Paul Public Schools, Minnesota Historical Society True North: Mapping Minnesota's History, Science Museum of Minnesota, Union of Concerned Scientists

Professional Development: National Education Association/Education Minnesota, St. Paul Public Schools, University of Minnesota, Science Museum of Minnesota, Minnesota Alliance for Geographic Education, Minnesota Association of Secondary School Principals, and additional professional education associations.

Online interactive classroom: Minnesota Historical Society, Minnesota History Center, Science Museum of Minnesota

B. Project Impact and Long-term Strategy:

Minnesota's Changing Climate is part of a suite of climate change education programming the Will Steger Foundation has pioneered and will continue to develop as a core component of the organization's ten-year strategic plan. This program fills a

critical need, while also adding value to existing resources, and will be featured in perpetuity on the Foundation's website. Future financial support from diverse revenue sources will sustain this program. To date, the Foundation has created four climate change curricula, endorsed by the National Education Association, Union of Concerned Scientists and National Geographic, reaching thousands of educators nationwide. The Will Steger Foundation is committed to delivering relevant and factual climate change content and tools for action to empower student leadership in the mainstream classroom.

C. Other Funds Proposed to be spent during the Project Period:

Will Steger Foundation earned revenue from private foundations, corporations and individuals (which will be support staff and office support of this project): \$72,919.43

Saint Paul Public Schools (for Summer Institute program support): \$15,000

National Education Association Education Program Support: \$18,000

Summer Institute meals and snacks: \$5,300

St. Paul Public Schools Technology Support (for Summer Institute): \$6,000

Existing WSF climate change education resources/curricula: \$15,000

Media Development/multi-media videos and images: \$15,000

Total In-Kind: \$147,219.43

D. Spending History:

The Will Steger Foundation has executed three Summer Institutes for Climate Change Education since 2006, supporting over 250 educators with 5-day, 3-day and 1-day professional development opportunities on climate change education. The Summer Institutes that will be developed to support the LCCMR project will be based on the lessons learned from hosting previous Institutes. WSF has collaborated with partner institutions and school districts to recruit and execute the Institute. WSF has also garnered significant in-kind resources to support the program, including food, snacks, keynote speakers such as Dr. James Hansen, New York Times' Andrew Revkin and author Bill McKibben. The costs associated with the development, graphic layout and printing of the curriculum are based on past curricula produced by WSF.

To develop existing climate change education resources, WSF has received funding from private individuals, foundations, and the National Education Association. The Summer Institute receives support from school districts, universities and corporations. Budgets have been determined based on past expenditures for similar programming.

VII. DISSEMINATION:

Educators will be recruited through educator list-serves, education associations (such as Education Minnesota, the MN Alliance for Geographic Education and the MN Association of Secondary School Principals, MSTA, etc), graduate programs in education, and at educator conferences. In addition, current educators engaged in WSF programs and those that attended previous Summer Institutes will be contacted to utilize this new program.

The entire project and all of its components will be available online at the Will Steger Foundation Web site: www.willstegerfoundation.org. Curriculum will be printed and distributed by project partners and through the Summer Institute for Educators for Climate Change Education beginning in August 2011. All project results will be archived on the Will Steger Foundation Web site and will be accessible after the project is completed. School-to-school engagement and evaluative feedback will be showcased on the Will Steger Foundation Web site, through education association outlets (Web site, newsletters) and local media.

VIII. REPORTING REQUIREMENTS: Periodic work program progress reports will be submitted not later than December 2010, May 2011, September 2011, December 2011, May 2012, and September 2012. A final work program report and associated products will be submitted by August 2013 as requested by the LCCMR.

Project Title: Minnesota's Changing Climate: Engaging Students through Adventure Learning

Project Manager Name: Nicole Rom

Trust Fund Appropriation: \$ 250,000

Amendment approved - Mar 5, 2013

2010 Trust Fund Budget

Budget Item	Beginning Result 1 Budget - Approved 3/5/13	Current Balance Result 1	Amount Spent through 6/30/13	Beginning Result 2 Budget - Approved 3/5/13	Current Balance Result 2	Amount Spent through 6/30/13	Beginning Result 3 Budget - Approved 3/5/13	Current Balance Result 3	Amount Spent through 6/30/13	Beginning Result 4 Budget - Approved 3/5/13	Current Balance Result 4	Amount Spent through 6/30/13	Beginning Total Budget	Current Balance Total	Total Amount Spent through 6/30/13
	Result 1 - Curriculum			Result 2 - Summer Institute			Result 3 - Online Adventure Learning			Result 4 - Evaluation			Project Total		
Use information from Attachment A from Work Program															
Personnel Wages and Benefits															
Education Program Mgr .75 FTE	\$ 49,771.38	\$ -	\$ 49,771.38	\$ 14,544.55	\$ -	\$ 14,544.55	\$ 13,804.55	\$ -	\$ 13,804.55	\$ 1,402.28	\$ -	\$ 1,402.28	\$ 79,522.76	\$ -	\$ 79,522.76
Contracts															
Online/Web Support	\$ 9,791.89	\$ -	\$ 9,791.89	\$ 6,049.50	\$ -	\$ 6,049.50	\$ 27,998.00	\$ -	\$ 27,998.00	\$ 3,833.00	\$ -	\$ 3,833.00	\$ 47,672.39	\$ -	\$ 47,672.39
Archive/Multimedia Support	\$ 504.38	\$ -	\$ 504.38	\$ 2,945.62	\$ -	\$ 2,945.62	\$ 8,900.00	\$ -	\$ 8,900.00	\$ 1,150.00	\$ -	\$ 1,150.00	\$ 13,500.00	\$ -	\$ 13,500.00
Digitalizing Service	\$ 934.50	\$ -	\$ 934.50	\$ 934.50	\$ -	\$ 934.50	\$ 3,738.00	\$ -	\$ 3,738.00	\$ 623.00	\$ -	\$ 623.00	\$ 6,230.00	\$ -	\$ 6,230.00
Summer Institute Coordinator	\$ 2,240.00	\$ -	\$ 2,240.00	\$ 18,260.00	\$ -	\$ 18,260.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,500.00	\$ -	\$ 20,500.00
Graphic Design for Curriculum	\$ 2,947.50	\$ -	\$ 2,947.50	\$ 22.50	\$ -	\$ 22.50	\$ 22.50	\$ -	\$ 22.50	\$ 7.50	\$ -	\$ 7.50	\$ 3,000.00	\$ -	\$ 3,000.00
Evaluators			\$ -			\$ -			\$ -	\$ 9,000.00		\$ 9,000.00	\$ 9,000.00		\$ 9,000.00
Interns	\$ -	\$ -	\$ -	\$ 3,000.00	\$ -	\$ 3,000.00	\$ 1,000.00	\$ -	\$ 1,000.00	\$ -	\$ -	\$ -	\$ 4,000.00	\$ -	\$ 4,000.00
Printing (curriculum, educator packets)	\$ 19,700.00	\$ -	\$ 19,700.00	\$ 1,800.00	\$ -	\$ 1,800.00	\$ 1,480.25	\$ -	\$ 1,480.25	\$ 870.98	\$ -	\$ 870.98	\$ 23,851.23	\$ -	\$ 23,851.23
Supplies (list specific categories)	\$ 1,468.25	\$ -	\$ 1,468.25	\$ 2,291.58	\$ -	\$ 2,291.58	\$ 9,166.35	\$ -	\$ 9,166.35	\$ 1,527.73	\$ -	\$ 1,527.73	\$ 14,453.91	\$ -	\$ 14,453.91
Travel Expenses in Minnesota (reimbursement for keynote speaker travel, program travel, site visits, teacher travel)	\$ 2,453.08	\$ -	\$ 2,453.08	\$ 19,200.00	\$ -	\$ 19,200.00	\$ 294.75	\$ -	\$ 294.75	\$ 904.02	\$ -	\$ 904.02	\$ 22,851.85	\$ -	\$ 22,851.85
Summer institute Facility Rental	\$ -	\$ -	\$ -	\$ 1,890.00	\$ -	\$ 1,890.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,890.00	\$ -	\$ 1,890.00
Outreach/Educator Recruitment	\$ 1,502.86	\$ -	\$ 1,502.86	\$ 675.00	\$ -	\$ 675.00	\$ 675.00	\$ -	\$ 675.00	\$ 675.00	\$ -	\$ 675.00	\$ 3,527.86	\$ -	\$ 3,527.86
Column Total	\$ 91,313.84	\$ -	\$ 91,313.84	\$ 71,613.25		\$ 71,613.25	\$ 67,079.40		\$ 67,079.40	\$ 19,993.51	\$ -	\$ 19,993.51	\$ 250,000.00		\$ 250,000.00

