



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2015 Work Plan

Date of Report: October 15, 2014

Date of Next Status Update Report: January 1, 2016

Date of Work Plan Approval:

Project Completion Date: December 31, 2016

Does this submission include an amendment request? No

PROJECT TITLE: Students Engaging Local Watersheds Using Mobile Technologies

Project Manager: Joan Freese

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Location:

St. Louis, Hennepin, and Ramsey counties

Total ENRTF Project Budget:

ENRTF Appropriation: \$147,000

Amount Spent: \$0

Balance: \$147,000

Legal Citation: M.L. 2015, Chp. 76, Sec. 2, Subd. 05d

Appropriation Language:

\$147,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Twin Cities Public Television to deliver an experiential, project based educational program utilizing mobile technologies to empower at least 200 middle school students in 4-H programs to engage in understanding and protecting local water resources.

I. PROJECT TITLE: Students Engaging Local Watersheds Using Mobile Technologies

II. PROJECT STATEMENT:

Splash Screen: *SciGirls Exploring Watersheds Using Mobile Technologies* will foster environmental stewardship of water resources in youth living in urban Minnesota communities. *SciGirls* will partner with 4-H programs in Duluth and the Twin Cities to teach middle school youth about water resources in their communities. The program, which is a pilot, will combine Place Based Education (project based learning experienced outside the classroom alongside community experts) with Mobile Learning, or education that uses portable technology, to teach about watersheds.

The curriculum has already been designed and written, and it includes the use of iPads equipped with:

- Geospatial Technologies such as Google Earth and ArcGIS App;
- an Augmented Reality app called ARIS;
- a digital journaling site called Kidblog; and
- media creation tools including SoundCloud, iMovie, and Google Apps for the iPad.

The project also integrates hands-on lessons from *Project Wet*, a well-established water curriculum.

As part of the urban watershed study, participating youth will:

- understand the importance of water resources in their community via an existing curriculum;
- be able to describe the major features of their local watershed;
- develop a basic understanding of some ways that humans can help and/or hurt this important resource;
- become acquainted with storm water runoff and what people can do to prevent it; and
- experience environmental advocacy first-hand by developing a public information campaign, project plan, or augmented reality tour of the watershed to share with their peers, family, and community, educating them about the watershed.

The *SciGirls* staff at Twin Cities Public Television will host a two-day training in St. Paul for 4-H educators to prepare them to run the project, with ongoing support offered online. Ten 4-H sites will implement the program in the Twin Cities and Duluth metro areas between April and September 2016, reaching 200 middle school students, providing 25 hours of hands on learning per student, or 5,000 student hours. This pilot project will be evaluated by the Science Museum of Minnesota's Department of Evaluation & Research in Learning and will serve as a model for future scale up programs at 4-H and other organizations in communities across Minnesota.

SciGirls is an Emmy Award-winning PBS Kids television series, website and on-the-ground educational outreach initiative, which is produced for PBS by Twin Cities Public Television. *SciGirls* is made possible with funding from the National Science Foundation. The *SciGirls* mission is to

- inspire, enable and maximize learning and participation in Science, Technology, Engineering and Math, or STEM;
- encourage greater interest in STEM careers; and
- promote positive impressions of STEM, and STEM identity development.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of January 1, 2016:

Project Status as of June 30, 2016:

Project Status as of December 31, 2016:

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Professional Development

Description: Activity 1 - Professional Development has three parts:

1. 4-H Site Selection
2. Professional Development workshop for 4-H club leaders/instructors
3. Technology Tutorial Creation, iPad Set Up, and Video Content Editing

Professional Development part 1. 4-H Site Selection

Our two partners for **Splash Screen** implementation are

1. University of Minnesota Extension Center for Youth Development in Duluth, and
2. Urban 4-H, University of Minnesota, in the Twin Cities metro area.

Both organizations have established youth development programs, whose missions are to “measurably improve learning through youth-centered educational and engagement programs.”

The 4-H staff will recruit ten 4-H clubs within Minnesota to participate in **Splash Screen**. SciGirls staff will provide 4-H project leads Rebecca Meyer in Duluth and Amie Modl in the Twin Cities with a project description and outline of participating club requirements to help them recruit clubs within their organization. Sites can choose to implement the program over six weeks (meeting twice a week) or during a weeklong “camp” format, suitable for summer youth programs. Either option provides 25 hours of hands on learning per child..

Each 4-H club participating must agree to:

- send 2 adult leaders/instructors to the training in St. Paul;
- collaborate with watershed experts in their community;
- participate in ongoing communication with other leaders on the *SciGirls* educators’ website; and
- provide feedback as part of the evaluation process with the Science Museum of Minnesota’s Department of Evaluation & Research in Learning. (See Activity 3 below.)

SciGirls staff will help the selected site educators localize the **Splash Screen** curriculum for the watersheds where they live. For Duluth, the focus will be on:

- Lake Superior
- Great Lakes Basin
- St. Louis River Watershed.

For the Twin Cities, the focus will be on:

- Mississippi River
- Upper Mississippi Basin
- Mississippi Water Management Organization
- Minnehaha Creek Watershed Organization.

(See the curriculum scope and sequence in Activity 2 below.)

Professional Development part 2. Training for 4-H club leaders

Professional development for 20 4-H club leaders/instructors (2 educators per 4-H site from 10 sites) will be delivered face-to-face in a two-day training at *SciGirl*/Twin Cities Public Television offices in St. Paul. This training will take place in early 2016 and project implementation will follow in Spring or Summer 2016. Having more than one educator from each 4-H partner organization attend trainings ensures the fidelity of program because educators will have a knowledgeable support system within their own organization. In addition, give the large size of 4-H clubs/groups (20 youth), two leaders will be required for outdoor lessons held near water and to troubleshoot the tech integration.

The training syllabus will focus on ***Splash Screen*** content that 4-H leaders will need to successfully run the program including:

- Place-based education overview including how to work with community based experts in watershed districts;
- *SciGirls Seven Strategies* - research based best practices for encouraging youth to pursue STEM subjects
- Technology overview and tips for using mobile devices in the field (to be enhanced with online tutorials);
- *Project Wet* hands-on activities;
- Science inquiry overview (to be completed online); and
- Evaluation plans and general project administration requirements.

SciGirls staff will provide ongoing support for the 20 4-H leaders on the scigirlsconnect.org website. This online community offers resources to educators who are implementing *SciGirls* programs in their communities. ***Splash Screen*** project on-line resources for educators will include:

- a collection of screen-capture video tutorials that provide how-to information for each featured technology tool. These video tutorials can be used by educators and shared directly with students on a “just-in-time” basis (when a learner needs to know more to proceed); and
- a series of videos, from *SciGirls* library, that model the inquiry process and will support and enhance both educators’ and students’ experiences.
- Science inquiry overview

SciGirls will also host a series of monthly webinars for the 20 4-H leaders, during which project participants will discuss implementation successes and setbacks, share tips, and provide feedback for continued refinement of the pilot program.

Professional Development part 3. Technology Tutorial Creation, iPad Set Up, Video Content Editing

Because the ***Splash Screen*** curriculum (outlined below in Activity 2) includes extensive integration of mobile technology, *SciGirls* staff will develop screen capture video tutorials for each featured technology to help 4-H leaders learn to use the software.

The videos will be developed so they can be shared directly with youth, to help them learn new software during the implementation phase of the project. (See Activity 2 for details.)

Videos will be created for the following technologies:

- **Google Earth and ArcGIS App**—Known as geospatial technologies, these applications include graphic information system (GIS), global positioning system (GPS), and virtual globe features.
- **ARIS Augmented Reality Platform**—ARIS is a user-friendly, open-source platform for creating and playing mobile games, tours and interactive stories. Using GPS and QR Codes, ARIS players experience a hybrid world of virtual interactive characters, items, and media placed in physical space.

- **Kidblog**—This safe and simple blogging software, which was designed for educational environments, lets learners practice digital journaling in nature. Science journals are a major focus of science education initiatives as they prompt observation and reflection for youth.
- **SoundCloud, iMovie, and Google Apps for the iPad**—Digital creativity tools will foster “4 C skills” (communication, collaboration, critical thinking, and creativity—aka “Twenty-first Century skills”). They allow youth the opportunity to synthesize what they learn as part of this project and use digital technologies (video, audio, websites) to communicate their learning to their communities and other **Splash Screen** project sites. Youth will have some determination in the technologies they employ.

In addition to creating technology tutorials, *SciGirls* staff will purchase iPads for the project and deploy the software on these devices. (Note: the iPads will be purchased with non-LCCMR funds.) We will also research and create a student user policy for youth participating in the **Splash Screen** program.

SciGirls staff will also gather and edit existing video content from the *SciGirls* library of 28 half-hour shows to create an online resource for educators on the basics of inquiry-based science education. These videos will be shared on the project portal, which will be located at our *SciGirls*’ educator website: www.scigirlsconnect.org.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 81,250
Amount Spent: \$ 0
Balance: \$ 81,250

Outcome	Completion Date
1. Create 7 screen capture video tutorials for Apps/software used in Splash Screen .	October 31,2015
2. Download necessary software onto mobile devices.	October 31,2015
3. Research and create an iPad user policy for student participants/parents to sign.	October 31,2015
4. Select and edit a series of existing SciGirls videos on the scientific inquiry process.	October 31,2015
5. SciGirls develops marketing materials for 4-H project leads for recruiting sites/clubs.	October 31, 2015
6. SciGirls develop contracts for Duluth and Twin Cities 4-H commitment.	October 31, 2015
7. 4-H leads in Duluth and Twin Cities recruit a total of 10 clubs (20 leaders) to participate.	December 15, 2015
8. Once the clubs are selected, SciGirls staff will identify community based watershed expert resources for the 10 sites.	February 1, 2016
9. 2-day training for 20 4-H educators in the Splash Screen curriculum completed.	February 28, 2016
10. Educators completed online training.	March 31, 2016
11. Evaluation for the 2-day training is completed and provided to evaluators (pre-post program survey for educators).	March 31, 2016
12. Monthly webinars are held for all participating educators to discuss challenges, successes and program implementation.	August 31, 2016

Activity Status as of January 1, 2016:

Activity Status as of June 30, 2016:

Activity Status as of December 31, 2016:

Final Report Summary:

ACTIVITY 2: Program Implementation at 10 sites in Duluth and the Twin Cities

Description: Sites will implement the *Splash Screen* curriculum between April 1 and August 31, 2016. Support for 4-H site leaders will occur online at scigirlsconnect.org and during monthly webinars.

SciGirls staff will help each site connect with community resources, such as watershed and rain garden experts, as well as other relevant environmental organizations.

<i>Splash Screen</i> Curriculum Outline		
Session	Lesson	Technology
Day 1 Map Your Watershed	Experiment with a model to see how water runs down hills. Use Google Maps to create personalized maps of their watershed.	<ul style="list-style-type: none"> • Google Maps • Kidblog
Day 2 A Day in the Field	Bike (or bus) from club site to a major water feature in their watershed.	<ul style="list-style-type: none"> • iPads for image, video, and audio collection • Kidblog
Day 3 Meet Local Watershed District Expert	Use Project Wet activities to identify parts of a watershed and determine its boundaries. Meet with educator from local watershed district to learn more about the watershed they live in and problems associated with human use.	<ul style="list-style-type: none"> • ARIS App (to take an augmented reality tour of the watershed they live in) • iPads for video creation • Kidblog
Day 4 Just Passing Through	Participate in hands-on inquiry activities (also from Project Wet) to experience how water travels on land.	<ul style="list-style-type: none"> • iPads for image collection and note taking • Kidblog
Day 5 Preventing Run off Solutions	Meet with community members to learn about practical solutions (rain gardens, pervious pavement, green rooftops) for preventing runoff.	<ul style="list-style-type: none"> • Google Maps • Kidblog
Day 6 Site Runoff Surveys	Work in small groups to survey sites in their neighborhood, determining the percentage of each site that contributes to storm water runoff and the percentage that encourages water infiltration.	<ul style="list-style-type: none"> • ArcGIS app • Kidblog
Day 7 Site Survey Debrief	Students share and discuss data from site surveys.	<ul style="list-style-type: none"> • Google Maps • Kidblog
Day 8 Project Selection and Planning	Work together in groups to determine a creative project that will educate others about watersheds, advocate on behalf of the environment, or improve the local environment (could be plans only and would not need to be completed).	<ul style="list-style-type: none"> • Google Docs • Kidblog • New Media Creation tools
Days 9, 10, & 11 Project Development	Work on advocacy/education/service projects/project plans.	<ul style="list-style-type: none"> • Google Docs • Kidblog • New Media Creation tools

Upon completion of the project, each 4-H student participant and 4-H club leader will participate in evaluation (as described below in Activity 3).

A poster session event will be held in the Twin Cities and Duluth for clubs to share their projects with other 4-H clubs, family, and the broader community. Potentially, these events could be held on the same day and connected via technology so that all participants can see each other's work.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 40,000
Amount Spent: \$ 0
Balance: \$ 40,000

Outcome	Completion Date
1. Each 4-H site completes the 6 week program.	August 31, 2016
2. All girls complete a pre-post program survey for the evaluators.	August 31, 2016
3. Poster session events held for clubs to share their work.	August 31, 2016
4. Each 4-H site reports participation through final program evaluation.	September 30, 2016

Activity Status as of January 1, 2016:

Activity Status as of June 30, 2016:

Activity Status as of December 31, 2016:

ACTIVITY 3: Evaluation of Splash Screen

Description: Science Museum of Minnesota's Evaluation and Research in Learning group will focus on measuring the overall impact of the project on the educators and youth in relation to the project outcomes.

Evaluators will work with *SciGirls* and 4-H staff during each phase of development, implementation, and refinement of the **Splash Screen** project. The evaluation will monitor and document the project in relation to the project's outputs and outcomes with the ultimate aim of capturing knowledge to inform what is needed for others to implement the **Splash Screen** materials.

The evaluation will be guided by a number of overarching questions, which are aligned with project outcomes for educators and youth. The questions and data collection methods used to answer each question are outlined below.

Evaluation Questions	Data Collection Methods
1. How prepared are <u>educators</u> and what support do they need to implement the Splash Screen curriculum, integrate technology into the curriculum, and use the <i>SciGirls Seven</i> strategies? To what extent do educators integrate both technology and the <i>SciGirls Seven</i> strategies into their use of the curriculum?	<ul style="list-style-type: none"> • Observe two-day training • Post-training debrief with <i>SciGirls</i> staff • Pre-interview with Site Teams • Mid check-in online survey
2. To what extent does the project increase <u>educator</u> awareness and knowledge of issues around watershed health and environmental stewardship?	<ul style="list-style-type: none"> • Pre/Post interviews with site teams • Mid check-in online survey
3. To what extent does the project increase <u>educator</u> knowledge and skills around the integration of technology into environmental education?	<ul style="list-style-type: none"> • Pre/Post interviews with site teams • Mid check-in online survey
4. To what extent do <u>youth</u> increase their awareness and knowledge about watersheds, issues and decisions that affect watershed health, and actions they can take to be stewards of watersheds in their community?	<ul style="list-style-type: none"> • Pre/post youth survey • Youth digital journals

The formative evaluation will focus on improvement of the educator training and support components of the project, which can in turn impact the educator and student outcomes. An evaluator will attend the two-day professional development training for 4-H leaders and, at the end of each day, debrief with *SciGirls* staff to identify immediate, actionable improvements to the project.

Between their training and on-site implementation of the project, evaluators will interview each pair of educators. This interview will assess how prepared educators feel to implement the curriculum and identify key areas for educator support. The pre-interview will also have retrospective questions to serve as a baseline for gauging increases in educator awareness, knowledge and skills as a result of the project.

Evaluators will check in with each of the teams halfway through project implementation to identify additional supports and measure each site's progress towards meeting program outcomes. Throughout the project, the evaluators will meet with *SciGirls* staff to share formative evaluation findings and offer recommendations for improvements, where appropriate.

Summative evaluation will focus on measuring the overall impact of the project on the educators and youth in relation to the project outcomes. To measure achievement of educator outcomes, post-interviews will be conducted with site teams, which will be compared to the pre-interview and mid-survey data.

Youth outcomes will be measured through pre- and post-surveys, and findings will be triangulated through reviewing a sample of youth journal entries and related youth projects.

To develop the youth pre/post surveys, we will draw from scales the Science Museum of Minnesota helped to develop as part of the NSF-funded *Developing, Validating, and Implementing Situated Evaluation Instruments* project, specifically the Self-Efficacy for Environmental Action and Behavioral Intention scales because they measure aspects of environmental stewardship. These scales are in the final development stages and will be completely validated in advance of the **Splash Screen** project.

Pre/post surveys will also include questions specific to watershed awareness, knowledge, and stewardship.

An Internal Review Board through the Science Museum of Minnesota will ensure the privacy and confidentiality of all participants through proper oversight of this study.

Summary Budget Information for Activity 3:

ENRTF Budget: \$ 25,750
Amount Spent: \$ 0
Balance: \$ 25,750

Outcome	Completion Date
1. SciGirls provides Science Museum of Minnesota research staff with project materials	February 1, 2016
2. Plan formative evaluation with Science Museum of Minnesota staff.	February 15, 2016
3. Science Museum of Minnesota executes formative evaluation.	March 31, 2016
4. SciGirls project staff review formative results and look for additional training needs and ways to improve support.	April 31, 2016
5. SciGirls plans summative evaluation with Science Museum of Minnesota staff.	July 31, 2016
6. Science Museum of Minnesota executes summative evaluation.	October 31, 2016
7. SciGirls review summative results, shares results with 4-H partners and integrates ideas into dissemination work and future implementations of Splash Screen .	December 31, 2016

Activity Status as of January 1, 2016:

Activity Status as of June 30, 2016:

Activity Status as of December 31, 2016:

Final Report Summary:

V. DISSEMINATION:

Description: *SciGirls* will share project findings on informalscience.org, at conferences, such as:

- Minnesota Association for Environmental Education;
- Minnesota National Science Teachers Association; and
- The Minnesota' Naturalists Association.

SciGirls will also share project findings via established 4-H Youth Development channels and established *SciGirls* outreach partnerships. *SciGirls* staff will conduct a series of three webinars about the project for the *SciGirls* CONNECT network of formal and informal educators nationwide.

Status as of January 1, 2016:

Status as of June 30, 2016:

Status as of December 31, 2016:

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$69,000	1 Project Manager/Web & Print Producer 20% FTE for 1.5 Years; 1 STEM Content & Outreach Specialist 15% FTE for 1.5 Years; 1 Outreach Coordinator 6% FTE for 1.5 Years, 1 Director of STEM Education & Outreach 2% FTE for 1.5 Years; 1 Managing Producer 2% FTE for 1.5 Years, 1 Asst Editor/Media Manager 5% FTE for 1.5 Years
Professional/Technical/Service Contracts:	\$68,000	4H Partner Coordination \$10,000 (4-H staff coordination est 370 hours @ \$27/hour) ; Science Museum of Minnesota Evaluation \$18,000 (quote) ; 4H Club Leader fees \$40,000 10 sites, 2 Leaders per site = 20 people x est 100 hours @ \$18/hour + fringe = \$40,000)
Equipment/Tools/Supplies:	\$2,950	Training event supplies - Curricula materials; Poster session event supplies; field kits
Travel Expenses in MN:	\$4,800	2 State educational conferences for presenting; Mileage; two evaluator trips to out-of-metro sites; Out-of-metro educators travel to training workshop
Other:	\$2,000	Content Experts for professional development; Data Plan for 4H Group Activities; 4H site blog storage fees
TOTAL ENRTF BUDGET:	\$147,000	

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 0.75 FTE

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 0.2 FTE

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
Corporate & foundation support	\$6,780		Tablets - 6 per mobile lab (rate includes also a hotspot) - 12 units at \$565 per unit
Twin Cities Public Television (In-Kind Support)	\$31,250	\$	General and administrative support and overhead expenses not allowable expenses in ENRTF budget, calculated at 21.26%, Twin Cities Public Television's federally negotiated rate
Twin Cities Public Television (In-Kind Support)	\$30,000	\$	Instructional video clips, 10 clips of 3 minutes each.
TOTAL OTHER FUNDS:	\$68,030	\$	

VII. PROJECT STRATEGY:

A. Project Partners:

Project Partners Not Receiving Funds

- Misc. Watershed District education staff: connect with 4-H educators to provide "community expert" knowledge for Place Based nature of the project (individuals may receive \$100 honoraria)
- Minnesota Project Wet Coordinator: attend Professional Development training to represent Project Wet curriculum

Project Partners Receiving Funds

- Urban 4-H, University of Minnesota: \$5,000 to facilitate group sign up; \$20,000 for 5 clubs to run programs
- University of Minnesota Extension Center for Youth Development in Duluth: \$5,000 to facilitate group sign up; \$20,000 for 5 clubs to run programs
- Science Museum of Minnesota's Department of Evaluation & Research in Learning \$18,000 for formative and Summative evaluations

B. Project Impact and Long-term Strategy:

Splash Screen integrates current goals within the field of environmental education in terms of reaching urban audiences and integrating technology. The opportunity to run the program with accomplished youth educators at the University of Minnesota's 4-H sites and evaluate our efforts with Science Museum of Minnesota education researchers allows project staff to implement a new curriculum and best learn from the experience. In addition, because the program is replicable, it has potential for future scale-up across the state, through the 4-H networks working in collaboration with community-based watershed educators.

Water quality is a topic of universal interest as it is relevant statewide. Because of the ubiquity of this important resource in Minnesota, what we learn from this project will be of interest to other educators across the state, where many communities feature prominent water resources that impact community life.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
N/A		

VIII. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:

A. Parcel List: N/A

B. Acquisition/Restoration Information: N/A

IX. VISUAL COMPONENT or MAP(S): See attached

X. RESEARCH ADDENDUM: N/A

XI. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted no later than February 1, 2016; July 31, 2016; and January 31, 2017. A final report and associated products will be submitted between April 1, 2017 and June 30, 2017.

Environment and Natural Resources Trust Fund
M.L. 2015 Project Budget



Project Title: Students Engaging Local Watersheds Using Mobile Technologies
Legal Citation: M.L. 2016, Chp. xx, Sec xx, Subd. Xx
Project Manager: Joan Freese
Organization: Twin Cities Public Television
M.L. 2015 ENRTF Appropriation: \$ 147,000
Project Length and Completion Date: 1.5 Years, December 31, 2016
Date of Report: 10/15/2014

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activity 2 Budget	Amount Spent	Activity 2 Balance	Activity 3 Budget	Amount Spent	Activity 3 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	<i>Professional Development</i>			<i>Site Program Implementation</i>			<i>Evaluation</i>				
Personnel (Wages and Benefits)	\$59,100	\$0	\$59,100	\$5,750	\$0	\$5,750	\$4,150	\$0	\$4,150	\$69,000	\$69,000
Joan Freese, Project Manager/Web & Print Producer \$31,000 (74% salary, 26% benefits) 20% FTE for 1.5 Years											
Sarah Carter, STEM Content & Outreach Specialist \$19,000 (74% salary, 26% benefits) 15% FTE for 1.5 Years											
Niki Becker, Outreach Coordinator \$7,000 (74% salary, 26% benefits) 6% FTE for 1.5 Years											
Rita Karl, Director of STEM Education & Outreach \$4,000 (74% salary, 26% benefits) 2% FTE for 1.5 Years											
Emily Stevens, Managing Producer \$4,000 (74% salary, 26% benefits) 2% FTE for 1.5 Years											
Kyle Blakeborough, Asst Editor/Media Manager \$5,000 (74% salary, 26% benefits) 5% FTE for 1.5 Years											
Professional/Technical/Service Contracts	\$20,000	\$0	\$20,000	\$30,000	\$0	\$30,000	\$18,000	\$0	\$18,000	\$68,000	\$68,000
4H Partner Coordination Fee (U of M Twin Cities & Duluth) \$10,000											
Science Museum of Minnesota Evaluation \$18,000											
4H Staff Leader fees for 10 sites @ \$4,000 each											
Equipment/Tools/Supplies	\$700	\$0	\$700	\$2,250	\$0	\$2,250				\$2,950	\$2,950
Training event supplies - Curricula materials \$700											
Poster session event supplies (2 events) \$1,000											
25 field kits, allow \$50 per educator & staffer \$1,250											
Travel expenses in Minnesota	\$1,200	\$0	\$1,200	\$0	\$0	\$0	\$3,600	\$0	\$3,600	\$4,800	\$4,800
2 State educational confs for presenting (includes conf fees) \$1,900											
Mileage @ federal mileage rate (100 miles/month) \$700											
Two evaluator trips to out-of-metro sites \$1,000											
Out-of-metro educators travel to training workshop \$1,200											
Other	\$250	\$0	\$250	\$2,000	\$0	\$2,000				\$2,250	\$2,250
Content Experts for professional development (5 x \$50 honoraria)											
Data Plan Allowance for 4H Group Activities \$1,500											
4H site blog storage fees \$500											
COLUMN TOTAL	\$81,250	\$0	\$81,250	\$40,000	\$0	\$40,000	\$25,750	\$0	\$25,750	\$147,000	\$147,000

Splash Screen: Exploring Watersheds Using Mobile Technologies

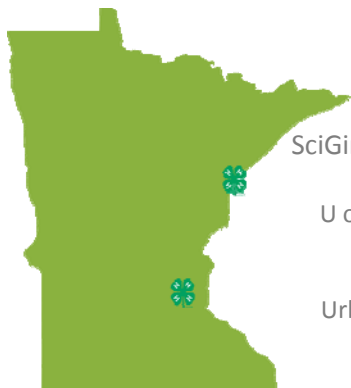
1.

Splash Screen is a pilot watershed curriculum to be run with 10 urban 4H clubs, reaching a total of 200 middle school youth with 25+ hours of learning time for each student.

The project includes 2 days of professional development training for 20 adult youth leaders (2 per club).

This pilot has scale-up potential for 4H clubs across Minnesota.

2.



Project Partners

SciGirls | Twin Cities Public Television

U of MN Extension Center for Youth Development | Duluth

Urban 4H | University of MN | Twin Cities Metro Area

3.

Project Schedule {September 2015 - December 2016}	
9/15 - 1/16	4-H will select ten participating sites; TPT will prepare the workshop.
2/16	The professional development workshop
4/16 - 9/16	Sites will implement the program
10/16 - 12/16	Evaluation work & dissemination of findings at conference presentations

4.

Learning Outcomes	
As a result of the 6-week Splash Screen program, learners will:	
1.	Understand the importance of water resources in their community;
2.	Be able to describe the major features of their local watershed;
3.	Explain ways—both good and bad—that humans can impact water resources;
4.	Understand storm water run-off and what people can do to prevent it; and
5.	Develop a public information campaign to share with their peers, family and community.

5.

Evaluation

Science Museum of Minnesota’s Evaluation and Research in Learning group will focus on measuring the overall impact of the project on the educators and youth in relation to the project outcomes.

Research Questions:

- 1) To what extent do youth increase their awareness and knowledge about watersheds, issues and decisions that affect watershed health, as well as actions they can take to be stewards of the watersheds in their community?
- 2) To what extent does the project increase educator knowledge and skills around the integration of technology into environmental education?

