



Museums for America

Sample Application MA-20-14-0417-14

Project Category: Community Anchors

Funding Level: \$25,001-\$150,000

Nurture Nature Center

Amount awarded by IMLS: \$76,180

Amount of cost share: \$99,569

Attached are the following components excerpted from the original application.

- Abstract
- Narrative
- Schedule of Completion

The Nurture Nature Center (NNC) Inc., serving the Lehigh Valley in PA, in cooperation with RMC Research Corporation, NH, will develop an innovative community needs assessment process in order to broaden its engagement with populations at risk for environmental hazards. Reproducible community-wide evaluation processes are necessary to further the research and development of NNC's *Risk to Resiliency* model so that, in the future, it can be applied regionally and nationwide to communities that face a wide range of hazards: floods, wildfires, access to food and clean drinking water; climate change; air pollution; earthquakes, hurricanes, tornados, etc. Since 2007, NNC has used science, art, and dialogue to increase community resiliency, social networks, and public agency in decision making about ways to mitigate likely hazards and risky conditions. The first objectives of the NNC's Strategic plan calls for: renewed outreach and assessment of risks among all resident populations, and a formalized protocol for assessing environmental hazards as these are perceived by people who live and work in communities at risk. In 2014-16, NNC and RMC staff will:

- Develop, conduct, and refine a protocol for employing methodologies and multi-media formats to diversify and increase community-wide participation in articulating topics of concern, particularly among those who have not yet regularly participated in NNC programs.
- Discern how publics become aware of risks, identify baseline knowledge levels and FAQs, and understand better what factors support or impede risk awareness and preparedness.
- Query audiences about preferred formats, days, and times for program delivery and gauge levels of satisfaction with NNC's processes for recruitment, engagement, and assessment.

Activities and Methods: NNC uses sustained programming and multimedia strategies for engaging audiences in discussions of the risks that affect people in the communities where they live. RMC evaluators will employ quantitative and qualitative measures and stratified analyses to study impacts through data gleaned from: short surveys on postcards, longer summative surveys to capture responses to significant events, interviews with all strata of stakeholders, reiterative focus groups for residents and others living and working in distinct neighborhoods, a city-wide dialogue, a lengthy multi-media campaign, and a photo exhibition documenting community member's viewpoints on risks. Data will be stratified and analyzed to discern common as well as distinct viewpoints held by residents, city officials, and community agency staff in all four neighborhoods in the City of Easton.

Measures of Success will include high levels of retention and participation among residents and others during the project, reported equitable dialogue among discussants, and high levels of satisfaction. The summative evaluation will capture and analyze follow-up communications from residents, community organizations, city managers, etc. RMC will also evaluate opportunities for improvements to NNC's connection to City officials and community organizations, as well as analyze outcomes from the community needs assessment process in Easton and offer suggestions for its wider application as part of NNC's *Risk to Resiliency* model.

Public Benefits: A thorough needs assessment will enable NNC to advance its model for increasing public safety, community resiliency, social networks, and socio-economic stability in the face of imminent and potential environmental hazards. IMLS will supply critical funding for the keystone of NNC's strategic plan to engage a wide spectrum of its constituents, especially residents who usually do not engage in leisure-time learning or participate in public conversations and decision-making. In the future, NNC will adapt and disseminate its model to communities throughout the region and the U.S. that face a wide variety of environmental hazards (see above and in narrative).

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The Nurture Nature Center (NNC) Inc., in partnership with RMC Research Corporation, seeks to develop an innovative community needs assessment process in order to broaden its engagement with populations at risk for environmental hazards. A replicable community-wide evaluation process is necessary to further the research and development of NNC's *Risk to Resiliency* model so that, in the future, it can be applied regionally and nationwide to communities that face a wide range of hazards. NNC's *Risk to Resiliency* model uses science, art, and dialogue to increase learning, public safety, community resiliency, social networking, and public agency in decision making about policies and action plans that can reduce personal and community-wide losses.

Located in Easton, PA, NNC has been developing its *Risk to Resiliency* model of community engagement and science learning about environmental hazards since 2007. Its building has been open and free to the public since 2011. Its programs have been funded by NOAA, NSF, and FEMA. NNC has gained widespread recognition and several awards for its embedded (i.e., long-term) model of community engagement with science and hazards education. Risk rivets citizen interest in science learning and risk management, remediation, and warning systems. *Importantly, this approach reaches people who don't see themselves as museum visitors or science learners.*

The topics of risk in NNC's programs are chosen because the threats personally affect the lives of residents, their homes, their health, their socio-economic stability, and safety. Studies (see below) indicate people at risk are highly motivated to attend NNC programs over long periods of time because NNC offers them the knowledge they need to protect and prepare themselves, their families, and neighbors. NNC's steadfast partners at NOAA/NWS, Lafayette College, Lehigh University, regional social service and community development agencies, the Association of Science Technology Centers as well as local artists, municipal officials, and emergency managers have not only assisted but also learned alongside NNC. Staff and partners develop interdisciplinary methods and programs that adapt techniques from Appreciative Inquiry (AI), personal expression through art, deliberative democracy (DD), public engagement with science (PES), and public hazards education to advance a model for community-wide learning about risks and the practices that can lessen loss.

Although NNC's model is successful in engaging a dedicated audience, NNC seeks to broaden its community engagement. In fact, the primary objective of NNC's strategic plan (attached) is to reach a greater cross-section of constituents with its programming. To achieve this goal, NNC must formalize a protocol for assessing the diverse needs of its many publics.

Goals

- Institute a protocol and methodology that can be used to assess risk topics that concern residents, particularly those who have not yet participated in NNC programs.
- Discern how publics become aware of risks, identify baseline knowledge levels and FAQs, and understand factors that support or impede risk awareness and preparedness;
- Query all audiences about preferred formats and times for program delivery and gauge levels of satisfaction with NNC's needs assessment process, including focus groups, dialogue events, and a community exhibition.

IMLS funding will support NNC's strategic plan and advance its ability to disseminate a model that will serve communities at risk for hazards such as: flooding, air and water pollution, inadequate access to high quality food and water, wildfires, earthquakes, hurricanes, tornadoes, etc.

Populations Served and Public Involvement in the Development of NNC's Model

NNC is located in the City of Easton within the Lehigh Valley of northeastern PA, a 731 sq. mile area of rural

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communities and rust belt towns. This area has experienced severe flooding throughout its history. Following three major floods in 2004-06, NNC was founded to meet the needs of the many who wrestle with the multiple threats posed by severe and repeated flooding (see [Organizational Profile](#)).

In a landscape dotted with proud family farms and redolent with the vestiges of the American Industrial Revolution, including dilapidated canals and railways, abandoned coal mines and steel and milling factories, NNC offers one of the area's few centers for science learning. Easton has a high poverty rate and significant minority populations (20% Hispanic or Latino and 17% African American). 22.4% of householders live at or below the poverty line. The median income is almost 25% below the State average (which is itself below the national average) (American Community Survey, 2006-2008). With support from its founder, the Nurture Nature Foundation (see [Organizational Profile](#)), NNC is able to offer free, in-house and outreach programming.

Seed monies from NOAA, NWS, and NSF have helped launch, test, and enhance NNC's model for informal learning. In direct response to the needs, life and work constraints of professionals and residents, NNC has established itself as a trusted place for the discussion of complex scientific and environmental topics. To date, NNC has used informal means to keep apace with a variety of risks and concerns facing residents in the Valley. In addition to flooding, staff have launched educational programs on urban decay and building renewal, climate change (with flooding as a local tie-in), access to fresh food in towns, invasive plant management, and water quality issues.

Since 2007, NNC has found that when people are faced with imminent environmental risk, their interest in science learning is bolstered. Initial pilot focus groups and forums were held over ten months in recently-flooded towns and rural areas: *all had high attendance and retention rates*. People participated in paired sets of focus groups and forums promoting discussions of flooding: its science, causes, socio-economic consequences, and implications for land use. The recruitment strategy was simple: people were invited to come and share their experiences and learn about flooding. Many practitioners in informal learning, hazards education and public engagement in science recommend putting people and their stories upfront in difficult dialogues (Landau & Saul, 2004; Martin & Toon 2005; McLean & Pollock 2007).

At NNC's events, it was evident that the human need to share personal narratives about flooding was a primary vehicle of information exchange. NNC created a portable exhibit that displayed photos and summarized stories shared by locals and found the exhibit to be very effective as an engagement tool and conversation starter. Public hazards educators seeking to improve community resiliency and response to emergency events from environmental hazards most often endorse informational exchanges, particularly networking among neighbors, residents, and emergency personnel. One core tenet of all NNC's educational programs is that they promote milling -- the process of seeking information and reflecting on it with others through small group discussions. Research has determined that: 1) milling activities precede citizens' readiness to prepare, and 2) citizens respond best to the actions and advice of their neighbors (Mileti & Darlington, 1997; Mileti, 1999; Wood, Kano, Mileti, & Bourque, 2009). In PES programs, information flows between citizens and experts as well. Early programming at NNC allowed long-term residents who were fully conversant with the rivers' habits to deepen scientists' understanding of local flooding patterns. In addition to facilitating dialogues, NNC summarized recommendations from community discussions in formal reports that were presented to decision makers and published by local media. This strategy is widely practiced in the EU and it is highly valued by residents who do not normally have agency in decision-making about issues of risk. At the summative stage of a NSF-funded planning period, NNC's evaluator, RMC Research Corporation, found that 93% of focus group and forum participants agreed they were "better informed about the science of flooding;" 100% agreed the science information presented was "important for people like me;" 98% felt "better able to make a positive contribution to my community," and 79% were "better informed about how I can prepare for flooding" (Apley and Goldman, 2010).

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In 2010, NNC received a large peer-reviewed NOAA grant to install and develop a Science on a Sphere® (SOS) program focused on the increased severity and frequency of flooding throughout the world. Community dialogues were launched to describe how climate change affects precipitation events. NNC's SOS® script and accompanying community forum formats were shared with NOAA's SOS worldwide network of over 100+ sphere venues and won a national award in 2013. RMC's summative results of NNC's SOS® project showed 93% of viewers reported knowledge gains; 97% indicated they would talk with their neighbors, family, friends, and colleagues about the topic; 91% indicated they wanted to learn more, and 78% said they intended to join community groups that addressed risks related to flooding and climate change (Frankel and Goldman, 2012).

Dennis Mileti, PhD has deeply influenced NNC's model and his research informs the majority of U.S. campaigns to increase readiness and response to natural hazards in the U.S. He has long argued sustainable hazard readiness practices and the social networks that support them are best developed through inclusive decision-making processes and long-term educational campaigns (Mileti & Darlington, 1997; Mileti, 1999 & 2006) -- both hallmarks of NNC's *Risk to Resiliency* model. NNC promotes community resiliency as defined by Pfefferbaum, Reissman, Pfefferbaum, Klomp, and Gurwitsch (2005) – “the ability of community members to take meaningful, deliberative, collective actions to remedy the impact of a problem including the ability to interpret the environment, intervene, and move on.”

Another part of NNC's model is the use of personal expression to build interest and knowledge in risk topics. Art, as an expressive vehicle, gives voice to the diverse personal values and emotions surrounding the experience and anticipation of natural hazards. NNC reaches beyond emerging new frameworks for Science, Technology, Engineering, Art, and Math Education (STEAM) (cf. Rose, Smith, and Ryan, 2011), and offers art programs that incorporate self-expression and experiential learning to clarify personal thoughts and opinions. NNC's galleries and exhibits complement community dialogue programming to expose audiences to a range of opinions, offering opportunities to explore (without confrontation) others' values and concerns as people move through deciding how to increase awareness, preparedness, and emergency response.

4. Community Need/Relation to the Strategic Plan

NNC Directors are trained in environmental science, art, and community organization, and have built up relations with federal agencies and local municipalities, emergency managers, fire houses, social service agencies, and scientists and researchers in DD, PES, and public hazards education. NNC has conducted award-winning science and public hazards programs that received prestigious funding and are now disseminated by NWS throughout the MidAtlantic states and through NOAA's SOS network (see <http://nnc.uberflip.com/i/114789>).

Two years after opening its building in 2011, NNC has built a strong base of returning participants to its diverse programs. Programs are regularly well attended and received. But NNC staff recognize many critical and timely community issues remain unidentified and unaddressed through its programming. Traditionally, NNC has identified its programming topics by monitoring local media, talking with environmental organizations and listening to concerns of the participants in its programs. To truly meet the range of issues facing the local community, NNC now needs to expand its focus on a broader resident audience by increasing and diversifying that base. An example that will serve to illustrate: Recently, during informal polling of a Spanish-speaking audience, residents indicated concern and confusion about the associated health risks and remediation of mold. Prior to this NNC was unaware of this neighborhood concern. NNC also recently attended community night out events in two of Easton's neighborhoods and chatted with residents about their environmental issues of concern. Again, NNC discovered new, highly localized topics that are not covered by news media or widely recognized. These and similar experiences underscore NNC's need to conduct a comprehensive assessment of perceived risks in order to ensure that all citizen needs are addressed and their voices equitably represented in NNC programs.

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The development of a community needs assessment process will allow NNC, both now and in the future, to discern topics of greatest concern to residents in all four of the City's neighborhoods, identify factors triggering alarm and awareness, gain a sense of general knowledge and misconceptions, learn what people want to know, and understand better how to develop comfortable ways for people to talk about problems in places where they live. Further, the methods developed for gaining these insights will be reproducible and will allow NNC to enhance its *Risk to Resiliency* Model for eventual broad dissemination.

5. Plan of Action/Research Design (A two-year timeline is attached.)

NNC will work with RMC to conduct the community needs assessment in Easton over a two-year period. A standardized process will be incorporated into NNC's *Risk to Resiliency* model in preparation for broad regional and national dissemination.

The project will use a stratified approach to study four neighborhoods in Easton: each has distinct characteristics: 1) West Ward (low income, ethnically diverse residents with community gardens and active church and community groups); 2) Downtown (Main Street undergoing revitalization and regentrification, high- and low-end rentals, year-long farmers' market, a density of social services); 3) College Hill (liberal arts campus, tree-lined residential neighborhoods, cultural resources at the College), and 4) Southside: much commercially zoned land with lower and middle class housing, few public resources, long-standing neighborhoods). Populations in each of Easton's four neighborhoods will be treated separately in data collection and analysis. RMC will apply qualitative and quantitative measures to analyze responses to four sets of questions:

- What environmental issues concern residents? How are issues distributed across Easton's four neighborhoods? Do residents living in the same neighborhood tend to share similar concerns or is there wide variation of risk perceptions in each neighborhood?
- What factors/experiences prompt resident concerns? Is it personal experience, media reports, advice from healthcare providers, or talks with family, friend, and/or neighbors? In what ways are perceptions of risk related to concerns about health, physical safety, financial security, family well-being, neighborhood cohesiveness, and other personal/social factors?
- What do residents feel they need to know and where do they currently go for information? Which community-based resources are valued and trusted by residents? What educational and communication strategies are most useful in participant attraction and retention?
- How well served are existing stakeholders by this project (NNC, the City of Easton, the Easton Environmental Council, existing alliances with CBOs, and most importantly: residents)? What are the attendance and retention rates regarding citizen involvement in the two-year process? Does the needs assessment process build trust? Do community members feel they are being heard and their viewpoints valued and taken seriously?

There are four phases: 1) Media launch with postcard survey; 2) Civic and community organization interviews and round tables, 3) Citizen focus groups that culminate in photovoice exercise (described below) and 4) Photo Exhibition and city-wide discussion of risks.

Methods: RMC will conduct surveys, interviews and focus groups to collect data during the project. Data will be subjected to various interpretive methods (Lincoln and Guba, 1985; Patton, 2002) to portray sense- and meaning-making as well as the quality of discussions and their moderators (NNC staff). Data will be analyzed to understand relevant environmental threats and their meaning to community members. These data will be used to inform refinements to the community assessment design as it evolves over two years. Each of Easton's four neighborhoods will be sampled. Analysis of aggregated responses from interviews, round tables, and facilitated

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discussions will establish priority environmental topics, baselines for individual's STEM knowledge, hazard readiness, and knowledge of associations for aid and information. RMC will document new alliances between NNC and community organizations in the City as well as complete a summative evaluation of the success of the needs assessment process, including an explanation of outcomes for NNC, city officials, community-based organizations, and participating residents. Results of this evaluation will inform refinements to NNC's *Risk to Resiliency* model for wider dissemination. RMC's logic model is attached.

Phase I kicks off with a city-wide media campaign. Online and print news media will broadcast the effort to learn more about citizens' perceptions of risk in the City. NNC and RMC will develop a postcard survey that will be made publically available online and in print. Printed postcards will be stamped and self-addressed and liberally distributed in the City in community spaces (post offices, fire halls, banks, grocery stores, thrift shops, gardens and farmers' markets, churches, and community rec centers). The postcards will ask residents to describe environmental issues that concern them in their neighborhood as well as elicit demographic data (optional) and contact information (optional) that will be used if participants would like to be part of the focus groups during Phase IV. The postcard will also invite people to participate in a photo-essay that will be created for the project and hosted by NNC on Flickr. Residents will send photos to NNC which will moderate and caption photos as the project evolves. NNC and RMC expect a 25-35% response rate to the postcard survey over each of the four neighborhoods.

Phase II will begin with interviews and/or focus groups with civic leaders including planners, the mayor, and other key staff from the City of Easton and the Easton Environmental Advisory Council. These discussions will elicit broad perspectives on the City's environmental risks, and give staff insight into how City officials understand residents' concerns.

Focus groups will then be conducted with community organizations serving all four neighborhoods. NNC will convene two round tables with community organizations including the Easton Block Watch (see attached letter of support). Interviews and roundtables will be conducted not only to gather more feedback about environmental topics of concern and how these organizations understand their clientele's attitudes, feelings, and behaviors related to these issues, but also to gather additional information about community resources available to residents to address hazards. RMC will interview community organizations to determine if their participation in the community needs assessment has affected their neighborhood environmental- related priorities or influenced how the organization will deal with them. Through interviews, RMC will also evaluate improvements in NNC's connection to and collaboration with neighborhood and citywide community organizations. During this phase NNC seeks to develop a process that better connects its work to community need. This understanding as a part of the needs assessment and NNC's model will serve to help other museums and science centers that may consider exploring relevant local issues.

During **Phase III**, NNC and RMC will use data and feedback gathered during the community organization interviews and roundtables to develop protocols for neighborhood discussions through focus groups in each of Easton's four neighborhoods. Two rounds of focus groups will be held. These focus groups will serve to clarify neighborhood-specific environmental concerns and resources to address those concerns, and probe community members' understanding of the hazards through collaborative concept mapping (Nesbit and Adesope, 2006; Rotheberger, 2004; Williams, 1998).

During the first round, one focus group will be held in each of the four neighborhoods. Each group will have up to 25 participants including community leaders recommended by each of the community organizations interviewed in Phase II, as well as residents who expressed interest in being part of the focus groups through the postcard survey in Phase I. This first round of focus groups will query community members about environmental concerns in their neighborhood. RMC will lead a community concept mapping exercise to explore perceived risks and the context of their personal concerns. This data will be used to establish a baseline

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of science knowledge. To the extent that it adds to rather than influences participants' understanding, facilitators will share the range of environmental concerns already gathered during the project to this point.

The first round of focus groups will include an introduction to the photovoice exercise which will complement the Flickr photo essay and include deeper community discussion. Photovoice engages citizens as participant data collectors through visual record keeping and individual reflection, coupled with critical dialogue, reflection, and meaning-making both within the group and to external public audiences such as local officials and decision-makers. The "photovoice" process, originated by Wang and Burris (1997), appears to be especially powerful with bilingual communities and with people unused to exercising a public voice. (See also Lai, 2011.) A recent literature review of 37 peer-reviewed articles on the photovoice technique found that it appears to enhance a community's understanding of its assets and needs, while also leading to the empowerment of participants (Catalani & Minkler, 2009).

The photovoice concept will be used in Round 2 of the focus groups and will also be conducted in each of the four neighborhoods. NNC and RMC will enlist up to 10 residents in each community to continue with the photovoice project, and will offer tips for good photography as well as disposable cameras to those who do not have access to cell phone cameras. Following the focus group, residents will spend the next two weeks capturing risks, issues and conditions in their neighborhoods from a visual perspective. Photographs may include specific hazards such as discolored drinking water or a polluted-looking stream, but also potential impacts of environmental concerns, such as flood damage or asthma medication. Photographers will be asked to document each photograph, identifying the subject and where the photo was taken. Photos will then be emailed to NNC staff or disposable cameras collected by NNC. NNC staff will print the photographs and request each participant choose up to five for further discussion.

The second round of four focus groups will give photographers and other participants an opportunity to discuss these neighborhood risks, issues, and conditions documented in their photos. Through these focus groups, NNC and RMC staff will moderate further community discussion that will serve several purposes, including: to identify and archive commentary about select photographs for inclusion in a public exhibit; to explore in greater depth the community's identified environmental concerns and the importance of these risks on residents' personal lives; and to clarify the implications of these understandings on future programming at NNC.

Phase IV: The assessment process will culminate with the public display of a photography exhibit featuring the images from the Flickr photo essay, photovoice and commentary by community members. For the opening night of the exhibit, NNC will open its doors to all people who live and work in the City and will host a final, culminating facilitated discussion about community needs and perceptions of risk.

This and subsequent forums that stem from the project findings, will help NNC begin to prioritize and plan future programming based on communally identified needs. In addition to observing and recording this event, RMC will administer a brief survey and interview subjects. Based on data collected through surveys and interviews, "photovoice," and community discussion, RMC will complete a final community needs assessment report and summative project evaluation.

Indicators of success will include high levels of retention and participation among residents and others during the project, reported equitable dialogue among discussants at public events, and high levels of satisfaction indicated on summative surveys distributed by RMC at the end of the culminating event. In preparing the summative evaluation, RMC will also capture and analyze follow-up communications from residents, community organizations, city managers, etc. after the public assessment process. For example, RMC will interview the City's Environmental Council at the conclusion of the project to determine how this community needs assessment will affect its priorities for the City. Through its interviews, RMC will also evaluate opportunities for improvements to NNC's connection to City officials and community organizations. RMC's summative evaluation will include

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an analysis of outcomes from the community needs assessment process in Easton and offer suggestions for its wider application as part of NNC's *Risk to Resiliency* model.

6. Communicating Results to Others: NNC has already presented preliminary results of its model to the Association of State Flood Plain Managers (ASFPM), American Rivers, Inc., NOAA's SOS® Network, the MidAtlantic NWS, and the Association of Science and Technology Centers' Community of Practice in PES. NNC's model for science education in communities at risk has significant potential for dissemination through NOAA, FEMA, and other agencies that manage national security and public safety programs. NNC has and will continue to communicate the finding and strategies for development of its model to experts in hazards education, AI, PES, and DD through publications, conferences, and workshops.

7. Management Plan (See List of Key Project Staff and Resumes for Qualifications)

NNC: Catherine Brandes, NNC Science Director, M.S., Licensed Professional Geologist, will devote 40% FTE to project direction, budget oversight, reporting, communications, and coordinating the work of RMC. Rachel Hogan Carr, Director of NNC, M.A., will commit 8% FTE and oversee networks with city officials and community organizations. Brandes and Carr will work with RMC to design, implement, analyze, and refine the community needs assessment processes and its instruments. Brandes and Carr are skilled, trusted moderators of public discussions. They have been trained by the NNF, are fully versed in the literature and practice of AI, DD, and PES, and are seasoned by the variety of public education and outreach programs conducted by NNC since 2007. Keri Maxfield, NNC Art Director, BFA, will manage the project's visual media and assist the needs assessment strategies from a graphic design and artistic perspective (8% FTE). NNC's project associate (40% FTE) will assist staff in writing and developing outreach materials; coordinate survey efforts; and support recruitment efforts. **RMC: Susan Frankel, Ph.D. and Elizabeth Goldman, M.A.,** have been the external evaluators for NNC since 2009; their research underpins the development of NNC's model. The project builds upon the expertise of RMC research conducted for NNC since 2008. RMC researchers, in fact, recently completed a government contract to conduct a national assessment of the IMLS/MFA program. Among many indicators, this study found that U.S. museums are increasingly interested in evaluating longitudinal and community- wide impacts of their programs (Apley, Frankel, Goldman, & Streitburger, 2011), such as NNC proposes here.

8. Cost-sharing NNC will contribute staff salaries and fringe totaling \$97,296. RMC will absorb some salary costs totaling \$2,274. Total cost share is \$99,570.

9. Strategic Benefits The City and the Easton Environmental Council have endorsed the need for this proposal (see letters). Tested and proven needs assessment protocols and impact measures will strengthen NNC's model for public hazards and science education and gauge its efficacy among a wide spectrum of its constituents, especially residents who usually do not engage in leisure-time learning or participate in policy and decision making. IMLS support will supply critical funding for the keystone of NNC's strategic plan. The protocols developed will become an integral part of NNC's institutional model, and will continue to be shared with leaders in public hazards education, DD, and PES. Reproducible community-wide evaluation processes are necessary to further the research and development of NNC's model, so it can be applied to a wider range of hazards and environmental issues such as access to food and drinking water, climate change, air pollution, wildfires, earthquakes, hurricanes, etc. (see Strategic Plan, attached).

