

**AN UNSOLICITED PROPOSAL TO THE OFFICE OF SUSTAINABLE
DEVELOPMENT AND INTERGOVERNMENTAL AFFAIRS**

National Oceanic and Atmospheric Administration

U.S. Department of Commerce

Submitted by

Edwin Clausen

Vice President for Academic Affairs and Dean of the College

Daemen College

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I. PROJECT SUMMARY

Daemen College requests \$24,670 from the Office of Sustainable Development and Intergovernmental Affairs to write a report for NOAA on a sustainable development initiative in Buffalo, New York applicable to other cities/towns on the Great Lakes. The report will be issued by the College's Student /Faculty Interdisciplinary Research Think Tank for Sustainable Communities and Civic Engagement (SRT). SRT is part of the College's Center for Sustainable Communities and Civic Engagement. The feasibility report for NOAA is based on a sustainable recreation project operating on the Buffalo waterfront that draws upon local stakeholders, city planners, local government officials, local colleges, non-profits and inner city neighborhoods.

II. Daemen College and Sustainable Communities

A. The Center for Sustainable Communities and Civic Engagement

While the concept of sustainable communities has been gaining in vitality and viability over the last twenty years, its link to civic society and civic engagement has been much less clear. Much of the dialogue now taking place underscores the need to nurture in citizens the understanding that civic engagement may be the lynchpin of any community's ability to sustain its cultural and environmental treasures while also providing for sustained economic growth. In 2002 Daemen College established the Center for Sustainable Communities and Civic Engagement, thanks to support from NOAA and support from the Oishei Foundation (\$600,000). In Western New York, the interplay between sustainable community development and civic engagement is intense, making it an ideal location for the development of the Center. The Center is the first entity in the country to focus undergraduate education on the linkages between sustainability and civic responsibility and could serve as a model to be used in other regions of the nation.

The mission of the Center is to strengthen Daemen College's commitment to graduating students familiar with the issues surrounding sustainable development, the cultivation of livable communities, and the twin tasks of preserving the cultural and historical legacies that define communities while providing for economic development that does not compromise the well being of subsequent generations. The Center, in order to fulfill its mission, provides the education that will enable students to understand that a community's well-being and sustainability are related to levels of civic participation. The Center will also engage students in activities directly benefiting a community and its sustainability. This practical component will entail the establishment of long-term collaborations with private, public, and non-profit organizations dedicated to improving existing communities and ensuring their vitality over time.

The activities of the Center are three fold. First, the Center will provide a focal point for the development of collaborative curricular projects. The curriculum piece will be designed to prepare students to understand the concept of a sustainable community

and to be engaged in the development and definition of the interplay between sustainability and civic engagement. The curricular piece will initially focus on the development of a major field of study in Sustainable Communities and Historical and Cultural Preservation. This approach will place Daemen College in the forefront of undergraduate education in Western New York. Graduates of this major will be prepared for an unfolding and enduring discussion that addresses the question: what is the relationship between economic development and environmental well being, especially as related to the region? The major will focus on the need to sustain the waterways and lakes, and the need to keep and restore major historical and cultural artifacts and legacies, ranging from indigenous lands, the Erie Canal, to the Peace Bridge.

In addition, the major requires a substantial research project, done collaboratively between students and a sponsoring faculty member. The research is applied, with strong policy implications. Each research project takes place during the student's senior year, although many will be initiated during the second semester of their junior year. Students must take an interdisciplinary approach, while also demonstrating an ability to bring to bear a key methodology (biology, history, statistics, economics, sociology, chemistry, etc.) as a centerpiece of the analysis. A limited number of projects receive funding support from the Center and will be considered for publication in the Center's on-line Occasional Papers Series.

In part the research is folded into the second part of the Center's activities: the development and operation of **collaborative community projects** designed to address serious problems impeding the development of sustainable communities. The Center focuses on one issue on a long-term basis and also develops yearly projects that may stem from the collaborative research done by student and faculty teams. General areas that addressed include: (1) the state of land and water toxicity in select communities and the development of projects that promote sustainability and can be replicated elsewhere; (2) the resilience of native cultures and their significance to definitions of sustainable communities; (3) the effect of international trade between Canada and Mexico on Western New York's vitality as a sustainable community; (4) the facilitation of civic participation on vital issues affect the sustainability of the Buffalo-Niagara area; (5) policy recommendations to various organizations and/or state agencies on such issues as the pollution of waterways, lack of civic engagement in poor communities, and the state of and remedy for health issues in select underrepresented communities; and (6) the education of K-12 students by Daemen College students on civic engagement and the improvement of their communities. In support of the sixth area, The College is currently developing Centers for Community Excellence, the inaugural one being in the Seneca Babcock community. The first Center has received support from various local private and corporate foundations. Overall, these local projects engage faculty and students from a variety of disciplines and provide an often-missing link in undergraduate education: the connection between a liberal arts curriculum, applied learning and research, civic engagement, and the development of sustainable communities.

The third activity is the operation of the Student-Faculty Interdisciplinary Research Think Tank for Sustainable Communities and Civic Engagement (SRT). The

think tank is the heart of the Center--providing a public forum for research into issues and policies affecting the nexus between civic engagement and sustainable communities. The SRT will have three functions: (1) to promote knowledge about the concepts of and issues surrounding sustainable communities and civic engagement among colleges and universities in the United States and eventually, internationally; (2) to develop and sponsor research projects on sustainability and popular participation in decision making; (3) and to disseminate the findings of the sponsored research projects and sponsorship of reports on successful sustainable development projects.

B. The Student-Faculty Interdisciplinary Research Think Tank on Sustainable Development and Civic Engagement: NOAA Support

Daemen College has received support from NOAA in the design and development of the think tank and for the first research project during the period, March 1, 2001 to February 28, 2002. The College successfully completed its agenda, including

1. The development of the Think Tank, including its design, web site, board of directors, and board of editors.
2. The completion of its first research project ("The Effects of an Invasive Wetland Plant (*Lythrum salicaria*) on Community Structure) undertaken by the head of environmental sciences and two students. The results are being evaluated and considered for publication by the on line occasional paper series. The Occasional Paper Series (OPS) publishes the results of suitable and efficacious joint faculty-student research projects. The projects are faculty/student generated and must deal with an important local, national, or global issue affecting sustainability. Particular emphasis will be placed on issues that also involve the investigation of the relationship between community sustainability and levels of civic engagement and ones that seek to increase the capacity for sustainability through policy recommendations. Each project must be interdisciplinary and optimally contain cognitive and affective dimensions. They need to also involve some qualitative and quantitative analysis.
3. Three workshops were held on campus, co-sponsored with the Oishei Foundation, on sustainability. Each workshop was attended by between 20-25 faculty. They focused on definitions and applications, local and global issues, and curriculum issues.

SRT is now fully operational and is currently sponsoring three projects designed to address pressing community needs affecting the quality of life and the potential for sustainability in the Buffalo/Niagara region. The projects address issues of radioactivity in local streams and the need for an early warning system, how lead paint and lead in water has affects certain Buffalo neighborhoods over the long term, and how wetlands are affected by development policies and in turn affect the viability of flora and fauna in the region. The projects supported by the Think Tank are applied and designed to produce reports and recommendations to various bodies and agencies, including NOAA.

.IV. THE REPORT

A. The Project On Which The Report is Based

Daemen College's Student-Faculty Interdisciplinary Research Think Tank for Sustainable Communities and Civic Engagement (SRT) is designed in part to generate reports on successful sustainable development projects involving significant collaborations among members of a community that can be replicated by others. One of its functions is to report on projects that involve the sustainable use of waterfront areas by all stakeholders and that contain a substantial educational component that is experientially based. In concert with its mission, the SRT requests support from NOAA to generate a report on how a successful project involving novel recreational use of the Buffalo waterfront, the involvement of low income children, and education for sustainability of fresh water provides a model for other waterfront areas.

This sustainable development project provides insights into key areas of sustainability, including multi-group/agency collaboration, stakeholder participation, the link between poverty and environmental marginality, education, and appropriate technologies and protection of fresh water sources. The project to be reported on provides all of these sustainable development ingredients through a recreational use of the waterfront that promotes responsible multiple uses. In addition, the project provides inner city kids with practical skills and uses learning about sustainability as a way to enhance literacy and promote education.

The report will analyze the success of the project as a model of sustainable development. The idea for the project originated during a Seneca Babcock neighborhood community meeting facilitated by Daemen's Center for Sustainable Communities and Civic Engagement. The Seneca-Babcock neighborhood of Buffalo is inner city area characterized poverty, low education levels, high teen pregnancy, substance abuse, high unemployment, and high levels of chemical pollution. For most people of the community, sustainability is a foreign concept and their community has been subjected over the years to substantial environmental stress and degradation. Daemen is working in to change this situation through collaboration with various non-profit agencies, the local government, and local businesses.

During the community meeting three intertwined issues arose – lack of recreational facilities, degradation of the environmental, and a poor education about the environment. There emerged an idea that perhaps a project could be designed that addressed all of these issues. Following the meeting, the Director of Daemen's Center met with community members, environmental groups, and certain city officials to design the project. The result was a project that teaches inner city kids about sustainability, fresh water use, collaboration, and practical skills through the hands-on building of small boats (Six Hour Boats) at the Buffalo waterfront. Accompanying the boat building is an educational "kiosk" that simultaneously provides education about the environment, the importance of fresh water lakes, what sustainability means, and how community participation is necessary for change. Daemen faculty and students staff the kiosk and have developed "education kits" related to the project and to the larger issues of sustainable development. The College is partnered with another university, other non-

profits organizations, stakeholders, and certain city government offices – helping to account for the project’s success.

B. The Report For NOAA and the Request for Support

Daemen College requests support from NOAA for \$24,640 to write a report for NOAA on this sustainable project that can be used by other cities and towns on fresh water lakes.

Daemen’s Student-Faculty Interdisciplinary Research Think Tank for Sustainable Communities and Civic Engagement will oversee the writing of the report and has selected an exceptional team to the review of the project and write the report on its applicability and viability to other waterfront communities. The team will be led by Dr. Richard Knaub, Executive Director of the Center For Sustainable Communities and Civic Engagement. Dr. Knaub is a biologist, specializing in fresh water issues and has substantial experience in the sustainable development/communities field. His curriculum vitae is be found in the appendix.

Dr. Knaub will be assisted in writing the report by Dr. Brenda Young, chair of Natural Sciences and Director of the Environmental Studies Program. She has extensive knowledge in the field of sustainability and focuses much of her work on fresh water issues. She is also involved in the Seneca Babcock neighborhood – where most of the inner city kids involved in the project live. Her vita is also in the appendix. She and Dr. Knaub will be the primary authors of the report.

Dr. Ned Cuddy, historian and community leader, specializes on local issues that affect a community’s livability and has extensive credentials in building consensus among stakeholders. He teaches courses that investigate the idea of the Great Lakes as cultural icons, as well their role in the economic survival of the region. He works with non-profits to strengthen the community’s understanding of sustainability. He will assist the primary authors in preparing the report, focusing on the historical and political context of Buffalo’s effort to achieve sustainability and its efforts to develop the waterfront.

Collaborating with the authors of the report will be those people in charge of the boat building center and education kiosk. They include students who worked to educate the younger students, Professors Kevin Kegler and Joe Kukella, the master boat builders and marketers of the program. Both are from the Graphic Arts Department.

The report will focus on the viability of this Buffalo waterfront project as a model for others to use. Emphasis will be placed on specific aspects of sustainability, including indicators such as stakeholder participation, decision making, the relationship of costs to outcomes/benefits, government/private sector support, community participation, especially from the inner city, how success is measured and why, the number of people served, the nature of the curriculum, the appropriateness of the boats, the amount of use of the boats receive, and the heightened consciousness among the participants. The report will also suggest other areas that could most readily benefit from the model and will propose how to best reach these communities. It will also report on an assessment of the

project, in part derived from focus groups and public meetings convened to discuss the project. A tentative outline of the report includes

- ❑ A brief history of the buffalo waterfront, including its environmental and ecological histories;
- ❑ Recent plans for the waterfront;
- ❑ A description of the project;
- ❑ An assessment of the project's success; and
- ❑ Recommendations of lessons for other sites and how the project can be used and adopted and adapted by other communities interested in low cost sustainable-community-college-based collaborations for sustainable waterfront use.

Leadership

The project director, Dr. Edwin Clausen, is the Vice President for Academic Affairs and Dean of the College. His participation assures strong administrative support and he brings to the project significant experience in working with the Office of Sustainable Development and Intergovernmental Affairs. His curriculum vitae is included in the Appendix.