POSITION DESCRIPTION

Extension Associate, Great Lakes Coastal Processes and Hazards Specialist

<u>General Position Responsibilities:</u> This extension associate position serves as the primary technical resource on coastal erosion processes and hazards (including impacts of climate change), shoreline erosion management and engineering, and coastal flooding and mitigation on the Great Lakes for New York Sea Grant and Cornell Cooperative Extension. The position will develop extension education and training programs and fulfill administrative duties in these areas.

Minimum requirements include a Master's degree in coastal geology, coastal engineering or related marine science, with one-three years of relevant experience in coastal processes and erosion management, shoreline engineering and structures and/or water-dependent facilities design and operation, related permitting, advanced computer skills and training/certification in the use of GIS software.

The position requires a self-motivated individual with excellent technical and communication skills who can work independently and with groups and who can successfully seek, obtain, manage and administer external funding for extension activities related to subject matter areas. The position represents the Sea Grant Extension Program in the above areas of subject matter specialization to the public, industry and community leaders, government officials, and university leaders. The extension associate brings technical resources of the National Sea Grant Program, Cornell University, the State University of New York, and NOAA to New York and regional audiences including industry; coastal residents; federal, state, and local governmental representatives, nongovernmental organizations and university faculty and staff. Primary geographic area responsibility includes Sea Grant's Great Lakes district-- Lake Erie and Lake Ontario as well as the great rivers—the Niagara and the St. Lawrence. The Extension Associate secures grants and contracts to support the implementation of outreach and educational programs.

University & Extension Program Ties:

The Extension Associate/Specialist:

- Plans and conducts extension education programs in coastal resources, and may develop significant new subject matter materials such as curricula and extension education publications.
- Actively pursues outside grants and contracts to support this program area. It is expected that a significant portion of the Extension Educator's salary and program budget will be supported by grants and contracts and other outside funding sources.
- Has subject matter leadership responsibility for integrating Sea Grant Extension and University coastal resources programming initiatives in a statewide, regional, and/or national context.
- Acts as a leader within their area of expertise within their area of program expertise within New York Sea Grant and Cornell Cooperative Extension, and, when appropriate, within the Great Lakes or National Sea Grant Network.

Educational programs are developed, implemented and evaluated based on the needs of clientele as identified, in part, through a Program Advisory Committee whose members represent the interests served by the position.

Educational programs are implemented using a variety of educational tools such as publications, electronic technology, group experiences, mass media, individual advisement, websites, social media and the like. The educator develops networks of volunteers and/or public/private professionals (experts) to assist in educational program development and initiates volunteer training efforts, when applicable, to enable volunteers to be effective in their role. When appropriate, new organizations and representative groups are developed to articulate industry needs. Leadership development activities result in new leaders from industry being legitimized and assuming positions of responsibility in private associations, cooperatives, etc.

The specialist coordinates educational program initiatives with university resources, County Cooperative Extension Associations, the New York Sea Grant Institute, and other Sea Grant and Cooperative Extension Programs regionally and, where appropriate, nationally.

Specific Program Development Responsibilities:

- Serve as a recognized subject matter specialist in the area of coastal erosion processes and hazards (including impacts of climate change on Great Lakes coastal systems), shoreline erosion management, coastal flooding and mitigation planning, and coastal engineering, including related public policy issues.
- Collaborate with other university, Sea Grant, and extension staff to stimulate educational resource program sharing in the field of coastal resources management.
- Develop and implement an outreach and education program, as well as facilitate organizational partnerships, science, and monitoring and information management actions to provide science-based information to inform and support implementation of management, conservation, restoration and sustainable development activities within New York's Great Lakes Basin.
- Develop, disseminate and apply sound scientific, technical and related research knowledge in order to improve restoration and resilience in coastal communities and natural resources.
- Provide coastal processes and coastal erosion control technical expertise and educational program support to shoreline property owners; local, state, and national elected and appointed officials; resource managers; extension educators; and the media.

Program Evaluation: (15%)

The Extension Associate provides leadership for the design, execution and analysis of educational program evaluations. At least one major educational program evaluation is performed annually to assess benefits and identify avenues for program improvement. The results of such program evaluations are summarized in a written narrative which communicates findings and recommendations to regional and county extension educators, program advisory committees, lay leaders, industry representatives, and university faculty.

Staff Development & Professional Improvement: (15%)

The Extension Associate may design and teach regional in-service education programs to support the efforts of regional and county extension educators, Sea Grant specialists, volunteers, agency personnel, and industry leaders in the area of coastal resource management. The Extension Associate may occasionally collaborate with university departments and other state Sea Grant programs in planning and conducting extension staff development activities.

The Extension Associate keeps current in their area of professional expertise. Professional growth is demonstrated in development and fulfillment of professional improvement plans filed with Sea Grant Extension program leadership.

Knowledge, Skills & Abilities:

Knowledge of principles, theory, research, and educational materials in the subject matter field and knowledge of adult education methods related to the area of specialization is required.

Advanced computer skills and the ability to use computer and long distance education technologies in this area of extension programming expertise.

Demonstrated ability to develop educational programs and teach adults; initiate, plan, conduct and evaluate informal and/or formal adult education programs; define, conduct, and interpret original applied research and/or demonstration projects; lead and effectively participate in professional team efforts; relate effectively to co-workers, advisors, community and professional leaders, and targeted audiences; and communicate effectively through oral, written, and visual channels.

Minimum Qualifications:

Minimum requirements include a Master's degree in coastal geology, coastal engineering or related marine science, field with at least two years of relevant experience in coastal processes and erosion management, shoreline engineering and structures and/or water-dependent facilities design and operation, advanced computer skills and training/certification in the use of GIS software.

Demonstrated ability to develop educational programs and teach adults; initiate, plan, conduct and evaluate informal and/or formal adult education programs; define, conduct, and interpret original applied research and/or demonstration projects; lead and effectively participate in professional team efforts; relate effectively to co-workers, advisors, community and professional leaders, and targeted audiences; and communicate effectively through oral, written, and visual channels.

Reporting Relationships:

The Extension Associate reports to the Associate Director of New York Sea Grant for supervision and program support. Educational program direction is established through Program Advisory Committees, university faculty, and organizational leadership of the Sea Grant Extension Program. The position will be located in Oswego, New York or Newark, New York (in Wayne County).