



Introduction

A pleasure of having a member of one's Rotary club present to the group is having the chance not simply to get to know that person better, but also to get a glimpse of what that member truly cares about. For Jeff Rosen, that passion lies in marine and environmental resources and education. In what follows, Jeff tells us how he took this interest in his home of Massachusetts to another level. Jeff, the floor is yours!

The Marine and Environmental Education Alliance

Jeff Rosen

In January of 2007 a small group of residents of the town of Scituate, Massachusetts (pronounced sit-chew-it) met to discuss and develop a vision for developing a higher education program for the South Shore of Massachusetts that would be based on the marine and environmental heritage of the South Shore. Formed as the Scituate Group, our initial discussions centered on developing a program that capitalized on the rich resources of South Shore and our close ties to the ocean and our beautiful environment. We developed a vision for college and adult training for Marine and Environmental Technologies. The group was interested in identifying the needs for higher education and the possible positive community and economic impacts that a higher education program could have on the South Shore.



Massachusetts in the U.S. Northeast



The South Shore (Scituate is near the bottom of the graphic under the red arrow.)

On the Environmental side, the basic premise that emerged was that as we move into the 21st century our links to the ocean will involve exploration, monitoring, and use of the resources in the sea. The South Shore has a long history of economic ties to the marine systems that are our eastern and southern borders. These economic ties include fishing, energy, food, fertilizers, ship building, mining, disposal, tourism and recreation. In the past, these resources have been used with little consideration of anthropogenic impacts. Due to the severe impacts of uncontrolled use and the dramatic increase in population, government has moved to regulate the use of these resources. The regulation has resulted in a serious hampering of economic development, but has also presented new opportunities for improved stewardship, management, and exploration of responsible interactions with the environment.

The interwoven relationships between our society and the environment have resulted in the developed new technologies that can help in the effective uses of the marine resources, and related development of economic opportunities while better managing the resources. These new technologies require highly technical people and industries to develop, install, and maintain the complex instruments that come with the technological evolution that is related to people interacting with the ocean and the environment. The skills needed to support these technologies have relevance in many other industries that intersect with marine and environmental endeavors. These fields include but are not limited to:

- Biological Sciences
- Pharmaceutical Research
- Communications
- Navigation

- Engine Repair and Maintenance
- Fabrication (metal, fiberglass and other composites)
- Archeology
- Renewable Energy Development
- Drinking Water and Waste Water Treatment

The Scituate Group also observed that the economy was changing dramatically, resulting in adults losing their jobs and young high school graduates being left with dim hopes of employment without extensive college educations. Concurrently, the new technologies were exploding but were consistently lacking the technicians necessary to calibrate, install and maintain the new technologies.

The combination of expanded use and responsible stewardship will result in a whole new set of technical requirements that will include the training and development of technicians in electronics, engine maintenance, communications, construction, marine monitoring, boat building, navigations, exploration, deployment and maintenance of instruments, data analysis, and mapping and resource management to name just a few. As a society, our need for these skills is exploding, but our education system is not poised to develop this skilled labor force. The needs will be pronounced in southern New England, and a new opportunity has emerged for the development of these skills.

In January of 2007 we approached [Massasoit Community College](#) because of the college's reputation for innovation and excellent technical education programs. Massasoit Community College President Charles Wall immediately recognized the vision, since it is one that the college shares and had already begun to address. Massasoit was



already offering an extensive certificate program in marine technical skills, and has been working closely with The Massachusetts Marine Trades Association to develop classes and curricula related to these technical needs. The logical extension of the vision into marine monitoring, alternative energy, and environmental technologies made sense to everyone.

Between February and April 2007 the Scituate Group met with key people and committees in the town including the Board of Selectmen, the School Committee and the Waterways Committee. We also approached the Massachusetts Marine Trade Association and the Stellwagen Bank National Marine Sanctuary Program to seek support for this initiative. The response was overwhelmingly supportive. We identified a broad range of topics for possible curriculum development, and we also identified a number of possible venues that would work for the Town of Scituate and for Massasoit Community College.

On April 10th, 2007, the Scituate Group presented the idea of developing a marine and environmental higher education program to the Scituate Board of Selectmen. The proposal was for a program that would partner with Massasoit Community College and other high school and college programs to develop a program that would offer training, education, certificates and ultimately degrees in Marine and Environmental Technologies. Possible program focuses include:

- Environmental Monitoring
- Marine Biotechnologies
- Biological Monitoring
- Molecular Genetic Monitoring
- Pharmaceutical Explorations (new drugs and therapies)

- Boating Electronics
- Physical Oceanography Technicians
- Marine Engine Technicians
- Boat Building and Repair
- Alternative Energy - Technology
- Command and Control Systems
- Marine Piloting and Navigation
- Water Treatment and Recovery
- Geographic Information Systems (GIS)
- Marine Archeology
- Marine and Environmental Art

The selectmen were supportive and requested that we periodically report to them on progress.

The Scituate Group started out looking for existing facilities, including the possibility of using existing education facilities. With support of the Scituate Education Committee and the School Department an initial attempt was made to co-locate the program in existing space at the Gates Intermediate School. Initial optimism in starting the program was not appropriate, and the initial attempts failed for a variety of reasons including infrastructure, funding and concerns over promoting contact between grade school students and college students.

In the spring of 2008 the original Scituate Group identified the need to reorganize and expand the scope and representation of a formal committee to continue to pursue the original intent of the group. As the informal leader of the group, I took on putting together a committee with broad representation of the community and stakeholders in the development of the educational program. A steering committee made up

of remnants of the Scituate Group, Massasoit Community College, the Scituate Selectmen and the Scituate School Department met to organize what would ultimately become the Marine and Environmental Education Alliance, Inc. (MEEA). The group met to decide on the makeup of the committee and invite potential committee members to an organizational meeting. The mission and goals remained those outlined above, but a formal committee was formed. In September 2008 the citizens who expressed an interest in participating met and MEEA was initiated as a committee. MEEA is strictly a not for profit organization with its main objective to foster the development of an educational program to develop knowledge, expertise and technical capabilities related to marine and environmental technologies. I should note that MEEA and its Board of Directors have no intentions of making profits from these endeavors.

In the fall of both 2008 and 2009 MEEA, along with the Stellwagen Bank National Marine Sanctuary and Massasoit Community College, sponsored two seminar series on the technical programs that support the National Marine Sanctuary Program and the technical jobs that support these efforts. This was the first educational program that resulted from the alliance initiated by MEEA and demonstrated the interest in the planned programs.

The committee decided that in order to move forward effectively it needed to become a corporation that could pursue funding and formalize partnerships. MEEA developed articles of incorporation which were approved by the State of Massachusetts on October 15, 2008. MEEA is now working on a number of critical initiatives including the development of a program curriculum and the development of a location for a building and a building plan. Working closely with the Scituate

Selectmen, MEEA has identified an ideal location for an educational building which will support a variety of educational initiatives from local high school programs through degree programs offered and managed by Massasoit Community College. The building is being designed as a multiple phase implementation of a green building that will demonstrate the use of emerging technologies and renewable energy. Possible plans include windmills, use of land fill methane, tidal energy, wind energy and geothermal energy. The land is owned by the Town of Scituate and will be made available to MEEA on a long-term lease at a very low annual rental if MEEA can demonstrate the ability to develop the site and put up a building dedicated to marine and environmental education.

In order to do this, MEEA must raise funds from private and public sources. In order to make private donations attractive, and to access potentially large sources of funding, MEEA is pursuing official designation as a nonprofit organization.

If successful in raising funds, Scituate will complete all required engineering studies and design to allow the site to be designated as buildable. At the same time MEEA will be developing a building design based on a curriculum that is being designed along with Massasoit Community College, the National Marine Sanctuary Program and the Scituate School Department. The building design will be used to raise money and to plan for implementation.

Jeff Rosen

Rushton's comments:

Hopefully in the near future, Jeff will be able to report on his successes with MEEA, and we wish him and the MEEA team a speedy path to 501(c)3 status! Those interested in learning more are welcome to place questions and thoughts in the comments area following this meeting.