

EDUCATING LOCAL VOLUNTEER CITIZEN BOARDS ON REGULATION OF  
THE TIDAL WETLANDS OF CHESAPEAKE BAY

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The Commonwealth of Virginia has nearly 5000 miles of tidal river and estuarine shoreline and is one of seven states in the northeastern United States that comprises the 64,000 square mile watershed for the Chesapeake Bay. Virginia passed into law the comprehensive Tidal Wetlands Act in 1972 which established a resource management program in which the regulatory authority for coastal wetland resources was conferred on local government. Under the law, wetland boards in 22 shoreline counties plus 13 cities were established and empowered with regulatory authority over the intertidal wetlands in Virginia's portion of the Chesapeake Bay. Each wetland board is comprised of 5 or 7 local citizens serving on a volunteer basis for a four year appointment. The Virginia Institute of Marine Science (VIMS), a part of the College of William and Mary, was mandated the task to 1) advise and assist the Commonwealth of Virginia in development of guidelines that scientifically evaluate vegetated and nonvegetated wetlands by type and describe the consequences of use of these wetlands and 2) educate local citizen boards in order to maintain regulatory consistency while acting as stewards in protecting the State's tidal wetland resources. Suspecting a wide variance in education and background experiences of the wetland board members, the task was to develop and, when necessary, modify a program that would satisfy the goals of wetland education and resource management. One major goal was to provide each citizen board member with basic training regarding the structure, function and values of the various types of regulated wetlands. A second goal was to maintain consistency in decisions regarding management of Virginia's coastal resources by providing board members a similar, basic knowledge of wetland ecology. These goals have been confronted through a tripartite approach utilizing an annual workshop and educational offerings, field workshops and a bimonthly mailing of technical information and newsletters.

The seminar portion of the education program initially began with an annual one day education workshop offering presentations about the basics of wetland ecology and resource management. This informal workshop basically consisted of lectures presented by individual staff members and employed few visual aids. In addition, the Virginia Wetlands Report, published on a quarterly basis, discussed general and current topics in wetland ecology and resource management.

Believing that a fundamental nucleus of understanding was essential for sensible management, the next step was to develop a core course program that would address the major areas of wetland resource management. Eight core course units, each approximately 45 minutes in length, were developed using a format of 35mm slides with accompanying commentary. These core courses would provide all wetland board members with a comparable level of basic expertise. Records concerning which courses had been completed by board members were maintained in order to monitor their progression through the education program. The Wetlands Report continued on a quarterly basis, addressing topics of local interest as well as national resource protection issues.

It soon became apparent that many of the wetland board members had taken all eight core courses. In order to advance their knowledge, as well as maintain their interest, it was decided that another, more advanced series of courses was needed to augment the core courses. Utilizing the same 35mm slide and commentary format, eight new courses were developed which addressed more advanced topics in wetlands ecology and resource management. These advanced courses were offered in conjunction with the eight core courses in an attempt to satisfy the needs of veteran, as well as, newly selected wetland board members. The quarterly publications continued to address important topics concerning wetland ecology and resource management. The addition of several technical columns to the quarterly Wetlands Report provided the opportunity to address specific aspects of wetland ecology on a continuing basis.

It was soon evident that a portion of new wetland board members, particularly those at a great distance from VIMS, were not attending wetland courses offered at the annual workshop. After evaluating the problem and discussing possible solutions, it was decided to convert the eight core courses from the existing 35mm slide format into video versions, which could be distributed to wetland board members who were unable to attend the annual workshops. A video of the 35mm slide presentation formed the basis of a course unit which included a text discussing the subject of the video, and a self-administered examination used to verify that the important points of the unit had been acquired. Every attempt was made to design these units in a self-taught format. A procedure was established for providing the videos on a first come-first served basis using the mail as the means of distribution. Each education unit test was graded by the wetlands program staff. Individual records were kept for board members in order to monitor their progress through the education program. While initially intended for use by wetland board members, these self-taught units were made available to other State, local and private agencies in an effort to bring all participants in the wetland resource management arena up to the same level of competence.

Following each annual education workshop a questionnaire was distributed requesting feedback and recommendations. Using this information, it was determined that field workshops would prove useful in relating the education program courses to the actual wetland ecology of each county within the State's coastal plain. Realizing that most potential participants worked during the day, the local wetland field workshops were scheduled monthly from

16:30 to 20:30 in a different county during the summer months. Each county's wetland board was responsible for selecting a wetland site and for promoting attendance at the workshop by local citizens and interested parties. These field workshops provided the opportunity to apply and demonstrated much of the information learned in the core and advanced wetland education courses as well as to involve the general public.

The greatest challenge has always been, and still remains, identifying the specific needs of the wetland board members and then adapting the education program to meet these needs. Several needs have been identified which will influence the evolution of the education program in the near future. Responses from many participants attending the annual workshops and users of the self-taught units indicated that the video format of the 35mm slide presentations were static, dull and often boring. As a result of these responses, the eight core courses are now being redesigned in a more interactive, documentary format. In retrospect, on many occasions it had proven very difficult to capture or demonstrate concepts using a 35mm slide. The new documentary format will provide greater subject insight and yield a more interesting and engaging presentation.

Results during the past five years show that attendance at the formal seminars has been consistent, attendance at the field workshops has steadily increased, requests for addition to the technical newsletter mailing list have risen and wetland board member awareness has been heightened. By sharing the components and results of this model educational program, it is hoped that other coastal resource managers in other states comprising the Chesapeake Bay watershed, as well as in other countries, will benefit when facing similar coastal resource management and education challenges.