

VOLUNTEER WATER QUALITY MONITORING AND ITS IMPACT ON CHANGING COASTAL COMMUNITIES

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Public participation is increasingly seen as an important component of environmental decision-making, especially in the context of watershed management. In water quality monitoring, public participation has the potential to increase awareness of water quality problems and solutions while fostering better use of knowledge and experience from a variety of stakeholder groups. In addition, it limits conflict among the public, government agencies, experts, and the private sector by increasing public acceptance of decisions made.

One of the difficulties related to public participation is the ability to attract interest and willingness to participate over a long time period. Long-term participation can instill feelings of ownership over an area or resource, creating the potential for participants to empower other members of the community to change their behaviors in a positive manner.

The Coalition for Buzzards Bay, which is a non-profit, membership supported organization “dedicated to the restoration, protection, and sustainable use and enjoyment” of Buzzards Bay, Massachusetts, has made significant progress in overcoming this challenge through public involvement in their Baywatchers Water Quality Monitoring Program. Water quality in Buzzards Bay is affected by wastewater treatment, septic growth, and fertilizer use. Currently, citizen monitors play an important role in acquiring scientific information about water quality in Buzzards Bay; however, it is unclear whether their personal knowledge or level of civic involvement has increased. If participation in monitoring educates the public about the relationship between land use and water quality and changes the behavior of individuals who contribute to water quality impairment then it can also result in environmental improvements.

A survey of the Coalition for Buzzards Bay water quality monitors and the general public concerning knowledge and awareness of water quality issues, perceived benefits of citizen water quality monitoring, civic involvement, and social engagement was administered in August and September of 2008. Preliminary results indicate increased understanding of water quality problems in water quality monitors. Monitors have indicated changes in their behavior related to fertilizer use and septic tank maintenance. In addition, it appears that monitors generally feel that being part of a volunteer water quality monitoring program is beneficial for the community and the future of Buzzards Bay. Survey results indicate that this level of participation seems to create a feeling of responsibility for Buzzards Bay and its resources.

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