
PART III - MANAGEMENT MEASURES for HAWAII

Section 6217(b) of the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 requires state coastal nonpoint pollution control programs to provide for the implementation, at a minimum, of management measures in conformity with guidance published by the National Oceanic and Atmospheric Administration (NOAA) and Environmental Protection Agency (EPA).

Section 6217(g)(5), CZARA, defines “*management measures*” as:

economically achievable measures for the control of the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.

In other words, management measures are akin to goals which states must address through the implementation of regulatory or non-regulatory nonpoint source pollution control mechanisms and land and water users must implement through the application of best management practices. The management measures are to be based on technical and economic achievability, rather than on cause-and-effect linkages between particular land and water use activities and particular water quality problems. In this sense, coastal nonpoint pollution control programs are preventive rather than reactive. The legislative history made it clear that the intent of technology-based management measures was to allow states to concentrate their resources initially on developing and implementing measures that experts agree will reduce pollution significantly.

According to NOAA and EPA’s *Program Development and Approval Guidance*, states must provide for implementation of management measures for each of the nonpoint source categories and sub-categories identified in EPA’s *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* to protect coastal waters generally. States must also provide for the implementation of management measures specified for wetlands and riparian area protection.

In its coastal nonpoint pollution control program management plan, a state must respond to each of the management measures contained in EPA’s *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* by either (1) providing for the implementation of that measure or a comparable alternative, or (2) justifying why the management measure is not included in the program. A state must also describe how it will ensure implementation of each management measure. While Hawaii is not excluding any management measures from its program at this time, many management

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measures have been changed to better adapt them to suit Hawaii's unique physical and social environment.

Current Hawaii State and county regulations directly or indirectly address, in some form, all of the management measures for the coastal nonpoint pollution control program. Nevertheless, the implementation of many management measures can be strengthened through changes to existing programs and regulations and/or the development of new regulatory and non-regulatory program elements. Some administrators cite inadequate fiscal and staff resources as major impediments to effective implementation of these management measures. Others express concern over long-standing nonpoint source pollution problems that have not been resolved despite implementation of existing measures. In some cases, agencies may need to promulgate regulations to implement statutes. Ambiguity also exists in some statutes over which agency has the lead in enforcing water quality mandates. Finally, there is a need for better coordination among agencies charged with implementing and enforcing measures (Pacific Environmental Research 1994).

Land and water users will use "***best management practices***" to implement the coastal nonpoint pollution control program management measures. Best management practices (BMPs) are structural and non-structural techniques that are implemented on-site to control polluted runoff. EPA anticipated that the management measures typically would be implemented by applying one or more management practices appropriate to the source, location, and climate. While EPA lists and describes management practices in its guidance document, it is left to the individual states to determine the spectrum of BMPs that will be used individually or in combination to address the management measures in their state. Because there is often site-specific variability in the selection of appropriate practices, as well as in the design constraints and pollution control effectiveness of practices, specific practices are not mandated by the management measures. This flexibility enables a site-specific selection of appropriate BMPs and "updating" of BMPs as technologies and economic conditions change.