

Vision of a Balanced Ecosystem for Chesapeake Bay

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Traditionally, management of water bodies has relied on use criteria, such as fishable and swimmable, which in turn are based on water quality characteristics. Management of living resources has been species specific, focused on regulating harvests, and has often been reactionary. From the beginning of the interjurisdictional Chesapeake Bay Program, the common goal has been to restore and maintain the Bay's ecological integrity.

The evolving role of living resources in Chesapeake Bay management began with the publication of *Habitat Requirements for Chesapeake Bay Living Resources*. This document synthesized the best available information on selected target species and identified the most limiting environmental factors. It also provided the technical basis for developing submerged aquatic vegetation restoration targets and a dissolved oxygen goal for restoration of living resource habitats.

The *Chesapeake Bay Strategy for the Restoration and Protection of Ecologically Valuable Species* was developed because of the need for a policy which goes beyond the target species concept. The strategy views the Bay as an ecosystem composed of biological communities that interact with the physical and chemical factors of their surroundings to function as a single unit.

It became clear in the development process that "management" as traditionally practiced (regulating harvests) was unrealistic for many critically important Chesapeake Bay species. The majority of ecologically valuable species are not harvested. The focus must be on the environmental conditions and habitats necessary to support their populations and maintain their functional roles. The ecosystem concept provides the basis for exploring the relationships between the many separate plans for management of Chesapeake Bay species, habitats, and water quality.

The management recommendations of this document include: incorporating ecological and habitat considerations into fishery management plans, applying living resources habitat goals in the analysis and reporting of water quality information, developing ecosystem simulation models, and developing consistent systems of biological indicators for Chesapeake Bay. Monitoring, data management and analysis, and research are also emphasized in this document.

Many of these management recommendations are already being implemented. Developing resource based habitat restoration goals is a difficult, but necessary process, requiring inputs from the scientific and management community. With thorough peer review and consensus building, the process can succeed.