

The U.S. Approach to the Management of Enclosed Seas

Robert W. Knecht
University of Delaware, USA

The study was undertaken with the goal of characterizing the approaches being taken in the U.S. with respect to the management of large enclosed bays and estuaries. Puget Sound, San Francisco Bay and Chesapeake Bay were selected for study since they are the largest such systems in the United States. These systems were also chosen because they represent three rather different situations. While all are enclosed waterbodies, the three have rather different hydrologic regimes, different ecological properties, and different jurisdictional and management arrangements. Yet all three systems either have or are about to have put in place new governance arrangements which are the result of five or more years of concentrated study under the National Estuary Program and/or its precursor programs.

The information used in the study was compiled from a number of sources including published papers and reports, especially for Chesapeake Bay, and documents generated by the national estuary programs underway in both Puget Sound and San Francisco Bay. Emphasis was placed on assembling the following types of information for each of three systems:

- problems facing the waterbody;
- characteristics of the existing management arrangements;
- goals of the new governance program;
- action programs designed to achieve the new goals;
- institutional nature of the new governance regime.

A number of the basic problems are common to all three systems--serious declines in important fish and shellfish stocks, pollution by toxics, decline in submerged aquatic vegetation, and loss or degradation of the wetland elements of the systems. Also, the present management systems of the three bays are similar, that is, they tend to be fragmented with a number of separate but overlapping resource and environmental regimes. It appears that the improvements now being put in place involve the adoption of common goals and action programs for each of the waterbodies and an agreement among the individual management and regulatory agencies that they will endeavor to use their programs to achieve the agreed goals to the extent possible with the resources and regulatory leverage available to each of them.

Clearly, the governance of enclosed seas in the United States is in a state of flux as we move from an approach with a high degree of fragmentation and a single sector orientation to one grounded on better scientific understanding, strengthened program coordination and an agreed set of overall goals for each waterbody. Success of the new governance arrangements could depend upon answers to two questions:

1. Has the recent relatively large investment in scientific research produced the kind of understanding needed to achieve the goals?
2. Can improved governance result from an approach that virtually assures that the multiple regulatory regimes found in U.S. enclosed seas will continue in more or less the same form?