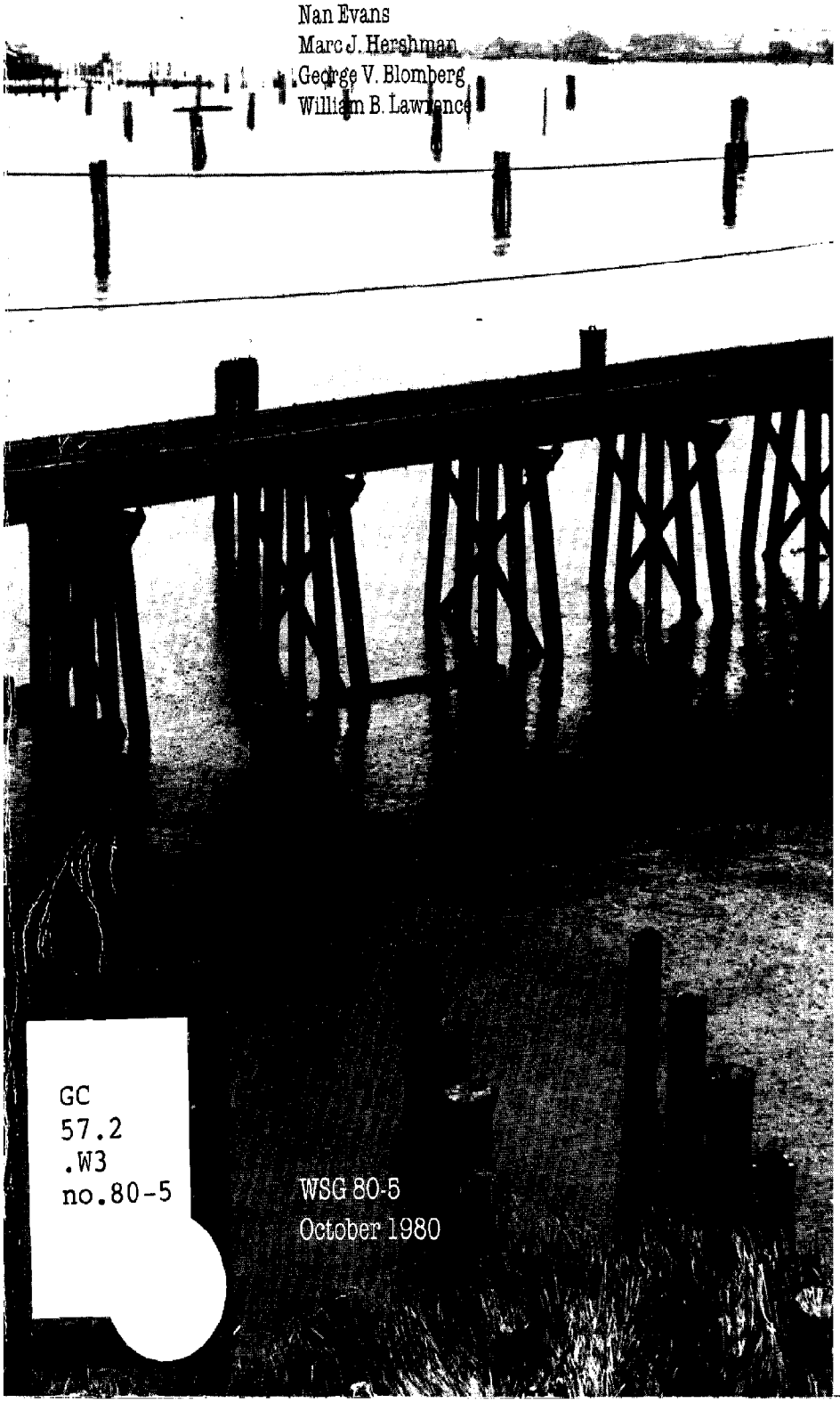
THE SEARCH FOR PREDICTABILITY

TECHNICAL REPORT

Planning and Conflict Resolution In Grays Harbor, Washington

Nan Evans
Marc J. Hershman
George V. Blomberg
William B. Lawrence



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PREFACE

This study of the Grays Harbor Estuary Management Program was undertaken so that others elsewhere faced with the challenge of resource management in special areas, particularly coastal ones, could learn from the experience in Grays Harbor, Washington. But, the Grays Harbor effort is not frozen in time. Rather, the dynamic and complex nature of the resources, the economy, the law, the politics and the actors have resulted in an on-going activity. Events in the future will affect the ultimate outcome of the Grays Harbor effort and will add further conclusions to the ones we have presented here. This monograph represents our best understanding up to the time of this writing. Whether the Grays Harbor Estuary Management Task Force succeeds or fails in its effort to produce and implement a comprehensive estuary management plan, the authors hope that the reasons for either outcome can be found in our analysis. Whatever ultimately occurs in Grays Harbor, the importance of this monograph is in the analysis of the process and the potential of applying the lessons learned to future efforts.

N. E., M. H.
June, 1980

1 OVERVIEW

In 1975 an experiment in coastal zone management began in Grays Harbor, Washington. The frequent conflicts which had occurred between government agencies, development interests, and environmental groups over shoreline development projects resulted in costly delays and great uncertainty about the use of the estuary. To resolve these disputes and avoid such conflicts in the future, agencies with decision-making responsibilities in the region formed the Grays Harbor Estuary Planning Task Force. The product of the Task Force effort, the Grays Harbor Estuary Mangement Plan, was to provide a management system to ensure that future uses of the Grays Harbor shoreline would be predictable. Now, by mid 1980, although some major agreements have yet to be reached, the Task Force effort is nearing completion.

The Grays Harbor Estuary Management Program has attracted the attention of a national audience of coastal managers, resource and regulatory agencies, port directors, environmental groups, and elected officials. They are asking major questions about this unique form of estuary management. Would this Task Force of decision makers be able to forge a Plan that would guide development and improve agency coordination for many years to come? Would the Task Force be able to resolve specific conflicts between resource protectors, users, and developers? Would the Plan provide adequate protection for the estuary's biological resources and ensure opportunities for economic development in the region? Would the Grays Harbor experience offer the nation a model for coastal zone management that integrates comprehensive planning, intergovernmental coordination, and conflict resolution?

The aim of this study is to begin to answer these questions about the planning process, so that the lessons learned from the Grays Harbor experience can be applied elsewhere. An interdisciplinary team at the Institute for Marine Studies of the University of Washington conducted extensive interviews with members of the Grays Harbor Estuary Planning Task Force and other interested parties. Interviewees were questioned about the problems of resource use and public decision making that made estuarine planning desirable in Grays Harbor, the expectations and objectives of participants in the planning activity, the methods used by the Task Force for estuary planning, and the methods and problems of plan implementation. Information documenting the impetus for the Plan, the collaborative planning process, and the estuary itself was also compiled.

Grays Harbor, an estuary on the Pacific coast of the state of Washington, is a major port and industrial center for lumber and wood products, and also supports major commercial fishing and tourism industries. The biological communities and habitats of the estuary and its drainage basin provide the resource base for the primary economic sectors in Grays Harbor county. Grays Harbor is also one of only five major estuaries on the West Coast of the United States, with crucial biological functions such as providing nursery areas for marine animals, wintering grounds for migratory birds, and nutrient supply and regeneration for aquatic ecosystems.

Grays Harbor has a long history of resource use. Disputes over resource allocation and use have been persistent, and have involved a multitude of issues and actors. Specific and heated conflicts in Grays Harbor are similar to those observed nationally, as special interest groups become competitors for scarce and ecologically vulnerable coastal resources. Each of the conflicts involves disputes over *what* are the most important and valuable uses of the resources,

who should determine the character and extent of uses affecting the estuary, and *how* the resources and their uses are to be managed or controlled. The parties to these conflicts include a wide spectrum of actors: federal resource and regulatory agencies, state resource management agencies, local governments, a port district, private landowners and developers, citizens, and environmental groups.

In recent years, conflict in Grays Harbor has been focused on shoreline development. The hilly terrain of the region leaves few opportunities for industrial development except in the nearshore flatlands and on filled wetlands. The industrialized portion of the estuary, especially in the inner harbor, provides the necessary infrastructure for further development. The Port of Grays Harbor is the owner of large areas of shoreline, and offers the major opportunity for economic development. Seasonal and high unemployment in Grays Harbor County creates pressure for expansion of existing economic activity and for industrial expansion to provide increased and more stable employment. The shorelands and wetlands, which offer important development opportunities, are, however, also valuable to the maintenance of ecological health and diversity in the estuary. The stage for conflict is thus set between development interests and those concerned with environmental protection and conservation.

Each specific project proposal or permit application for shoreline development encountered a complex set of federal, state, and local administrative procedures. The cumulative outcome of each of these reviews contributed to growing frustration of all parties. Developers were unable to obtain sufficient levels of predictability to secure investments and to provide economic opportunities. In contrast, resource managers feared that they would be unable to predictably protect the long-term biological viability of the estuary.

To provide a solution to these persistent and complex conflicts, representatives of the agencies and the governmental entities that had decision-making responsibilities and powers in the estuary formed the Grays Harbor Estuary Planning Task Force. The Task Force utilized a hybrid of many basic comprehensive planning and negotiation techniques. In addition, the Task Force assumed that its composition of actual decision-making agencies would provide a more effective coupling between planning and decision making than is often experienced by more traditional comprehensive planning efforts. The Task Force assumed that if all the governmental decision makers could jointly develop a comprehensive plan for estuarine resource use, the plan would be directly implemented by the agencies, using existing management frameworks and regulations. Such a plan was expected to make a real difference in how decisions were coordinated and how resources were used.

After nearly four years of hard work, a draft of the Grays Harbor Estuary Management Plan does exist, despite problems associated with process design and implementation. The Draft Plan is a comprehensive plan with general policy statements and resource-use objectives, but the Draft Plan also contains several selected and specific agreements on geographic areas subject to the most intense conflict. Elements of the Plan and records of the planning process show that the Task Force was successful in dealing with a number of trade-offs and in crafting several basic compromises, such as the multiple-use goal, conditional use provisions, split management units, and bankline straightening and erosion control policies. Also, as a result of the experience of Task Force participants in dealing with the difficult problems of intergovernmental coordination and resource use, the individuals (and perhaps their agencies) have

established a firmer basis for future cooperation in the estuary and elsewhere in the region.

The Draft Plan also has provided a basic planning framework enabling small-scale projects to move through the permit review and approval process more predictably than before the Task Force began their work. However, this cannot yet be said of larger scale projects. Confrontation over the filling of 500 acres (200 ha) of wetlands for industrial development on a site called Bowerman Basin must be resolved before the Plan can move ahead to adoption and implementation. This major unresolved issue requires national, state, and local decisions about how negotiated agreements developed during a regional planning effort interface with national environmental policies and decision-making procedures. One of the most significant contributions of the Grays Harbor Estuary Management Program to national coastal zone management has been to force necessary decisions on these questions. The predictability sought by all parties is jeopardized until these significant legal problems are resolved.

The original Task Force strategy was to rely on existing agency decision-making systems to implement and use the Plan. The Task Force itself expected to play a minor planning and advisory role. These assumptions are now being reviewed as a fuller range of adoption and implementation alternatives are being explored. Only when these procedures are selected and have a history of use can the conclusions on the success of the search for predictability in Grays Harbor be finalized.

This analysis of the Grays Harbor effort identifies several components of the decision-making process designed to integrate conflict resolution with comprehensive planning. These components form the basis of process design and operating procedures when the decision-making environment includes a number of diverse competing interests and scarce resources. First, the parties in the decision-making activity must have realistic expectations and criteria for success. To achieve this, the parties must understand the political and ideological nature of the conflict situation and they must accept that complete accommodation of all interests may not be possible. In addition, the parties must expect and be able to compromise. Second, all parties to the conflict who have a stake in the dispute resolution or can affect the implementation of any agreement should be involved in the planning/conflict resolution process. If critical parties are excluded, the political viability of any agreement may be threatened. As a corollary to the inclusion of all parties to a conflict in its resolution, and in order to maintain a task force of a workable size, parties who have no stake in the conflict, who are unable to compromise, or who are relatively powerless are best used as information sources rather than as members of the task force. Third, the selected representatives of the parties in a conflict resolution process should have the authority to speak for their agencies or constituencies. Also, the scope of authority of each party and its representative must be clearly understood by all participants. Fourth, all representatives should have experience in bargaining and negotiating. Fifth, if consultants are used, they should be selected on the basis of mediating skills, as well as planning skills, because in conflict resolution a neutral mediator who can facilitate negotiations is necessary. Sixth, the technical information used by the negotiators is most useful when presented in the form of alternative analyses so that the effects of specific trade-offs can be appreciated.

Finally, one conclusion of this monograph is that a staged process of making commitments may be the most useful approach to special area management.

The lessons learned from the experience of the Grays Harbor Estuary Planning Task Force should be applicable to efforts elsewhere. Even more importantly, the Grays Harbor experience has been an invaluable experiment in a form of special area management that is meaningful nationally. Grays Harbor provides a prototype of national coastal zone management issues. The Grays Harbor effort represented and attempted to answer the needs for improved interagency and intergovernmental coordination, for assured and adequate coastal resource protection, for providing development opportunities to protect the economic health of the coastal communities, for considering national interests in state and local coastal management programs, and for close connections between a management plan and the decision-making power and mandates of a multidimensional, multi-jurisdictional, and democratic government.

The Grays Harbor experience in bringing all levels of government into a cooperative planning and management process could not have occurred without the flexible funding philosophy of the federal and state coastal management agencies that allocated funds to flow to areas where problems were clearly defined and where the actors were willing to jointly participate in experimental methods in the attempt to resolve these problems. The administration of the Coastal Zone Management Act should continue to be flexible and responsive to innovations in coastal planning and conflict resolution methods.

2 THE REGIONAL SETTING

Physical Characteristics of the Estuary

Grays Harbor is one of two major estuaries on the Pacific coast of Washington (fig. 1), and one of five significant estuaries on the West Coast of the United States. The estuary covers ninety-seven square miles (260 km^2), half of which is intertidal. The Grays Harbor watershed drains about 2,550 square miles (6,630 km^2), with tributary headwaters in all of the surrounding mountainous regions of Grays Harbor, Jefferson, Pacific, Mason, Lewis, and Thurston Counties. Fresh water flows into the estuary from four major rivers--the Chehalis, the Hoquiam, the Humptulips, and the Wishkah. The Chehalis River drains 80 percent of the tributary watershed.

The volume of saline oceanic water entering the estuary is much greater than the volume of fresh water entering from land and river sources. Thus, circulation and mixing in the estuary are strongly affected by tidal parameters and moderately influenced by river flow. Salinity is highest in summer, when upwelling occurs along the Pacific coast, and lowest in winter, when stream discharges are highest. At the mouth of the estuary, there is nearly complete vertical mixing of saline and fresh water. The upper portions of the estuary are somewhat stratified, and a salt wedge is characteristic of the inner regions of the estuary.

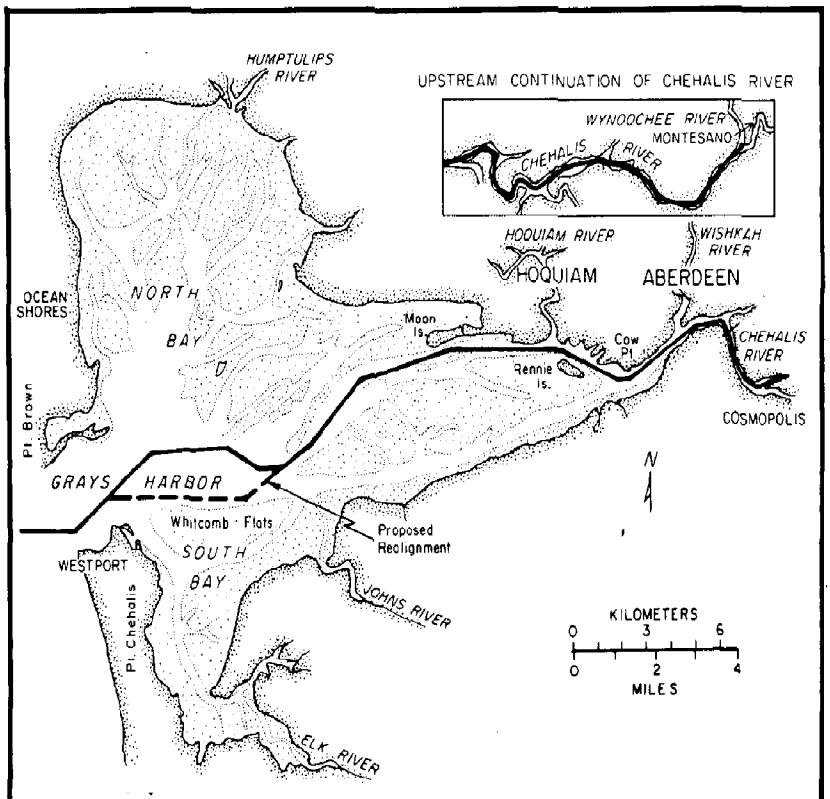

Figure 1 Grays Harbor Estuary.

Grays Harbor is a shallow basin with an average depth of less than twenty feet (6 m) below mean lower low water (MLLW). The entire estuary is shoaling and probably has been doing so since the last rise in sea level about 10,000 years ago. The estuary is of the "drowned river valley " type. The Chehalis River enters the estuary from the east across a flood plain formation. The annual sediment load reaching Grays Harbor from upland sources is approximately 1.5 million cubic yards (1.15×10^6 m^3). Oceanic sediments enter Grays Harbor through the mouth of the estuary. Point Brown and Point Chehalis, spits at the north and south sides of the entrance, were formed by sediment accretion. Sediment deposition and erosion are active processes along the estuarine and oceanic boundaries of these major spits.

Because Grays Harbor is shallow, dredging is required to provide navigational access. The earliest records of such dredging in the estuary date from 1905 (Weinmann and Malek, 1978) and maintenance dredging has been continuous ever since that date. Surveys of historical conditions and current dredging data indicate that the natural depth of the channel is about fourteen feet (4 m) measured from MLLW; the channel extends twenty-three miles (37 km) from the outer bar entrance to Cosmopolis, a small city on the south shore of the estuary near Aberdeen. Several ship-turning basins are also maintained.

Grays Harbor is the only coastal estuary in Washington State with a maintained deep-draft navigational channel. The Seattle District of the Corps of Engineers (COE), together with the Port of Grays Harbor as a local sponsor, has proposed improvements to the navigation channel intended to allow larger, deeper draft vessels access to Grays Harbor and, secondarily, to encourage growth and diversification of marine transportation in the region. The proposal calls for widening the existing channel to 1,200 feet (360 m) and deepening it to 40 feet (12 m) below MLLW in the outer reaches. Eastward from the entrance channel, the project recommendations are for a channel width of 600 feet (180 m) and an average depth of 40 feet (12 m) MLLW. This would require excavation and disposal of approximately 19.3 million cubic yards (14.7×10^6 m^3) of dredge material, compounded by an increase in annual maintenance dredging volumes of about 1 million cubic yards ($.765 \times 10^6$ m^3) to about 2.8 million cubic yards (2.1×10^6 m^3) of annual dredging in order to maintain authorized channel depths. This is two to three times the annual sediment load to the harbor. The proposal is currently undergoing further study and evaluation.

Dredging and disposal of dredged material has been one of the most pervasive agents of change in the estuary's aquatic and intertidal areas. Historically, dredged material was deposited in the most economical fashion--unconfined onto adjacent tidelands and uplands. Large portions of Moon Island, Rennie Island, and the shoreline fastlands in Aberdeen and Hoquiam were created in this way. Army Corps of Engineers records indicate that approximately six square miles (1,550 ha)--nearly 11 percent--of the total intertidal area of the estuary has been used for dredged material disposal since 1940 (Dice, et al., 1976).

Biological Characteristics of the Estuary

The significance of Grays Harbor as a coastal environment of great natural wealth is undisputed. The estuary has extensive intertidal flats with associated eelgrass and saltmarsh communities, and provides a habitat for abundant fish, bird, and mammal populations.

The estuary receives a steady supply of nutrients from the surrounding watershed, from the bordering marshland, and from marine sources.

Aquatic vascular plants grow on 20,000 (6,700 ha) of the estimated 33,600 acres (13,600 ha) of intertidal habitat in Grays Harbor (Dice, et al., 1976). Of these vascular plants, eelgrass flats account for approximately 70 percent of the vegetated area. Eelgrass flats form the transition areas from subtidal or nonvegetated tidal flats to wetland marsh areas. The eelgrass beds support a rich and complex group of invertebrate and vertebrate communities by providing food and habitats for breeding and refuge. There are 3,500 acres (1,400 ha) of undiked salt marshes, both high and low variety, and 200 acres (81 ha) of sedge marsh in the estuary. Sedge marsh is relatively more dependent on freshwater runoff than high or low salt marsh, and is therefore characteristically found in the inner harbor where generally lower salinities prevail. The extent and distribution of sedge marsh has been more severely influenced by disposal of dredged materials than that of other aquatic vegetation. There are also 1,087 acres (440 ha) of diked salt marsh in the estuary, which were created for low-intensity agriculture.

A wide variety of fauna is present in the estuary. Fifty-three species of fish and shellfish, representing twenty-six families, live in the estuary during some stage of their life history (USACOE, 1976 d). Productive estuarine shallows are critical to spawning and rearing of euryhaline life forms, and serve as migratory routes for juvenile and adult organisms. Commercially important fish and shellfish include: chum, coho, and chinook salmon; steelhead trout; white and green sturgeon; Dungeness crab; and the Pacific oyster.

The aquatic areas and margins of the estuary provide habitat for fish-eating waterbirds, shorebirds, seasonally present waterfowl, and many terrestrial bird species. Three hundred twenty-five species of birds, belonging to fifty-six families, occupy estuarine habitats during some period of the year (Dice, et al., 1976). The diversity and numbers of bird species are greatest during migratory periods.

The estuary also contains a diversity of mammalian life. Forty-six species inhabit aquatic areas and adjacent wetlands. There are commercially and recreationally significant populations of mink, beaver, blacktail deer, elk, and black bear. Whitcomb Flats, southeast of the North Channel, is the site of perhaps the largest remaining breeding colony of harbor seals on the Washington and Oregon coast (Dice, et al, 1976). Summer conditions bring other species of marine animals to the estuary for the rearing of young.

Socioeconomic Profile of the Region

The estuary and the commercially navigable portions of its watershed are entirely located within Grays Harbor County. Of the 60,000 persons living in the county, approximately 34,000 live near the shores of the estuary. The population is concentrated in the northeast urban area of Hoquiam, Aberdeen, and Cosmopolis. This is also the site of industrial and commercial development. The estuary provides the resource base for the primary economic sectors in the county: timber harvest, processing and transportation of forest products, commercial fishing, and tourism.

The forest-products industry is dominant in the regional economy. Over 90 percent of the land area of Grays Harbor County and 67 percent of the shoreline area are committed to timber-related uses. There are three pulp and paper mills on the shores of the eastern urban area. Approximately one-third of the work force in the county is employed in the timber industry, and 70 to 80 percent of these persons are employed near the waterfronts of Hoquiam and Aberdeen.

Export of forest products is a significant activity in Grays Harbor. Of seven major softwood exporting areas in Washington State, Grays Harbor ranks second. During the last fifteen years, a yearly average of approximately 357 million board feet of softwood, valued at $68 million, have been shipped from Grays Harbor (Ruderman, 1978). The majority of the exports are destined for Asian markets. Washington State provides 65 percent of the annual U. S. timber shipments to Japan, and Grays Harbor supplies 23 percent of that volume. Approximately 40 percent of the region's timber products are shipped through facilities owned by the Port of Grays Harbor. The Port's major holdings in the estuary provide present locations and potential development sites for ship access and loading facilities, as well as dry-land log storage areas.

Commercial fishing is another major economic activity in the county. Commerical fish species, primarily salmon and bottom fish, are found in Grays Harbor and adjoining ocean waters in substantial numbers. Crab and other shellfish are also significant. As a market center, Grays Harbor accounts for approximately 10 percent of Washington's commercial catch landings. In 1974, the total value of landings to fishermen in Grays Harbor was approximately $10.5 million. About half of the catch was taken from the estuary itself; the other half was taken from the ocean.

Tourism and resource-based recreation are also basic economic activities in the region. Two incorporated cities located at the western mouth of the estuary, Ocean Shores and Westport, have extensive resort and sport-fishing facilities. Grays Harbor accounts for nearly one-quarter of the yearly state total marine charter sport trips. It is estimated that sport fishing added $45 million to the local economy in 1973 (Montagne-Bierly, 1977 b). Recreational activities and tourism are changing in the state, and nonconsumptive recreational activities are expanding at a faster rate than consumptive recreation in the county (USCOE, 1976 d). The breadth of economic effects and benefits resulting from nonconsumptive recreational activities is significant. A recent analysis indicates that, when economic dependency is measured relative to employment in basic economic activities, tourism ranks second to the forest products industry in Grays Harbor and displays a greater potential for positive change in employment than the forest industry or commercial fishing (GHRPC, 1979).

In spite of this economic activity, Grays Harbor County is characterized by fluctuating and chronic unemployment. The forest-products industry, fishing, and tourism are all seasonal in nature, sensitive to market conditions, and subject to unpredictable changes due to natural phenomena. The level of unemployment in the county has been consistently higher than the state and national averages. For example, in 1975, unemployment exceeded 12 percent, and forest workers accounted for approximately one-half of those unemployed. Employment in the county is also less stable than in other regions of the state; 41.5 percent of the male work force was unemployed for more than two weeks in 1975, compared to 36.1 percent statewide. Furthermore, the average family income in the county was about 15 percent lower than the state average in 1970, and the payment rates to welfare recipients in Grays Harbor during 1976 were the highest in western Washington.

The population of Grays Harbor has increased by only ten percent since 1950 and the region's relative share of the state's population has declined consistently. There is a high proportion of older persons, reflected in the median age, 29.9 years, in the area. Census data indicate a net out-migration of younger members of the work force; approximately one-fourth of twenty-to-twenty-five year olds left the

county between 1960 and 1970 (Montagne-Bierly, 1977 b). Current population estimates and projections by the Washington State Office of Financial Management and the Grays Harbor Regional Planning Commission show a continuation of the apparent out-migration of younger people, in contrast with a significant state-wide increase in this segment of the population (GHRPC, 1979). Since members of the working population tend to migrate in response to employment opportunities, it would appear that insufficient jobs are available in Grays Harbor County to hold or attract the working-age group.

Pressure for Further Development

Grays Harbor is typical of traditional open economic systems which are geographically distant from other population and trade centers. In such areas, local governments and industrial concerns favor actions that will create additional revenues and an expanded tax base. Benefits expected to result from increased and diversified industrial and commercial activity are reduced unemployment, elevated living standards, and increased overall socio-economic stability in the region.

Both the natural resource values of Grays Harbor and its significance as a regional industrial and commerical center are well recognized. As stated above, existing industrial and commercial activity in the region is resource based and directly dependent on the estuary. In Grays Harbor and elsewhere, the compatibility of human activity with the environmental integrity of coastal regions is a complex matter, particularly in estuaries where many special constraints affect human activity.

In Grays Harbor, there are several constraints on expansion of present industrial and commercial uses and establishment of new activities.

(1) There are impediments to navigation, such as inadequate channel width and depth, as well as congested points of shore access to the navigation channel, which necessitate dredging and disposal of the resultant spoils.

(2) There are limited areas of level uplands upon which industrial, commercial, residential, and tourism-related activities can be located.

(3) Away from the inner harbor, where development activity has been historically concentrated, areas tend to lack the infrastructure and support services necessary for new development.

Determinations concerning the type, extent, and location of development and the cumulative effect of resource uses are central to the future character of the region. Expansion of any of the existing economic sectors in Grays Harbor may be incompatible with the natural biological uses of the estuary and may undermine the environmental properties supporting such uses. The following discussion describes the expected kinds of development likely to affect estuarine margins.

Expectations for increased economic development and diversification focus on improving the navigation channel and creating new fastlands in shallow aquatic areas and wetlands along the margins of the inner harbor. Expansion of forest-products manufacturing or the establishment of new industrial activities would most likely be situated along the margins of the inner harbor, regardless of water dependency or water relatedness, for three reasons: (1) the majority of flat land (and shallow aquatic areas) suitable for industrial growth is in shoreline

areas; (2) this region of the estuary already has the necessary transportation, industrial water supply, sanitary services, and electrical power; and (3) the efforts of the Port for upgrading and extending its shoreline facilities serves to generally encourage expansion and development of new industries in areas near existing facilities.

Port Development

The Port formulated a comprehensive development plan in 1970 to project potential Port growth and shipping activity (Port of G.H., 1970). The plan, essentially a development forecast completed by professional consultants, concluded that the Grays Harbor estuary is expected to exerience significant and accelerated industrial development, since: (1) the entire Puget Sound area would be subject to rapid population growth; (2) industrial land accessible to navigation waters in the Puget Sound area would be exhausted by 1985; (3) large areas of undeveloped land are available in Grays Harbor and these lands have potential for navigation access, (4) large amounts of industrial water would become available in 1972 due to a regional flood control project; and (5) the planned Satsop nuclear power plant would expand available electrical power. Thus, as a result of the conclusions drawn from the comprehensive development study, the Port of Grays Harbor advocates improving the scope of the present navigation project and creating new industrial sites by filling shallow aquatic areas and wetlands with the resultant dredged materials.

Port-owned land is concentrated in the area north and west of Moon Island, and includes a significant portion of the existing and potential industrial land in the estuary (3,500 acres, or +1,413 ha). The Port owns Bowerman Airfield, the Westport Marina and docks, the main deep-draft dock facilities west of Cow Point, and 166 acres (67 ha) of shoreline area directly opposite Cow Point on the south shore of the estuary. The Port has suggested that tidelands under its ownership could be used as sites for disposal of dredged material (a potential capacity of 68 million cubic yards [+52 x 10^6 m^3] of dredged or fill material) resulting from channel excavation and maintenance. Fastlands created from dredged material disposal would then become sites for future industrial expansion.

Forest-Products Industry

Export of logs, lumber, and wood products accounts for approximately 45 percent of the throughput of the forest products industry. Approximately one-half of the logs processed in or exported from Grays Harbor are harvested in Grays Harbor County, and the other half are harvested in adjacent Jefferson and Pacific Counties. The proximity of deepwater facilities to forest supplies and forest-product industrial sites minimizes land transportation costs of exported forest products. These lower costs partially account for the large volume of forest products exported from Grays Harbor relative to other Pacific Northwest ports. Other factors affecting shipping costs are economies of scale, tidal delay, and nighttime delay. Comparative studies of costs integrating these factors indicate that it is cheaper to ship logs from Grays Harbor to primary Asian markets than from Tacoma or Longview, Washington. Also, Grays Harbor is approximately 12 hours sailing time closer to Japan than Puget Sound ports (USACOE, 1976 b).

Development interests feel that significant economies of scale would result from utilizing larger, more efficient vessels. Vessels ranging in size from 15,000 to 30,000 deadweight tons (DWT), drawing

up to 34 feet (10.2 m) of water when laden, commonly use the navigation channel at present. Construction of new vessels for trading along the Pacific Rim will include ships exceeding 40,000 DWT. The factor limiting the use of such vessels and exploitation of potential shipping economics in Grays Harbor is channel depth.

The Corps of Engineers maintains a year-round authorized channel depth of 30 feet (9 m) below MLLW. In addition, five feet (1.5 m) of advanced maintenance, and dredging to two feet (.6 m) of over-depth in specific locations, is provided for in the present authorized channel project. Thus, the channel varies in depth from 30 to 37 feet (9 to 11.1 m), depending on the time elapsed since the previous maintenance dredging and the reach of the channel in question. Vessels with drafts exceeding the authorized channel depth (which also depends on the maintenance schedule and the particular channel reach) must rely on favorable plus tides and weather conditions to navigate the channel safely. Costs increases due to tidal delays are very high for vessels requiring tides greater than plus eight feet (2.4 m). Thus, ships with laden drafts greater than thirty-six to thirty-eight feet (10.8 to 11.4 m) would not be expected to call at Grays Harbor or would not be capable of receiving capacity cargoes.

As the timber export volume leader in the region, and as a development agency, the Port of Grays Harbor is a principal advocate of the proposed widened and deepened channel. The Port seeks channel improvements to accommodate vessels of about 35,000 DWT, which draw in excess of thirty-four feet (10.2 m) of water when laden. Advocates of channel widening and deepening assert that the capability of receiving larger vessels in Grays Harbor would allow the region to more effectively compete in world wood trade. While the improved channel may allow Grays Harbor to retain its present locational advantage in international trade and enable newer, larger ships to use the estuary, it is not certain whether realized economies of scale would increase the volume of forest products exported from Grays Harbor because of other factors, such as competition with nearby ports.

A secondary benefit expected from the proposed channel project is reduction of regional unemployment and creation of new employment opportunities from increased and diversified industrial and commercial activity. Employment opportunities for the forest-products industry were included in an environmental impact statement prepared in 1976 by the COE (USACOE, 1976 c) for a tideflat and marshland fill proposal in the inner harbor. The EIS stated that, although lumber exports have increased somewhat in recent years and the wood-products industry has expanded and diversified, the relative level of regional employment provided by such industry has remained nearly constant. Moreover, the U. S. Forest Service estimated that future employment levels for timber-related jobs would decrease 33 percent by the year 2020 (USFWS, 1975 d). Employment in lumber and wood-products industries accounts for most of the projected decrease, as modern capital-intensive plants replace older labor-intensive facilities. Employment in the pulp and paper industry is expected to increase slightly or remain constant, depending upon national economic conditions (USACOE, 1976 b).

Although employment in the forest industry may decline in the long term, forest products will continue to be the most significant sector of the regional economy in the immediate future. The existing labor force already has the relevant skills, transportation linkages are already in place, and the surrounding watershed will be able to supply the needed raw materials for some time.

In preparing the 1979 edition of the Grays Harbor Overall Economic Development Plan, the Grays Harbor Regional Planning Commission highlighted the potential economic benefits stemming from construction of a wider and deeper channel, noting further that environmental questions relating to the protection of wetlands must be resolved (GHRPC, 1979). The need for water access and the manner in which the current infrastructure is developed, suggest that significant industrial site development can only occur near the estuary where wetland protection issues will be a significant factor in obtaining the necessary government approvals for development.

Commercial Fishing

The compatibility of commercial fishing with upland forestry, wood processing, and dredging practices, all of which affect water quality, has long been an issue in the estuary. Observers generally agree that the water quality in Grays Harbor is improving, following a history of poor conditions, and will continue to improve as industrial and municipal dischargers in the estuary upgrade waste treatment facilities. Nonetheless, major conflicts with fishery interests could be expected from continued filling of aquatic and wetland habitats and disturbances due to the introduction of waste materials into the aquatic environment from industries along the margins of the estuary. Expansion of the infrastructure of the fishing industry itself is not expected to result in significantly increased shoreline development.

As a source of economic stability in the region, commercial fishing and fish processing may not have broad potential. For example, it has been estimated that a 14 percent expansion of commercial fishing activity would be needed to match the more pervasive economic effects (e.g., value of labor and proprietor income) of a one percent increase in industrial manufacturing capacity in the county (Montagne-Bierly, 1977 b). Although there is much speculation concerning expanded offshore fishing activity resulting from establishment of the 200-mile Fishery Conservation Zone, significant expansion would be necessary to liberally influence the regional economy.

Tourism and Recreation

Tourism and resource-based recreation are rapidly gaining importance in the regional economy. Revenue derived from sport fishing and hunting is great and may be equalled or surpassed by other revenue derived from nonconsumptive recreational activities. Recreational uses require public access to estuarine shorelines in the form of boat docks and launch sites and, in the case of nonconsumptive activities, such as birdwatching, conserved habitat areas are necessary. The estuary includes three refuges--Oyhut, located east of Point Brown, and the Johns River and Humptulips River Game Ranges at the mouths of those rivers. The total area of these refuges is approximately 2,200 acres (890 ha).

Tourism in Grays Harbor may also take the form of resort development, as has occurred in Ocean Shores and Westport. Such development on privately owned upland and shore areas could result in higher residential densities and a greater demand for water and sewage services. Although the tourist industry has potential for diversification, it is characterized by seasonality, high demand for public services, and generally low wages. Further, although increased tourism brings economic benefits to the region, it may also adversely affect or exacerbate the existing strain on county facilities services and transportation routes (GHRPC, 1979).

3 IMPETUS FOR TASK FORCE FORMATION

A number of factors provided the impetus for the development of an estuary-wide management plan in Grays Harbor. First of all, the geographic, socioeconomic, and governmental characteristics of Grays Harbor made it a prime candidate for successful regional planning. Secondly, Grays Harbor already had a tradition of interagency planning before the Task Force was formed. Thirdly, the navigation channel maintenance project and the potential channel improvement project result in dredged materials that could be used as free fill material to create usable development land in wetland and intertidal areas. The Port of Grays Harbor, in particular, wanted a plan that would specify sites to receive dredged material. Finally, the existing estuary management framework was inadequate and a great deal of frustration was engendered by attempts to manage development and conservation in the estuary using the existing procedures. Several key disputes erupted as a result of this inadequacy and served as catalysts to plan development. The following discussion examines in more detail these four factors which gave impetus to the planning effort.

Regional Homogeneity Conducive to Planning

The geographic, socioeconomic, and governmental characteristics of Grays Harbor predispose it to successful regional planning. Although there are numberous cities and towns with special interests, there is considerable homogeneity in the region, which distinguishes it from a number of other areas facing similar management problems. The entire estuary lies within a single county; there is only one port district, and its jurisdiction is countywide; and the regional economy is predominantly dependent on a single resource--timber. As stated in chapter 2, about 90 percent of the land in the county is committed to timber-related industries. Also, the Port of Grays Harbor uses its shipping facilities almost exclusively for the export of timber-related products.

This homogeneity should simplify comprehensive regional planning. Fewer actors are involved, and there is no competition among different port authorities or multiple county governments, as is the case in many other estuarine regions. For example, San Franscisco Bay and Puget Sound contain numerous cities, counties, and port authorities, and support a highly diverse set of uses. Estuary planning in these areas would be significantly more complex than in Grays Harbor.

Interagency Planning Tradition

Regional interagency planning activities are not new to Grays Harbor. Regional planning has been conducted under the auspices of the Grays Harbor Regional Planning Commission (GHRPC) and the Army Corps of Engineers (COE). Because of the frequent use of interagency planning in the last two decades, a tradition had developed which was followed when a new set of problems arose in the estuary in 1974 and 1975.

The GHRPC was formed in 1960 as a result of the Washington State Planning Enabling Act (RCW 36.80). The Commission is funded from state and federal sources and functions as a clearinghouse for social, economic, and environmental information. The GHRPC uses this information to facilitate a regional approach to water supply, solid-waste management, transportation, comprehensive zoning, and economic development in general. Although the GHRPC has no official authority

to make development decisions, it has demonstrated its ability to influence county and municipal policies and decision making through data organization and directed studies.

In the early 1960s, Grays Harbor County became the first county in the state to formulate a countywide comprehensive zoning plan. The GHRPC played a primary role in establishing this plan and provided support for municipally generated zoning ordinances. Also beginning in the 1960s, the GHRPC initiated a series of Overall Economic Development Program publications as an element of regional comprehensive planning. The fifth edition was completed in June 1979 (GHRPC, 1979). Supported by federal redevelopment funds, each edition functions as a review of current regional economic conditions and focuses on the formulation of particular development goals intended to further economic diversification, resource development, and environmental improvement. An economic development committee, with regional membership, guides the creation of economic development goals and objectives.

In the early 1970s, the GHRPC took the initiative to develop the first county-wide Shoreline Master Program (SMP) in the state. The SMP was developed with the cooperation of local governments in the region, who subsequently used the county's plan as a model in the development of city SMP's.

The COE has been a primary influence in the development of Grays Harbor, and was an early advocate of interagency environmental planning for the estuary. Beginning in the late 1960s and increasing in intensity in the early 1970s, uncertainty over the environmental effects of maintenance dredging and the disposal of dredged material in Grays Harbor developed among public groups and resource management agencies.

The first overture for interagency collaboration in the COE's long-range maintenance dredging planning program came in 1968. In addition to the COE as project sponsor, participating agencies were: the U. S. Fish and Wildlife Service (USFWS); Bureau of Commercial Fisheries (predecessor of the National Marine Fisheries Service); Federal Water Pollution Control Administration (predecessor of the Environmental Protection Agency); Washington State Departments of Fisheries, Game, and Natural Resources; and the Washington Water Pollution Control Commission (predecessor of the Department of Ecology). The product of this mutual planning effort was an agreement stipulating the scheduling of dredging in the upper harbor to avoid seasonal low river flow conditions when dredging would cause water quality degradation.

In 1972, with the strong support of the state, the COE gathered a similar cast of participants to plan the conduct of maintenance dredging in the estuary. The federal agencies reached an agreement but, in recognition of recent federal and state legislation increasing the role of state and local governments in shoreline planning and developments, they decided to include these entities in the long-range planning program. In June 1973, a conference of federal, state, and local representatives revealed significant questions and different points of view about the development requirements of the Grays Harbor region and the future health of estuarine resources. Pending resolution of these differences, the federal agency agreement was accepted as an interim program by state and local entities. A technical study was instituted to produce an adequate environmental data base for effective long-range planning.

When the technical study was completed early in 1977, the COE asked federal and state resource management agencies, the Port of Grays Harbor, and the GHRPC to participate in formulating an

estuary-wide, aquatic-area dredging plan. As explicitly stated at the outset, planning was to be within the framework of existing federal, state, and local policies, laws, and regulations. Particular emphasis was placed on integrating guidelines controlling dredge and fill activities with state and local shoreline-use laws and programs (Weinmann & Malek, 1978). Although a long-range plan has not yet been published or submitted for general public review, the program proposes a flexible system for mutual decision making among regulatory, management, and development entities. Thus, the COE played an important role in establishing interagency collaboration as a workable planning format in Grays Harbor.

Opportunity to Specify Fill Sites

In 1971, the Washington State Shoreline Management Act (SMA) required local governments to create Shoreline Master Programs (see appendix). In the Grays Harbor County SMP, 2,100 acres (840 ha) of Port-owned tidelands and wetlands are specifically designated as conservancy areas. This designation would prevent these wetlands from being filled and thus preclude industrial and commercial development. Why this program, which severely limits development, was approved by the state without Port objection cannot be fully answered. The program may have been approved because (1) it was the first local program in the state scheduled to receive approval by the Washington Department of Ecology (WDOE), and thus a certain degree of inexperience prevailed; and (2) the conservancy designation was, under certain conditions, allowed to accommodate some kinds of development.

It may be that Port officials did not strenuously object to the restrictive plan because they were confident that, with Congressional approval of the improved navigation channel, conditional approval of filling and developing the tidelands could be obtained. The Port is responsible for providing disposal sites to receive volumes of dredged material resulting from maintenance of the present channel project. Based on its comprehensive plan (see p.10), the Port could present a well-substantiated case for creating industrial and commercial development sites. Such development would provide the local economy with a needed boost, and thus the local and state political pressures would seemingly be directed to grant conditional approval for filling the tidelands.

The combination of the Port's responsibility for providing dredged material sites, the annual availability of dredged material, the scarcity of usable flat land surrounding the estuary, and the fact that the Port owns a great deal of potentially usable tideland served as strong stimuli for active Port support for development of an estuary-wide comprehensive plan. Such a plan could predesignate sites to receive fill for creation of industrial sites, and the Port could be assured that filling of at least some of its tideland holdings would be allowed.

Inadequacy of Existing Management Framework

As shown above, Grays Harbor has had an extensive planning and management framework for some years. A detailed discussion of the existing local and state coastal management programs, state environmental legislation and regulatory agencies, and federal environmental legislation and implementing agencies is provided in the appendix. This complex web of decision-making authorities, with overlapping project review responsibilities and sometimes conflicting review standards, created an atmosphere of confusion and frustration in

Grays Harbor prior to the initiation of the Grays Harbor Estuary Management Program and was a primary impetus for the formation of the Task Force.

Resource management and protection agencies, such as the state and federal agencies responsible for fish and game, play a primary role in review of development proposals. These agencies exercise permit review powers over development proposals to ensure the long-term environmental health of the estuary. Although these agencies often articulated contrasting perspectives and cited differing legislative mandates, they were in general agreement that (1) ecological and resource values must be preserved and protected for the future; (2) the amount of development the estuary could absorb while retaining its environmental viability is unknown, but limited; and (3) case-by-case permit review results in uncertainty over the cumulative effect of development and risks piecemeal disruption of estuarine resource properties. Technically, it is difficult for resource management personnel to document the ecological importance of the loss of a particular expanse of salt marsh at a particular point in time. Yet, their knowledge of estuarine ecology and their observations of changes over time in the estuary led them to conclude that incremental shoreline development activities were leading to significant adverse environmental effects in Grays Harbor.

Economic interests in the estuary want timely and predictable responses from government agencies to project proposals. Aquatic and wetland areas owned by development interests are valuable industrial and commercial property. Without the addition of fill or elevation of aquatic margins to upland grades, tideland owners may not obtain the full commerical value of their property. Whenever resource agencies impose limitations on the use of private land, and these limitations are unaccompanied by specific, technical criteria and are supported only as a protection of valuable natural resources, frustrated opposition ensues. Resource agencies maintain that the benefits from preservation and conservation are in the long-term public interest. In contrast, development interests maintain that the cost is not borne by the public when aquatic areas and tidelands cannot be developed. In effect, advocates of economic development agree that adhering to agency restrictions leaves them with an uncertain future, property with decreased commercial value, and violated personal property rights.

Local governments in Grays Harbor, although not always directly involved as project sponsors, began to feel that state and federal decision-making policies were interfering with their efforts to diversify and stabilize the regional economy. They considered the legislative concepts and administrative frameworks required by state and federal law to be time consuming and cumbersome. Private interests and local governments felt that their efforts as advocates of regional benefit through the use of estuarine resources were being subjected to highly generalized, and often arbitrary, decision criteria for the benefit of state and national interests at the expense of the residents of Grays Harbor.

Given these conflicting interests, disputes over the regional benefits to be gained from industrial development versus the potential environmental disturbance resulting from physical development activities were inevitable. The disputes were intense and resulted in a great deal of tension between development and conservation interests, and among public management agencies with regulatory responsibilities. The cities and the Port were the prime

local actors concerned with the development projects. State agencies involved in the disputes were the Washington Departments of Ecology, Fisheries, Game, and Natural Resources (WDOE, WDF, WDG, and WDNR), and the federal agencies involved were the COE, the Environmental Protection Agency(EPA), the U. S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS). Several key disputes are presented here to illustrate the conflict and the frustrating process of project review.

Key Disputes in Grays Harbor

Three key disputes between development interests and resource management and protection agencies in Grays Harbor were sufficient to catalyze demands for comprehensive environmental planning in the estuary. The first example demonstrates local and state coordination difficulties, while the latter two instances illustrate the interaction of development interests with all levels of government with decision-making authority in Grays Harbor.

Thunderbird Motel proposal The City of Aberdeen submitted a draft SMP to the Washington Department of Ecology (WDOE) in June 1974. WDOE had not evaluated or approved Aberdeen's SMP when the city received and approved a substantial development permit application for construction of a Thunderbird motel, restaurant, and marina complex along 1,200 feet (372 m) of shoreline near the confluence of the Chehalis and Wishkah Rivers in the eastern reaches of Grays Harbor (see fig. 2). Aberdeen determined that the project proposal, situated on a vacant site formerly occupied by a wood-products

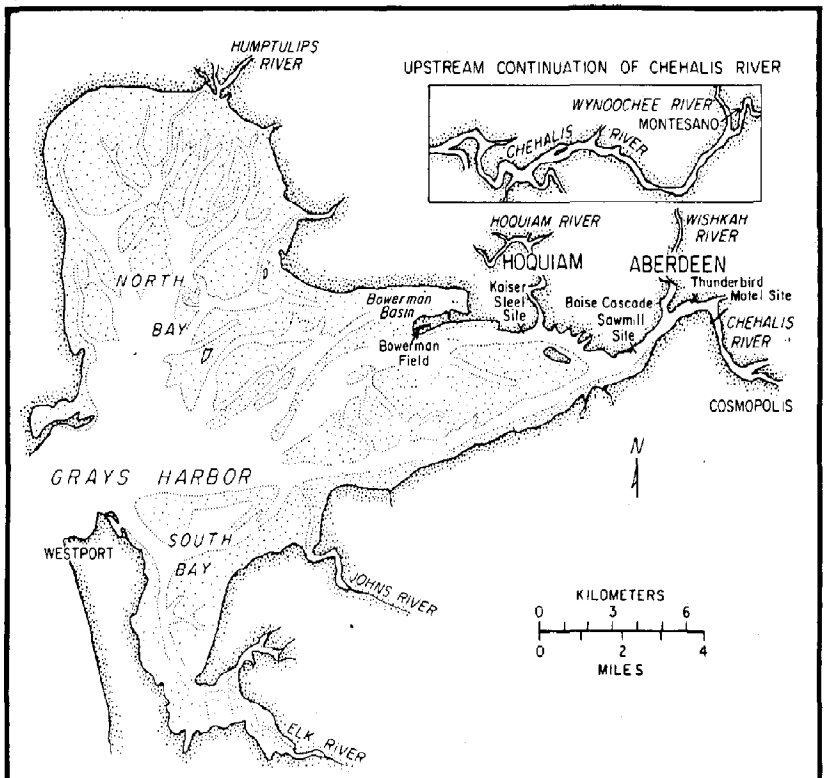

Figure 2 Sites of key permit-issue disputes.

facility and owned by the Port of Grays Harbor, was a reasonable and appropriate use and that project plans would generally enhance the area and benefit the public. The site was designated as "urban" in Aberdeen's draft SMP and adjoined an upland area zoned "commercial," which permitted commercial and light industrial activities.

In accordance with the SMA, the approved substantial development permit was forwarded to WDOE for review. WDOE did not concur with local approval, noting that the proposal was not in consonance with sections of Aberdeen's draft SMP dealing with restoration, public access, and development policies relating to water dependency. Further, WDOE determined that, in compliance with the provisions of the State Environmental Protection Act (SEPA), an environmental impact statement must accompany the proposal. Neither Aberdeen nor the project sponsor had prepared an EIS or the alternative, a statement of negative impact.

After WDOE rejected the proposal, development sponsors appealed to the judgement of the Shoreline Hearings Board (SHB #162, 1978). The state board concluded that the appellants did not comply with the SEPA guidelines and that this alone mandated WDOE's remand of the matter for reevaluation. The board made additional comments, noting that (1) although the project generally incorporated the provisions of the SMA regarding substantial development permits, the proposal did not closely follow the development policies stated in Aberdeen's draft SMP; and (2) the draft SMP did not appear to parallel state policies relating to navigation, commerce, and protection of estuarine resources, especially regarding landfills.

As a result, the project sponsor abandoned the proposal, while Aberdeen voiced irritation that a potential commercial venture and use of privately held land and shoreline had been discouraged by the state. The City of Aberdeen was particularly frustrated because they believed the project had conformed with the draft SMP. A shoreline permit was eventually obtained, although no EIS was prepared. The COE issued the permit over strenuous objections by the environmental community that the use was not water dependent, and that the COE and the permittee refused to mitigate the activity by removing the structure upland to avoid bulkhead filling.

The Aberdeen SMP was finally approved in June 1975 after amendments concerning landfills had been incorporated by the city. WDOE approval was accompanied by comment that the SMP did not squarely address complex issues relating to landfills and the expected uses of filled areas. WDOE referred to the proposed long-range dredging effects study sponsored by the COE as providing future clarification of this issue.

Boise Cascade Corporation sawmill proposal In October 1973, the Boise Cascade Corporation submitted a substantial development permit proposal to the city of Aberdeen. Boise Cascade proposed placing 1,348 feet (414 m) of bulkhead along the northern margin of the Chehalis River opposite the Aberdeen Reach of the main navigation channel (see fig. 2), and filling the bulkhead with wood-waste materials to provide level terrain for log storage and sorting.

Local authorities approved the project proposal. In November, however, WDOE appealed the proposal through its substantial-development review capacity because of potential water-quality impacts from wood-waste leachate. The appeal was based on guidelines restricting placement of wood-waste fill in shoreline areas. The permit was eventually granted by the state in late 1975, after it was

agreed that dredged material from the COE channel maintenance project would be used for the bulkhead fill in place of wood waste.

Obtaining a federal permit decision for the Boise Cascade project proved more difficult, and brought the need for comprehensive planning in the estuary to the attention of the state's two senators. In 1973, EPA had not codified criteria implementing section 404 of the Clean Water Act (CWA). Consequently, EPA centered its opposition to the project on water-quality criteria alone. The EPA was concerned about the long-term effects of wood leachates entering the estuary. However, after the proposed fill material was changed to dredged material, EPA retracted its objections. NMFS conditionally approved the project based on policies for protection of aquatic resources and water-quality guidelines. The remaining federal agency, USFWS, opposed the project due to expected adverse effects on fish and wildlife. USFWS noted specific impacts on (1) juvenile anadromous fish migrating through the proposed project area; (2) juvenile salmonid food supply that would be significantly altered by the fill; (3) shorebird and waterfowl use of the adjacent affected area for feeding and resting; (4) other specific impacts related to the use of wood waste for fill material; and (5) former deposition of wood waste in wetlands and tidelands in the Aberdeen area. Moreover, the USFWS response addressed the need for comprehensive estuarine planning, stating that they:

> . . .urged development of a comprehensive land use plan for this area to identify spoil sites and water oriented industrial needs. Until such a coordinated plan has been developed to establish a requirement for additional waterfront log storage area, we cannot accept the losses that such projects engender for fish and wildlife resources. We thus recommend denial of this permit (USFWS, 1974).

In a letter to the project sponsor, USFWS indicated similar concerns. The agency emphasized that "piecemeal and indiscriminate filling and construction" is chronic in the Grays Harbor region, and reiterated the desire for a comprehensive plan: ". . .we do, and will continue to, recommend that all such projects be denied pending development of a comprehensive plan, or at least until solid progress on a jointly developed plan is evidenced" (USFWS, 1974). Even after the nature of the fill material was changed from wood waste to dredged material, the site was designated for the water-related requirements of a sawmill, and the other involved agencies approved the proposal, USFWS continued to oppose the project.

The City of Aberdeen charged the Department of the Interior and USFWS with placing "a moratorium on development in the City of Aberdeen without consulting the government of Aberdeen and without providing the people of Aberdeen a chance to be heard." Aberdeen considered such action to be "an abuse of governmental power." The response went on to state, "Your objections, without good reason, have had a damaging effect on the economy of Aberdeen when we have 12 percent unemployment" (City of Aberdeen, 1975). Copies of the letter were also sent U. S. Senators H. M. Jackson and W. G. Magnuson.

The USFWS provided detailed responses to inquiries from both senators. They informed Senator Jackson that they had previously communicated their position on tideland filling to the GHRPC, and that USFWS "was not unalterably opposed to the project, but recommended denial of permits for fill projects until such time as a proper comprehensive plan is offered." The agency also took

exception to Aberdeen's charges regarding a moratorium on development:

> This is inaccurate. If our position may be termed a moratorium, it is a short-term moratorium on certain kinds of developments, such as tideland fill for all of Grays Harbor. This is done for the purpose of reaching a jointly determined plan that will accommodate our shared interests in the future management of the estuary (USFWS, 1975 a).

The response to Senator Magnuson was similar, but also stated:

> There is definite need for some kind of balancing action in this area. We realize port areas are primarily industrial zones; but to condone the continued piecemeal filling of valuable littoral areas for nonwater-dependent facilities and the resultant loss of fish and wildlife habitat without guarantee that the more valuable tidal and wetland areas will be preserved. . .is shortsighted and inconsistent (USFWS, 1975 b).

On 4 September 1975, the USFWS, Boise Cascade Corporation, the Port of Grays Harbor, and the GHRPC met in Aberdeen in an attempt to resolve the permit conflict. Boise Cascade indicated serious reservations about continuing the proposed project. On 18 September 1975, USFWS released its objection to the issuance of a COE section 10 permit:

> In the belief that good faith has been shown with respect to prompt action on a memorandum of understanding for joint development of a mutually acceptable comprehensive plan and with the full expectation that the City of Aberdeen and other local governments adjoining Grays Harbor will cooperate to the end that such a plan is developed in conjunction with federal navigation projects, it is our intention to withdraw our objections to issuance of the Boise Cascade Corporation permit (USFWS, 1975).

The agency stated, however, that it would object to any future filling activity involving wetland areas where a federal permit was required unless USFWS and appropriate local governments signed a memorandum of understanding relating to development of a comprehensive plan. The permit was finally issued after significant political intervention and a delay of nearly two years.

Kaiser Steel Corporation industrial facility proposal Perhaps the most pivotal dispute over estuarine resource use in recent years began with a permit application published by the COE on 31 March, 1975. An area at the mouth of the Hoquiam River (see fig. 2) had been obtained by the Port of Grays Harbor in 1963 as an industrial development district and was zoned "industrial" in the City of Hoquiam's comprehensive land-use plan. Hoquiam's SMP classified the site as "urban development." Therefore, local interests considered industrial use of the plot appropriate. The 44.5 acre (18 ha) site included approximately 25 acres (10 ha) of sedge-marsh habitat and 13.8 acres (5.6 ha) of tidelands (the remaining 5.5 acres [2.2 ha] was of upland grade), thus requiring the issuance of a combined federal permit to satisy section 10 of the Rivers and Harbors Act and section 404 of the Clean Water Act. An impervious dike, enclosing 3,355 feet (1,023 m) of shoreline, was included in the project proposal, with a total of 456,000 cubic yards (351,000 m^3) of fill material required to raise the grade of the entire site above the 100-year flood plain.

The Port of Grays Harbor, as project sponsor, stated that the fill was for log and lumber sorting and storage yards. Federal agencies responded as required by law. However, there was considerably more weight to certain review statements than in the past, particularly those of EPA. That agency had recently published proposed guidelines for implementation of section 404 (b) of the CWA. The guidelines emphasized project alternatives, and EPA stated that destruction of tidelands and associated wetlands warranted a critical evaluation of all reasonable alternatives to the fill of estuarine margins. EPA also expressed concerns about potential water-quality impacts of the proposed project; the fill material was to come from a submerged borrow site, thus increasing the likelihood of adverse affects on aquatic systems. EPA therefore recommended that the permit be denied.

The USFWS responded in depth to the Port's proposal, relating a list of project-linked impacts and the absence of comprehensive estuary planning necessary to avoid regional cumulative environmental disruption. The response reiterated the now-familiar position of USFWS:

> Past piecemeal development along the channel has decimated fish and wildlife habitat and drastically limited public access and fish and wildlife related uses. This is essentially the last remaining area that has the potential for becoming a waterfront park, providing public access to the waterfront, or being dedicated as open space. We believe the failure to consider this location for such uses is shortsighted and does not constitute waterfront planning in a comprehensive and coordinated manner (USFWS, 1975 c).

USFWS also stated that the use planned for the fill area was inappropriate because it was non-water dependent, and that alternative log storage sites existed elsewhere. USFWS requested that the permit be denied, and further stated that:

> . . . we have not abandoned our original objectives that there be coordinated and comprehensive site specific planning for the Grays Harbor estuary, its shorelines and wise waterfront utilization. We remain available. . .(USFWS, 1975 c).

NMFS objected to the permit, concurring with EPA that adverse water-quality impacts would significantly affect aquatic resources.

After all federal agencies recorded opposition to the proposed log storage and sorting project, events took an unexpected turn. On 24 June 1975, the EPA received a letter from Senator Jackson stating, "I have learned that the land in question, for which a permit must be obtained from the Corps of Engineers, is intended to be used by a firm which constructs equipment designed to increase energy production in this country" (Jackson, 1975). Apparently the Port had confidential development plans for the site. Specifically, the Port had been privately negotiating with Kaiser Steel Corporation for an energy-related industrial facility.

On 17 July 1975, EPA and USFWS personnel met with Port of Grays Harbor officials and were informed that on 22 July 1975, a lease option for the site would be signed with Kaiser Steel Corporation. This firm, it was revealed, would manufacture and assemble off-shore drilling platforms for exploration and exploitation of oil and natural gas deposits on the continental shelf of North America.

On 17 September 1975, the Port made appropriate revisions to the SMA permit application reflecting the proposed Kaiser Steel facility and identifying Kaiser as a project co-sponsor. The use change from log sorting and storage to the fabrication of off-shore drilling

equipment also necessitated a revised COE permit application and thus reevaluation by all agencies.

In September 1975, EPA's proposed interim final section 404 guidelines were promulgated, and construction of the Kaiser Steel facility appeared to meet the agency's criteria. The Port and Kaiser Steel, however, had not yet finalized a lease agreement. As previously noted, many of EPA's original water-quality concerns with this project were due to the source of the proposed fill material. To overcome this objection to the project, the Port, Kaiser Steel, and the COE initiated discussions to coordinate the spring 1976 maintenance dredging schedule with the filling of the Kaiser Steel and Boise Cascade sites so that dredged material could be used for fill. EPA recognized the adverse water-quality impacts caused by filling the wetland area, but noted that impacts would be minimized if dredged material were used. As the project would aid energy production and was considered to be in the national interest, and since it appeared to conform to their criteria for dredging and filling, EPA responded on 14 October 1975:

> If this agency withholds permit approval pending an actual Port of Grays Harbor and Kaiser Steel Corporation use agreement, the time needed for filling the site for this use may expire. The Port and the Aberdeen-Hoquiam area may lose this needed industry and employment. We will not, for this reason, hold up the issuance of the permit for the agreement (EPA, 1975).

As noted earlier, Kaiser Steel had merely committed to a lease option on the property. Concurrently, the availability of off-shore oil leases in the Gulf of Alaska became uncertain due to conflicts surrounding secondary impacts of oil development on coastal communities in Southeast Alaska. Furthermore, additional delay of the Kaiser Steel project seemed unavoidable since the COE had determined that a federal EIS would be required. EPA foresaw these potential problems and surmised that Kaiser Steel would probably never use the site. Therefore, EPA conditioned its response, citing 404 implementation guidelines, to require future dedication of the site for water-dependent use regardless of the ultimate occupant.

In an eleventh-hour effort to salvage the fill proposal and to retain Kaiser Steel as a lessee for its site, the Port of Grays Harbor formulated Resolution No. 1673 on 9 December 1975, (Port of G. H., 1975; USACOE, 1976 b & c). This resolution officially ". . .dedicates and pledges the use of this industrial site by water-dependent activities only, and be it further resolved, the Port of Grays Harbor pledges its continued cooperation in developing a comprehensive plan for the Grays Harbor estuary. . ." With the signing of this resolution, the remaining federal agencies conceded to the issuance of the COE permit.

The filled area west of the mouth of the Hoquiam River is vacant at present, since Kaiser Steel and the Port did not complete the final lease agreements. Development of off-shore oil resources in Alaska has not proceeded as rapidly as initially expected. Commercially developable oil reserves have not been discovered on the leased tracts. Off-shore oil and gas drilling equipment probably will be fabricated and assembled elsewhere. The vacant site remains controversial, however. The area is stabilized fastland and is available for use. Resource agencies hold that, if there is a pressing need for industrial development sites, as local interests and the Port assert, the site would be occupied at this time.

Decision-Making Problems at the Local Level

The three key disputes discussed above reflect general decision-making problems. One of these general problems centers on uncertainties in implementation of the SMA at the local level. Since the inception of the SMA in 1972, WDOE has reviewed all substantial shoreline development applications in the estuary (see appendix). WDOE records for the years 1972 to 1975 indicate that an overwhelming majority of project proposals were situated in the inner harbor area, thus requiring initial review by Grays Harbor County and the cities of Aberdeen and Hoquiam. Although the county SMP was first approved by the state in June 1974, WDOE reevaluated the program in September of that year. The state determined that the county SMP allowed "indiscriminate use of fill for all types of activities" and, as a result, was inconsistent with SMA implementation guidelines (WDOE, 1974). WDOE requested that Grays Harbor County amend and rewrite portions of the program such that "regulations for landfills and bulkheads. . . favor shoreline-dependent uses." The county SMP was not officially approved until July 1978 after specific WDOE suggestions had been incorporated. The Aberdeen SMP was finalized in June 1975, but, as noted above, it contained fundamental inconsistencies with state water-dependency policy guidelines. Hoquiam's SMP was accepted by WDOE in April 1976.

Thus, estuarine resource-use disputes, preceding the agreement to enter into collaborative planning, had generally occurred in the absence of officially approved SMP's. A formalized coastal zone decision framework, as mandated by the state SMA and the federal CZMA, was not in place in Grays Harbor from 1972 to 1975, the period in which the three disputes discussed above created a common impetus for collaborative planning. During this three-year period, approximately fifty-five substantial development permits were administered by Aberdeen, Hoquiam, and the County. All of these were followed by state review. Of this total, only six projects were remanded by WDOE for reevaluation by local government. Five of the permit applications returned to local administrators for additional analysis were appealed to the Shorelines Hearing Board, including the three disputes described above. Although local SMP's were not functioning as formal devices for implementation of shoreline management in the estuary, only a small portion of project proposals were appealed to the Shorelines Hearing Board.

State criticism of local permits decisions centered on fill proposals, water-dependency criteria, and state environmental policy. As the local SMP's were installed, conflict in Grays Harbor was not being ameliorated. Furthermore, those involved in the use and permitting conflicts apparently did not expect the situation to improve with the forthcoming federal approval of the state Coastal Zone Management Program (CZMP) in June 1976.

Decision-Making Problems at the State and Federal Levels

At the state level, four agencies -- WDOE, WDF, WDG, and WDNR -- are important participants in estuarine resource-use determinations in Grays Harbor. Each has authority over aspects of shoreline and aquatic resource regulation and management, but their individual approaches differ. These four agencies also have differing sources of decision-making authority (see appendix). Authority for water-quality control has been delegated by the federal government to the WDOE under section 402 of the CWA. Both WDF and WDG are responsible for management of living aquatic resources, but have no specifically mandated authority

to protect estuarine shoreline or aquatic-area habitat, except in issuing a Hydraulics Project Plan Approval. However, both WDF and WDG have expanded their role in affecting the use of wetland and aquatic resources because they can influence the federal permit process (to be discussed below). WDNR, as a manager of state lands in the public interest, has established policies and guidelines for the management of state-owned aquatic areas. WDNR use policies address navigation and commerce; public use; food, mineral, and chemical production; uses of aquatic areas by abutting land owners; and revenue production.

Differing sources of decision-making responsibility and diverse approaches to management of specific estuarine resources make for potentially fragmented review of project proposals by state agencies. For example, WDOE may respond to a particular proposal by noting water quality concerns. WDF, with primary interests in the direct use of aquatic areas by fish and shellfish, might agree with WDOE, especially if no irreversible loss to benthic or intertidal habitat is foreseen. WDG views development on estuarine margins in a different manner. If the proposed project would affect estuarine wetlands or marsh areas, WDG might resist project approval owing to its more broadly based objectives, which include habitat maintenance. WDNR's position might support approval or denial, depending on the proposed project's proximity to established harbor lines or state owned tidelands or the perceived need for upland access. Thus, agencies responding to different aspects of a proposal, with potentially contrasting criteria and objectives, may not only confuse the project sponsor, but generate concern among the agencies themselves over the state's overall ability to manage estuarine resources for the long-term public benefit and protection of the estuary's viability.

The federal resource agencies have perspectives similar to those of state agencies with authority over the same resources. USFWS, like WDG, has a primary interest in wildlife and its habitat; NMFS, like WDF, has a primary interest in fish and shellfish; and EPA, like WDOE, is primarily concerned with water quality in the estuary. Also like the state agencies, the federal agencies' fundamental concern is for the adverse environmental effects of filling estuarine tidelands and wetlands.

At the federal level, the COE, EPA, USFWS, and NMFS share responsibility for review of proposed estuarine development projects. While the COE actually issues section 10 and section 404 permits, in the latter case they must apply criteria developed by EPA, and specific COE decisions can be vetoed by EPA. Moreover, the authority of both these federal entities is subject to review and evaluation by other federal and state resource agencies, stemming from the broad requirements for decision making set forth in the Fish and Wildlife Coordination Act (FWCA) and the National Environmental Policy Act (NEPA). Thus, USFWS, NMFS, and concerned state resource agencies provide comment and can influence section 10/404 determinations. In theory, this multiagency review should result in a comprehensive analysis and decision, since COE expertise lies chiefly in section 10 matters, USFWS and NMFS have extensive experience in management of specific aquatic resources and wetland habitats, and EPA concentrates on water quality. However, fragmented decision making may also result.

Another potential problem area in federal agency decision making concerns the alternatives analysis required under NEPA, CWA, and FWCA. In particular, analysis of alternatives to wetland fill is central to the joint EPA/COE guidelines to implement section 404 of the CWA. Alternatives must be determined for each proposed shoreline or aquatic-area project, with analysis and evaluation dependent upon

the specific nature of the proposed activity as it relates to wetland resources. The various federal agencies may differ in their evaluation of the proposed alternatives. Thus, although the proposed joint 404 guidelines establish agency responsibilities for review of the specific environmental effects expected from development proposals, the agencies could still differ among themselves on the preferred outcome.

Given all these difficulties in coordinating local, state, and federal decision making, case-specific disputes similar to those over the Thunderbird Motel, Boise-Cascade, and Kaiser Steel proposals were expected to continue and increase in frequency. All interests and actors were dissatisfied. Dredging and filling activities were likely to be continuous and the decision-making system offered little relief to developers or resource agencies. By the mid-1970's, all parties were, therefore, ready to participate in a Grays Harbor Estuary Management Program.

4 TASK FORCE ORGANIZATION AND PROCEDURES

Formation of the Task Force

Frustration with the existing management framework in Grays Harbor increased throughout the early 1970's. All the parties involved in permit-issue disputes felt that either the methods of making decisions and/or the results were unsatisfactory. Development sponsors protested that, even though many of their projects proposals were ultimately approved as permitted shoreline uses, the complex decision-making process caused excessive and expensive delays. Resource management and regulatory entities felt the project-by-project control of shoreline development was heavily influenced by pragmatic economic considerations and political pressures that were inconsistent with their environmental mandates.

By the fall of 1975, development interests and regulatory agencies had reached an impasse, and both considered collaborative planning as a means of reducing the persistent difficulties being encountered. All groups concerned with resource use or protection felt they would benefit from planning for the future development of the estuary. In particular, the Port of Grays Harbor, the U. S. Fish and Wildlife Service (USFWS), and the National Marine Fisheries Service (NMFS) advocated collaborative estuarine planning as a mechanism for establishing a clear framework of mutual policies for the use and conservation of shorelines and aquatic areas. Although interest groups had contrasting individual objectives, they all agreed that cooperative planning would be a means of reducing future resource-use conflicts. All groups hoped that an estuary-wide plan could combine everyone's needs and would allow improved economic development opportunities and the allocation and protection of valuable resources.

The information on the formation and procedures of the Grays Harbor Estuary Planning Task Force presented in this chapter was gathered from interviews, minutes of initial Task Force meetings, and correspondence in the files of Task Force participants.

The need for a comprehensive estuary plan was formally recognized in the Port of Grays Harbor Resolution Number 1673, dated 9 December 1975. In this resolution, the Port of Grays Harbor also pledged to use the Kaiser Steel industrial site for water-dependent activities only. The resolution recognized that federal resource and regulatory agencies shared legitimate interests with local and state governments, and that these interests could be served by a comprehensive plan for future development activities in and around the Grays Harbor estuary. The Port of Grays Harbor pledged its support in the resolution for developing such a plan through a memorandum of understanding and coordination with other local, state, and federal entities.

In February 1976, the Grays Harbor Regional Planning Commission (GHRPC), acting as the local coordinating and organizing agency, sent letters to the various agencies and local governments that had been involved in the many administrative and natural-resource-use problems in the estuary, informing them that an estuary planning program was being initiated. Representatives of each of the local municipalities, the Port authority, the state and federal resource agencies, and the Corps of Engineers were requested to participate on the Grays Harbor Estuary Planning Task Force. The GHRPC was to act as the coordinating and facilitating agency and therefore was not officially represented on the Task Force (See p. 46 on Task Force membership and the importance of including all parties).

This initial overture occurred prior to approval of Washington State's Coastal Zone Management Program (CZMP) by the Secretary of

Commerce and the Office of Coastal Zone Management (OCZM). Acceptance of the state program was expected to increase the possibility of federal financial support of a comprehensive planning effort at the local level. In anticipation of receiving federal funding, the GHRPC presented prospective Task Force members with three alternatives for developing an estuary plan: (1) preparation of an estuary management plan by the Task Force with the effort coordinated and assisted by a consulting firm; (2) expansion of the GHRPC staff to work with the Task Force in formulating a comprehensive plan over a period of twelve to eighteen months; and, (3) maintainence of the GHRPC staff at its existing level and reliance on staff assistance loaned from participating agencies (GHRPC, 1976). The GHRPC also distributed a draft grant proposal outlining the need for estuary planning in Grays Harbor and requesting planning funds under the provisions of section 306 of the Coastal Zone Management Act (CZMA).

Two Task Force organizational meetings occurred in April 1976. Participants determined that the funding application should be made to the Washington Department of Ecology (WDOE) and the federal OCZM and that funds should be requested to retain a consultant to assist the Task Force. The Task Force solicited proposals from environmental consulting firms in May 1976. Federal approval of the Washington CZMP came in June 1976 and the Estuary Planning Task Force was officially established with CZMA funding provided through WDOE and the GHRPC in September of that year.

During the first Task Force session, the NMFS representative related his agency's experience on an interagency task force that developed the Lower Willamette River Management Plan (LWRMP). The LWRMP was sponsored by the Oregon State Land Board and provided a framework to manage shoreline resource use along the Willamette River in the Portland area. Task Force members were impressed by the plan. The GHRPC director, who later became the planner for the Port of Grays Harbor and its representative to the Task Force, also knew of the LWRMP effort and worked to stimulate local interest in a similar plan for the Grays Harbor Estuary (Walters interview, 1978; Lattin interview, 1978). In the fall of 1976, the Task Force selected the firms of Montagne-Bierly Associates and Wilsey and Ham from three candidate firms to assist with development of a Grays Harbor Estuary Management Plan. Montagne-Bierly was chosen primarily because of the experience of its president as the State of Oregon official in charge of developing the LWRMP.

Task Force Planning Methodology

The Task Force and the consultants agreed on a traditional planning methodology of inventory, analysis, synthesis, and evaluation-decision making. They decided on a format consisting of five steps:

Step 1. Collection and analysis of information describing the physical, biological, economic, and social characteristics of the estuary

Step 2. Development of estuarine management policies based on data from Step 1; preparation of a first draft of the Grays Harbor Estuary Management Plan

Step 3. Review of the Draft Plan by the agencies and jurisdictions represented on the Task Force and by the public

Step 4. Two-day Task Force workshop to reach agreements on final changes to the Draft Plan

Step 5. Formal process of review and adoption of the final Draft Plan by local governments and state and federal agencies

The primary planning effort in Steps 1 and 2, is discussed in this chapter and will be used as critical background information for understanding the dynamics of the Task Force effort in subsequent steps.

Step 1: Compilation of Technical Information

The consultants played a primary role in the initial portion of the planning process because they accepted responsibility for gathering basic inventory data and information for the Task Force. The consultants were assisted by a team of technical experts drawn from industry and local, state, and federal agencies. Team members represented a variety of disciplines, including economics, forestry, planning, engineering, and biological sciences. An effort was made to enlist the technical expertise of people living and working in Grays Harbor. Three subject areas became the focus of the information-gathering activities.

First, the physical and biological features of the estuary, including regional geology and soils, hydrology, hydraulics, sediments, and water quality, were described. The technical team used the extensive base of information generated by applied research efforts in connection with the Corps of Engineers' Long Range Dredging Maintenance Study, nearing completion in late 1976, as well as previous studies conducted by Grays Harbor Community College and the Washington Departments of Ecology, Fisheries, and Game. These latter studies described and delineated fisheries and wildlife resources occurring in the estuary.

Secondly, the technical team summarized the socioeconomic nature of the region. They described historical trends in shoreline development and existing uses of land and water surface by utility and transportation infrastructures, the forest-products industry, commercial fishing, agriculture, and tourism. The assembled data depicts the resource-based economy of the region. As a complement to this aspect of data gathering, the consultants assessed public opinion in the Grays Harbor area by means of sixty-eight one-hour personal interviews. These interviews with local residents, special interest groups, and individuals in industry centered on perceptions of estuarine- and shoreline-use conflicts and public expectations of the utility of an estuary management plan.

Lastly, the technical team characterized the existing institutional and administrative framework in Grays Harbor. They delineated the shoreline permit process and agency jurisdictions, enforcement powers, and legal constraints.

The consultants and the technical team gathered regional environmental, economic, and social information into a single document, the Technical Memoranda, which was presented to the Task Force in March 1977. Subject headings of the Technical Memoranda are:

1. Physical Features
2. Living Resources
3. Resource Use and Harvest
4. Socio-Economics
5. Governmental Jurisdictions
6. Public Input and Base Data

As an additional prelude to Step 2 planning sessions, the consultants and the technical team prepared summary statements interpreting the personal interviews in order to help focus Task Force analysis. Twenty-seven key issues and areas of conflict were identified.

The issues were listed and numerically graded by representatives of each of the disciplines included on the team, resulting in an average value and overall weighting of issues. Fourteen primary issue groups emerged as recombinations of the original twenty-seven key issues derived from community interviews (Montagne-Bierly, 1977 b).

Site-specific environmental conflicts received higher priority in technical team weighting than more subjective issues, such as the relative dominance of state and federal versus local control of estuarine shoreline activities or the absence of specificity of shoreline-use criteria and predictability in the decision-making system. The most critical issue concerned use of the estuary for the disposal of dredged materials and the associated cumulative loss of estuarine habitat. The technical team identified the basic conflict between, on one hand, the continued need for maintenance dredging in the inner harbor and navigation channel, the proposed dredging to widen and deepen the channel, and the demands for fill and development of aquatic areas and, on the other, the desire to reduce the destruction of salt marsh and tideland habitat which results from dredging and filling.

Step 2: Development of Estuarine Management Policies

After compilation of the information in the form of large-scale maps and the Technical Memoranda, Task Force activity entered Step 2. The Draft Estuary Management Plan identifies Step 2 as the "real planning process" (GHEMP, November 1978, p. 2). The Task Force met in workshop sessions of one to three days' duration. The sessions were separated by periods of one to two months, during which communication was maintained by memoranda prepared by the consultants containing summaries of Task Force proceedings. Six planning workshops were held over a sixteen-month period.

The first series of workshop sessions was devoted to analyzing inventory information and considering the summarized and weighted key issues and conflicts. In addition, the consultants supplied the Task Force with advance materials that stated the need to agree on an overall estuary management goal, contrasted concepts of management-level approaches, and introduced preliminary descriptions of use-related management schemes. Thus, the initial Task Force workshop sessions were designed to establish a broad management goal and to choose a planning approach appropriate for the Grays Harbor estuary. The Task Force determined that they would reach all decisions by consensus.

Choosing a management goal. To decide on a management goal, the consultants stressed that the Task Force needed to agree on three essential issues: (1) what is to be accomplished through planning; (2) what are the uses and activities to be managed; and, (3) whether management should operate by permitting, prohibiting, and/or regulating uses and activities, or by establishing specific standards for uses and activities. The consultants mentioned in their introductory memorandum on management concepts (2 March 1977) that determining the why, what, and how to manage the estuary may depend, in part, on who is to manage, but the subject of who would or did have what management responsibilities was not further developed during these early stages.

To assist the Task Force in establishing an overall management goal for the estuary, the consultants suggested two alternatives that could provide a major direction: management to achieve a diversity of uses within the estuary, or management to strengthen a single resource use or function. The Task Force considered that an overall managment goal must be oriented toward the regional community and the economic base of the area, and therefore must be very broad. The

Task Force resolved that a balance among a wide range of uses and needs was necessary, and that planning for diversity within the estuary would provide integration of industry and recreation uses with protection of natural resources.

During the first workshop, the Task Force agreed on the formal statement, "The overall goal of the Grays Harbor Estuary Management Plan is the management of the estuary for multiple use." The consultants asked the Task Force whether there would be any overriding assumptions that would guide the management plan. A suggested assumption was that any uses or activities permitted in the Plan would be accomplished in a manner that would minimize the impact on the environment. The Task Force was unable to reach a consensus on this issue (Montagne-Bierly, 1977 a).

Choosing a management strategy. Goal formation was followed by the equally critical decision on an appropriate management strategy. The consultants presented alternative strategies ranging from development of general guidelines to specific decisions. Advance materials exhibited the concept of a management study area (the entire estuary) with two levels of geographic subdivisions (Planning Areas and Management Units). Division of the estuary into proposed subregional Planning Areas would be based on the area's principal characteristics (e.g., existing use or environmental type) as determined by the inventory information. These Planning Areas would be divided into smaller Management Units to allow definition of project-level decision-making guidelines within the context of subregional goals.

The Task Force reviewed three different management strategies to determine the utility of using geographic subdivisions of the estuary as a management tool. The first strategy is that used in the LWRMP. In this approach, fixed geographic regions within the study area are established, and policy guidelines determining beneficial uses and permitted activities are linked to each geographic region. The second strategy is a traditional land-use allocation approach used in many areas of the country. In this approach, specific use categories are formulated first and then applied to defined areas, with regulation ensured via zoning requirements. The third strategy is similar to that used to administer Washington State's Shoreline Management Act (SMA). In this approach, environmental categories are established based on existing use types, and regulating policies are assigned as appropriate to each category (e.g., urban, rural, natural, and conservancy). Geographic areas are then allocated according to environmental and use characteristics, with use or activity guidelines stemming from predetermined policies.

The Task Force, supported by advice from the consultants and comparative materials, decided on a synthesis of the management approach used in the LWRMP and that used in administering the SMA. They decided to establish general use categories and to divide the entire estuary into Planning Areas on the basis of existing uses. The Task Force intended to define the principal character and attributes of the Planning Areas, and then to subdivide each Planning Area into geographic Management Units. Finally, the Task Force would establish use categories and a potential range of permitted or conditional activities for each Management Unit that would be compatible with the general character of the Planning Area. In this way, increasingly specific use designations would be developed and applied.

Establishing management guidelines. Having decided upon the multiple-use objective of the Estuary Management Plan and a geographically based planning strategy, the Task Force directed the consultants to employ five criteria to develop a map of potential Planning Areas within the estuary as the first step in establishing

management guidelines. The consultants later prioritized these criteria based on Task Force discussions during the first workshop. Table 1 lists the priorities assigned to these criteria by the Task Force and by the consultants.

Table 1 Criteria for Developing Planning Areas

Priorities Assigned by Task Force	*Priorities Assigned by Consultants*
1. Ownership patterns	1. Physical boundaries and natural features
2. Political jurisdiction boundaries	2. Ownership patterns
3. Existing Uses	3. Areas of conflict or possible conflict
4. Areas of conflict or possible conflict	4. Political jurisdiction boundaries
5. Physical boundaries and natural features	5. Existing Uses

The resultant map geographically subdivided the estuary into eight Planning Areas (fig. 3). The basic divisions were presented to the Task Force members, who reviewed and refined the Planning Area divisions based on their knowledge of the estuary. The criteria weighting system used by the consultants, although quite different from the original order assigned the criteria by the Task Force, produced Planning Areas acceptable to the Task Force with only minor revisions.

The consultants explained to the Task Force that the eight Planning Areas were flexible units to be used to organize decision making. The use of political jurisdiction boundaries to define the Planning Areas was defended by local government representatives and the GHRPC director on the grounds that the ultimate management controls would be with local governments. Resource agency representatives were concerned that the Planning Area boundaries made no sense from an ecological perspective. After some discussion, the Task Force agreed by consensus that Planning Area boundaries should not be tied directly to specific management policies. Instead, the Task Force agreed that distinctions among Planning Areas were general in nature and were to be used for planning organization only (Montagne-Bierly, 1977 a).

The four general environmental types in the state Shoreline Management Act (i.e., natural, conservancy, rural, and urban) were felt by the Task Force to be insufficient to provide the desired level of specificity. Task Force members wanted an expanded list of environmental types to help them organize and group specific uses appropriate for each of the environmental types. The consultants provided the following environmental types and suggested general functions of each category:

1. *Natural* - to preserve and restore to their natural or original condition unique natural and cultural areas

2. *Conservancy/Natural* - to ensure that future uses and changes in natural areas are minimal and are designed to enhance the natural characteristics of the area

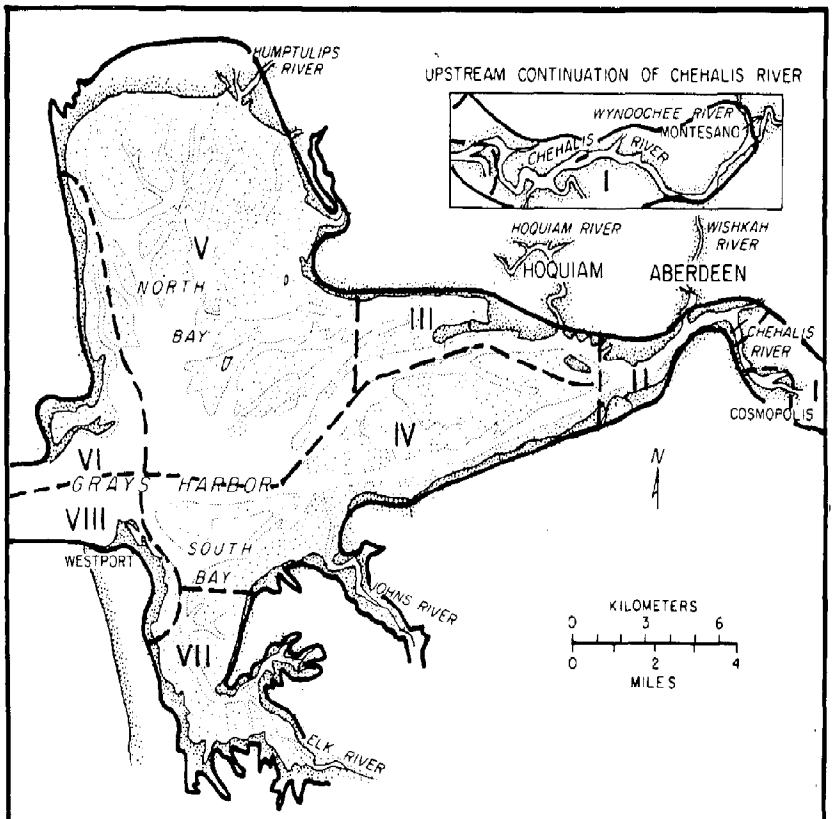

Figure 3 Approximate boundaries of planning areas in the Grays Harbor Estuary Management Plan (November 1978 draft).

3. *Conservancy/Managed* - to manage and protect areas for purposes that directly use or depend on natural systems and to ensure that uses of the area do not have adverse impacts on the natural systems

4. *Rural/Agricultural* - to protect existing and potential prime agricultural land from the pressures of urban expansion and low-intensity development

5. *Rural/Low Intensity* - to restrict intensive development along undeveloped shorelines so that open spaces, recreational opportunities, low residential density, and low-intensity farming are maintained

6. *Urban/Residental* - to protect areas in which the predominant use is or should be residential

7. *Urban/Mixed* - to designate areas for a mix of compatible urban uses

8. *Urban/Development* - to designate areas for predominantly industrial and commercial uses

The Task Force accepted these eight environmental types as presented. In the Draft Plan they are listed as the Management Categories.

As the next step in establishing management guidelines, the consultants developed a list of types of uses and activities that take place in Grays Harbor in connection with the following generic uses: port facilities, transportation, manufacturing, food industry, commercial, natural areas, residential, agriculture, and recreation. Each generic use encompasses possible use types. For example, agriculture as a generic use encompasses such possible specific uses as: major cultivated crops, passive agriculture (pasture), subsistence/local market farming, tree farms, and timber production. The Task Force was then asked to determine whether the listed uses would be permitted or conditional within each of the eight environmental designations. These determinations, as summarized by the consultants, eventually became the Standard Use Matrix in the Draft Plan (fig. 4).

During the second workshop session in May 1979, discussion focused on how to combine general policies, specific use designations, and management areas. Task Force members finally reached a consensus that the eventual specific guidelines for uses and activities allowable in Management Units must stem from general Planning Area guidelines. The Task Force decided that analysis of the nature of a Planning Area as an entity and in relation to the whole estuary would allow use designations to be more rationally applied. To this end, the consultants polled the Task Force with regard to a list of characteristics that would be used to establish general policies for each of the Planning Areas. The consultants asked the Task Force to consider the characteristics of each Planning Area using the following questions as a general format:

Planning Area General Character

What is the predominant character of the Planning Area?
What are the major committed uses?
What are the significant conflicts?
What are the assets of the Planning Area?

Planning Area Resources

How should the resources of the Planning Area be used? Protected? Specifically: shoreline, water surface, water quality and hydraulics, fish and wildlife, vegetation (including salt and freshwater marsh), aggregate and mineral extraction

Development within the Planning Area

How should the Planning Area function in support of local and estuary-wide development needs?
Specifically: local and regional economic base, general Planning Area use character, recreation uses (including public access), resource harvesting (aggregate mining, aquaculture, commercial fisheries), navigation (channel and dock access -- including dock area dredging and dredged material disposal), structures and fills

By the conclusion of the May 1977 workshops, the Task Force had established general policies for Planning Areas I and II and a portion of Planning Area III. The consultants eventually drafted guidelines for the remaining Planning Areas. The consultants felt that they could anticipate with reasonable accuracy the positions of Task Force participants and that they could therefore speed the review and revision process during the next set of workshops by drafting the guidelines themselves.

In the final series of workshop sessions, the Task Force used the policies, strategies, and guidelines described above and translated them into specific uses and activities that would be allowed in the

STANDARD USES

● PERMITTED USE
□ CONDITIONAL USE
✱ SPECIAL CONDITIONS (SEE MGT. UNIT)

	USE CATEGORY	NATURAL	CONSERVANCY		RURAL		URBAN			MANAGEMENT UNIT NO. 44
		N	CN	CM	RL	RA	UR	UD	UM	CM
PORT FACILITIES	Dock and Warehouse Facilities						□	●	●	✱
	Port Terminal Facilities							●	□	✱
	Ship Berthing							●	□	●
	Barge Berthing							●	□	●
	Ship Construction and Repair							●	□	✱
	Navigational Aids	□	□	●	●	●	●	●	●	●
MANUFACTURING AND OTHER	Heavy Industry							●	□	
	Light Industry						□	●	●	
	Water Dependent Industry						□	●	●	□
	Forest Products Processing							●	□	
	Mineral Extraction and Storage			□	●	●		●	□	
TRANSPORTATION	Ferry Terminal			□	●	●	●	●	●	
	Shipping				●	●	●	●	□	●
	Roads and Railroads		□	□	●	●	●	●	●	
	Airports				□	□	□	●	●	✱
	Overhead Utility Corridor		□	□	●	●	●	●	●	□
	Submerged Utility Corridor		□	□	□	□	●	●	●	□
FOOD INDUSTRY	Commercial Fishing (Incl. Shellfish)	□	●	●	□	□				●
	Oyster Culture	□	●	●	□	□				●
	Aquaculture	□	●	●	□	□		●	●	●
	Fish and Food Processing			□	□	□	□	●	●	
COMMERCIAL	Motel						●		●	
	Boat Sales, Construction and Repair						●	●	●	●
	Restaurant				●	□	●		●	□
	Marina				□		●	●	●	●
	Other Commercial						□		●	
RECREATION	Public Fishing Areas	●	●	●	●	●	●	●	●	
	Water Dependent Hunting	●	●	●	●	●				
	Pleasure Boating	●	●	●	●	●	●		●	
	Camping		□	●	●	□	□		□	
	Public Boat Ramp		□	●	●	□	●	●	●	
	Park/Parkway			□	●	□	●	●	●	□
RESIDENTIAL	Floating Homes						□		□	□
	Urban/Suburban						●		●	
	Rural Low Intensity (Scattered)			□	●	□	●			
	Rural Agricultural (Farm House)			●	□	●				
AGRICULTURE	Major Cultivated Crops					●				
	Passive Agriculture (Pasture)			●	●	●				
	Subsistence/Local Market Farming		□	●	●	●				
	Tree Farm and Timber Products		□	●	●	●				
NATURAL AREAS	Estuarine and Marine Santuaries	●								●
	Wildlife Refuges	●	●	●	●					●
	Living Resource Production and Habitat	●	●	●	●	●	●	●	●	●

Figure 4 Standard use matrix from the Grays Harbor Estuary Management Plan (March 1978 draft; subject to revision).

Management Units. Figure 5 presents an example of the permitted activity designations for one Management Unit. Using the large-scale maps, the consultants "walked" the Task Force around the estuary to develop specific guidelines. During this process, major issues and site-specific conflicts arose. Private landowners requested Management Unit boundary and permitted use changes. Disagreements and mis-

Management Category

CM - Conservancy Managed

Boundary Description

Eastern Boundary - Management Unit 23.
Western Boundary - a line at the eastern edge of the Weyerhauser property in Section 24 (T17N, R9W).
Study Area Boundary - the Chicago, Milwaukee, St. Paul and Pacific (CMSP&P) Railroad line out to the main navigation channel.

Management Objectives

This management unit is similar in character and future use intent to Management Unit 20. Its relatively undisturbed, natural character will remain, with continued use for wildlife observation and hunting encouraged. Activities that hinder its natural characteristics, particularly its function as a natural water storage area, will not be permitted.

Special Conditions

In addition to Standard Uses and Permitted Activities, the following conditions will apply:

1. Continued maintenance and/or redevelopment of the South Bank Road and railbed will be permitted.

2. Reconstruction of the South Bank Road or construction of a new highway in the same approximate corridor alignment will be permitted. Specific plans for such a facility will be reviewed by the estuary planning task force.

3. Limited filling and erosion control measures will be permitted only as required for the reconstruction of the South Bank Road.

PERMITTED ACTIVITIES

	MANAGEMENT CATEGORY	CM	
STRUCTURES	Breakwater		
	Piers, Docks, and Wharves		
	Piling and Mooring Dolphins	●	
	Bridges	✱	
	Causeways	✱	
	Outfalls		
	Cable and Pipeline Crossings	□	
	Boathouses		
BANK	Diking		
	Bulkheading	✱	
	Groins and Spurs		
	Jetty		
	Filling	✱	
	Bankline Straightening		
	Bankline Erosion Control	✱	
CHANNEL	Access Channel	□	
	Dredging	□	
	Channel Maintenance	□	
	Channel Realignment	□	

PERMITTED ACTIVITY	●
CONDITIONAL ACTIVITY	□
SPECIAL CONDITIONS	✱

STANDARD USES See Standard Uses Matrix

Figure 5 Sample management unit permitted activities matrix from the Grays Harbor Estuary Management Plan (March 1978 draft; subject to revision).

conceptions developed over the definition and use of the water dependency requirements of the state Shoreline Management Act and Guidelines. Local governments objected when Planning Area guidelines and specific permitted activities conflicted with their development plans. Perhaps the biggest conflict arose over the Port's plan to fill

2,200 acres (800 ha) in the Bowerman Basin region for industrial development. To resolve such conflicts, a process of bargaining and negotiating was used (see pp. 62 and 63 for a discussion of the Bowerman Basin case).

At the present time, documentation of the final evaluation-decision and bargaining/negotiating process in Step 2 is scant. There is limited information concerning deliberation over the three Planning Areas in the inner-harbor areas and the Bowerman Basin conflict. No formal record describes decisions determining the final number and boundaries of the Management Units or the specific permitted uses in them. It appears that the majority of the Management Unit boundaries and uses were derived by the consultants, utilizing the criteria noted above, and submitted to the Task Force for approval. However, Task Force interviews indicate that each Management Unit was reviewed to some extent by participants.

The draft of the Grays Harbor Estuary Management Plan produced during Step 2 was circulated for public and agency review in January and again in March 1978. Some Task Force participants thought the public release of the draft was premature because there were still many areas of disagreement and uncertainty among the members. The consultants have since incorporated comments from the Task Force participants on the draft into a revised Draft Plan. In November 1978 the revised Draft Plan was recirculated to Task Force participants but not to the public. This draft contains significant changes from the March draft and much new language representing the consultants' interpretation of Task Force directives.

Subcommittees of the Task Force have been meeting repeatedly since 1979 to address unresolved issues and produce recommendations to present to the entire Task Force for approval. At the time of this writing, the consultants have been directed to prepare a memo of proposed changes to the November 1978 Draft Plan and to distribute it to the full Task Force and to interested environmental groups (along with copies of the Draft Plan) thirty days before a full Task Force meeting. The environmental groups will be invited to attend the meeting and present additional recommendations (Boomer, 1980 a). The decisions and actions necessary for adoption and implementation of the Plan are discussed in chapter seven.

5 THE ATTEMPT TO RESOLVE CONFLICTS THROUGH COMPREHENSIVE PLANNING

Integrating Comprehensive Planning and Conflict Resolution

The Grays Harbor Estuary Management Program began as a comprehensive planning activity to produce a management plan for the estuary. As it evolved, the Grays Harbor activity clearly became a hybrid of comprehensive planning and conflict resolution by negotiation. Many of the Task Force participants were committed to the concept of comprehensive planning and assumed that a good comprehensive plan would resolve or provide a mechanism for resolving the resource-use and administrative conflicts they had all experienced. A jointly derived specific plan or guide for the future use of the estuary would provide a framework or system to determine what and where resource-use demands would be fulfilled. Implementation of a plan by governmental decision makers would lessen the past frustrations with a cumbersome, sometimes contradictory, and often unpredictable decision-making system.

The success or failure of the Grays Harbor effort has become an issue of widespread national concern. The reason for this national interest in the affairs of a somewhat remote estuary on the shores of the Pacific Ocean is that the types of problems found in Grays Harbor are shared by numerous other areas throughout the country. Furthermore, there is a growing national concern with finding ways to improve government decision making on resource protection and use by moving away from "muddling through" case by case toward a more holistic and coordinated approach.

Designers of the Grays Harbor Estuary Management Program reasoned that, by actually involving representatives of decision-making entities, conflicts could be more directly resolved and participants and their agencies would develop strong commitments to the planning process and its resultant plan. Written materials to the Task Force from the consultants and interviews with both Task Force members and the consultants indicate that most of them envisioned a rather traditional planning effort to be conducted by a distinctly untraditional Task Force. The basic difference between the Grays Harbor Estuary Management Program and traditional comprehensive planning would be that, instead of the usual team of professional planners or a regional planning commission, the Task Force would be composed of representatives of all the major governmental units and agencies with decision-making responsibilities in the estuary.

The novel composition of the Grays Harbor Task Force, the complex decision-making environment in the region, and the intensity of specific conflicts moved the dynamics of the effort increasingly toward those of bargaining and conflict resolution by negotiation. Negotiation requires skills and can give results different from those of traditional planning methods. Some Task Force participants fully expected to enter into bargaining and negotiation, while others were surprised at this development.

The Grays Harbor effort resides somewhere in the middle of a continuum from conflict resolution by negotiation, such as labor-management arbitration, to problem solving by planning, such as comprehensive planning by an advisory commission. An analysis of the Grays Harbor Estuary Management Program must clearly recognize this integration of processes and must ask whether the process used in Grays Harbor matched the problems to be solved and whether there are alternative designs or methods that could improve attempts to resolve conflicts through comprehensive planning. An assumption of

this analysis is that all participants in intergovernmental task forces that attempt to develop plans and resolve specific conflicts will optimize their effectiveness when they analyze the decision-making environment, employ appropriate skills, and anticipate the dynamics of a process and the limits to the possible outcomes. A prime objective of this case study report and analysis of the Grays Harbor Estuary Management Program is to provide future participants in efforts similar to that in Grays Harbor with a background of experiences and a framework upon which to build successful activities.

Differentiating Comprehensive Planning and Conflict Resolution through Negotiation and Bargaining

A stable democracy characterized by a wide diversity of competing interests and values requires institutions or systems to provide mutually acceptable compromises. Modern comprehensive planning has developed as one means to systematically integrate the sometimes disparate public preferences and to develop solutions to social, economic, and environmental problems. Comprehensive planning as it has evolved in the United States usually involves an advisory body to governments on policies for growth or resource use. "Comprehensive" implies representation of a broad spectrum of public interests and applicability to all aspects of community development and resource use. "Planning" implies the establishment of long-term goals for development and resource use which would allow short-term, specific decisions to fit into a broad, holistic perspective for the future. The plan itself is usually a graphic and written description of uses or activities appropriate for specific regions now and in the future. General policies about implementing the plan and achieving the desired end-point are also included.

The Grays Harbor Estuary Management Program has all the elements and expectations of a comprehensive planning effort. Memos from the consultants to Task Force members address essential management concepts: a reason to manage, agreement on what is to be managed, decisions on how to manage. The consultants guided the Task Force through a process designed to establish overall estuary management goals, to agree upon the management approach or level, to define criteria for Management Unit boundaries, and to identify use concepts. "The end objective of [the] management plan [was] to provide enough guidance to an elected or agency official to be able to evaluate a specific use or activity and make a decision on that proposal" (Montagne-Bierly, 1977 a). The end-product of the effort is a Management Plan complete with an estuary management goal, general policies, Planning Areas, Management Units, and standard uses.

Modern comprehensive planning, however, often experiences difficulties satisfying the expectations held for it. (See, for example, Bolan, 1969; Braybrooke and Lindblom, 1963; Friedmann, 1959; and Wingo, 1963.) A major challenge for comprehensive planning is to resolve conflicts between differing community goals. However, such goals (a) may be undeterminable using standard planning methods; (b) probably cannot be completely described regardless of the sophistication or resources available for information gathering and analysis; (c) may have different time scales of concern; (d) may be intricately and inextricably interwoven into the political framework of the region; and (e) may certainly result in intense conflict unless differences are resolved.

The group of intergovernmental agencies and decision makers that comprised the Grays Harbor Estuary Management Task Force were faced with a situation having many of these characteristics. Decision making in Grays Harbor had become highly politicized and the Task Force

became an expression or extension of those interests that, as in all political systems, were competing for power and influence. It is little wonder that the expectations held by some Task Force members for a planning activity were overwhelmed by the need for complex negotiation.

In a decision-making environment like that in Grays Harbor the distribution of costs and benefits or gains and losses becomes a matter for negotiation. Even though the economy and sociopolitical setting may be less diverse than in more heavily urbanized areas such as San Francisco Bay, Grays Harbor is complex and mulitdimensional and the political system is just as decentralized as elsewhere in this country. In these situations, community goals and the public interest are never holistic and often they are simply undeterminable.

Even if there were holistic community goals and perfect information, values and goals change in response to changes within and outside of the community. For example, changing patterns of international trade, growing nationwide inflation, diminishing opportunities for public shoreline access, dwindling sedge marsh due to local development, pollution of local waters, or changing personnel in local government all contribute to a constant flux of public goals which comprehensive planners often have difficulty anticipating or incorporating into community plans.

Differing time scales of concern also create planning difficulties. A port authority may need to plan precisely for development and returns on investments for the next five, ten, twenty-five, or perhaps fifty years, but a port authority can discount much of the future beyond fifty years. In contrast, a resource biologist requires five or ten years to begin to understand natural variations in ecosystems before human impacts can begin to be adequately assessed. Unlike the developer, the resource agency cannot discount the long-term future, but must act to protect the vitality of living systems for generations to come.

The fact that comprehensive planning in Grays Harbor, or elsewhere, is beset with difficulties or inadequacies does not imply that such attempts should be abandoned in favor of a purely incremental decision-making system that "muddles through" by making small changes, fragmented choices, and remedial decisions. Strategies for coordinating public and private agendas and for adapting governmental and private decision making to the human environment may be possible through a skillful integration of comprehensive planning and conflict resolution by negotiation and bargaining.

Although comprehensive planning cannot proceed without some conflict resolution, and conflict resolution may certainly involve a plan as part of a solution, comprehensive planning and conflict resolution by negotiation and bargaining are two distinct processes. Each is a unique activity that can have expectations, strategies, tactics, and criteria for success quite different from the other's.

Conflict resolution by negotiation requires that the parties to the conflict work together in an attempt to reach a mutually agreeable solution, usually involving compromises. Resource management disputes which are resolvable via negotiation procedures are generally those where room for compromise solutions exist and the compromises are capable of being implemented at a local level. In general, negotiable disputes are those in which the primary questions are "where," "when," and "how much" rather than "what should" or "who should." Also, the negotiation process does not guarantee an agreement or set legally binding precedents for future disputes (Cormick and Patton, 1977).

Defining the Decision-Making Environment

An analogy for visualizing the decision-making environment could be a multisided box. Inside the box is the conflict situation and all the actors. Each side of the box represents a constraint (or a set of similar constraints) on one or all of the actors or parties to the conflict. For example, one side may represent the legal constraints on any possible solution to the conflict. Another could be the limit to the impacts an estuarine system can endure before critical food-web species are lost. Another side could be the minimum amount of economic growth acceptable to the community. Another side could be the maximum amount of uncertainty that can be tolerated by potential investors or developers.

The sides of the box may not be discrete, but may rather be fuzzy or unclear. In such cases, the sides are actually ranges within those attempting to resolve the conflict may be able to maneuver. Any solution to the conflict situation must lie somewhere within the confines of the box (decision-making environment) and its fuzzy edges (uncertain information). Those who search for a resolution to the conflict on any time scale or within any geographic area must recognize that the box exists, approximately what its boundaries are, and who else is in the box.

To determine what happened and what can now be expected from the Grays Harbor Task Force effort and to transfer the lessons to other circumstances with other actors, this chapter discusses (1) the persistent nature of the conflict situation; (2) the search for predictability; (3) the parties to the conflict; (4) the distribution of power among the parties; (5) the ability of the parties to make commitments; (6) the use of technical information; and (7) the role of the consultants.

The Persistent Nature of the Conflict

Conflict in Grays Harbor in the 1970's was persistent and complex. As discussed in chapter three, a series of struggles had erupted over development proposals in several specific areas of the estuary. Supporters of development confronted those who wanted habitat values protected. Local governments battled federal agencies over who had the right to make decisions affecting the future of the estuary and area residents.

The Grays Harbor Estuary Planning Task Force was expected to provide solutions to specific conflicts and avoid future conflict situations. Participants and supporters of the comprehensive planning activity expected to eliminate the persistent and continually erupting conflicts.

Assessing the accomplishments of the nationwide effort in coastal zone management at a meeting of the Coastal States Organization, Robert Knecht, head of the Office of Coastal Zone Management, singled out the Grays Harbor effort as a prototype of effective coastal management (Knecht, 1978). Knecht applauded the partnership process in which decisions were based on sound technical information and which would resolve conflicts by balancing environmental and developmental needs.

An earlier case study staff report to Knecht clearly states the expectations for conflict resolution in Grays Harbor: "If the Grays Harbor Estuary Management Plan is adopted and implemented as designed, continued *conflicts over each individual permit or development activity in the estuary will be avoided*" (emphasis added) (Dehart, 1978). Quotes from the interviews with Task Force members also indicate expectations for final or complete conflict resolution. "No more permit appeals," "avoid issues and controversies," "conflict avoidance mechanism," and

"avoid traditional confrontations" were expectations expressed by local, state, and federal representatives.

However, considering the persistent and complex nature of the conflicts it may be unrealistic to expect the complete elimination or avoidance of future conflicts in Grays Harbor. Basic conflicts may be quieted for a while, but great expectations for conflict avoidance and elimination are likely to lead only to frustration.

For example, as noted in chapter three, the many agencies overseeing shoreline development have differing missions, decision-making criteria, and procedures. With or without a Plan, they will likely continue to disagree about the treatment of particular development proposals in the future. Further, Congress and the legislature often change the laws guiding the agency actions, and can add new agencies or regulations to the process. Such changes in the decision-making system could increase the likelihood of jurisdictional conflict continuing in Grays Harbor because new actors would be present with different objectives to advance. Finally, as was discussed in chapters two and three, there is great pressure from economic development interests to use dredged material to fill intertidal areas for needed industrial development. Yet, environmental and resource protection agencies consider those same intertidal areas fundamentally important to the maintenance of wildlife habitat, water quality, and overall biological productivity.

The Grays Harbor Estuary Management Plan has, however, an opportunity to provide a mechanism for resolving both ongoing and future conflicts. Because conflicts are likely to arise in the future, an effective conflict-resolution process should contain two elements. First, it should deal with the specific, timely issues over which there is controversy. Second, it should establish a framework for treating future issues that could arise. The Task Force has dealt at great length with the specific, timely issues. During the first five years, however, they did not give as much attention to the crucial process of plan implementation, review, and modification necessary to future conflicts. A general procedure for reviewing plan implementation and evaluating its success is included in the Draft Plan, but not in sufficient detail to deal effectively with future conflicts that are likely to arise. (For further discussion of implementation, see chapter seven.)

The Search for Predictability

Looking beyond the issues that triggered conflicts in Grays Harbor, an analyst sees a complex fabric of political and idealogical elements that require recognition and treatment in any successful resolution mechanism. Everyone involved in the Grays Harbor effort talked about "predictability" and expressed the hope that the planning process would achieve "predictability." Predictability, however, is not a single goal. The search for predictability by distinct interest groups in Grays Harbor embraced some fundamentally different political and ideological concepts. The extent to which this is recognized affects the successful resolution of conflict in Grays Harbor.

Definitions of Predictability

As a matter of definition, *political disputes* develop when different interests are deploying political capital and organizational effort to influence an outcome of the decision-making or permitting system and the allocation of scarce resources. In Grays Harbor, the political question is, "What *does* or *can* occur in the estuary?" *Ideological disputes* arise when beliefs and norms differ about what should be. In

Grays Harbor, the ideological questions are, "What *should* occur in the estuary?" and "Who *should* make these decisions?"

Table 2 separates the political and ideological elements of the search for predictability by the two basic interest groups in Grays Harbor. This categorization is not meant to be rigid or mutually exclusive. For example, resource agencies are committed to the exercise of private property rights as well as to a responsible and effective regulatory system to protect the public interest in a healthy environment. The objective of this categorization is rather to portray the highly complex political and ideological setting of the search for predictability. The table also highlights the fact that there can be different definitions of predictability.

Table 2. The Goal of Predictability

The Parties	**Political Qualities** "What *does* or *can* occur?"	**Ideological Qualities** "What *should* occur?" "Who *should* decide?"
Development Interests (especially port, local governments, regional planning commission)	Predictability = assuring that projects proceed smoothly—from private proposal development, to public administrative review, to approval and completion. (This predictability is relatively short term.)	Predictability = determining estuarine use locally through normal operation of the market system. The results are the most efficient and beneficial uses. (Some government interaction is still necessary—e.g., accounting for common property problems and public safety.)
Environmental & resource management interests (especially NMFS, FWS, EPA, & WDG)	Predictability = assuring that state and federal regulations operate to effectively protect critical resources and environmental systems (e.g., NEPA, CWA, CZMA, and SMA).	Predictability = protecting long-term biological viability of the estuary. Ecological concerns influence management to protect the resource and the public interest. (This predictability is long term.)

In a speech to the American Association of Port Authorities ("Coastal Zone Management," 1979), Henry (Hank) Soike, General Manager of the Port of Grays Harbor, described the Port's difficulties with the existing decision-making system. The Port was "FRUSTRATED with the situation where everyone seems to act independently and comes into a given situation with their own evaluative criteria" (emphasis his). Soike goes on to defend estuarine planning by the Task Force. "You might be asking the question, 'Why should we do this and give up some of our options?' The answer for the Port of Grays Harbor is *PREDICTABILITY*. We would rather have a 99% chance of success on really important matters, than a 30% chance of success on anything we might want to try" (emphasis his).

The Hoquiam representative also talked of predictability. Unless the permitting process under the Plan was rapid, efficient, and specific, the Plan was simply "not worth it" (Johnson interview, 1978). Local governments and development interests anticipated that the planning activity would resolve the political questions of what can occur in the estuary. State agencies shared this concern for a predictable decision-making structure that would operate as a conflict-avoidance mechanism. A specific plan, once approved, would result in a predictable and unobstructed permitting process--a set of specific criteria by which any project could be judged.

Politically, the goal of predictability had an additional meaning for some of the resource and regulatory agencies. To the Environmental Protection Agency (EPA), predictability meant "an assurance that there would be adequate environmental and resource protection in an open-ended time frame" (Lee interview, 1978). The Fish and Wildlife Service (USFWS) and the National Marine Fisheries Services (NMFS) concurred. The USFWS wanted the "assurance that a viable and productive estuary would remain" (Bowker interview, 1979) and the NMFS representative spoke of the need for "better representation of environmental values in ecosystem planning" (Walters interview, 1978). The federal resource agency representatives further defined predictability as a rational allocation of resources, the weighing of resource protection against development, and the prior identification of trade-offs. Many of the federal and state agency representatives believed that predictability would eliminate the need for political approaches to problems, and avoid solutions that were nontechnical or nonscientific.

Political questions of what can occur in the estuary combine with the ideological questions of what should occur in the estuary. Not only did environmental and development interests see different, and sometimes incompatible, values in the estuary; they also expressed different beliefs about who should make the decisions affecting resource use and allocation. For example, an Aberdeen building inspector, who represented that city during the later stages of the Task Force activity, expressed strong opinions on the rights of private owners to develop their property as they see fit. He felt that decisions of landowners must be within local zoning ordinances and codes, but without the constraints of alternatives analyses or state and federal agency directives (Lauritzen interview, 1979). On the other hand, state and federal agencies saw their involvement as fundamentally desirable in light of their legal authorities in permit issuance and review.

Benefits of Analyzing the Conflicts over Predictability

The pay-off of analyzing the nature of the conflict situation comes when the political and ideological components of the conflict in Grays Harbor, or elsewhere, are understood and areas of consensus are identified. It is then that compatible processes can be designed and efforts can be realistically evaluated. The distance between the different political and iedological perceptions of predictability will probably never disappear regardless of skill, effort, or commitment. If these distances are not recognized, then there can be a false security or cohesiveness in the search for what is believed to be a common goal, but is not.

On the other hand, these very differences can create room for bargaining. This is not solely the "balancing" of the comprehensive planner but rather includes the trading between actors with different values or, using the economist's term, different marginal utilities. A skillful negotiator or mediator may be able to take advantage of these differences to find bargaining items that are of little value to one party but of great value to another, and vice versa. One example of this in Grays Harbor would be providing specific assured long-term protection mechanisms for critical habitats in exchange for using sections of already urbanized portions of shoreline for siting commercial endeavors that are benefited by, but do not require, shoreline locations. Or perhaps the Port could help support a long-term environmental monitoring program in return for multiagency support of a formalized advisory group to help design shoreline development applications. These suggestions are not meant to provide answers,

but merely to illustrate the creative latitude available in negotiating when the differences between basic value systems are recognized and accepted. (Recently, the Task Force has begun to explore this form of trading more extensively by considering an exchange of protective covenants on conservation areas for development policies.) A pay-off also comes when a Task Force member analyzes the nature of the conflict situation and the parties to the conflict, and then strategizes in the full knowledge that agencies are no longer simply engaged in comprehensive planning, but are also negotiating.

Parties to the Conflict

After the first analytical step of understanding the nature of the conflict, the next step is identifying all the relevant parties to the conflict and their individual positions. Relevant parties to resource-use conflicts are those who define themselves as significant actors and who exercise some control over any of the resources or the decision-making process in dispute, and/or have the ability to impede the activities of another party.

Traditional planning efforts are usually undertaken by an advisory group or a staff of professional planners who recommend plans or policies to elected or appointed government decision makers. Although it is sometimes thought to be a weakness of planning, those doing the planning often do not have any direct control over the resources at stake and they usually have either limited or no statutory authority to implement or enforce a plan or its policies. The Grays Harbor effort was innovative in this respect. The Task Force was an inter-agency group with considerable control over resources since only those agencies with direct decision-making responsibilities in the estuary were represented on the Task Force.

The restriction of membership to government agencies reflected the perceptions of the conflict situation as one of administrative incompatibilities and inconsistencies. For example, individuals who had experience with the Corps of Engineers' Long-Range Maintenance Dredging Study saw conflicts arising around each large development project in Grays Harbor because:

> the responsibility for making decisions . . . falls to a variety of local, state, and federal agencies. Each agency has a plan, guidelines, or regulations to decide what may or may not be done; cities and the country have their own comprehensive plans and shoreline master program. Normally, each entity has prepared their plan or guidelines independently, with resulting inconsistencies, conflicts, and complex process of decision making (Weinmann and Malek, 1978).

Membership was also limited to representatives of governmental entities in recognition of the need to keep the Task Force small enough to be able to reach decisions. Another assumption underlying this limitation was that the range of participating governmental entities could adequately represent all of the public interests.

Task Force Participants

Table 3 lists government agencies and entities participating on the Grays Harbor Estuary Management Task Force. Comments from interviews with representatives are included to highlight some of the members' interests in the conflict and its resolution.

Disagreements over Task Force Composition

Actual agency composition of the Task Force was not without conflict. Early in the process, local governments questioned the

right of federal agencies to be "at the table" and to make decisions that affected local government behavior or that were counter to local wishes. On the other side, federal resource agencies questioned the ability of local governments to plan and to make decisions that gave adequate recognition and value to natural resource questions. Considerable time and effort during the early Task Force meetings were devoted to establishing the right of the separate governmental parties to participate.

One of the biggest disagreements facing the Task Force over the right to participate surrounds the decision to exclude nongovernmental entities. The Task Force believed this exclusion would result in a more efficient process without sacrificing public concerns, since the public would be represented by elected officials and public servants. Also, during Step 1 of the planning process, the consultants interviewed approximately sixty-five persons from the community and special interest groups. The consultants provided written summaries of the social-governmental and resource-use concerns stressed by interviewees (Montagne-Bierly, 1977 b). Public reactions would also be sought after the plan was drafted. Further, the Task Force believed that the public had other opportunities to affect decisions in the region through the NEPA and SEPA processes (see Appendix).

The decision to exclude public and nongovernmental representatives from the Task Force has made the process subject to strong criticism and challenge on legal, ideological and political grounds from environmental interests. They argue that, in order to be implemented, the GHEMP is to become part of the federally approved state Coastal Zone Management Program (CZMP). Section 306 (g) of the Coastal Zone Management Act (CZMA) requires full participation of all interested parties, public and private, in the development of state CZMP's and in the amendment of an approved state program. Environmental groups charge that exclusion of the public from the Task Force violates this criterion for federal approval of a state CZMP. On the other hand, the Office of Coastal Zone Management (OCZM) believes that, while there may be other, or even better, ways to meet the requirements of full public participation, the fact that the Task Force membership was limited as it was cannot be construed to be a violation of the CZMA (Kifer, 1980).

As a fundamentally ideological criticism, environmental groups, particularly Friends of the Earth, are objecting that the Task Force refused to recognize the capability of citizens to discuss complex problems in the spirit of cooperation and to identify possible solutions and trade-offs.

The Grays Harbor Estuary Management Plan may be jeopardized by the exclusion of nongovernmental entities from the Task Force because excluded parties lack the commitment to the Plan shared by Task Force members and the understanding of why certain trade-offs are included in the Plan. For example, excluded parties may attempt to block implementation of the Plan by bringing a law suit, challenging its legality.

Improving Criteria for Selection of Task Force Participants

Putting aside possible legal challenges directed at the adequacy of public participation in the Grays Harbor Estuary Management Program, another, perhaps more significant, problem of the Task Force composition demands attention. As previously indicated, the Grays Harbor effort was not merely comprehensive planning, but rather a hybrid of planning and conflict resolution via negotiation, mediation, and bargaining.

Table 3. Members of the Grays Harbor Estuary Planning Task Force (Information from interviews with the representatives)

Local Representatives

City of Aberdeen
Representative: Changed several times, finally was city building inspector. **Role:** The city only became involved in Task Force activities when directly affected. Operated under constraints of zoning ordinances and less-than-supportive mayor and city council. Strongly supported right of land owners to develop their property as they saw fit. Opposed state restriction that shoreline development should be water dependent or related.

City of Hoquiam
Representative: Chemical engineer for ITT-Rayonier, appointed by mayor. **Role:** Representative was also a non-elected member of the city planning council. Wanted a plan that would be less restrictive regarding development.

City of Westport
Representative: Circuit city manager (also manager for two other cities in Grays Harbor County). **Role:** Not actively involved in Task Force. Looked after city's interests; didn't expect to gain much from a plan. Had one major development interest—an airport.

City of Ocean Shores
Representative: Mayor, then fire chief. **Role:** Positions similar to Aberdeen's. Single development issue was airport. City's interests later included issues associated with Ocean Shores becoming a bedroom community for Aberdeen.

Port of Grays Harbor
Representative: Planning Director for Port. **Role:** As previous Director of GHRPC, he played an active role in starting the Task Force effort. The Port's General Manager also participated. Port is a major landowner and is committed to economic development.

Grays Harbor Regional Planning Commission (GHRPC)
Role: Not a formal member, but played an organizational role. Identified with and strongly supportive of local development interests, especially the Port.

Other small towns and cities in the region were not involved on the Task Force—probably because they saw nothing to be gained by participating in the process.

The goal of matching Task Force membership with the problems to be resolved and the methods of problem solving is not easily accomplished. In a hybrid process like the Grays Harbor Estuary Management Program, the criteria for selection of participating groups need to recognize requirements for successful planning and negotiating. The Grays Harbor Task Force recognized this need in part by including agencies and governments that had some control over decisions affecting resources or real estate in the estuary. This analysis suggests that task forces engaged in special area management could enhance their effectiveness in resolving conflicts by using additional criteria for participation. Specifically, such additional criteria are: including all relevant parties to the conflict, and employing as technical advisors agencies or groups that have some special interests or expertise, but do not define themselves as parties to the conflict.

In any successful conflict resolution (e.g., labor negotiations, international treaties, or environmental disputes), the negotiation team should include all parties to the conflict who have some relative power that they are willing to exercise. Unlike more

State Agency Representatives

Washington Department of Ecology
Representative: Planner from Office of Planning and Community Affairs. **Role:** Neutral and advisory. Agency did not see itself as an interest group. Had to be certain that any plan met SMA requirements (but local SMP's had already been accepted by WDOE).

Washington Department of Game
Representative: Game biologist. **Role:** Agency did not have strong position or strategy. However, representative had technical expertise and believed in strong resource protection.

Washington Department of Fisheries
Representative: SEPA coordinator. **Role:** Agency took no strong stands, had no planned strategy. Flexible on most issues except protecting fish runs and potential for aquaculture development.

Washington Department of Natural Resources
Representative: Aquatic area manager. **Role:** Agency didn't consider itself directly involved in outcome since its issues/decisions were handled by another process. Position flexible since no direct challenge to authority or positions felt. Representative tried to play "go-between" role with development interests and resource agencies.

Federal Agency Representatives

U.S. Fish and Wildlife Service
Representative: Assistant field supervisor for Ecological Services Division, later by coastal zone coordinator. **Role:** USFWS was prime mover of planning process by (1) imposing moratorium on development decisions pending comprehensive plan, and (2) working with GHRPC director (later Port's planning director). Committed to planning concept. Legally constrained by CWA section (404) and NEPA. Representative concerned that federal agency positions were too flexible with regard to their legal mandates.

Environmental Protection Agency
Representative: Chief, dredge and fill permitting section. **Role:** Primary concerns were wetlands and other resource area protection. Committed to planning process as (1) more rational decision-making system and (2) way to avoid political resolution of typical conflicts. Agency policies primarily determined by CWA and NEPA.

National Marine Fisheries Service
Representative: Regional coastal zone management coordinator. **Role:** Another prime mover of planning process. Worked with GHRPC to get federal funds from OCZM. Representative contributed experience with other regional comprehensive plan, and influenced consultant selection based on this experience. Wanted better agency representation of environmental values in ecosystem planning. Representative personally highly committed to Plan.

Corps of Engineers
Representative: Chief, Navigation and Flood Control Section. **Role:** Agency action in channel dredging generated data base which Task Force used. But, dredging issues were treated separately from other estuary uses. COE has no legal authority to approve or reject plan, but agreed to use it in deciding section 10/404 permits as a guide to local interests and to satisfy certain documentation requirements.

traditional labor or treaty negotiations, disputes like those in Grays Harbor over resource use and environmental protection most often involve more than two parties. The significant, active, and relevant parties to resource use conflicts are those several parties who exercise control over any of the resources or factors in dispute and/or have the ability to impede the activities of another party. Using the analogy introduced earlier, identifying the parties to the conflict is discovering who is in the "conflict box." Relevant parties to a conflict usually identify or define themselves by such means as talking loud or long enough to ensure that others in the "conflict box" recognize them. Also, in situations like that in Grays Harbor, the mix of relevant parties may change with time or with the scope of the problem under consideration by the Task Force.

The parties to the conflict situation in Grays Harbor and the members of the Task Force are not completely overlapping sets. Some important parties are excluded from the Task Force, such as, the Federal Aviation Administration, environmental groups, chambers of commerce, fisherman associations, and some small towns in the region.

Any successful planning, bargaining, negotiation, and conflict resolution is bound to be extremely difficult, and perhaps impossible, without inclusion in the Task Force of all relevant parties to the conflict. Implementation of a Plan may also be extremely difficult without the commitment that could have come with involvement of excluded, but relevant, parties.

Further, several agencies were included on the Task Force that seem to have no real stake in Grays Harbor conflicts, although they may have had an interest in resource use in the estuary. Representatives of Washington Departments of Ecology and Natural Resources state that their roles were basically neutral because they had no special interests that were being threatened in Grays Harbor. This is not to say, for example, that WDOE is not an important participant in shoreline management in Grays Harbor. WDOE does have a statutory responsibility to assure that the objectives of the SMA are implemented, but this responsibility also requires that WDOE not take sides in specific conflicts which would not affect the continued approvability of the Shoreline Management Program. The WDOE representative could perhaps have been better used as a non-negotiating resource person to signal if a specific decision were "out-of-bounds."

An alternative configuration for Special area management teams would be to utilize the special expertise of agencies like WDOE on a technical or resource team, rather than on the negotiating team. The technical team could be an integral component of the Task Force sessions by continually watching over developments to ascertain, in the case of WDOE, that agreements and conditions agreed upon by the Task Force did not threaten the continued approvability of the local Shoreline Master Programs.

In addition to providing a mechanism for recognizing the concerns of neutral agencies, the use of a non-negotiating technical team could provide a mechanism for the continued involvement of resource specialists, legal experts, and special interest groups. Formation of a participating, but non-negotiating, technical team could also provide the means of involving many concerned parties without making the negotiating team too large and cumbersome to be effective. Mutual agreement on the composition of the negotiating team and the technical team could be the beginning of a record of consensus.

Another alternative arrangement could be to provide a mechanism whereby the membership of a special area management negotiating team could be dynamic and responsive to changing conditions. For example, by mutual and prearranged agreement, parties to only a specific component or subconflict could become voting members on these issues. Or, for specific types of questions and issues, a member of the technical team could exercise a vote or perhaps veto power. Or, a special area management negotiating agreement could provide a mechanism for including parties newly defined by changing laws or by newly perceived challenges to their interests.

To be effective, a dynamic membership arrangement would probably have to be designed and mutually agreed upon during the phase before the negotiation of specific conflicts actually begins. Also, in order to avoid spending extra energy bringing entering members up to date, the entire process would need to be public and well documented. A possible drawback to a dynamic membership arrangement could be the lack of previous opportunity for an entering member to develop the trust of other members and a commitment to the process.

The Grays Harbor Estuary Planning Task Force was an important step nationally toward designing a process to integrate comprehensive estuary planning and conflict resolution by negotiation. Continued

experimentation in identifying the institutional requirements of comprehensive planning and conflict resolution by negotiation and in structuring a task force or negotiating team will have to continue if some of the difficulties experienced by the Grays Harbor Task Force are to be avoided in the future.

The Distribution of Power Among the Parties

Had the Grays Harbor effort been entirely a comprehensive planning activity, the use of phrases such as "parties to the conflict" and the "use of power" would be unnecessary and, perhaps, even inappropriate. But everyone recognized, at least after the activity matured, that they were negotiating in an attempt to resolve conflicts in Grays Harbor. Given this, not only is it necessary to identify and involve the relevant parties to the conflict in a suitably designed process, but it is also necessary to analyze the distribution and use of power necessary for effective individual and agency negotiations.

Power is a major determinant of the ability of the parties to plan and negotiate. Within the Task Force, power varied with the level of control through ownership, jurisdiction, or mandate over organizational and physical resources; the ability to mount effective coalitions; the skill and experience of individuals; and the use of reference publics (i.e., groups outside of the main parties to the conflict, but generally supportive of the parties). In general, a necessary condition for successful conflict resolution is that all parties involved in the negotiations should have a relatively equal level of power. Relative power can be exhibited by the capability of one party to frustrate another or to prevent an action by another. If, for example, the design of the negotiating team includes a relatively powerless party, negotiation becomes farcical and any gains by the weak party are likely to be granted only by charity and to be ephemeral. If, on the other hand, one party is more powerful than any of the others, negotiation will not occur--acquiescence to demands will. The powerful party has merely to determine and exercise its will without bargaining with the others. If all parties have a level of relative power, however, small changes in power distribution, perceptions of power, and skilled use of power can greatly influence an outcome and a viable consensus resolution may be reached.

Sources and Use of Task Force Members' Power

Local governments and especially the Port of Grays Harbor directly represented, owned, or controlled physical resources. These resources and their control are at stake for local interests in the Grays Harbor conflict. It is worthwhile remembering that private landowners have this same kind of control and stake, but they were not directly represented on the Task Force.

The Port has extensive economic power: the ability to generate jobs and development opportunities. The political power of the Port is evidenced by its ability to appeal to Senators Magnuson and Jackson to influence permit approvals and provisions in the EPA section 404 guidelines (see chapter seven). Extensive land ownership, professional planning and development experience, and political influence with the Governor and the Congressional delegation made the Port the clear leader of local development interests, public and private. This power of the Port was, at times, somewhat resented by local governments, who could view the Port as occasionally encroaching on their rights and responsibilities (Lauritzen, interview, 1979; Johnson interview, 1978). However, a sometimes uneasy coalition of local governments and the Port argued for economic development opportunities and the local authority to make decisions.

The power of the resource and regulatory agencies resided in their ability to influence decisions, not in their direct control over resources. The permit review authority of these agencies is a source of very real power, although the resources themselves may be neither directly owned nor controlled. The legislatively mandated power of these agencies is, however, neither absolute nor evenly distributed. For example, the U.S. Fish and Wildlife Service (USFWS) section 10/404 permit review activities under the Fish and Wildlife Coordination Act are the most visible and active mechanisms employed by that agency to influence shoreline development and protect natural resources. USFWS believes its reputation as a tough reviewer (i.e., power) comes from its ability to be a credible and professional resource advocate (USFWS, 1979 b). Yet, the agency felt itself limited in its ability to adequately assure the long-term viability of estuarine resources. In Grays Harbor, USFWS finally granted approval of the Boise-Cascade project on the condition that this project would be the last permitted until an estuary-wide comprehensive plan was developed. When the Kaiser fill proposal surfaced and was justified on the grounds of a national interest in energy independence, the moratorium on wetland fill that had been proposed by USFWS was compromised and overridden, and the agency could only renew the threat of a moratorium for the next proposal.

The creation of the Task Force is evidence of the perceived power of the USFWS position. On the other hand, the early commitment of USFWS to the effort is evidence not only of philosophical and professional beliefs about methods of resource management, but also of uncertainty surrounding USFWS resource-protection capabilities and the vulnerability of its position to the political and economic influence of development interests.

Political factors beyond resource ownership and regulatory authority affect the distribution of power among the participants on the Task Force. For example, the state resource agencies may have had more legal potential for influence on the Task Force than they employed. Some of the state representatives felt severely constrained by political pressure from the executive level of state government to comply, within strictly legal limits, with the Port's stand on economic development needs (Smith, interview 1979).

Behavior of a party which is judged by the others as out-of-order, disreputable or contrary to group norms can also alter perceived power. The specific outcome of the action in question can influence either a net increase or a net decrease in the actor's perceived power. One party on the Task Force took action early in the effort to have a particular agency representative removed (Smith, interview, 1979). This party, reportedly, used their influence outside the Task Force rather than presenting the issue to the Task Force and recognizing its responsibility as a group to agree to its composition and participation of its members. Prediction of how power is likely to be altered by such an action is difficult. Had the effort succeeded, other participants on the Task Force could have become sufficiently disillusioned by the excercise of one party's influence that the planning effort could have died due to a sense of despair or futility. However, on the Grays Harbor Task Force, the attempt to remove the participant did not succeed. But the attempt did have an affect on the Task Force by increasing levels of distrust and polarization. The effect of such actions can impact the ability of a task force to build compromises--a prime task of effective planning and negotiations.

The formation of coalitions is one mechanism for exercising considerable influence over resource-use decisions. On the Task Force, a coalition of federal agency representatives finally became the

leaders of the environmental interests: a National Marine Fisheries Service (NMFS) representative strongly committed to the concept of comprehensive planning, an environmentalist who represented USFWS, and a knowledgeable representative of EPA.

Once the initial leadership patterns were established, the relative distribution of power has remained fairly constant with the exception of the perceived power of the EPA. When the Task Force effort began, the national guidelines for enforcing section 404 of the Clean Water Act (CWA) were neither well defined nor well understood. In 1979, new guidelines were proposed to implement the 1977 amendments to the CWA, and the President's Wetlands Protection Policy (Executive Order 11990) was proclaimed. The proposed section 404 guidelines further restrict shoreline development and allow EPA to take a stronger role in implementing their section 404 responsibilities. Section 307(f) of the Coastal Zone Management Act (CZMA) and a July 1978 memo from EPA headquarters (EPA, 1978) state that the 404(b)(1) guidelines must be an essential ingredient of all state CZMP's and that, in fact, any requirements of the CWA take precedence over CZMP's (see chapter seven). Because the inflexibility of national EPA policy guidelines was not known or appreciated early in the Task Force effort, the perceived power of EPA is greater now than in the early Task Force years.

In any successful conflict resolution, some redistribution of power must occur. In Grays Harbor, the power to influence decisions was at stake (by law) for the resource agencies. A critical expectation of local governments was a relaxation of the state and federal presence in the permitting process. In light of the realization that the powers of the resource and regulatory agencies were their only stakes in the bargaining and that these powers were defined nationally by law, the locally desired redistribution of power would seem unlikely and illegal from the start.

In a major compromise, the Port agreed to restrict its development to Bowerman Basin, an area behind Bowerman Airfield. In return for the Port relinquishing its options to fill and develop elsewhere in the estuary, the agency representatives agreed to designate Bowerman Basin as "one of the major areas of new basic economic expansion within the Grays Harbor Region" (GHEMP, November 1977). The Port understood that they could fill the 500 acres (200 ha) over the next fifty years, that half of the area could be filled immediately, and, if the need for additional fill could be demonstrated, the remaining 250 acres (100 ha) could be filled. Environmental groups, as well as attorneys for the resource agencies have since concluded that the resource and regulatory agencies were negotiating illegally by not recognizing the constraints of the section 404 guidelines for detailed review of each specific fill proposal and for the necessity of siting water-dependent uses on such filled areas. The resource agencies may have been bargaining without control of the chips or without full development of the rules of the game before the process began (USFWS, 1979 b). (A more complete discussion of these issues and the changes that have occurred since the initial negotiations is found in chapters six and seven.)

Perception of power is often as important as actual possession of power. For example, this is particularly true with regard to the power of environmental groups. Often citizen environmental groups have only minimal control over organizational or physical resources, but they are often perceived as having substantial influence. One of the reasons for this is the assumption that the active core of environmentalists is a lot larger than it actually is because environmental coalitions can reach out and enlist the support of those who may not be actively involved in a particular conflict, but who give general support to an idea.

In conflict resolution and negotiation techniques, those groups outside of the main parties to a conflict but generally supportive are called reference publics. The use of reference publics can alter the perception of power and can influence the outcome of negotiations. In Grays Harbor, the use of reference publics seemed to be limited to development interests. Several private landowners, developers, and their lawyers attended meetings and represented their cases to the Task Force during those sessions that addressed permitted uses on land they owned or were planning to develop. Although the Task Force finally limited these special-interest appeals, the perception they left was that there was immense local support for industrial development.

In the view of some observers, the federal agencies initially suffered from the lack of visible support from nonfederal interests and might have been able to benefit from the use of reference publics. Federal agency representatives, however, concluded that their professional ethics as environmental scientists and representatives of the federal government precluded them from enlisting the active political support of outside groups (Bowker interview, 1979). Available strategies to include reference public support were additionally limited. Some state agency representatives felt politically constrained. Representatives of environmental groups attended meetings, but felt their presence was actively resented; and, although the meetings were open to the public, some citizens reported that they were encouraged not to attend.

Potential reference publics did exist. One example is the Grays Harbor chapter of the Northwest Steelheaders, which has recently made public its opposition to dredge and fill activities that endanger the fish runs in Grays Harbor (Daily World, 1979). Another is a group of Aberdeen "white-collar" workers who are rumored to be willing to support the Plan when it becomes public. (The most recent draft of November 1978 was circulated only to Task Force members.) During the past year, resource agencies have been urging that environmental groups' representatives be given a limited opportunity to participate.

Importance of Negotiation Skills

The skills and training of individual representatives are also salient elements in the skillful use of power in conflict resolution by bargaining and negotiation. Either a mismatch in abilities possessed by an individual and those skills required for negotiations, or substantial inequalities in the distribution of skills among participants can affect the outcome.

In Grays Harbor, the representative of the Port was especially adept at analyzing the conflict situation and strategizing. These skills and a high level of stamina allowed this enterprising Port planner to be a dynamic leader of development interests. Although not a formal member of the Task Force, the regional planner from GHRPC also seemed to deal proficiently with the group dynamics of conflict resolution and negotiation. Professional training and personal aptitudes combined to make these two representatives strong and influential negotiators.

On the resource agency side, able negotiation skills were employed especially by the NMFS representative, who was also a prime mover, along with the Port planner, in the initiation of the Task Force effort. However, the resource agencies were, for the most part, represented by field biologists or biologists who became resource managers as they ascended in the agency bureaucracies. Aside from the legal questions of whether the agencies can bargain and determine trade-offs, these activities may be foreign to the professional training of biologists. One agency representative observed that a resource biologist could

benefit from the knowledge of the characteristics of group dynamics and methods of conflict resolution (Bowker interview, 1979). Another difficulty expressed by this representative is the ethical question of whether the professional standards of biologists allow them to participate in a process that sacrifices certain biological resources for the protection of others.

Earlier discussion in this chapter stressed the need to design a decision-making process to fit the problem. The distribution of skills and professional training of representatives illustrates another point: individuals should be chosen to fit the process. For example, if the agencies are only to provide technical advice to the decision-making process, one set of individual skills and knowledge are required. If, however, agencies are negotiating, an additional and entirely different set of skills and knowledge is required of an effective representative.

Most agency representatives did not have experience or skills in environmental negotiation and it is likely that this will be the case in many planning experiences elsewhere in the country. Agengy personnel are usually not hired for the negotiating skills, but for their technical background and understanding of ecological systems and resource management. However, based on the Grays Harbor experience, agency administrators are well advised to select individuals who have skills to match the demands of the planning activity and to provide training opportunities for agency personnel.

Selection of suitable representatives of local governments and development interest is, of course, subject to the same arguments for matching individual abilities and knowledge to the process. Consultants and designers of a decision-making process have a responsibility to be certain that all parties in a hybrid of comprehensive planning and dispute resolution via negotiation fully understand the requirements of the process and select representatives with appropriate skills.

In negotiations, power is the currency and adept negotiators manage power and the perceptions of power to impress the other side and to move the negotiations toward the desired ends. Thus, each side needs to consciously select individuals who, in addition to having technical knowledge, are adept in negotiation.

The Ability of the Parties to Make Commitments

In order to move forward toward viable compromises and agreements in a multisided dispute resolution process, the parties must not only be committed to the process but also must be able to speak for their constituents and be able to make some form of commitment on the part of the constituents. Also, whatever the mechanism of obtaining commitments (e.g., taking proposed agreements to a board of trustees for a vote, or referring a policy decision to a regional director of and agency), each party needs to understand the ability of other representatives to make commitments.

Task Force activities were affected by two aspects of the differences among the participants' ability to make commitments: the ability of the representatve to speak for the agency or entity, and the ability of the agency or entity to make commitments. These abilities are another component of the perception of power, and therefore influence the nature of the negotiations.

The ability of a representative to speak for the agency or entity is partially a function of that individual's position in the agency and the responsibilities delegated to the individual through a job

description or for a specific set of negotiations. The organizational distance between the position of the Task Force participants within their own agencies and the locus of agency decision making generally increased along a continuum from local to federal agencies. The Planning Director of the Port of Grays Harbor, who was the Port's representative on the Task Force, spoke directly for and was responsible to the Port Manager. In fact, the Port Manager attended Task Force meetings with the Port representative. Thus, although some decisions had to be referred to the Port Commission, the Port representative had the ability to caucus with the decision maker, to respond rapidly to changing circumstances, and to strategize accordingly.

In contrast, representatives of the resource and regulatory agencies were generally quite removed from agency decision makers. In a number of cases, final decision-making authority resided in top officials in the national or state headquarters. For example, after the July 1978 memo from EPA regarding the interaction between the provisions of the CWA and approval of state CZMP's, the local office of EPA was effectively removed from the bargaining. Decisions were thereafter handled nationally. One operational result was that communication became more difficult and time consuming. The whole process slowed.

As another example of the same basic problem, in the spring of 1979, the USFWS representative asked the USFWS Area Manager to request the Director of the USFWS to obtain an opinion from the USFWS Solicitor on the relationship between federal approval of a state's CZMP and the requirements of section 404 of the CWA (USFWS, 1979 a). When agency representatives found it necessary to refer to policy makers higher in the organization, the ability to strategize or negotiate was constrained, and representatives could appear weak, indecisive, or unreliable to the other side.

In addition to the varied abilities of representatives to speak for their agencies, the ability of the separate agencies to speak also varies. The Port has a clearly identifiable policy of enhancing economic development through the development of land in the harbor, therefore, the Port representative can develop specific strategies to advance these interests. Federal and state agencies have a more difficult job defining precisely what resources should be protected where, to what extent and in what manner. Also, in the view of at least one resource agency representative, they could not "take extreme positions for the sake of bargaining or gaming" (Bowker interview, 1979).

Regardless of disparities in the ability to speak, bargaining occurred and could be expected to occur. The lessons for the future would seem to be (1) to recognize when these disparities are unavoidable and adapt expectations and procedures to accommodate them; and (2) to analyze when disparities can be lessened by selection of individual representatives, by strategizing to minimize confrontations requiring referral higher in the bureaucracy, or by assigning certain ad hoc powers and responsibilities to agency representatives.

The Use of Technical Information by the Parties

In comprehensive planning, information is expected to provide a rational framework that supports the planning decisions. Good information is expected to stand on its own with no need for advocacy. In conflict resolution, the situation can be somewhat different. Information is often used to determine the bounds of the conflict

and the areas of compromise. In the analogy used earlier in this chapter, information is used in defining the conflict environment--the edges of the box in which the conflict occurs. When the information is uncertain or the edges fuzzy, advocates can select and use information to persuade; information can become a tool of one side for its own use.

Step 1 of the Grays Harbor Estuary Management Program was intended to establish an estuarine data base specific to Grays Harbor which could then be employed in the Step 2 planning activities. The consultants also expected that the use of an estuary-wide data base would be useful in getting the locals to begin thinking beyond their own jurisdictions (Montagne and Davis interview, 1978). Resource agency representatives required the specific environmental information before they could make trade-off or resource-use decisions. Legal and jurisdictional information was required to assure a legally viable solution.

Perceived Value of Technical Information

As stated in interviews, the value to Task Force members of the Technical Memoranda from Step 1 ranged from minimal to highly significant. Federal agency representatives used terms like "valuable," "extensive," and "necessary" to describe the utility of the Step 1 technical information. The representatives of the Washington Departments of Game (WDG) and Fisheries (WDF), who had the greatest personal knowledge of the estuary, felt that the Step 1 effort was of little use in the bargaining or planning process. Representatives of local governments seemed to have little use for the technical information, discounting environmental information as supportive and representative of special interests. Representatives of local governments quite often did refer to the WDF and WDG experts, who were also local residents, if information was needed.

Valuation of the Step 1 effort seems to reflect the political positions and professional training of the Task Force members. For example, resource and regulatory agency personnel believed the ecological information was necessary for them to make decisions regarding the use of the estuary and to ensure acceptable levels of habitat protection. However, these statements of the significance of the technical information have elements of a tautology. Resource specialists are trained in the paradigm of the scientific method and the accompanying necessity of information gathering and experimentation. Ecological information is also, of course, believed necessary for decisions on resource use to be legally supportable. The technical information describing the resources can therefore become a tool for the interests supporting resource protection.

The lesser value of the technical information to development interests is evidenced by the unfamiliarity of a number of the participants with the presented information (there were doubts expressed by some Task Force participants about whether some of the other individuals had read the volumes (Laukers interview, 1978); by the fact that perceptions of the nature and value of the estuary were only minimally changed during the process (for some participants no change seemed to occur); and by the statement from the Planning Director of the Port of Grays Harbor that a major value of Step 1 and the Technical Memoranda was to give credibility to the Task Force when viewed from outside (Lattin interview, 1978).

As is usually the case in environmental decision making, specific information is often unavailable, incomplete, or uncertain. Yet, postponement of decisions until more information is available is usually unacceptable or impossible. Grays Harbor is no exception. In

circumstances of uncertain information and high risks of environmental harm, the resource agency representatives relied on a strict reading of their agency mandates and took a strong protectionist stand. Uncertainties in economic information were handled similarly by development interests. The representatives of local governments and the Port argued that greater weight should be given to economic concerns even if information was speculative or unavailable.

Suggestions for Improving Technical Information and Its Use

Members of the Task Force offered the following suggestions to improve information use and transfer in future efforts. (1) A mechanism to provide new or additional information throughout the process would be useful. If most of the information-collecting effort is expended before all of the issues are identified and the areas of conflict defined, there can be only minimal attempts and limited opportunity to integrate additional information about other issues and problems as they develop. (2) Summaries of the technical data should be prepared that emphasize and interpret the conclusions of the technical team regarding their critical concerns and the special vulnerabilities of the estuary. Technical information also should be presented in a manner which directly addresses the policy questions a task force has to answer. Such summaries can be presented in person by the team leaders to a task force with the opportunity for discussion. (3) A field trip to "ground truth" the data should be conducted early in the process. In Grays Harbor a number of Task Force members expressed surprise when they did take a field trip late in the process. Perceptions developed solely on the basis of the technical information base can be, in some cases, inaccurate. (4) Lastly, whereas some of the Task Force members could rely on personal expertise in environmental sciences or planning, none were legal experts. At least one Task Force member suggested that the process might have gone more smoothly and that some of the legal difficulties that developed might have been avoided by better legal information (Lee interview, 1978). Granted that there is considerable national uncertainty on some issues, Task Force participants still believe that an opportunity for better decision making was missed by not having a better understanding of legal constraints at an earlier stage of the process.

The consultant did state clearly in interviews that it was essential for the Task Force members to have a thorough and mutual understanding of the legal and institutional basis of shoreline management in the estuary before developing estuarine management policies. However, interviews with Task Force members indicate that comprehension of the full meaning of state and, in particular, federal environmental mandates did not clearly result during Step 1 of the planning process. Local participants stated that, although their previous experience with shoreline permitting and reading of the Technical Memoranda gave them knowledge of the complexity of the existing management framework, they expected more flexibility from state and federal agencies. This expectation for increased flexibility reflects inadequate understanding of agencies' mandates and regulations.

One of the most important functions of information in conflict resolution activities is to define the conflict environment box and the boundaries of the possible solutions. To do this well, the information should provide answers to some very special types of questions. For example, instead of only providing a soils map to show the distribution of different types of materials and their capacity to retain water or their tendency to erode, soils information for negotiation needs to

provide data on limits to the capacity of the soils to support different levels of development, and trade-offs that could be made between intensive development and the costs of alternative sewage systems. As another example, projections of economic development are insufficient without accompanying analysis of the capacity of the resource (under varying conditions of development) to sustain both a level of acceptable environmental quality and the projected levels of economic development. One resource agency representative on the Task Force complained that he still did not understand why the Port needed exactly the area for filling it demanded, and why some alternative site, acreage, or facility was not as desirable (Smith interview, 1978). Such necessary information could be in the form of systematic alternatives analysis--"what would happen to A if B were allowed to occur?" Not only in Grays Harbor, but in many instances of environmental decision making, better "front end work," systems descriptions of the biological and legal environment, and identification of the effects of alternative trade-offs are required.

The Multiple Roles of the Consultants

Power distribution and its use by the parties to the conflict played a significant role in the evolution of the Grays Harbor Estuary Management Program and the character of the Draft Plan. The nature of this evolution was also influenced by an unaligned party: the consultants.

The Task Force hired a two-man consultant team to provide independent technical expertise. The experiences the consultants brought to the Task Force were in the fields of fisheries biology, state government, and regional planning. The Task Force chose the consultants for their specific experience and demonstrated capabilities in the development of the Lower Willamette River Valley Plan, which used a task force of primarily state agencies to develop a comprehensive resource-use plan.

After completing the data gathering in Step 1, the consultants led the Task Force into Step 2: deciding on a management concept and establishing a management plan. In a memo to the Task Force at this stage, the consultants defined their role in the coming workshops (Montagne-Bierly, 1977 c): "It is our job as consultants to the Task Force to try to lay out information for you, to identify decisions that you must make, and to provide the structure for you to reach decisions." The role described by the consultants leads to the conclusion that they expected to be facilitators in a comprehensive planning activity.

In interviews with the Task Force participants two years later, nearly everyone compared the consultants to labor negotiators or mediators. At this same stage, the consultants described the function they actually performed to be "bringing or refocusing the group on the original goals and ideals of the process and forcing them back to the task at hand." The consultants list the following criteria for their functions:

1. Sufficient dedication to the group to accomplish the task and accept the liabilities of the process

2. The establishment of a fairly rigid set of ground rules and procedural format prior to implementation of the process

3. The clear establishment of a data base sufficient to allow technical questions to be answered and hypothetical impacts during the task force draft development to be evaluated

4. Crowd control specialists and referees: whether it be university, agency, or consultants, they must be sufficiently

skilled to work within the group dynamics unique to the task force and with sufficient courage to resist political pressures to ensure a final balance product will emerge for review (Montagne-Bierly, 1979).

In the above letter, one of the consultants added, "as hokey as it may seem, I honestly believe that idealism is most important to maintain credibility and a balance to the process."

The roles of technical advisors and facilitators of comprehensive planning expanded as the consultants became mediators during negotiations. The arguments for matching the skills and training of Task Force participants to the nature of the process also apply to the role of the consultants. In Grays Harbor, Task Force participants were favorably impressed with the competency of the consultants and credited them with easing tensions and keeping the sessions going. Effective consultants or mediators possess special skills and often have undergone special training. Just as developing foreign policy and negotiating a peace treaty require different skills and knowledge, so do developing a comprehensive estuary plan and mediating an environmental conflict.

Suggestions for Improving Consultants' Role

Task Force members suggested the following improvements. First, some issues unnecessarily can become too hot too quickly because of insufficient documentation of decisions and agreements made in earlier sessions. More careful notetaking and rapid reporting may defuse some issues. Secondly, in the early stages of the process time, should be made available for the purpose of developing mutual trust and credibility among the Task Force members before the actual negotiations begin. Several Task Force members suggested that simple changes in the physical setting could have helped the group interact. For example, a large round table could have lessened the tendency for subgroups to form during the workshops. Thirdly, some of the Task Force members felt at a disadvantage because they did not fully appreciate the fact that they would be bargaining and that they needed special skills to be effective. Special training programs on bargaining techniques can prepare participants to plan and to negotiate in special area management efforts. Lastly, by working informally with participants, consultants can explore alternative solutions privately and avoid public commitments or debate when the time is not ripe.

At least one Task Force member felt the consultants played too strong a leading role, instead of encouraging the Task Force members to undertake such jobs as designing standard use matrices in the Plan and deciding what information should be accumulated during Step 1 (Walters interview, 1978). Working under pressure to meet a schedule, the consultants drafted a series of Planning Area guidelines for areas that had not been completely discussed by the Task Force. Workshop discussion had focused on conflicts in the inner harbor, leaving six of the eight Planning Areas undiscussed by June 1977. Although the consultants made a responsible attempt to develop these draft guidelines to reflect what they thought the Task Force would want, the fact remains that the Task Force did not work through the process of developing these guidelines, causing some resentment.

A lesson for future special area management activities is the need to select or solicit outside help based, at least in part, on an individual's experience in conflict resolution by negotiation or mediation. The Office of Environmental Mediation at the University of Washington offers a description of a professional mediator. The mediator supports the joint decision-making and negotiation process,

but has no authority or responsibility to impose a settlement. In environmental conflicts the mediator begins by helping to define a framework for negotiations. That framework must provide for the full participation of those groups and individuals whose interests require that they be a part of any solution to the problem. The mediator facilitates the negotiation process by helping to define and interpret positions while working with the parties jointly and separately and by providing liaision with important agencies and political bodies. The mediator must operate from a base independent of the ultimate decision makers and must be trusted by each party to carry messages when appropriate and to honor confidential remarks. The mediator also can help the parties to obtain the technical assistance necessary to ensure that realistic decisions are reached (OEM).

Summary

A primary conclusion from a study of the Grays Harbor Estuary Planning Task Force effort is that the political, economic, and ecological environment in Grays Harbor required a hybrid process of conflict resolution and comprehensive planning. Although comprehensive planning by a planning commission, professional planners, or local governments will involve some resolution of conflicts, a task force of decision makers such as the Grays Harbor Estuary Management Task Force will, of necessity, be required to bargain and to negotiate and to commit themselves to difficult compromises. Yet, the "rules of the game" in conflict resolution differ from those in comprehensive planning, and good "players" must recognize the differences and mobilize their resources accordingly. Further, a designer of any decision-making process needs to fit the process to the problem.

Grays Harbor can be viewed as an experiment in integrating comprehensive planning and conflict resolution via negotiation. Lessons from Grays Harbor to the next generation of efforts underscore the necessity of understanding the basic nature of the conflict situation; identification and inclusion of all the relevant parties to the conflict; skillful use of power, or the perception of power; development of negotiating strategies; and selection of all participants and outside help on the basis of a full range of skills required to successfully negotiate a solution.

6 THE OUTCOME

After nearly four years, the Grays Harbor Estuary Planning Task Force does have a revised Draft Plan (November 1978). The estuary-wide management format provides both general guidelines and specific agreements for resolving conflicts over resource use. The Task Force successfully forged several substantive compromises and drafted a set of bargains that together attempt to establish a "balance" in the estuary. As individuals and as agency representatives, the Task Force was able to create an atmosphere of increased cooperation and coordination. Although questions of adoption and implementation surround the future of the Plan and a number of important problems remain unresolved, these results can certainly be identified as benefits of the estuary planning activity.

Compromises Reached and Bargains Struck

Several management concepts and agreements for allowed uses of specific areas were reached by a lengthy, and sometimes tempestuous, process of compromise. These agreements included the multiple-use compromise, the conditional-use compromise, the split-management-unit compromise, the Bowerman Basin bargain, and the bankline alteration compromises.

The Multiple-Use Compromise and Specific Trade-Offs

The first compromise the Task Force was able to make was identifying multiple use of the estuary as an overall goal. Initially, the Task Force had difficulty finding a middle ground between such single-focus goals as the total protection of the remaining natural habitats, management primarily to protect migrating fish runs, and development of all suitable areas for industry. The multiple-use concept was not spontaneous, but grew, haltingly, into a consensus. The Port retains opportunities for filling and industrial development in specific areas designated by the Plan. Existing uses are, for the most part, allowed to continue. For example, gravel extraction in the Chehalis River is permitted to continue as a special condition in Conservancy Managed units where other activities that would interfere with wildlife observation, hunting, and natural characteristics are not permitted. Two Management Units in the outer harbor are set aside as Natural and are to remain undisturbed for wildlife habitat enhancement and preservation. One of these Management Units is a Washington Department of Game (WDG) refuge and the other is the property of the Nature Conservancy.

Like most general compromises, the concept of multiple use can be of only limited utility in specific decisions. Several Task Force members observed that this general goal was rarely used as a baseline during the actual negotiations over site-specific designations. The real significance of the multiple-use concept was probably not fully appreciated by all participants until the battle over filling the wetlands in Bowerman Basin had established the concept of balance (see pp. 62-63).

After hard-fought bargaining and specific trade-offs on the Bowerman Basin issue, Task Force participants now speak of the Plan as being "balanced." One of the major aspects of this balance is the protection of fish passage along the Chehalis River in exchange for landfill in Bowerman Basin where migratory shorebirds feed. Fish passage along the Chehalis is crucial to anadromous fisheries, whereas the estuary has other shorebird feeding areas in addition to Bowerman Basin. In particular, fish passage is secured along the Chehalis River by policies that protect it from development that

would disrupt fish migration. Also, the Fish Base, an area in Management Unit 14 near the east end of the sewer ponds in the Hoquiam area between the Hoquiam River and Bowerman Airfield, is protected. This area is characterized by shallows and fringe marsh, a type of marsh rare in other areas of the estuary, and a very important food source for migrating fish (Boomer, 1980 a and b).

However, neither the Task Force, the Regional Planning Commission, nor the consultants have shown by rigorous documentation that the mix of uses in the estuary is indeed "balanced." The balance was achieved by negotiations, and it is assumed that this political balance is a use balance as well. The Plan is expected to be changed and amended as time passes, but how the balance is to be maintained or reestablished remains unanswered in the Plan in the present implementation and amendment schemes.

The Conditional Use Compromise

Another compromise in the management scheme is the conditional use provision. Task Force participants decided that having only two categories, permitted uses and prohibited uses, was too inflexible. Development interests believed that a priori exclusion of many uses was unjustified and too constraining. The conditional use provision is an attempt to provide developers and land owners with the predictability of knowing that a set of uses or activities in a particular Management Unit is generally consistent with the goal of multiple use. At the same time, the agencies retain the ability to determine, by specific case or permit review, whether special design criteria are required or whether the specific proposal is entirely inappropriate for the Management Unit, even though in general the use is allowable. For example, in a Rural Low Intensity Management Unit along the southern shore of the estuary, continued development of scattered residences and bankline erosion control are considered appropriate and are permitted. Proposals for outfalls, pilings, and mooring dolphins are conditional and in this area must undergo specific case review because of the problems inherent in these types of activities.

The conditional use compromise was developed to postpone specific decisions on potentially controversial activities in particular Management Units. The test of this mechanism will come, if the Plan is adopted, when specific new proposals are questioned. The conditional use compromise may prove to be a conflict-delaying tactic rather than a conflict-resolution tactic.

The Split Management Unit Compromise

The split Management Unit provision offers another type of compromise. A number of nonaquatic Management Units (fourteen of forty-three) are subdivided in an attempt "to add special emphasis to the management philosophy or to achieve specific objectives for those areas" (GHEMP, November 1978, p. 11). In the Plan, the upland boundaries of Management Units are defined by convenient near-shore highways, railroads, or plat lines running approximately parallel to the shore. The aquatic boundary for all Management Units, except the open-water ones, is the line of ordinary high water (mean high tide). In a split Management Unit, the line of aquatic vegetation (COE section 404 line) further divides the area into two regions that have different Management Categories.

This compromise begins to recognize that aquatic-area characteristics can be quite unique and different from upland-area characteristics. Resource agencies dealing with aquatic areas tend to view special aquatic qualities or vulnerabilities as limitations to specific types of upland development that could be threatening or degrading to the aquatic area.

Upland developers and landowners often believe that appropriate uses of an area are determined primarily by upland characteristics. A Management Unit that is Urban Development on the upland side and Conservancy Managed on the aquatic side is an attempt to satisfy all of these concerns. Some observers consider the resource agencies to have won the split Management Unit provision. If so, perhaps this is the "foot in the door" which balances the developer's "nose in the tent" from the conditional use provision.

The Bowerman Basin Bargain

Perhaps the most significant and the most difficult specific compromise involves the development of Bowerman Basin (Management Unit 13), a wetlands area on the northern shore of the estuary and one mile west of Hoquiam (fig. 6).

The Port of Grays Harbor is the sole owner of the 500 acres (200 ha) in Bowerman Basin and the 1,700 acres (680 ha) in more exposed wetlands immediately to the west. During the negotiations, the Port expressed its intentions to fill the entire area to create additional flatland for industrial development.

Bargaining began with "all or nothing" positions. The Port wanted the entire 2,200 acres (880 ha) predesignated for eventual filling, and the resource agencies opposed any filling on such an extensive scale. The National Marine Fisheries Service (NMFS) representative claimed "that's more fill than I think we'd look at nation-wide in five years" (Chasan, 1978).

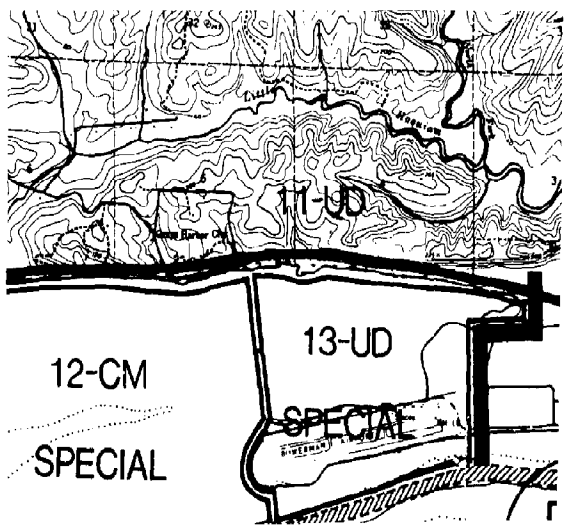

Figure 6 Management Unit 13: Bowerman Basin (Grays Harbor Estuary Management Plan: preliminary draft, March 1978. Grays Harbor Regional Planning Commission, Montagne-Bierly Associates, and Wilsey & Ham.)

The negotiating session on Bowerman Basin lasted one-and-a-half days. Participants caucused, took firm stands, and argued fiercely. The consultants are credited with keeping everyone together and talking. The climax was reached when the General Manager of the Port finally grabbed a pointer and, in front of the media, local politicians, and the rest of the Task Force, reeled around to a large map and

pointed to a possible compromise line (Lee interview, 1978). The compromise line was the boundary of Bowerman Basin, the end of the peninsula where the airport is located.

In the provisions of the compromise as detailed to date, the Port has agreed to relinquish development of its 1,700 acres (680 ha) in return for assurances that it can develop the 500 acres (200 ha) in Bowerman Basin. The 1,700 acres (680 ha) are to be transferred to a designated state resource agency for fifty years. The 500-acre (200 ha) parcel was split in half and only a 250-acre (100 ha) fill will be allowed until additional need can be demonstrated. Terms of the compromise are being refined in ongoing discussions among Task Force members.

After the negotiating session on Bowerman Basin, a new piece of information relating to the area became available. A report in 1978 (Herman, 1978) for the U.S. Fish and Wildlife Service (USFWS) nominates Bowerman Basin as a Unique Wildlife Ecosystem and states that the area is the most important shorebird roosting area in the Grays Harbor region. "No area of comparable extent in the Grays Harbor region supports so critically such a high diversity and abundance of wintering shorebirds." Also, the endangered subspecies of peregrine falcons feed on shorebirds and hunt in the Basin. The report concludes that "the loss of this area to development would mean the sacrifice of the most significant and heavily used piece of this kind of habitat in coastal Washington and would reduce further the capacity of Grays Harbor to support wintering shorebirds and waterfowl." Uncertainties still remaining about the Bowerman Basin compromise are discussed later in this chapter.

The Bankline Alteration Compromises

The bankline erosion control and bankline straightening policies are components of the general policies for fill set forth in the Plan. In a case-study review of the Grays Harbor Estuary Management Plan prepared as part of the Office of Coastal Zone Management (OCZM) 1978 review of the Washington Coastal Zone Management Program, Dehart identified the limitation of bankline straightening and bankline erosion control to the least productive portions of the harbor as a major compromise.

Bankline erosion control is a maintenance action to preserve and protect existing shorelines from erosion. Riprapping and minor bankline straightening and sloping necessary for erosion control may only be used where specifically authorized in the Permitted Activities Matrix of each Management Unit. For example, bankline erosion control is permitted in all Urban Development and Urban Mixed units except one, in which it is a conditional use. Bankline erosion control is not permitted in any of the Natural areas. In the several Conservancy Managed units, bankline erosion control is not permitted in seven, is a special condition in four, is a conditional use in three, and is permitted in two (GHEMP, November 1978). The Plan set forth a general policy that bankline stabilization procedures are to be confined to areas actively being eroded or where new development or redevelopment requires protection for the maintenance of the integrity of upland structures or facilities. The Plan further states that "under no circumstances shall bankline erosion control be initiated for the purpose of gaining developable uplands from existing water areas" (GHEMP, November 1978).

The bankline straightening policy applies to small fills that are designed to provide additional usable uplands for development. This type of fill is a permitted activity only in four Urban Development and one Urban Mixed Management Units. Bankline straightening can

occur only between two existing points of land as defined by the limit of Corps of Engineers (COE) jurisdiction (section 404, line of aquatic vegetation). The maximum size of a permitted fill is two acres (.8 ha) measured from the line of aquatic vegetation.

The Plan identifies guidelines for both bankline erosion control and bankline straightening, but the relationship between these guidelines and other state and federal policies is not elaborated and is, in fact, somewhat confused. For example, the maximum outer slope of a fill or bulkhead allowed in the Plan is different from that allowed by Washington Department of Fisheries (WDF) guidelines (Tegelberg, 1980). Also, the Plan does not reference existing guidelines for landfill structures (e.g., WAC 173-16-060).

Even though some fine tuning of the bankline erosion control policy and the bankline straightening policy in the Plan may be necessary, these provisions do represent substantive compromises reached by the Task Force. However, in some senses this could be expected. For the most part, small-scale bankline modification issues were given a fairly low priority in importance by the technical team (see Montagne-Bierly, 1977 a). Thus, the generally low level of controversy surrounding bankline issues makes them especially good opportunities for compromises.

Increased Cooperation and Coordination

In Grays Harbor, decision-making changes have occured that are necessary for any conflict resolution or comprehensive planning effort to succeed. Those changes resulting in even marginally increased cooperation and coordination may be considered "signs of success."

Each "side" has accepted the legitimacy of the involvement of others in the negotiations and has made progress toward understanding the positions of others. For example, some local governments, which had bitterly protested federal agency "meddling" in local decisions, now have a more sophisticated knowledge and appreciation of federal agency mandates. These local governments had the opportunity to learn the legal and scientific basis for federal agency concerns and to recognize the federal presence in the joint decision-making process. On the other hand, some federal agencies, which believed local decision-making was proceeding with insufficient regard for natural resources values, were exposed to the reality of local concerns for the economic health of the region. In general, most participants felt that, as a result of the Task Force meetings, they had a better understanding of the positions of members from the "other side."

All Task Force participants claim they experienced a valuable lesson in interagency coordination and negotiation. The negotiating nature of the procedure did require resource agencies to coordinate their positions so that they could at least present a somewhat unified front in the bargaining sessions. The increased interagency coordination that is likely to result from these interactions may alleviate some of the problems that made planning necessary in Grays Harbor in the beginning. One possible sign of increased coordination is the scoping activity now being initiated by the COE (see Appendix for NEPA "scoping" definition). The COE has organized a team composed of some of the same agencies and individuals who were on the Task Force. This team has been charged with preparing a suggested scope of studies necessary to assess the environmental impacts of the channel widening and deepening project in Grays Harbor. Using the new Council on Environmental Quality (CEQ) regulations (see Appendix), the scoping began in June 1979 and is expected to continue through the fall of 1979 (see pp. 68-69).

Even though better coordination on future issues and better resource-use decisions are expected to result from the increase in the skills and knowledge of individuals, the development of interpersonal ties with other members of the Task Force, and the enhanced understanding of the other side, important questions remain. Is involvement in such a planning process the most efficient or appropriate means to develop this kind of knowledge and understanding? Or, would a simple but comprehensive and rigorous compilation of all agency mandates and responsibilities have provided an equally predictable framework for decision making? A rhetorical but perhaps important question is whether agencies should be involved in bargaining at all. Also, can this kind of experience be transferred to the parent agency or other individuals? If this can occur only with difficulty or only infrequently, the benefits of learning from the process may be very short lived.

Already a number of the original agency representatives on the Task Force have moved on to other jobs. The ability of new personnel to absorb the experiences and the information they need to act as productive, but sensitive, members of the group is unknown. The future commitment of individuals (and perhaps agencies) in cases where only informal adoption procedures are used is also uncertain. A local government Task Force member has expressed this concern and uncertainty by suggesting that if someone in some agency, who does not appreciate the Plan and the negotiated nature of the trade-offs in it, obstructs a permit application that complies with the Plan, then the Plan will probably collapse. A lot may depend on the role of the Task Force in the implementation and amendment process and the level of involvement that agencies and individuals maintain on the Task Force.

On a positive note, it should be observed that the Task Force has established a certain coherency and level of commitment to the Plan and the process. For example, when the Port and the EPA recently tried to develop mutually acceptable, but bilateral, alternative arrangements to implement the Bowerman Basin agreement, other members objected and wanted the issue remanded to the Task Force for group consideration (Kifer, 1979).

Achieving Predictability

Task Force participants and other members of the involved agencies are now critically evaluating the Draft Plan as they consider adopting it and committing their agencies to its provisions. A crucial and common question being asked by all of the parties is, "Does the Plan provide increased predictability?" Answering this question is difficult, due to the different definitions of predictability held by the separate interest groups and due to the unavoidable fact that final evaluation of success of the search for predictability awaits future developments: plan adoption, implementation, and testing of specific proposals over a period of time. If, however, certain outcomes of the Grays Harbor Estuary Management Program are displayed alongside the components of predictability (see Table 2, p. 42), certain signs of success in increasing the level of predictability can be identified. However, it can also be shown that total fulfillment of expectations for increased predictability has not occurred. Thus, the final judgmental question is whether the trade-offs made to achieve partial predictability are worth the costs.

At the local level, predictability meant that landowners and developers would have a set of specific guidelines to determine which types of development would be acceptable to the resource and regulatory agencies and that the presence of these state and federal

agencies would be minimized in local decision making. The building inspector from Aberdeen has observed that, during the past year, several shoreline development permits that complied with the Draft Plan "sailed right through"--a change from earlier cases (Lauritzen interview, 1979). There seems to have been a reduction in the intensity of conflict around small-scale shoreline developments, which has resulted in increased predictability for some local interests.

The level of conflict is high, however, around another localized issue: the Bowerman Basin fill (see pp. 62-63). Assurance that particularly important development proposals, such as the Bowerman Basin fill, would proceed smoothly from project plan development, through public administrative review, to timely approval and completion was a major motivating factor behind Port involvement in the planning process (see chapter four). At a recent conference in Oregon ("Coastal Zone Management," 1979), the General Manager of the Port of Grays Harbor spoke on the success of coastal zone management. With reference to the Grays Harbor Estuary Management Plan (GHEMP), the General Manager stated, "Given, then, the situation we have today, CZM cannot succeed unless local, state and federal agencies can find ways to *set aside their regulations and guidelines* and let CZM function" (emphasis added). Although events occurring now or in the future may alter the situation, the Grays Harbor activity to date has not achieved this definition of predictability, and it is unlikely that such solutions would be politically and legally viable. The Port's official position has now changed. The Port recognizes that resource agency regulations cannot be set aside in their entirety (Lattin interview, 1979).

The Task Force participants are still struggling in their search for predictability, but the focal point has shifted from individual permit applications and development proposals to a national policy issue. The question facing headquarters-level federal agency policy makers is the precise relationship of policy statements and trade-off decisions in regional comprehensive plans developed under the Coastal Zone Management Act (CZMA) to the case-by-case permit review procedures required of federal agencies by section 404 of the Clean Water Act (CWA) (see chapter seven). This change in focus of the tension and the broadening of questions to include national policy issues are not signs of either failure or incompetency on the part of the Task Force. In fact, this development was probably unavoidable, given the experimental nature of the Grays Harbor Task Force and the uncertain decision-making rules that existed when the Task Force began. Whether or not a Grays Harbor Plan is adopted and implemented, the process itself has had the positive result of forcing decisions of national policy significance, which in the long-term will certainly result in increased predictability in the decision-making system.

The resource agencies expected that the Plan would assure that the system of state and federal regulations would operate effectively and predictably to protect critical resources and environmental systems for the future. Whether the Plan will provide this protection for estuarine values is another judgment which, of course, cannot be made for many years. However, the Washington Department of Game (WDG) resource biologist in Grays Harbor does believe strongly that the Plan will result in decreasing the rates of wetland loss and habitat degradation, and that in fifty years there will be more of the estuarine qualities retained and more opportunities for resource-based recreation than without the Plan (Smith interview, 1978). This is the possible benefit that all of the resource agencies are trying to gauge. The resource agency negotiators will continue to struggle

with the questions of whether the sacrifice of allowing the fill of specific sites, such as Bowerman Basin, in return for at least limited protection of resources elsewhere in the estuary is wise or defensible and whether public environmental awareness will increase enough over the next fifty years to ensure continuing future protection.

A troubling question for resource agencies is whether congressional intervention will continue in the future in order to facilitate new energy, defense, or industrial development in what are thought to be "protected" areas. For example, the maritime industry throughout the nation is urging modification of the EPA draft section 404 guidelines to delete certain permit review criteria in section 404 and substitute provisions that would allow filling, when agreed to under an approved coastal zone management plan (e.g., Brinson & Haar, 1979; Hill, 1979; Hurst, 1979, and Lattin, 1979 c).

Alleviation of such concerns about predictability requires the continued commitment of all parties to the Task Force process and the resolution of a number of issues.

Remaining Issues

A number of issues remain that were not fully confronted by the Task Force or treated in the Plan. The tenacity of these persisting problems and the vulnerability of the Plan due to these unaddressed issues will be seen in the future as discussion of Plan adoption continues and after implementation occurs. The issues that were not fully addressed include: (1) the impacts of activities in the watershed on estuarine conditions and alternative management opportunities or schemes for watersheds; (2) the relationship between the COE's channel maintenance and improvement projects, the Plan, and implementation of the Bowerman Basin fill; (3) specific alternatives for positive management schemes that could include increased public access, habitat improvement, and marsh creation; (4) implementation mechanisms that would protect and conserve those wetlands and estuarine resources designated for conservation by the Plan; (5) identification of specific alternative development options and locations; (6) compliance of the Plan with the National Environmental Policy Act (NEPA); and (7) management systems in which the special qualities and limitations of aquatic areas are recognized in addition to land-use characteristics.

Watershed Management

The limited geographic scope of the Grays Harbor Estuary Management Program precluded broader watershed management concerns. Opportunities to address resource use problems and solutions via more holistic watershed or drainage basin planning were not available to the Task Force. For example, watershed management geared toward reducing sediment loads in the streams and rivers could alter the need for channel widening and deepening or change the pattern of siltation and accretion. Control of forest practices and pesticide or herbicide spraying on the uplands could alter the water quality of the estuary or result in changes in the quantities of contaminated sediments deposited in the estuary.

Environmental organizations, notably Friends of the Earth, have criticized the Task Force for not considering watershed issues as part of the planning effort. They stress that upstream development activities could damage the estuary and undermine the environmental gains sought by the Plan. The Task Force, however, decided early in their deliberations to limit themselves to considering only shoreline activities. According to the Director of the Regional Planning Commission, the major conflicts to be resolved were over

shoreline development projects. Also, in the interests of saving time and money and of producing a focused plan that could be implemented through the existing Shorelines Management Programs, limiting the effort to shoreline issues was judged to be reasonable and desirable.

COE's Channel Project and the Bowerman Basin Fill

The COE's channel widening and deepening project was never fully considered in the Task Force planning effort, and the relationship between these two activities is still confusing. Many of the same agencies--even some of the same individuals--were involved on the Task Force *and* on the widening and deepening study. The role of the COE was, however, quite different for each exercise. While the COE was actively involved in the navigation project, its role on the planning Task Force was advisory only. This perhaps explains why the widening and deepening project was not advocated by the COE during the planning effort and why the two activities were not linked together early in the Task Force effort. One Task Force member had a different reason: he believed that, since the widening and deepening project was federally funded by Congress, there was little the Task Force could do about it (Lattin interview, 1979a). The member's reason was credible because the November 1978 Draft Plan specifically excluded federal projects from consideration in Management Unit 44 (aquatic areas). Aside from this exclusion, it could be further questioned why the Port did not attempt to link the two activities during the Task Force planning effort. Without the widened and deepened channel, the expected use of the estuary by larger vessels would be precluded and the Port's continued capability for viable timber export and industrial growth might be diminished.

The major unresolved problem stemming from the nonalignment of the widening and deepening project with the Task Force planning effort involves the designation of disposal sites for material dredged during the navigation project. The COE Feasibility Study and EIS (1977) recommended open water disposal of all material dredged below the Union Pacific Railroad bridge in Aberdeen and disposal on diked uplands of all material dredged above the railroad bridge. This study examined Bowerman Basin as a potential disposal site, but since the basin is a valuable wetland and the filling of such areas with dredged material is contrary to several agencies' guidelines and overall national wetlands policy, the site was not recommended. In the Plan, however, Bowerman Basin is designated as a site to be filled, with the most obvious and cheapest source of fill material being the navigation projects. The Plan and the COE's project are, therefore, clearly inconsistent.

If the Plan is adopted and if it provides for filling of Bowerman Basin, but the COE, because of national wetlands policy does not use the area for a dredged material disposal site, a clear conflict is apparent (Ortman, 1979 b). This issue would have surfaced earlier had the COE's project been given more attention during the Task Force planning process. An outcome yet forthcoming will be whether or not national wetlands policy will be set aside in recognition of a locally developed plan that is said to balance uses over a fifty-year period. If the COE, or any other Task Force participant, had concluded that national wetlands policy would likely preclude the disposal of dredged material in Bowerman Basin, then Task Force debate over the issue may have been avoided and an alternate strategy, such as soliciting congressional action, might have prevailed.

One step has recently occurred that may resolve this inconsistency. In June 1979, the COE initiated scoping activities to further study the feasibility of the channel widening and deepening project. Again, the

same agencies, and even some of the same individuals who were involved on the Task Force, participated in the scoping sessions. During an early scoping session, the Port argued that, since the Bowerman Basin alternative was in the Plan, federal and state agency commitment to the Plan required scoping of the site. WDG and a representative of Friends of the Earth argued that the Bowerman Basin alternative should be studied at a future date (Ortman, 1979 a). They pointed out that the feasibility study, the draft EIS, and the long-range maintenance dredging interagency Task Force recommended against Bowerman Basin as an alternative disposal site. They suggested that the alternative could be added at a later date if the GHEMP included the Bowerman Basin fill in its final version (USACOE, 1979; Ortman, 1979 a).

The disagreement was resolved temporarily when the USFWS agreed that, if the Plan could be adopted and implemented, they would not object to filling Bowerman Basin. It is not yet certain whether or not Bowerman Basin will be included in the formal COE Plan of Study. The EPA representative officially disagreed with the USFWS position. The COE finally decided to prepare a suggested scope of studies that would include Bowerman Basin and wait until the preparation of the Plan of Study to decide whether or not to actually conduct the studies (see USACOE, 1979).

The proposal to use Bowerman Basin for dredged material disposal as part of the COE's channel widening and deepening project brought quick reactions from environmental interest groups. The Natural Resources Defense Council (NRDC), an organization that does environmental litigation, monitors governmental agencies, and conducts scientific research and citizen education, wrote to Doug Costle, Administrator of EPA. In their letter, NRDC recognized EPA's right to process a 404 application for the disposal of dredged material, but cautioned that the alternatives analysis must be done with respect to other dredged material disposal alternatives, not with respect to the purpose for which the dredged material would be used (i.e., industrial development) (Banks, 1979). The NRDC will probably press EPA to opt for open water disposal, a less damaging alternative in Grays Harbor than deposit on wetlands, especially in view of the strong national policies supporting protection of wetlands. Also, the dredged material is "clean" and water-quality impacts of open ocean disposal would be less damaging than the elimination of productive wetlands. This alternative would, of course, eliminate the potential for a large supply of free dredged materials for fill purposes. However, should strong needs for landfill materialize in the future, an economical opportunity for providing low cost, clean fill material would be lost.

The resolution of the inconsistency between the Draft Plan's proposed use of Bowerman Basin for fill and the COE's plan for disposing of dredged material in open water remains unsettled. However, the possible inclusion of Bowerman Basin within the COE's plan of environmental studies suggests that there may be an avenue by which the Draft Plan and the COE navigation improvement project can be aligned. This development is occurring late in the process, however.

Public Access, Habitat Improvement, and Marsh Creation

Public access concerns are not specifically discussed anywhere in the Plan. The Summary of Personal Interviews in the Technical Memoranda states generally that there was a need for public access to the shore areas. Local government and industry preferred that public access be limited to already existing areas of the ocean beaches or public boat launch points and excluded from shorelines that are

primarily committed to industrial uses. Several residents of the Hoquiam-Aberdeen-Cosmopolis area who felt excluded from the planning process also felt that the Task Force failed to recognize that convenient access to safe waterfront areas is desirable. Some residents object that traditional areas to walk or to run dogs along the waterfront are now either inaccessible or dangerous due to polluted waters and sediments. These residents also observe that no new facilities for public access are being provided.

Ports, cities, and water-dependent industries nationwide are increasingly realizing that additional public access to industrial and urban waterfronts is not only a civically responsible goal, but is also a genuine public interest. Increased public learning can also benefit port districts and industrial users in the form of public support for well-designed development projects. Providing mechanisms for increased public access to the urban waterfront could be a relatively low-cost and effective way to increase public awareness and support. The Task Force apparently missed an opportunity for a positive management action. This is understandable, however, given the multitude of issues that demanded their attention. Moreover, non-urban areas in Grays Harbor that depend on tourism do have adequate public access, and representatives from the more urban areas were more concerned about employment opportunities than such "refinements" as public access to the waterfront (Laukers, 1980).

The preliminary Draft Plan of March 1978 contained no specific provisions for habitat improvement or marsh creation. The revised Draft Plan of November 1978, which has not been formally released for public review, does contain a general provision for the restoration of marsh areas that have been diked for land reclamation (GHEMP, November 1978, pp. 22-23). Breaching the dikes would allow the marshlands to come under tidal influence again and should result in higher levels of wetland productivity. Although marsh restoration is given preference in two Management Units, no specific areas are identified, the relative gains from restoring alternative sites are not evaluated, and no mechanism to implement these projects on either privately or publicly owned land is provided.

Another new provision in the November 1978 draft calls for the creation of new marshland from a dredged material disposal and waste treatment site (Rennie Island in the inner harbor near Aberdeen). The Seattle District Corps of Engineers' Environmental Resources Section is particularly interested in this opportunity to mesh maintenance of the community's economic vitality with developing the region's natural resource base by breaching the dikes around the treatment ponds, which may no longer be needed, and by the planned disposal of dredged materials to build new intertidal habitats. The Plan does not provide for the implementation of this project except to say that it "will require the cooperation of private land owners and various regulatory agencies since individual objectives can only be achieved with the cooperation of all" (GHEMP, November 1978, p. 23).

Implementation of Resource Conservation

All participants on the Task Force wanted the Grays Harbor Plan to be more than just another set of recommendations. Everyone was searching for predictability. After examining the Draft Plan, environmental interests have questioned whether the implementation measures provided by the Plan are sufficiently strong to provide for resource conservation and to protect the designated conservation areas. A letter from an Environmental Defense Fund lawyer to the Area Manager of the USFWS states this problem well:

> I can only consider the implementation mechanisms for protecting and conserving those wetland and estuarine resources which are designated for conservation uses to be unnecessarily weak, and certainly far weaker than the mechanisms for implementation of the development plans. . . [I]mplementation of the land use objectives for management unit 13 [Bowerman Basin] is not to depend upon . . . private parties . . . [but] upon the U.S. Army Corps of Engineers to fill in a futuristic industrial park site with dredged spoils from the navigation channel in Grays Harbor, all financed directly by the United States Treasury . . . Given these extraordinary implementation mechanisms for Unit 13, it seems reasonable to judge the mechanisms for protecting wetlands and estuarine areas of the other management units by them. By any measure, those protection mechanisms must be considered feeble by contrast. . .The protective mechanisms for the other extensive and highly productive wetlands and shallow area rely heavily on enforcement of existing federal and state programs. . .However, it is these very programs which are being manipulated here to remove the existing system of protection mechanisms. . .for Bowerman Basin. . .Are we supposed to be pleased by reliance on such mechanisms for protection of vital biological resources when we now must bear witness to the ease with which they can be withdrawn? (Tripp, 1979)

Some local environmental organizations concur with the above assessment and suggest that the Plan illustrates that few mechanisms, tools, and programs were available or were used to protect critical wetland areas. For example, no new sanctuaries, wildlife refuges, or nondumping areas are proposed in the Plan (the two completely Natural Management Units already existed under the jurisdiction and ownership of the Nature Conservancy and WDG).

Although EPA has never exercised it, the agency does have the power, under the current 404 regulations, to "predesignate" areas within the estuary for non-fill. "Predesignation" could have provided additional assurance that future development would not encroach upon conservation areas. OCZM, the Environmental Defense Fund, and the Natural Resources Defense Council have suggested this to EPA (Tripp, 1979; Banks, 1979; Kifer, 1979). EPA is resisting, probably because they want to remain flexible and avoid setting a precedent for the rest of the U.S. Furthermore, the positions of individuals at various levels in EPA differ and are not coordinated into an official EPA position at this time.

Alternative Development Sites and Options

The Plan also does not identify specific alternative development options and locations. Identification of development alternatives is limited by the extensive private ownership of waterfront and upland areas. Future development plans for future use of the land were therefore difficult for the Task Force to predict. The Task Force also concluded that alternatives analyses for development sites and options would best be conducted when a specific project was proposed and an EIS prepared.

However, with respect to the Port's development plans, some of the resource agencies still question the veracity of the arguments for increased wetland fill for economic development. These agencies are not necessarily questioning the degree of good-faith bargaining by the Port, but rather are objecting to the lack of publicly available

and rigorous economic development alternatives analysis from which a more rational choice for development sites could be made. They ask, for example, why an industrial park could not be located somewhere other than Bowerman Basin, for example, on the unused Kaiser Steel site (Smith interview, 1978). The lack of an economic development alternatives analysis is a specific problem that is not yet fully resolved. This could be addressed in the EIS now in preparation.

Environmental groups assert that the lack of alternatives analyses in the Plan simply continues the Port's practice of pushing for permits or predesignation of sites for filling by claiming that a project is necessary for economic development without having identified specific clients and obtained contracts for land use. They refer to this practice as "speculative fill." The Kaiser fill episode is used as one example of speculative fill (see pp. 20-22). The fill, which destroyed 13 percent of Grays Harbor's existing sedge marsh, remains unused. Environmentalists raise the question whether the Plan is a device by which the government is providing land and wetlands for unproven and speculative uses by private industries and the Port.

Another instance of specific alternative development options which remains unidentified surrounds the relocation of Bowerman Airfield. Siting of water-dependent or water-related activities on the land where the airfield is presently located or on the proposed fill area in Bowerman Basin requires relocation of the airfield. The Task Force discussed the need for relocation but did not conduct alternative analyses of possible relocation sites within the management area or nearby uplands, nor did they provide specific potential sites for relocation. This was considered outside the scope of their mandate. The issues of water dependency of shore industrial users and the relocation of Bowerman Airfield remain to be resolved in the future, but the mechanisms for doing so are still uncertain (see chapter seven).

Compliance with NEPA/SEPA

Before the GHEMP can be adopted by the federal and state agencies, the requirements of NEPA/SEPA (see Appendix) must be met. Adoption of the Plan by the federal and state agencies plus agreements to use the Plan in decision making could significantly affect the quality of the environment, thus, requiring preparation of an environmental impact statement (EIS).

The federal OCZM is now preparing an EIS. At first, OCZM was not sure an EIS would be necessary because the GHEMP would be implemented through local SMP amendments, not through an amendment to the state's CZMP. For many reasons, OCZM has now concluded that the Plan is a significant amendment to the state program and therefore requires an EIS. First, federal agencies participating on the Task Force wanted an EIS done because their concurrence in the Plan and commitment to live with it was a significant action that would determine how future decision making would occur in the agencies. Second, the Plan could significantly affect the quality of the environment and therefore requires an EIS. For example, the Plan calls for a substantial and highly controversial wetlands fill. Third, OCZM believed that the Grays Harbor Task Force experience was an important new conflict-resolution process that might serve as a national model. Therefore, it should include an EIS review. For these reasons, OCZM decided to act as lead agency on the EIS and cooperate with the other federal agencies in its preparation and review (Mieremet, 1979).

There has been considerable debate over the timing of EIS preparation. A case study report prepared for OCZM (Dehart, 1978)

raised the question of how the planning process relates to NEPA. The report questioned when it was most appropriate to begin the EIS process. Should it have begun while the Task Force was negotiating such questions as the Bowerman Basin fill, which resulted in an expansion of the different alternatives and the inclusion of new citizen and interest groups? If this had been done, would it have jeopardized the ability of the public agencies to reach a negotiated agreement? Or, should the EIS wait for the full development of the Plan so that a substantial document could be reviewed? And, in doing so, would OCZM be subject to risking the claim that NEPA was violated because the EIS process started too late?

OCZM now believes that the EIS is being prepared at the appropriate time. The Plan represents the desires of the public officials for development and conservation in Grays Harbor. When the final draft version of the GHEMP is made public, there will be something tangible to analyze using NEPA criteria and the section 404 guidelines.

Despite OCZM's intention to adhere closely to the EIS process and the new CEQ guidelines (see Appendix), there may be claims that NEPA was not properly applied in this case. The Friends of the Earth and the Natural Resources Defense Council have argued that NEPA was violated because an EIS draft should have been developed and reviewed as the Plan was being prepared (Ortman, 1979 b & c; Banks, 1979).

Representatives of these environmental groups argue that, since 1971, CEQ regulations have required that assessment of the potential environmental impacts of federal actions occur at the earliest possible time in the agencies' planning. They contend that NEPA was violated, because decisions and agreements on the content of the Plan have been made without disclosing potential impacts and without systematically describing alternatives. They argue, further, that the preliminary Draft Plan released in March 1978 was of no use to the reviewing public because it failed to include either the Technical Memoranda, a discussion of alternatives, or a discussion of impacts (Ortman, 1979 c). They also note that new information is now available to the Task Force which, under NEPA and other federal laws, must now be made a part of the alternatives analysis. This new information is a special study done for USFWS by Dr. Steve Herman that identifies Bowerman Basin as a candidate for inclusion in the USFWS Unique Wildlife Ecosystem Program (Banks, 1979).

The OCZM case study report (Dehart, 1978) also raised the perplexing question of how alternatives could be considered in an EIS when the Plan under review presents a politically acceptable alternative already agreed upon through negotiation. OCZM is considering presenting options which include: federal approval of the Plan; no action or denial of the Plan; delaying approval of the Plan; and alternative resource protection and development strategies (OCZM, 1979). In OCZM's view, these alternative strategies generated by the EIS process could then be considered further by the Task Force before the Plan is formally adopted (Mieremet, 1979). OCZM contends that this alternatives analysis would be sufficient under the requirements of NEPA and would allow full public participation.

Another issue is whether the EIS for the Plan substitutes in any way for project-level EIS's. Environmental organizations urge that site-specific EIS's should be used on particular projects even though there is an EIS on the Plan (Banks, 1979). OCZM notes that additional EIS's may be needed on certain specific projects but that their Plan EIS could satisfy many of the NEPA requirements of the implementing

agencies (Kifer, 1980). Developers, on the other hand, are looking for predictability and speed in the review process and probably would like to see the EIS on the Plan handle most, if not all, of the site-specific issues. Because of the range of viewpoints on this issue, it may be useful for participants in this or similar estuarine planning activities to analyze carefully in advance how the information in Plan-level EIS's can be used to satisfy the requirements for project EIS's.

As of this writing, the EIS is not completed and cannot be completed until the Task Force finishes the Plan. OCZM plans to circulate the draft EIS along with the Draft Plan. At that time, questions about the proper or improper use of the NEPA process will undoubtedly be raised and debated.

Planning for Aquatic Areas

The last major issue not fully addressed by the Plan involves the use of traditional land-use planning techniques for aquatic areas. Estuarine areas have special qualities and characteristics quite apart from terrestrial areas. Uses which may be appropriate or nondamaging for a land or shore area may not be so for nearby aquatic areas. For example, a public boat ramp and service facility may be especially well suited to a piece of publicly owned land with nearby highway access. However, the associated boat traffic and human use of the aquatic area could physically damage or pollute sensitive aquatic plant or animal communities nearby. In the Plan, the offshore boundary of the shore-zone Management Units is the mean low water line. The shore use and the aquatic area (outside the Management Unit) are artificially separated by the Plan.

Unlike land areas, or even rivers, Management Units in an estuary are functionally connected to Units both upstream and downstream by the daily ebbing and flooding of the tides. Changes in the bankline in one Management Unit can alter the longshore flow of sediments and cause erosion or accretion in downstream and upstream areas. Industrial effluent released into the estuary can travel upstream and downstream several times before dispersing and being diluted to negligible concentrations. Also, a parcel of polluted water may travel past the outflow pipe several times before leaving the estuary. Each time more effluent is added to the parcel and the concentration of toxic material increases, biological communities both upstream and downstream are potentially threatened and migrating fish are potentially blocked. In a narrow portion of an estuary, migrating fish may prefer one side to another, and therefore development might be better sited on the non-preferred side. Rapidly and efficiently flushing areas of an estuary can tip the analysis of alternative sewage treatment plant site to an otherwise marginal or ordinary land location. All of these examples illustrate the interrelationships between aquatic areas and land areas and between appropriate uses of each. Planning in an estuary logically must account for both land characteristics or uses and aquatic characteristics or uses. The Task Force member from the Washington Department of Natural Resources (WDNR) observed that, as far as he could remember, the Task Force never addressed the question of use compatibility between adjacent Management Units or between land and water ares (Magoon interview, 1978).

In the GHEMP, there are forty shore-zone Management Units that end at the mean high water line, and three inwater Management Units surrounding intertidal mudflats (Whitcomb Flats) and islands (Sand and Goose Island, which are scientific preserves, Rennie Island, which is a waste treatment pond and dredge spoil site). Virtually the entire water area of the estuary is designated as one Management Unit, number

44. Management Unit 44 is classified as Conservancy Managed, but all uses that depend on the water area and the activities that support these uses are considered appropriate (GHEMP, November 1978). Additions to the November Draft Plan began to recognize the importance of special and ecologically variable characteristics. All new or expanded uses of this Management Unit that occur solely in the water (except authorized federal navigation projects) and that require a construction permit are conditional uses in the Plan. Permitted uses in shoreline Management Units that are water dependent/related or that require direct access to Management Unit 44 are permitted to the extent necessary to provide that access. Experimental resource utilization and habitat development programs are allowed, subject to review by state and federal resource agencies (GHEMP, November 1978, p. 93).

Federal and state resource agencies express concern that the Plan does not sufficiently protect living marine resources. The lack of specificity in Management Unit 44 will probably also mean continued conflicts of use. The problem of meshing land-use planning techniques and perspectives with aquatic-area characteristics is not unique to the Grays Harbor effort, but instead affects many coastal zone planning activities and provides a fertile field for future thought and analysis.

All these unresolved issues and the ability of the Task Force to address them directly affect the question of whether the Plan can be successfully adopted and implemented.

Preparing for Future Evaluation

Further evaluation of the ability of the GHEMP to provide predictability in decision making and to resolve conflicts over resource protection and development opportunities await adoption and implementation of the Plan and a history of use and testing on specific proposals over a period of time. To prepare for future analyses and evaluation, two steps are needed now.

First, because the planning process in Grays Harbor was a hybrid of comprehensive planning and conflict resolution, appropriate, but special, evaluation criteria must be agreed upon. Only a general framework is suggested here.

If the Grays Harbor Task Force effort is seen as a comprehensive planning effort, relative success could be measured by a number of criteria: whether a plan or guide for development is generated and implemented; how well resource needs and development trends are anticipated; how well adverse cumulative impacts are ameliorated or mitigated; whether the methodologies and information used were rigorous, complete, and appropriate; and whether a broad spectrum of community goals are represented in the Plan. For the GHEMP the gauges of a successful effort and the enumeration of benefits (or losses) must be expanded beyond these rather traditional signs of success for comprehensive planning to include criteria for successful conflict resolution.

Measures of success for conflict resolution, like those for comprehensive planning, include obtaining an agreement which is politically and legally viable, can be implemented, and has the commitment of the parties. Unlike traditional comprehensive planning, gauges of successful conflict resolution also include: whether the parties begin to recognize the legitimacy of the other side, whether the behavior of the parties becomes less obstructive and more cooperative, whether the level of "heat" or pressure is decreased, whether all the issues are flushed out and confronted, whether benefits accrue to each of the parties, and how completely their gains meet

their realistic expectations.

Second, monitoring the decision-making system, development activities, and environmental quality is required to provide a suitable information base for future evaluation. For example, gauging how well the Plan anticipates future trends and needs and judging the ability of the Plan to ameliorate or mitigate adverse cumulative impacts even after ten years is likely to be difficult due to lack of a mechanism to monitor change in the estuary. Some baseline data that is focused primarily on the existing channel and Bowerman Basin was compiled in the COE's Long-Range Maintenance Dredging Effects Studies. The COE also maintains a water-quality data bank, and WDG has been conducting eelgrass-bed surveys. However, the Task Force has not dealt with future information needs and there is no mechanism in the Plan, or eleswhere, to monitor on a long-term or continuous basis the environmental changes in the estuary.

Perhaps after the Task Force participants and the member agencies have solved the problems of adoption and implementation discussed in the following chapter, they will be able to focus their efforts on establishing a mechanism to evaluate their hard work in developing the Plan.

7 PLAN ADOPTION AND IMPLEMENTATION

The pivotal question for the future of the Grays Harbor effort is whether the Grays Harbor Estuary Management Plan (GHEMP) can be successfully adopted and implemented. The extent to which agencies can participate in intergovernmental planning and conflict resolution *and commit themselves to a resultant plan* have become issues of national concern as a result of the Grays Harbor experience. The Task Force model will not be considered very useful for coastal zone management elsewhere in the country unless the Plan is adopted and implemented; i.e., unless the Grays Harbor experiment is considered a "success." Furthermore, because important jurisdictional interpretations must occur before agencies can adopt and implement the Plan, the results of the Grays Harbor Estuary Management Program could affect the direction of coastal zone management throughout the country.

Because these issues are far from settled at this time, critics of the Grays Harbor effort could conclude that the Task Force failed in not carefully and completely addressing the complex legal and administrative framework of adoption and implementation early in the process. More supportive observers could suggest that the Grays Harbor effort was necessary to actually identify the range of difficulties, and that one of the lessons of Grays Harbor for other similar activities is that agreements on commitment, adoption, and implementation must be explored and clearly defined in the initial stages of regional coastal planning activity. A corollary lesson from Grays Harbor is that a range of creative implementation alternatives that can meet the legal and administrative constraints of the numerous government agencies and that can provide acceptable levels of predictability to all concerned parties must be evaluated.

This chapter examines the original expectations for implementing the Plan, the changing agency regulations and their evolving interpretations that affect agency actions in adopting and implementing the Plan, and the alternative procedures that could be used to adopt and implement the Plan.

Task Force Expectations for Plan Implementation, Use and Amendment

Implementation Procedure

The Task Force began in 1975 with the straightforward assumption that when a plan was finally agreed upon by the participants, it would be implemented via the existing state shoreline management system and existing federal regulatory programs. Local governments would adopt the portion of the Plan relevant to their jurisdictions into the local city or county Shoreline Master Programs (SMP's). The state resource agencies would be subject to these new SMP's as indicated under state law. Private applicants could use the Plan to screen proposals likely to be approved or denied. Applications for substantial development permits would then be reviewed for agreement with local SMP's. Public agencies and interest groups would participate in this review. Appeals could be made to the Shorelines Hearing Board by certain agencies or any aggrieved party. The Washington Department of Ecology (WDOE) would include the Plan as an amendment to the Washington Coastal Zone Management Program (CZMP) and submit the amendment to the Secretary of Commerce for approval and incorporation into the State's CZMP. Federal agencies would then use the Plan as a specific framework for permit review and approval or

denial because they participated in its formulation and, presumably, incorporated their policies into the Plan (GHEMP, November 1978, p. 4). Also, because federal agency actions must be consistent with approved state CZMP's (see Appendix), this would be further reason for federal agencies to adhere to the policy of the Plan.

As discussed in chapter three, the shoreline management process in Grays Harbor suffered from lack of specificity and predictability. To solve this problem, the GHEMP attempts to be more specific about what can or cannot take place in the future. However, the GHEMP does not contain its own implementation mechanism. There is no special permit review system or capital expenditure program tied directly to the Plan, nor is there a visible, active management group with independent enforcement powers overseeing the use of the Plan. Implementation is to occur through the existing powers of the agencies on the Task Force. Each agency will review development activities independent of the Task Force.

This approach to implementation was deliberate and there are reasons that support it. The Task Force members represented agencies from all levels of governement, each of which already had a management function. Their intent was to simplify and coordinate the existing management system, not to create an additional one. The GHEMP indicates that it cannot eliminate other plans and agency regulations. Rather, as argued in the November 1978 Draft Plan (GHEMP, November 1978, p. 4), logic indicates that the Plan would be used by the agencies as a baseline reference. Since the agencies that issue permits were directly involved in developing the Plan, permit requests made to them that conform to the Plan should move quickly through the review process. If a permit request conforms to the Plan, part of the burden of proof resting on an applicant to satisfy the agency is met. The November 1978 Draft Plan (GHEMP, November 1978, p. 1) states:

> An individual property owner, a local city or county legislative body, a state or federal agency will be able to use the Plan with general concurrence of all agencies involved in finalizing the decisions.

Day-to-Day Use of the Plan

The Task Force assumed that the day-to-day management of the estuary, using the Plan, would be performed by existing agencies. If a proposed use and its associated activities were "permitted" in the Plan, then the responsible agencies would issue the required permits. If a proposed use or its associated activities were conditional, a permit application would be reviewed on the basis of the proposal's specific merits rather than the general use or activity characteristics; i.e., it would be reviewed using the Plan's more general goals, guidelines, and objectives as criteria (GHEMP, November 1978, p. 10). A use or activity subject to "special conditions" would have to comply with the special conditions set forth in the Management Unit description. Finally, the Plan sets out a "special implementation policy" that requires certain commitments to be made by developers before permits are issued. For example, commitments to marsh restoration and marsh creation projects would be required in certain cases before major development activities could take place. This applies to the Bowerman Basin and the Ocean Shores fill projects (GHEMP, November 1978, p. 23). Further, mitigation may be required if the balance of development and conservation were shifted in the amendment process (Boomer, 1980).

This scheme seems to provide a rational and efficient method of using the Plan in the routine of agency decision making. However,

at the level of specific proposals under review by specific governmental units, the Plan does not indicate clearly or precisely how existing agencies would mesh their ongoing rules and regulations with the policies and designations in the Plan. The Task Force assumed that, since the permitting agencies were involved in the process of developing the Plan, the evaluation of a proposed use based upon the guidelines in the Plan and the result of agency review using their codified guidelines would be similar. That this may not be the case is a problem that became apparent beginning with the July 1978 memo from the Environmental Protection Agency (EPA) (discussed below). The Task Force also assumed that the planning process established a balance of estuarine uses. How new permit applications might affect this balance is not stated clearly in the Plan.

There is a presumption in the Plan that a permit application that conforms with the Plan is the preferred use or alternative. This argument may be substantially correct with regard to permitted uses, but for the many conditional uses and activities in the Plan, discretion and judgment must be exercised. In these instances, it is conceivable that a great diversity of opinion could emerge on the meaning of the general goals, policies, and objectives of the Plan. Ways to resolve these potential disputes are not laid out in the Plan. Day-to-day management under the Plan is therefore likely to be troublesome and will require flexible coordination and adjustment procedures, and some overall guidance by a new or existing group. One way to achieve this flexibility is through an amendment process.

Amendment Procedure and the Future Role of the Task Force

The Task Force has reserved for itself a future role that includes: periodic review of the Plan and the preparation of amendments; review and comment on Plan amendments proposed by others; review of the special conditions of Management Unit 13 (containing Bowerman Basin, see figure 6); and making decisions regarding certain issues that were postponed for a later date because of incomplete information (GHEMP, November 1978).

The Task Force would meet annually to review how the Plan is working. At the end of five years, the Task Force would conduct a systematic review of all aspects of the Plan. At each of these reviews, the Task Force would make amendment recommendations to the respective jurisdictions that have adopted and are implementing the Plan. The Task Force would also act as a "planning advisory body" to the local jurisdictions, suggesting amendments to the SMP's. Thus, proposed amendements would receive the same type of hearing and review as the initial Plan (GHEMP, November 1978, p.7-8).

When others propose amendments to the Plan, the Task Force would play a "review and comment" function. Such amendments may be proposed by individuals, interest groups, or agencies. The Plan calls for the local government to forward a proposed amendment to the Grays Harbor Regional Planning Commission (GHRPC), which in turn would inform all the Task Force members. A meeting of the Task Force could be held if necessary. The criteria the Task Force would use in reviewing the proposed amendments include: the degree the use conforms with the Plan's goals, guidelines, objectives, and policies; whether the use is permitted elsewhere in the estuary or other permitted areas are unsuitable; and whether the use will cause adverse effects on natural systems and whether it will be within the capability of infrastructure support systems.

The amendment process is important because it permits the Plan to be adjusted in the future when conditions or actors change. This

flexibility could facilitate the adoption of the Plan because agencies would feel that future options are not altogether foreclosed. However, the amendment process laid out in the Draft Plan raises several questions.

First, how would amendments proposed by the Task Force be adopted by the agencies with jurisdiction in the Management Unit affected by the amendment? This is a part of the general adoption problem discussed below. If progress is made in the design of an adoption strategy for the Plan as a whole (e.g., through a memorandum of understanding among the agencies, which is discussed below), a similar procedural requirement could be made a part of the amendment process.

Second, would the Task Force have the resources to act as a continuing "planning advisory body?" Presumably the GHRPC would act as staff for the Task Force. But would it have the funds and personnel to monitor Plan implementation, manage meetings, and research and prepare amendments? If a regular staff effort is not desirable because the Task Force is to be a forum for reaching compromise solutions only (GHEMP, November 1978), then can it act as a "planning advisory body?" A delicate balance is sought between developing a working Task Force that implements its own Plan, and maintaining the traditional independence of the agencies represented on the Task Force. Such a balance may not be achievable. Lack of aggresive use of the Plan, which requires staff time and meetings, may cause it to become an unused "shelf plan." This suggests that more attention to the operation of the Task Force in the future is needed in the Plan.

Third, the Task Force members believe the completed Plan would represent a "balance" of conservation and development within the estuary (GHEMP, November 1978, p. 4), and they expect this balance to continue. How is this to be achieved? The amendment process does not suggest criteria by which the balance can be maintained, only criteria that require an analysis of adverse impacts of proposed uses. If the concept of "balance" is to be used as a future guide in the management of the estuary, then more specific ways to maintain the balance could be included as part of the amendment process. Conservation agency representatives have expressed concern that the amendment process could swing the balance more in favor of development interests (Boomer interview, 1978; Bowker interview, 1979). They suggest that marsh creation, restoration, or other mitigation requirements could offset any new development projects in the future, thus maintaining the balance now achieved in the Plan (Boomer, 1980).

In addition to its role in the amendment process, the Task Force has reserved to itself certain other functions. The Task Force wants to review the final procedures by which use rights of 1,700 acres (680 ha) of Port-owned submerged land are transferred to resource agencies. This transfer is a special condition attached to the Bowerman Basin Management Unit. Further, the Task Force wants to act as a continuing review body to determine whether the conditions of that transfer are being followed. Also, the Task Force intends to maintain continuous review of the preliminary development plan that the Port of Grays Harbor will prepare in conjunction with the use of existing and future Port lands that could be used for industrial development. Finally, in the case of a marina expansion project whose dimensions were unknown, and the classification of a Management Unit where future uses were very uncertain, the Task Force delayed final determination until more information was available.

The Need for Task Force Continuity

One fear expressed by many of the members of the Task Force is that

the experience of creating the Plan was an exciting and valuable learning experience to individuals who participated, but that this experience may not be transferable to others in the agencies. If this observation proves correct, it may be difficult for the GHRPC to get the Task Force to act as a cohesive group with commitment to the Plan and the agreements that members worked so hard to achieve. Agency members who respond to proposed amendments to the Plan circulated to them by the GHRPC may interpret changes in light of the agency's particular bias, rather than in the spirit of the "balance" achieved by the Plan. This would seem inevitable if the agency representative or reviewer did not participate in the initial compromise and was not sensitized to the positions and constraints of the other agencies. Also, the local political climate may change as a result of elections or unforeseen events. Commitment of a local government or the Port to the Plan could be as transitory or vulnerable to political influence as long-term commitments to land-use zoning has traditionally been.

These problems are not inevitable or intractable, however. A positive view of the negotiation and compromise process and the maintenance of the balance in the estuary could be passed on to future generations of Task Force members. More frequent meetings, an ongoing staff, and special studies of particular problems would be ways to create a more active and enduring role for the Task Force. In this way, a group would be nurtured that has continuing allegiance to the established Grays Harbor planning process and Plan development. Rather than taking power away from established line agencies, the Task Force could be a forum for immediately applying new information and policies of existing agencies. The Draft Plan does not, however, address the potential problems of continuing Task Force involvement or create a method to resolve them.

Adoption: The First Big Problem

Before the Plan can make documentable changes in decision making and resource use in Grays Harbor, the sequence of implementation events--adoption, day-to-day use, and amendments as needed--obviously must proceed. The first step--Plan adoption--is a major problem. Many of the issues of adoption and agency commitment have been removed from regional offices and have become the concern of national policy makers.

Before discussing adoption, it may be useful to consider the consequences if the Plan is not adopted. As mentioned elsewhere in this report (p. 66), the Draft Plan has been used to evaluate some projects. Conceivably, the Plan could remain unadopted and yet be used informally by agency officials as a guide to their actions. This approach, however, could result in legal challenges because it fails to provide notice and an opportunity for a hearing to the public. Even if the Plan is not adopted, one could conclude that the agencies have established a working relationship that can continue into the future and provide a more coordinated, and presumably more informed, decision process. Although there may be utility to the planning process even if the Plan is never adopted, the participants and observers have made substantial investments of time in anticipation that an implemented Plan would result, and all of their efforts in the past year have been directed at assuring an implementable plan. It is conceivable, however, that the failure to adopt a plan could generate ill will and discouragement and could lead to less coordination and more friction in the future. This underscores the importance of developing a Plan that can be adopted by all the agencies.

State and Local Adoption

As mentioned earlier, the basic assumption from the beginning of the process was that adoption of the final Plan at the state and local level would occur when it was incorporated into local SMP's. The Task Force planning process was developed as a way to refine the Grays Harbor local SMP's, which had been criticized as too general and incapable of resolving conflicts. In addition, the Shoreline Management Act (SMA) has a built-in implementation device. Major proposals require a locally granted substantial development permit. These permit requests are reviewed at the state level by the Department of Ecology (WDOE) and the Attorney General's office, and appeals by a variety of parties can be taken to a quasi-judicial Shorelines Hearings Board. Thus, from the perspective of Task Force members, adoption and implementation at the state and local level would be virtually complete by incorporation of the Plan into the shoreline management process.

One adoption problem at the state level may be troublesome. As presently envisioned, the WDOE would be the only state agency to adopt the Plan because of its role in administering the state SMA. The Task Force does not envision that state resource agencies, such as the Departments of Game and Fisheries (WDG, WDF), would be required to adopt it. The Task Force is assuming that state resource agencies will be bound to follow the Plan if it is adopted under the SMA and by the federal agencies. For example, SMP's approved by WDOE under the SMA are official regulations of the state and have legal authority to which other agencies must adhere. Since the Plan would be incorporated into local SMP's, it would have the force of law and bind other agencies. However, under the Hydraulics Project Approval Law (HPAL), the WDG and WDF review saltwater shoreline development as well. These agencies need not issue a hydraulics approval simply because a shoreline permit has been issued. Conflicts between the two systems of review have occurred, though most issues have been resolved through interagency coordination (Peterson, 1979; Pratt, 1979; Sandison, 1979).

The second power that state resource agencies have is their ability to influence the Corps of Engineer's (COE) section 10 and section 404 permit processes. The COE and other federal resource agencies, such as the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and Environmental Protection Agency (EPA), are required by law to receive the views of all interested state and local agencies on proposed projects. In Washington, this requirement is met officially by a composite statement of the state agency views prepared by WDOE and sent to the COE. The WDOE statement repeats the concerns state agencies have relayed to it. There is no attempt by WDOE to resolve differences between the agencies. Thus, the COE considers the concerns of state resource agencies as well as the results of the state shoreline management process. This heightens the effective power of the resource agencies independent of the shoreline process. Further, the COE and other federal agencies often want to consider closely the views of state resource agencies because these officials have extensive first-hand knowledge of the environment at the site of the proposed project. Often an informal network of communication develops between state and federal officials. This can give state resource agency officials additional effective power in influencing the outcome of a section 10 or a section 404 permit request.

Recognizing the many problems in securing federal agency adoption of the Plan (discussed below), the Task Force is probably wise in

concentrating attention there at this time. However, problems at the state level could develop in the future because of the informal, but effective, power state resource agencies have. If state resource agencies do not officially adopt the Plan, their commitment to work within that framework may lessen over time. If they do not adopt the Plan or if it is adopted over their objection, there will be no incentive to participate in future meetings of the Task Force to consider amendments or modifications, nor to use the Plan when commenting on development proposals. This could result in conflicts that would reduce the predictability the parties seek. The state resource agencies played an important part in the development of the Plan and expected to commit the agencies' resources to implement it. At least one official felt that his agency could adopt the Plan through the State Environmental Policy Act (SEPA) process (Smith interview, 1978). Thus, it would appear beneficial to seek adoption from all the participating parties to ensure that the Plan is used by all the agencies with some degree of power over the future use of the estuary.

Federal Adoption

Formal adoption of the GHEMP into the state's CZMP was seen by the Task Force members as an indirect way in which federal agencies would "adopt" the Plan. The Coastal Zone Management Act (CZMA) states, under the federal consistency provisions, that federal agencies must give greater recognition to an approved state CZMP than to nonapproved state or local actions (see Appendix).

This "carrot" of federal consistency attracted local commitments to estuarine and coastal planning in the beginning. However, imcomplete understanding of the extent of federal consistency by some of the Task Force participants led to confusion and uncertainty at the outset.

Some members assumed federal consistency to have both "positive" and "negative" components. "Positive" consistency would bind or direct federal activities to follow provisions in a state's CZMP. "Negative" consistency would prevent a federal agency from undertaking an action counter to a state's CZMP. In fact, only "negative" consistency is provided by the CZMA. Thus, federal consistency does not require federal agencies to approve projects or activities because the state has approved them. It only precludes federal agencies from acting where a state has denied that same action under a valid state law. The federal consistency provisions do not abdicate the legal responsibility of federal agencies; they only limit agency discretion in those cases where an approved CZMP takes a position on an issue.

Some of the confusion over the legal interpretation of the federal consistency provision of the CZMA could have been clarified early in the planning process. Although final regulations on federal consistency were not issued until March 1978, long after the Task Force had started its work, agency attorneys knew in 1975 that the CZMA did not provide "positive" consistency. Thus, the confusion in the Task Force could have been resolved to some extent at the outset if there had been a more complete determination of the legal framework in which the conflict was occurring. OCZM or the WDOE might, in future situations, provide briefings on these issues.

Even with these limitations of federal consistency, it appeared that the incorporation of the Plan into local SMP's and into the state CZMP would be a big step toward full adoption and implementation of the Plan. It would not, however, be completely sufficient because the CZMA does not require "positive" consistency from federal agencies. Thus, federal agencies would have to adopt the Plan and use it in their

regular procedures in order to achieve complete implementation. Determining how this is to be done is not easy because the federal agencies have different statutes and regulations under which they operate.

The Task Force has not addressed this question. Individual agencies have offered opinions or speculated on how adoption would or would not occur. The COE representatives indicated that the agency will not formally adopt the Plan because, through the normal project review and NEPA processes (see Appendix), the COE can give considerable weight to the local views as expressed in the Plan, assuming it is adopted locally and because the COE has no authority to adopt local plans. For the COE, the Plan will become a general referral document that expresses a preferred alternative, but it will not be a specifically binding agreement on the COE. The USFWS representative speculated, prior to the EPA memorandum of July 1978 (see below), that some form of agency action at the regional level would recognize the Plan as containing the criteria for decision making. No specific comments from the other agencies were identified during these early stages.

From the scanty reference in Task Force background material to potential methods of adoption, one could conclude that the federal agencies were primarily concerned with Plan content and wished to resolve that problem first before worrying about implementation methods. From their perspective, if no acceptable compromises could result, the debate over implementation methods was academic. As events have turned out, however, acceptable compromises appear to have been reached, but substantial adoption and implementation questions remain.

Adoption Questions Raised by EPA

The EPA is a central actor in the national policy debate over the interpretation of the Clean Water Act (CWA) and the Coastal Zone Management Act (CZMA), i.e., whether or not agreements stated in a comprehensive regional plan developed under the CZMA can substitute for the project-by-project review called for under the CWA. This issue is addressed in an EPA memorandum of July 1978. The process of revising the guidelines for implementation of section 404(b) (1) of the CWA provides another forum for analyzing this issue.

July 1978 memorandum on the CZMA and the CWA In July 1978, EPA circulated a memorandum that raised serious questions about the ability of any agency to adopt and use a plan similar to the draft GHEMP. The memo discussed EPA's interpretation of section 404 of the CWA and section 307 of the CZMA. Under their interpretation, any state CZMP, including the GHEMP, could not be approved by the Secretary of Commerce unless the EPA 404(b) (1) guidelines were applied in developing that plan. Those guidelines do not permit authorization in advance for fill or discharge into aquatic areas, but require a case-by-case determination based on an analysis of the use to which the filled area is to be put. The EPA legal argument in the memorandum is as follows:

1. The CZMA, section 307(f), says that the "requirements" of the CWA are to be incorporated into state coastal management programs.

2. "Requirements" means "enforceable standard or duty." As interpreted by EPA's General Counsel, section 404(b) (1) guidelines are the principal substantive standard that all section 404 permits must meet and are, therefore, an "enforceable standard or duty."

3. Thus, section 404(b) (1) is a "requirement" of the CWA that must be incorporated into CZMP's in order for them to be approved and to receive federal funds.

4. The GHEMP, as a potential addition to the approved CZMP for Washington State, must incorporate the section 404(b) (1) guidelines in order to comply with the CZMA.

5. The proposed fill in Bowerman Basin now permitted in the draft GHEMP does not specify uses to take place in the area, making it impossible to determine if there are practicable alternatives or mitigating measures that will result in less damage to the aquatic ecosystem; therefore, the section 404(b) (1) guidelines have not been applied in the GHEMP draft.

6. Since the section 404(b) (1) guidelines have not been applied, the GHEMP draft would be unlawful if adopted under the CZMA.

In more general terms, the EPA position is that consistency with a broad-based plan such as a state CZMP is fundamentally different from the case-by-case review required by section 404 of the CWA, which is designed to protect the nation's waters. EPA suggests that the two approaches could be integrated to some extent. State CZMP's could use section 404 (b) (1) guidelines as essential criteria. In turn, the section 404 (b) (1) guidelines could allow the use of CZMP's as information sources, particularly with respect to alternative sites for discharge of dredged or fill material. But the section 404 (b) (1) guidelines do not permit an abdication of project-by-project reviews which have been established to determine if there are practicable alternatives to conducting the activity that are less damaging to the aquatic ecosystem and if there are ways to reduce adverse impacts on affected aquatic ecosystems (EPA, 1979 a, p. 54233).

The EPA position has been echoed by numerous national environmental organizations, including Friends of the Earth (Ortman, 1979 b), the Sierra Club (Matheson, 1978), and the Natural Resources Defense Council (Banks, 1979). NRDC arguments suggest a lawsuit will be filed if an attempt is made to adopt the current draft Plan. An opinion of the USFWS attorney (USFWS, 1979 a; USFWS, 1978) also backed EPA's interpretation. Plus, the conclusions of a commentator who recently analyzed the laws carefully are similar to those of the EPA and USFWS attorneys (Blum, 1978). In addition, one environmentalist has suggested that the problem of project-by-project review versus an area-wide plan can be resolved "by providing adequate protection to those areas of importance to the estuary (whether they occur in potential development areas or not) and designating possible development in the remaining areas. . .Site-specific impacts, and most importantly the alternatives test, can then be addressed in site-specific impact statements" (Ortman, 1979 c). Ortman argues that this approach would provide maximum flexibility at the project level to ensure environmental protection.

OCZM has implicitly accepted these interpretations by stating in their own regulations for section 307 that they would rely on EPA's General Counsel for an interpretation of section 307 (NOAA, 1979; at §923.44, p. 769). The drafters of the November 1978 Draft Plan reacted to the EPA interpretation by including a note preceding the discussion of Management Unit 13 (Bowerman Basin), indicating that legal questions had been raised about the proposed wetlands fill, but that they had not yet been resolved.

Proposed revision of section 404 (b)(1) guidelines EPA's proposed

revision of the implementation guidelines for section 404 (b) (1) of the CWA, printed in the Federal Register of 18 September 1979, provides another arena for the national policy debate over project-by-project review versus use of comprehensive regional plans (EPA, 1979 a). As noted above, the proposed revisions permit CZMP's to provide some of the information needed in project review, but do not allow substitution of CZMP's for that review.

At one time, the Port of Grays Harbor pressed EPA to consider ways in which the results of a comprehensive planning effort could be recognized as meeting the requirements of section 404 (b) (1). The Port proposed language that would allow the results of estuary planning to substitute for the project-by-project alternatives analysis performed by EPA. In a letter to Senator Jackson dated 14 November 1978, the Port proposed the following addition to the draft guidelines that were then circulating:

> . . .the discharge of fill material in wetlands shall be permitted if such discharge is included in a Comprehensive Statement or Regional Plan which has been approved by the Administrator. A plan shall be deemed approved by the Administrator if the Administrator finds that the plan properly balances public needs and reflects the national concerns for both protection and utilization of important resources (Soike, 1978).

The Port's views were vigorously supported by Senator Jackson in a strong letter to the EPA Adminstrator sent three days later (Jackson, 1978). The Port's position, as supported by Senator Jackson, is that the CZMA was designed by Congress to move the nation toward area-wide planning that would provide a balance of uses in the coastal zone. The Act was passed, the Port argues, to eliminate the need for a project-by-project review of development activities. Further, the Port argues that without adherence to an area-wide plan, there is no incentive for state CZMP's. Why should local governments bind themselves to a plan when it doesn't guarantee that federal agencies will go along with it? Such a plan provides no predictability. The Port concluded that if the GHEMP fails, it will be a substantial setback for coastal zone management. Their arguments did not persuade EPA. The proposed guidelines contain no such provision. Numerous comments on the proposed guidelines have made much the same appeal to EPA (Wegner, 1979; Tuor, 1979; Nemirow, 1980; Brinson and Haar, 1979; OCZM/NMFS Joint Comments).

As of the summer of 1979, the Port's position had changed. During the previous six months, the Port and EPA had met frequently to try to work out their differences. Apparently it became clear to the Port that EPA could not yield completely to the Plan without violating the CWA. In the summer of 1979, the Port had concluded that the Plan could be only one of the primary criteria used by EPA in reviewing applications for section 404 permits (Lattin, 1979).

The Grays Harbor planning process has squarely raised one of the most important issues facing the management of shoreline resources today. Can a plan that prescribes future uses be developed *and implemented* expeditiously, or will shoreline-use decisions be made on a case-by-case basis with little or no recognition of the Plan? The legal debate over the interpretation of the CZMA and the CWA poses the dilemma between planning comprehensively and managing specific resources by evaluating potential impacts each time a use is proposed. This issue became apparent to many of the participants relatively late in the planning process (Laukers, 1980).

The Grays Harbor debate has probably made resolution of the differences between these two positions a little more likely. A state CZMP most likely must allow for a case-by-case review of certain aspects of shoreline development projects when navigable waters are involved. Otherwise it would be in violation of the CWA. Similarly, EPA must give up its discretionary review of certain aspects of development projects because those issues were previously resolved in a state CZMP. Otherwise EPA could be fostering redundancy and unnecessary paperwork and acting contrary to the "spirit" of the CZMA consistency provisions. The EPA's proposed guidelines could be changed, so the debate may not be over. If this debate is resolved satisfactorily, it will be because the issues were raised and debated in Grays Harbor. In this regard, Grays Harbor has done a service for the entire nation by forcing confrontation and debate of a generic problem facing coastal management. For others participating in such a planning process, it is extremely important that the relationship of area-wide plans to site-specific decisions gets early and continuing attention.

Alternative Approaches for Adopting the Plan

Once the problems identified above are resolved, or clarified sufficiently so that the agencies know the extent to which they can agree on common procedures and policies, formal adoption must occur. As mentioned above, the Draft Plan does not discuss how federal agencies would adopt the Plan; it states only that the Plan or applicable portions will be incorporated into the procedures and policies of the agencies (GHEMP, November 1978), p. 4). Presumably, adoption methods will vary among the federal agencies, and the Task Force did not wish to prescribe how adoption would be accomplished. One agency might prefer action at a national level, whereas another would leave adoption to regional or field-offce personnel.

Because adoption of the GHEMP represents a very important commitment of an agency and will affect its future decisions, the timing, form, and level of government at which adoption occurs become important substantive issues in and of themselves. The Plan is detailed and complex, and an agency may feel more comfortable about adopting some parts of the Plan rapidly while allowing more time for debate over constroversial provisions. The risk of a piece-meal adoption of sections of the Plan is, however, the loss of the comprehensive, balanced plan for which the participants worked so hard. Some sections could be adopted locally, whereas other sections need review and approval at a higher level of government. Some parts of the Plan may be dependent on another action occurring first. For example, the decision of the COE on dredged material disposal may have to precede specific decisions about use of Bowerman Basin. In such a case, an agency may elect to delay adoption of certain provisions, or conditions imposed upon adoption. Thus, adoption becomes an important issue in the development of the Plan, and the design of an adoption strategy could be crucial to its success. Flexibility in the pace and scope of adoption could avoid an "all-or-nothing" frame of mind on the part of Task Force members, or at least raise the issue of whether each part of the Plan is vital to the whole, or whether the parts can be treated separately. Admittedly, however, some agencies may prefer an "all-or-nothing" strategy, because only then are individual agreements "worth it."

Distinguishing "Signing" and Adoption

A distinction could be made between signing the Plan's text, to be done by the members of the Task Force, and adoption of the Plan by the

agencies. The latter action could bind a number of other people and future actions, depending on the level at which the Plan could be adopted and the way the agency uses it. The former action is only an acknowledgement that the participant to the drafting agrees with the words in the text. An analogy to international treaty making is helpful. A treaty is signed by the negotiators representing their countries. This only establishes validity of the text. Ratification by the appropriate governments must occur before the treaty takes effect.

The Task Force has not yet considered how "signing" or "ratification" would take place. "Signing" by the Task Force members could occur when the final Plan and EIS is produced. "Ratification" could occur when an agency officially adopts the Plan. Clear distinctions between signing of the text by Task Force members and adoption by the agency should be identified. First, all the agencies would know that the text has been agreed upon by their delegated representatives. If there are specific issues causing the agency problems, these issues can be associated with particular provisions of the Plan and not with others. This would allow plan adoption with certain reservations or exclusions, a common practice in international negotiations. Second, signing of the text would have an important psychological effect. A milestone in the process would have been reached, and this may spur quicker action on the part of the agencies. Third, if signing of the text is seen as separate from adoption, agency delegates could concentrate on specific terms and conditions that would fit the agencies' resource policies and missions; they would not confuse that process with the broader "ratification" issues of the appropriateness of the agency entering a pact with a host of other agencies that will endure for the foreseeable future and may set precedent for related agency activities. USFWS representatives were especially concerned about broader "appropriateness" and "precedent-setting" issues, and mixed these concerns with debate over the specific trade-offs at issue in the Plan (Bowker interview, 1979). Fourth, if the text is signed, those agencies wishing to adopt it may do so even if problems remain to be worked out among other agencies. Many participants on the Task Force noted the possibility that the Plan could be adopted by some, if not all, the participants.

The Form and Procedure of Adoption

Adoption would be the official expression of how an agency will use the Plan in conducting its future affairs in Grays Harbor. Adoption could take many forms. For example, an agency official could indicate his/her future intentions by a letter or a policy statement circulated to the other agencies and interested parties. Or, an agency could enter into a memorandum of understanding (MOU) or an interagency agreement with another agency. Further, new regulations could be adopted on Grays Harbor specifically, or on special area management in particular, which would authorize and direct adherence to plans prepared through a task force effort. ("Special area management" is a new term being used by agency and congressional officials to indicate refined and more detailed coastal management plans and controls in limited geographic areas.)

From a legal perspective, a letter, policy statement, MOU, interagency agreement, or regulations are all "rules" of the agency, that is, statements that are ". . .of general or particular applicability and future effect designed to implement, interpret or prescribe law or policy or describing the organization, procedure, or practice requirements of an agency. . ." (Administrative Procedures Act, §551). Fundamentally, a rule is an expression of how the agency intends to apply the law under which it operates. A rule is an extension of the

law which Congress (or a state legislature) enacted. The form of a rule (i.e., whether a letter or a regulation published in the Federal Register) is less important than two other crucial factors: whether the agency is acting within the powers given to it by Congress, and whether fair procedures are followed. Courts often test these factors by asking whether an agency's action is arbitrary or capricious, and thus outside the bounds defined for it by Congress, and whether those persons to be affected by the new agency policy were given notice of the new rule and an opportunity to comment.

In considering the form in which adoption occurs, it is therefore important to consider whether the agency can, by law, act as it intends to, and whether it has been fair in providing notice and opportunity for comment. It is less important from a legal standpoint that the agencies happen to be acting in concert by entering into an MOU or interagency agreement. These actions are concurrent expressions of agency policy, not a contract between them. One agency's policy is not stronger under the law because it was adopted in consideration of another agency's adoption of a similar policy. Courts have, however, viewed favorably MOU's that enhance government efficiency, but the test of their legality is determined primarily by the two principles noted above. This will be discussed in more detail below. Thus, in designing the form and procedure for adopting the Plan, agency legal "homework" is needed. EPA did such "homework" in preparing its July 1978 memorandum, which was discussed above. That memo significantly altered the conception of the participants about the use of the Plan and the role of case-by-case permitting in Grays Harbor.

Legal issues aside, certain practical considerations are essential to the adoption of the Plan. Although joint action of the agencies is not an important legal factor, it is an immensely important practical factor. The agencies are only considering taking action because other agencies will follow suit. A bargain among agencies is being struck, and even if there are no legal remedies to enforce it (i.e., one agency cannot take another to court to enforce the bargain), the agencies are expected to treat it as an agreement. There are numerous examples of agreements among agencies on which important programmatic, personnel, and budget decisions are based. Even if not supported by law, these agreements are probably effective because of a combination of factors, such as, professionalism among government officials, fear of "bureaucratic or political" reprisals in case a bargain is breached, desire to maintain good future relations, and congressional or Office of Management and Budget (OMB) oversight. Most crucial to the success of these bargains is that each agency feels it is gaining more than it is losing by entering into the agreement; thus, it is based on a trade of actions that are of vital interest to the agencies.

Level of Government at which Adoption Occurs

Another practical consideration essential to the adoption of the Plan is the level of government at which adoption action will be taken. This could include agency action at the regional or secretarial/administrator level, or action by the President or Congress that would pave the way for rapid adoption of the GHEMP and similar efforts. Each approach has its advantages and disadvantages.

Regional-level adoption Adoption at the regional (or district) level would involve the regional directors of USFWS, NMFS, and EPA, the District Engineer of the COE, and the federal OCZM (which has no regional offices) acting jointly to adopt the Plan. Regional heads could exchange letters, issue policy statements, or enter into an MOU or interagency agreement. Policy action at the regional level is

not at all uncommon and has been used extensively by EPA, COE, and others on various matters.

This approach has a number of advantages. First, it could occur rapidly. Most of the officials are in the same region and can meet often to work out difficulties. The formal and time-consuming Federal Register notice and comment procedure could be avoided, although some type of notice and comment may be needed at the regional level. Second, those reviewing and adopting the Plan are the same officials who will implement it. Their personal commitment to it should be high and their knowledge of the provisions should be detailed. These factors could enhance the chances of successful implementation. (Note that if the adoption of the Plan were forced onto regional officials who were not personally committed, had no detailed knowledge, or both, successful implementation could be undermined.) Finally, an advantage of the regional approach is that no precedent for other regions need be implied. Grays Harbor could be seen as an experiment that may have good results applicable to other regions, or it may be concluded that it works for one estuary in Washington State and that is all.

The regional approach has disadvantages as well. If it is primarily a "regional show," back-up support may be lacking from headquarters. Support may be needed from the agency general counsel to document the legal basis for an implementation action, or budget support may be needed for a field position to monitor Plan implementation. Another disadvantage is that personnel changes at a regional level could result in subsequent neglect of the Plan or the issuance of contradictory rulings or statements that undermine the Plan. These are problems that adoption at a higher level could avoid.

Secretarial/Administrator-level adoption Under this form of approval the Secretaries of Interior, Commerce, and Defense, and the Administrator of EPA would act to adopt the GHEMP and require their regional officials to use it, or they would act to set up general regulations authorizing "special area management" and require adoption and use of such plans when the prescribed procedures are followed. Such actions would, of course, have to be within their discretionary powers under the laws they administer. In each case, the Federal Register process of notice and comment and prior OMB review would have to be used. Agencies use this type of procedure regularly. For example, the Chief of Engineers of the COE authorized district engineers at the field level to enter into joint permit procedures with state shoreline permitting agencies; this has been accomplished in many districts (USACOE, 1978). Also, the Port of Grays Harbor and Senator Jackson have tried to convince EPA to include within its 404(b) (1) guidelines a provision that would allow formal recognition of an estuary-wide plan as a substitute for case-by-case review (discussed above).

A major advantage of action at the secretarial/administrator level is that the policy comes from the top agency official and will be given serious attention within the agency and by courts reviewing agency actions. The regulations are normally given a great deal of prior public and agency review and legal analysis. Because they are formally published in the Federal Register and subsequently in the Code of Federal Regulations, they normally survive changes in administration and shifts in regional personnel.

Disadvantages of this approach tend to be the reverse of the advantages seen in the regional-level approach. The procedure takes a lot of time and may bring in issues not specific to the GHEMP because the regulations are designed for special area plans occurring anywhere

in the country, or because approving the GHEMP could set a precedent for future actions elsewhere in the country. The effect could be to delay implementation of the Plan while much broader issues are debated. Another disadvantage may be that nationwide action to authorize or encourage special area plans may be premature. The Grays Harbor experience with its Plan is just beginning, and more lessons could be learned for application elsewhere if the process were given more time.

Executive action The President could issue an Excutive Order or send messages to the cabinet officials requiring cooperative action on special area management. Since the agencies are quick to respond to these orders and messages from the Chief Executive, this would be a very effective way to get action. Also, the Executive Office of the President, which normally drafts the orders and messages, checks on their implementation. However, the President uses this device infrequently and normally for very critical, high-priority matters. The orders are very general and apply to many agencies of government. For example, in the environmental field, they have been used to require federal facilities and installations to comply with the pollution-control requirements of the states in which they are located, and to require federal agencies to adopt a wetlands protection policy in all of their construction and regulatory actions.

The possibility of a Presidential Executive Order should, however, not be dismissed too rapidly. The President's recent environmental message of July 1979 required a systematic review by the National Oceanic and Atmospheric Administration (NOAA) of federal programs that significantly affect coastal resources. The review is to provide the basis for specific recommendations to improve federal actions affecting the coastal zone and to develop any additional legislation needed to achieve national coastal management goals. The environmental message was drafted by the CEQ, within the Executive Office of the President. Charles Warren, recent past-chairman of the CEQ, has cited the Grays Harbor Estuary Management Program as a positive way to better coordinate environmental regulations with development planning. The CEQ could consider urging presidential action to reinforce the Grays Harbor process if the review of the CZMA and other developments make it appear to them to be a useful process for application nationally. Such action could be an Executive Order or an administration-backed bill.

Congressional action Congress could amend the law to authorize, require, or facilitate special area management modeled after the GHEMP. This could be done via the CZMA, which is scheduled to be reauthorized in 1980. There are several advantages to this approach. First, since it would be the law of the land, it could erase many problems of inconsistent laws and procedures. For example, Congress could address the problem of the interpretations of the CWA and the CZMA and the problem of how project-by-project review is handled when a plan is adopted. Second, this approach would get thorough public review and analysis. The original CZMA was in the Congress three years before it passed, and many people had an opportunity to comment on the many versions of the bill.

There are also disadvantages to this approach. Congress would want to consider a general approach to the problem of special area management and agency coordination rather than deal with the GHEMP, except by example. Thus, if adoption of the GHEMP were to depend on congressional action, it would probably take so long that the Plan would be forgotten by the officials back in the region. Also, when Congress gets hold of an issue, there are no limits on what can be added to it or substracted from it. For example, the question of special area management could become closely tied to the problems of

federal consistency, national interest, and excluded federal lands provisions, all of which could overshadow or warp the intentions in setting up a special area management provision. Further, energy, transportation, and environmental protection interests will use debates over special area management as a way to advance their causes, which may not make adoption of GHEMP any easier.

Several national organizations have already proposed that a special area management provision be included in the 1980 CZMA reauthorization (National Advisory Committee, 1979; Chassis, 1980; CSO, 1979). The OCZM has *not* proposed a special area management provision, but often uses Grays Harbor as an example of the achievements possible under the CZMA (Knecht, 1979). Congress amended the CWA, section 404, in 1977 to allow permitting authority to be delegated to the states and this amendment could be extended to give states more authority over coastal activities. Also, it should be kept in mind that simplification of permitting procedures is currently one of the very big pressures on the Congress, and the Grays Harbor procedure as a model may be of considerable interest to particular Congressmen. Further, Senator Henry M. Jackson, a powerful voice in the Senate, is very familiar with the Grays Harbor story and might be convinced to play a lead in a general law, building on the experience in his home state.

Summary When choosing the appropriate adoption strategy, various trade-offs must be considered. The higher the bureaucratic level at which adoption occurs, the more likely that a longer term, legally binding outcome will result. But the higher one goes, the less interest there will be in Grays Harbor and the more interest there will be in a general management scheme that use Grays Harbor as a "model." Also, time is an important factor. If the GHEMP can be adopted rapidly and begin to be implemented, the enthusiasm in its development could spill over into its implementation, and important lessons could be learned for the future. If the GHEMP is adopted too high in government, the resulting delays could cause a gap in the process that could permanently halt agency interaction.

The approaches outlined above are not mutually exclusive. Early action on the GHEMP could be taken through some combination of the regional and secretarial approaches while debate by the Executive or Congress continues on the broader notion of special area management. To get a closer look at a possible technique for adoption, OCZM has proposed a strategy based on a memorandum of understanding.

OCZM's MOU Adoption Strategy: An Analysis

A strategy for dealing with the question of how federal and state agencies would adopt the Plan was developed by the federal OCZM early in 1979 as part of their review of the Plan. The strategy envisions a single MOU entered into between WDOE and four federal agencies: COE, USFWS, NMFS, and EPA. The signing of the MOU would become the "adoption" of the GHEMP. It is interesting to note that the idea of an MOU was first proposed by the Port of Grays Harbor in 1975 at the outset of the Task Force process. In its Resolution No. 1673 of 9 December 1975, the Port pledged itself to continued cooperation in developing a comprehensive plan for the Grays Harbor estuary through a memorandum of understanding and coordination with other local, state, and federal entities.

The purpose of the MOU proposed by OCZM, as outlined in an initial draft (MOU, Mieremet draft, 1979), is to:

> provide an understanding between the various Federal resource agencies and the State that the Grays Harbor Estuary Management Plan. . . will provide a basis for Federal agency

decision-making on permit applications processed and reviewed under Federal laws; and, to the maximum extent permitted under law, activities which are deemed consistent with the Plan will receive expeditious approval if all other procedural and substantive requirements are met.

Within the MOU, each of the agencies would declare its role with respect to the Plan. As proposed by OCZM, each agency would acknowledge their participation in developing the Plan, recognize that it represents a balance of uses in the estuary, commit the agency to expedite permit requests that are consistent with the Plan, describe how the agency will use the Plan, identify any reservations or limitations on the agency and state the expected involvement of the agency in the amendment process.

Legal Issues Surrounding Use of an MOU

Regardless of the level at which it is adopted, a number of important legal issues are raised by the proposed MOU strategy. First, an MOU was upheld as a valid and binding action on agencies in a recent court case (Reynolds, 1977 and 1978). The judge ruled in favor of the MOU because of its attempt to avoid duplication and conflict among agencies, to achieve greater efficiency of government, and to foster the common goals of agencies. Although this case had nothing to do with coastal development (it involved equal employment opportunities), it may be a precedent in a future case, or simply an indication that judges will support attempts at agency coordination which utilize MOU's.

Second, although an MOU has the appearance of a contract among the agencies, it is in fact something quite different. In actuality, an MOU is a coincident expression of how the agencies intend to conduct their future affairs in Grays Harbor. The MOU is an exercise of the discretion given to the agencies by Congress. The validity of the agency statement within the MOU will be based on whether it complies with the laws the agency implements. In this sense, the purpose of the MOU is to help achieve the objectives of Congress. Thus, an MOU for Grays Harbor must show how adherence to the GHEMP helps achieve congressional objectives.

Third, a very important issue is whether each of the agencies has the power to enter into the MOU. This requires determining whether the agency's action is within its scope of authority under its authorizing statute. The agency's own analysis of this issue is often given considerable deference by courts later reviewing the agency action. Therefore, an MOU that includes the agency's own analysis of its statutory mandates and legislative history may be a more authoritative document than one that ignores this issue.

Fourth, because an agency's participation in an MOU is similar to issuing a rule or policy statement (see above), public notice and an opportunity for comment may be necessary before entering into the MOU. There is precedent suggesting that an agency rule may require notice in the Federal Register if it will have a "legal effect" or "substantial impact" on those affected by it (Davis, 1978). Because adoption of the GHEMP could affect private property owners and applicants for permits, it may be necessary to publish a notice of the proposed adoption of the MOU and allow comments to be received and considered. Publication in the Federal Register might forestall a subsequent lawsuit arguing that inadequate notice was given of the agency action. If the MOU were circulated with the draft EIS on the Plan, an analysis of the MOU in conjunction with the review of the draft EIS (discussed below) may be sufficient to meet requirements for adequate public notice.

Fifth, a question that may be asked by agency officials and other affected persons is how much weight a court of law would give to an agency's decision made in whole or in part by reliance on the MOU. This is a complex legal subject that can be discussed only in general terms. Under one interpretation, the answer depends on whether an agency's action in adopting the MOU is considered the adoption of a legislative rule, or only the adoption of an interpretive rule or policy statement. Legislative rules are considered by some courts to be law that must be followed, whereas interpretive rules and policy statements are not given as much weight (Davis, 1978). Applying this interpretation to the four federal agencies involved in the OCZM-proposed MOU strategy results in two being treated one way and two another. In case of the CZMA and CWA, Congress has delegated to OCZM, EPA and COE specific rule-making authority. In the case of the Rivers and Harbors Act and the Fish and Wildlife Coordination Act (see Appendix), explicit rule-making authority is not delegated to the USFWS or NMFS. The OCZM-proposed MOU, therefore, could not be considered a legislative rule because USFWS and NMFS do not have the power to adopt such rules under this interpretation of the law.

Under an alternative interpretation, some courts are prone to pay less attention to specific statutory statements about rule-making authority and to assume generally that agencies can and should play a dynamic role in administering the law, including making rules and regulations (Asimov, 1977). These courts will usually defer to the agency, especially when the agency can show that considerable thought and preparation went into the development of the rules and that the court has no expertise in the subject matter.

Analysis of these two interpretation of the law suggests that some additions to the text of the MOU would be desirable. First, the MOU could indicate the preparatory work in developing the Plan and the MOU. Further, to avoid a claim that the agencies (OCZM, EPA and COE) with delegated lawmaking power in their statutes (CZMA and CWA) were attempting to adopt a "legislative rule" without using the stricter procedures, or that agencies without such statutory power (USFWS and NMFS) were unlawfully attempting to create such a rule, the MOU could contain language indicating that it is a composite of agency policy statements rather than a composite of agency rules.

Sixth, legal questions may arise as the MOU is implemented. One agency may believe another is not using the Plan properly or misapplied it in a particular instance. Can one agency require another agency to adhere to the MOU? If two private parties had entered into a contract, one could sue the other if there were a breach of contract and could either receive damages or seek specific performance of the contract. A similar remedy does not exist when two agencies have such a dispute. An MOU is not analogous to a contract. Recourse can, however, be political; OMB, Congress, or the President could step in to resolve the differences. If political leaders do not step in, the agency dispute remains unsettled, akin to international relations, where there is no ready forum for conflict resolution.

The lack of a handy enforcement mechanism suggests two further strategies in setting up the MOU. The agreement could contain a dispute-settlement procedure, such as referral to a higher authority or a Plan amendment process. Also the MOU could be signed high in the agency hierarchy so that its importance is emphasized and it acts as an incentive to field personnel to find ways to resolve implementation disputes and avoid bringing cabinet-level officials into the process. Combining these two approaches could be an optimal strategy.

A related issue is whether a third party may bring suit to require that an agency adhere to the MOU. This questions whether an agency is

bound by its own rules or policy statements when making subsequent decisions on specific matters. Generally, agencies are bound by their own rules, and court cases have supported this (Davis, 1978). This proposition is less clear with respect to agency policy statements and interpretive rules because there has been little litigation of the issue. One would expect, however, that agencies would avoid appearing to have contradictory positions and would take action to amend the policy statement before acting contrary to it. If an agency acts contrary to a policy they have adopted it would, in effect, repudiate the MOU or a part of it.

In drafting the MOU, consideration could be given to mechanisms for allowing changes in agency positions with respect to discrete issues that would not invalidate or repudiate the entire MOU. In the draft MOU dated May 1979, (MOU, Mieremet, 1979), there is provision for reservations to be made to the MOU by the agencies. A reservation is a particular qualified action or exception noted by a party to a part of the MOU. Presumably, reservations could be added at a later date, subject to agreed-upon procedures.

Linking the MOU to the NEPA Process

OCZM intends that the MOU would be reviewed and signed as part of the NEPA EIS process (see Appendix); that is, the draft EIS would contain a draft MOU, so that the public agencies and private interests reviewing the draft would have before them a comprehensive statement of what the Plan proposes. The EIS would list the uses proposed for Grays Harbor, the environmental consequences of those uses, and the way in which the Plan would be used in decision making.

OCZM states that the primary reason for linking the MOU to the NEPA compliance procedure is that the signing of the MOU is the major federal action by the four agencies which triggers the need for an EIS. NEPA requirements must be satisfied before the agencies could agree to support the Plan.

OCZM argues that an additional purpose of linking the MOU to the NEPA compliance procedures is to give the public and other agencies who participated in the NEPA review process greater assurance that the conditions of the MOU will be met. The EIS will analyze alternatives and environmental impacts with a view toward the actions to be taken under the Plan. Thus, if an agency that issues the EIS and signs the MOU subsequently fails to adhere to the Plan, the agency could suffer political consequences in its future relations with other agencies. Also, its nonconforming action would necessitate a new EIS process, at additional expense, because the non-complying agency could no longer rely on the jointly prepared EIS to fulfill its NEPA requirements. Finally, an agency failing to adhere to the Plan will have gone back on promises made to the public in the EIS. Presumably, public agencies will wish to avoid these costly consequences. Therefore, the open and full discussion of the Plan under NEPA, including the environmental consequences and the method of implementation, will result in great pressure upon agencies to adhere to the MOU (Kifer, 1979).

The new CEQ guidelines for compliance with NEPA (see Appendix) contain provisions that could result in the MOU having more weight than it would if it were entered into apart from the NEPA process. The results of the NEPA process must include a "record of decision" indicating how environmental considerations were factored into the decision-making process (CEQ, 1978; "New Rules for the NEPA Process," 1979). The MOU could include within it a record of decision that explains how the agencies met NEPA requirements in reaching the decision to enter into the MOU. Subsequent departure from the terms of the MOU could then be considered a violation of NEPA, and a court

of law could require remedial action to ensure compliance with NEPA in analyzing impacts and considering alternatives.

The CEQ guidelines also require that measures to mitigate environmental harm be implemented by agencies issuing the EIS. If the MOU is signed by the four federal agencies and the Washington Department of Ecology, and if the MOU contains the record of decision required by the NEPA process, each agency would be mandated to implement mitigation measures (CEQ, 1978; "New Rules for the NEPA Process," 1979). To the extent that the Plan and the EIS identify mitigation measures, the EIS-issuing agencies would have a duty to require that the mitigation be implemented. Failure to do so could be construed as a NEPA violation. Viewed another way, the provisions of the Plan to conserve natural resources are "in mitigation" of those parts of the Plan allowing development. Thus, NEPA imposes a duty on the agencies to implement the conservation provisions of the Plan.

Another specific provision of the NEPA process may give the MOU more weight. Under the scoping procedures and the new EIS format, the lead agency must identify environmental reviews and consultations required by other laws so that these studies or analyses can be done concurrently with the draft EIS and integrated into the final EIS. In this way, the NEPA process is used to meet legal requirements of the lead and cooperating agencies and further binds them to the record of decision at the end of the NEPA process. If an agency should want to act contrary to the MOU, it would probably have to conduct a new analysis of that action under its own laws and NEPA.

The MOU strategy is at a very early stage of formulation, and thus it is difficult to say where it fits into the four alternative strategies described above (see pp.89). The MOU strategy does not appear to require actions by the Executive or Congress. Because the proposed strategy does not indicate specifically who would adopt the MOU, it is not clear whether secretarial-level or regional officials would be the signatory parties. Since the MOU deals only with Grays Harbor, it probably exhibits more of the characteristics of a regional approach than a secretarial-level one. This strategy favors flexibility and speed of implementation at the expense of commitment from higher agency officials and stability in the face of personnel changes.

Conclusions

Two important conclusions develop as a result of understanding the problems of Plan adoption and implementation. First, as the EPA memo of July 1978 illustrates, the framework in which conflicts are being resolved among agencies is likely to shift, either through reinterpretation or clarification of existing laws, or by the addition of new laws. Building a plan that effectively recognizes the complexity of the jurisdictional framework and that can respond, when necessary, to changes requires that the jurisdictional framework be monitored closely throughout the planning process. Special staff capability and legal advisors may be required for that purpose.

Second, a comprehensive plan of this type, which suggests major allocation of shoreline resources, may need agency commitment in stages, rather than an "all-or-nothing" adoption at the end of four years of work. Some of the Task Force participants (Hank Soike, Stan Lattin and Pat Dugan) attended a national workshop on Ports and Coastal Management in Boston, on 1 August 1979. The workshop concluded that plans like the GHEMP should proceed in stages, with agency commitment occuring prior to each stage. Stages could be defined with reference to such issues as the geographic area concerned, the commitment of personnel to the planning process, the interim

development controls and the post-Plan permitting procedures (Hershman and Feldmann, 1979). A staged commitment strategy could signal major difficulties in the ability or willingness of the participants to commit themselves to specific components of the Plan. The staged commitment strategy could also help build a history of agreement. Another advantage of a staged commitment strategy, which is developed and agreed upon by all the parties early in a planning process, is that if agreement cannot be accomplished at one step, parties have the opportunity to honorably withdraw from the activity. Also, it gives agencies a chance to feel comfortable with the progress of a planning effort before agreeing to move on to the next step.

8 LESSONS LEARNED FROM GRAYS HARBOR

Grays Harbor, an estuary of great natural wealth and the hub of regional economic activity, can serve as a prototype of nationwide coastal zone management issues. In their efforts to produce a long-range plan for the allocation and use of the estuary's limited and valuable resources, the Grays Harbor Estuary Planning Task Force grappled with many of the problems facing coastal zone planners across the country.

One very positive aspect of the Grays Harbor experience is the obvious increase in understanding and willingness to cooperate on the part of the Task Force participants. The Task Force workshops served as a forum for local, state, and federal representatives with widely divergent views and objectives to discuss their differences and priorities, their requirements and goals, and thereby to appreciate the complexity of the issues to be considered. Their perspectives broadened, they learned to take many additional factors into consideration when making decisions, and they realized that cooperation and compromise are indeed real possibilities. This new atmosphere of intergovernmental cooperation may be extremely beneficial in the process of planning for the future of the Grays Harbor estuary, and may have a continuing positive influence on the decision-making process. This increased understanding and cooperation, in itself, can be one of the strongest benefits from engaging a diverse set of government entities, industries and the public in special area management efforts throughout the nation.

The Grays Harbor Estuary Planning Task Force effort was an experiment in intergovernmental planning and site-specific conflict resolution, an innovative approach to estuary planning. As such, it was inevitable that "rough spots" would be encountered, that the unanticipated would arise. Therefore, the Task Force effort should be considered a source of information that can be used and refined by other coastal zone planners as a basis for building an improved, more streamlined process.

The planning process designed by the Task Force and their consultants combined traditional comprehensive planning methodologies and an innovative Task Force of parties with decision making authority in the estuary. During the process of establishing general guidelines for the long-term allocation and use of estuarine resources and, as the process evolved, of attempting to resolve site-specific conflicts the dynamics of the effort became increasingly one of conflict resolution by negotiation and bargaining. Any attempt to resolve the persistent conflicts over resource use and allocation, such as those which existed in Grays Harbor, requires a planning process that is designed to allow for negotiated settlement of the disputes. The major lessons to be learned from Grays Harbor which can provide guidance regarding process design for special area management activities in the future are reviewed below.

When forming a special area management task force, representatives of all relevant parties to the disputes to be resolved and representatives of all parties that have the power to affect the implementation of the resulting plan should be included in the task force efforts. Achieving this aim requires, first, a clear definition of the dispute, and second, a careful determination of all the relevant parties to the dispute. If a negotiated settlement of a dispute is to be politically viable, implementable and acceptable to all who will be affected by the settlement or by all who can influence implementation of the agreement, these same parties must be involved in the negotiation process

and develop a commitment to it. Inclusion of relevant parties will avoid criticism, such as those leveled against the Grays Harbor Task Force, that valid interests and concerns were not adequately represented, and could avoid legal challenges. Where the conflicts to be resolved are very numerous and inclusion of all relevant parties would make the group too large to be efficient, alternative task force strategies which provide for technical reference groups, flexible membership to address specific issues, or ad hoc voting authorities may be appropriate.

Successful negotiations depend on the skillful deployment of power and manipulation of perceptions of power, which in turn depend on the negotiating skills of the participants. This highlights another important consideration in determining the composition of a special area management team. In order for meaningful negotiations to occur, the power of the participants to control resources or to make decisions on their use and allocation need to be relatively equal. Each participant should have the authority to make commitments and decisions in the negotiations on behalf of their agencies or constituencies, the limits of the authority of representatives should be known to other participants, and opportunities should be provided for representatives to return to their agencies and constituencies to obtain agreements to commitments. Furthermore, all participants should have some training and/or experience in negotiation techniques or be provided learning opportunities so that lack of skill does not skew the bargaining in favor of another party with more proficient negotiators.

After it has been determined that particular disputes need to be resolved and a team of representatives with relatively equal power and negotiating skills has been formed to work out a settlement, the next important element in designing a planning process is to develop and present the technical information to be used by the participants in making their decisions. Dispute settlement implies compromise, and compromise implies bargaining and trading. To facilitate a fair process of bargaining, it is helpful to compile information in the form of alternatives analysis so that the negotiators can determine the results of various combinations of trade-offs. Alternative economic development options and industrial sites should also be included in this analysis.

In designing the planning process, opportunities should also be provided which allow data gathering during the process if the need for additional information arises. The ability to integrate new information will allow for adjusting the negotiations to include new elements. An example of such new information in Grays Harbor was the nomination of Bowerman Basin as a Unique Wildlife Ecosystem by the U.S. Fish and Wildlife Service.

Throughout a special area management effort which is attempting to produce a long-range plan and negotiated settlement of specific disputes, a neutral third party (e.g., consultant, mediator, arbitrator, etc.) is extremely valuable, even essential. Individuals who combine regional planning expertise and mediation skills and who can operate from a neutral funding and political base are probably best suited to assist a task force in achieving their goals and resolving conflicts. Other consultants or advisors may also be required to provide technical information and, in particular, legal advice. A legal advisor can delineate and explain the relevant environmental legislation and keep the task force informed of any changes in the jurisdictional framework (e.g., new interpretations or clarifications of existing laws or the addition of relevant new legislation) and can also ensure that all the agreements reached by the task force are legally viable.

A legal advisor can also help the task force develop adoption and implementation alternatives that meet the administrative and legal constraints of the governmental agencies that will adopt the completed plan. These alternatives should be developed during the planning process, concurrently with the agreements on trade-offs. An early and integrated delineation of adoption and implementation strategies should ensure that particular trade-offs are, in fact, capable of being implemented.

A flexible adoption strategy may be particularly desirable. Allowance could be made for parts of the plan to be adopted, for delay of adoption of certain provisions, if necessary, and for stipulating conditions on adoption of all or part of the plan.

During the negotiations, steps should be identified in the process that can act as check points where decisions to proceed or stop can be made without the loss of face. Preidentified check points or a system of staged commitments would allow the negotiating team to move incrementally through the complex and perhaps controversial chores at hand. Being able to pause at preidentified steps and assess what has been accomplished and what lies ahead should increase the ability of the negotiating team to forge an effective and viable plan.

Participants can slowly build a relationship of mutual trust if they can agree on pieces of a solution. Accepted points of exit from the process would avoid getting to the end of the process and being trapped into an agreement which one does not want to accept, but believes must be accepted in order to avoid accusations of bad faith bargaining.

Staged commitment also alters the definition of failure. If incremental agreements can be developed, some success can be measured even if the group eventually concludes that a final plan or compromise agreement is impossible. The mediators/consultants should also be given the recognized right to stop the process if, in their judgment, achieving a negotiated agreement becomes impossible.

Preidentified check points could also alleviate delays or other difficulties due to agency representatives not being able to speak for the policy-making unit of their agencies. At these times, representatives could confer with solicitors, policy analysts, or other specialists in the agency for their conditional commitments before going further into the process and running the risk of a participant not being able to adequately represent the needs and constraints of the parent agency.

If public groups are included in the negotiation, such check points could also be used to return to the constituency with reports of what has occurred and to ascertain the level of constitutency support. In the design of a negotiation process, it should be remembered that these check points can either be steps in the procedure or stages in the substance of an agreement, whatever is agreeable in advance to all parties.

A final and related point about the design of a process: *the process should include a feedback or monitoring system to check progress, document agreements reached, and audit the process.* Such a procedure could keep the participants informed on progress and would provide a record of what has occurred to date. Efficiency of the process should be increased by a steady input of information. Also, if individual participants change during the process, as they surely will, new members can be educated about the process, and experiences can be transferred. This monitoring service could be provided by consultants or the sponsoring organization, e.g., a regional planning commission.

Conflict over the allocation and use of coastal resources, as typified by the Grays Harbor experience, is likely to intensify in

the coming years. Given competing interests and pressures for both development and protection of resources, negotiation is likely to become a much more common method of dealing with these problems. Applying the lessons learned from the Grays Harbor Estuary Management Program may facilitate the development of successful environmental negotiation processes elsewhere in the country as people continue to search for predictability in the management of coastal resources.

APPENDIX
ESTUARY MANAGEMENT FRAMEWORK IN GRAYS HARBOR

Coastal Management Programs

Shorelines have increasingly been recognized as a valuable, limited, irreplaceable, and fragile resource. At the same time, human use of shorelines has increased dramatically. It has become clear that wise management is essential to protect shoreline resources while also fostering their appropriate use. To this end, federal, state, and local coastal management programs have been developed.

Shoreline Management Act

In 1971 the Washington State legislature passed the Shoreline Management Act (SMA) to promote all reasonable uses of state shorelines. It established four categories of shorelines: natural, conservancy, rural, and urban. Certain state coastal areas were declared to be of state-wide significance and in need of special management attention; Grays Harbor is one of these areas.

The SMA requires that all local governments of incorporated cities and counties develop individual Shoreline Master Programs (SMP's) using the general goals, policies, and guidelines promulgated by the SMA and specifically contained in the state administrative code adopted in 1972. Formulation of a SMP acceptable to the state is mandatory and the state has authority to establish a program in the absence of local initiative.

The SMA is administered by the Washington State Department of Ecology (WDOE). The act provides a permit application procedure through which local governments implement their state-approved programs and accept or deny substantial development projects in shoreline areas. Substantial development is generally defined as construction, dredging, filling, or removal of material in which costs or value exceed $1,000. Local government has decision authority subject to state oversight and appeal. Differences between local and state permit determinations may be arbitrated by the quasi-judicial Shorelines Hearings Board. Grievances may, however, ultimately be appealed to the courts.

Although WDOE is the administering agency, the potential problems and conflicts of coastal resource use may be the specific responsibility of other state agencies. WDOE acts as the coordinating agency, announcing the receipt of particular project proposals and circulating permit requests for comment by concerned agencies. A composite state agency response may be made to participating federal agencies, as will be noted later.

Grays Harbor County Shoreline Master Program

The Grays Harbor County SMP was the first local program approved in the state under the SMA. As initially submitted, it was rejected by WDOE but was approved with recommended changes in June 1974. The county program has undergone revision since then and was reapproved by the state in July 1978. The municipal governments bordering the estuary also have approved master programs, which were modeled on the county program. The cities of Aberdeen and Westport continue to disagree with WDOE over changes made in their programs prior to state approval.

Coastal Zone Management Act

The federal Coastal Zone Management Act of 1972 (CZMA) provides a third expression of law and requirements for government agency organization concerning development decisions in Washington's coastal

regions. The act's primary intent is to encourage state governments to cooperate with local government and federal entities to develop shoreline and aquatic-area use programs for the coastal zone. Rather than specifying environmental designations and use characteristics as the SMA does, the federal act is designed to affect the decision-making process in coastal regions. The CZMA does not require state participation and contains sufficient flexibility to accommodate and enhance state legislation and management efforts that have preceded it.

Under the CZMA, the state of Washington received planning grants to develop unified policies, criteria, and mechanisms for managing and regulating coastal land and aquatic areas. The state submitted a draft Coastal Zone Management Program (CZMP) in December 1975 to the Office of Coastal Zone Management (OCZM) of the National Oceanic and Atmospheric Administration, the federal entity responsible for administering the CZMA. The state CZMP is essentially the Shoreline Management Act with the addition of several other statutes and inter-agency coordination provisions. After limited modification, the Washington State Coastal Zone Management Program was approved in June 1976--the first CZMP to meet national standards--and it continues to receive administrative funding. Administrative funding made possible by the CZMA also allows for specific appropriations for the development of specialized management programs in areas of particular concern and for the establishment of estuarine sanctuaries. Grays Harbor is noted as an "area of particular concern" in the state's approved program under this special provision of the CZMA.

Central to the importance of the CZMA is the incentive of a participating state to interact with the federal government. If a state has formulated a management program acceptable to OCZM (i.e., the views of affected federal agencies have been adequately integrated into the program as determined by OCZM), all federal projects and permitting frameworks must conform to the state's approved management program. Specifically, all federal agencies with authorities in the coastal zone must ensure that their activities are "to the maximum extent practicable, consistent with approved state management programs." Applicants for federal licenses or permits must receive concurrence from the state that the proposed use of coastal resources is consistent with the approved state management program. Further, state or local projects receiving federal assistance must demonstrate consistency with the state's CZMP. The WDOE has utilized the consistency provisions of the CZMA as an additional method for implementing the pre-existing state Shoreline Management Act.

State Environmental Legislation and Regulatory Agencies

The present extent of environmental control of upland and coastal regions exercised by state agencies has largely developed in the last decade. Local governments have a long history of specific planning, zoning, and building permit powers, but only in recent years has state oversight and control of activities and uses with potentially broad environmental effects become important.

In Grays Harbor, four state agencies have permit and regulatory responsibilities applying to development or alteration of shorelands and aquatic areas in the estuary. The Washington State Department of Ecology (WDOE) is primarily responsible for water quality and administration of the SMA and the state CZMP. The Washington Department of Fisheries (WDF) manages fish and shellfish as well as various aspects of the commercial harvest of these resources. With similar responsibilities, but focusing on game fish, wildlife, and

wildlife habitat, is the Washington Department of Game (WDG). Lastly, the Washington Department of Natural Resources (WDNR) is responsible for the productive use and the maintenance, as a public trust, of aquatic resources. WDR leases state-owned lands for a variety of beneficial uses.

In addition to the SMA discussed above, there are three other important Washington statutes that define state agency authority in the coastal zone: the State Environmental Protection Act, the State Forest Practices Act, and the Hydraulics Project Approval Law. Discussion of the interrelated policies developed by state agencies in relation to this legislation follows.

State Environmental Policy Act (RCW 43.21c)

Similar in purpose to national environmental policy legislation, the State Environmental Policy Act (SEPA) adopted in 1971 is intended to ensure coordination and cooperation among local, state, and federal entities. The broad sweep of SEPA requires interagency coordination to foster and promote the general public welfare such that social, economic, and environmental goals may be effectively balanced.

SEPA requires preparation of a statement of the environmental effect of actions significantly affecting the environment, including the effect of state legislation. WDOE administers SEPA through a checklist of codified guidelines. A state agency is declared "lead agency," depending on the type of proposed action involved, and is responsible for determining the need for and formulation of an environmental impact statement (EIS), subject to WDOE oversight. The SEPA process prescribes a public hearing, information-gathering, and review process. Further, SEPA analysis and review may result in changes to the project proposal and mitigation of unavoidable adverse impacts.

Forest Practices Act (RCW 76.09)

Poor timber management practices cause excess run-off and thereby degrade the quality of watersheds. Concern for protection of the water quality of state watersheds and the maintenance of the long-term productivity of timber resources led to the Forest Practices Act (FPA) of 1974. Standards for growing, harvesting, and processing of timber are set down, with implementing responsibility falling to WDNR.

Detailed plans for timber industry operations must be submitted to WDNR for approval. WDNR may interrupt activities to prevent the possibility of continuing damage to public resources. Guidelines under the FPA stipulate that forest practices within SMA jurisdiction should have "no direct potential for damaging a public resource."

Hydraulics Projects Approval Law (RCW 75.20)

The Hydraulics Project Approval Law (HPAL) complement the FPA and places primary emphasis on control of landscape changes that affect natural streamways or result in stream diversion. Activities with such potential must obtain a specific Hydraulics Project Plan Approval. WDF and WDG have equal responsibility for implementing HPAL criteria. Written approval of both agencies is required and can be obtained only after project plans are submitted in detail and specifications for protection of fish and wildlife are determined. A wide variety of projects fall under the purview of this statute, including construction, dredging, or any changes made to the bottom or bed of fresh- or saltwater systems.

Federal Environmental Legislation and Implementing Agencies

Use of estuarine resources in Grays Harbor is subject to the planning, regulatory, and management responsibilities of four principal federal entities. The Army Corps of Engineers (COE) has perhaps the longest established presence in Grays Harbor as a result of activities related to navigation and channel maintenance. The U.S. Fish and Wildlife Service (USFWS), Department of the Interior, is responsible for the protection and development of all species of wildlife and their habitat. Under the Fish and Wildlife Coordination Act of 1958, the USFWS reviews new proposals and existing activities to ensure the conservation of wildlife resources. The National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration, Department of Commerce, is concerned with the conservation and management of marine fishery resources. NMFS has particular interest in maintaining estuarine fish habitat as a result of the Fishery Conservation and Management Act of 1976. Finally, the Environmental Protection Agency (EPA) draws upon the Federal Water Pollution Control Act and Amendments of 1972 and the Clean Water Act of 1977 to support its role in preserving the physical, chemical, and biological integrity of aquatic areas.

All four federal agencies derive interrelating management, jurisdiction, and coordination responsibilities from five critical federal measures: the Fish and Wildlife Coordination Act of 1958, National Environmental Policy Act of 1969, Coastal Zone Management Act of 1972 (discussed above), the Rivers and Harbors Appropriations Act of 1899, and the Clean Water Act of 1977. The central and cohesive elements of federal natural resource decision making spring from the Fish and Wildlife Coordination Act (FWCA) and the National Environmental Policy Act (NEPA). Both measures are designed to integrate public interest, expansion of national economic activity, and preservation of environmental values.

Fish and Wildlife Coordination Act

The FWCA stresses that wildlife conservation must receive equal consideration and coordination with water-resource development proposals. A consultation framework is established whereby any proposal by federal, state, or private interests to alter or control the waters of any body of water or shoreline area may not be allowed without first consulting USFWS, NMFS, and the agencies administering the wildlife resources of the particular state.

National Environmental Policy Act

NEPA requires all federal agencies to give full consideration to environmental effects in planning and carrying out their programs, and prescribes specific procedures for doing so. The act states that the continuing policy of the federal government is ". . . to use all practicable means and measures. . .to create and maintain conditions under which man and nature can exist in harmony, and fulfill the social, economic and other requirements of present and future generations of Americans" (Public Law 91-190).

To ensure that federal agencies implement this policy, NEPA requires each federal agency to prepare a detailed statement of environment impact (EIS) on every major federal action that might significantly affect the quality of the human environment. The EIS must discuss (1) any adverse environmental effects that cannot be avoided if the proposal is implemented; (2) alternatives to the proposed

action; (3) the relationship between local short-term benefits and the enhancement of long-term productivity; and (4) any irreversible and irretrievable commitment of resources involved in the proposed action. The EIS must be circulated to other federal agencies, to state and local governments, and to the public for review and comment.

NEPA also created the Council on Environmental Quality (CEQ). Among other things, CEQ administers the EIS procedure and provides guidelines for EIS production.

Starting 30 July 1979, new guidelines for compliance with NEPA and the EIS process became effective. These new guidelines were prepared by CEQ at the direction of the President (Executive Order 11991) and are intended to reduce paperwork and delay while fostering agency decisions based on a full understanding of environmental consequences. Four of the new guidelines are especially noteworthy.

First, a process is laid out for determining the lead agency for preparation of the EIS. This will facilitate early environmental analysis because disputes between agencies over lead roles can be avoided. The lead agency can call upon other agencies, referred to as "cooperating agencies," to assist in preparation of the EIS.

Second, to distinguish significant issues for analysis from secondary matters, a mandatory "scoping" process is required. The lead agency must invite other agencies and the public to participate in scoping. Environmental reviews and consultations required under other laws must be identified during the scoping process and they can be prepared concurrently with the EIS.

Third, the EIS format has been changed to encourage concise statements, written in plain language, that address significant environmental issues and alternatives. Length is limited in most cases to 150 pages and the comparative analysis of all reasonable alternatives to the main proposal and their environmental ramifications is stressed.

Fourth and most important, the agency preparing the EIS must produce a concise "public record of decision" that explains how environmental considerations were included in the decision-making process. Agencies still need not choose the environmentally preferred alternative in their decision, but the fact that they disclose how the decision was reached means a reviewing court can more easily determine that the decision was not arbitrary or capricious. Also, the record of decision must address whether all practicable means to mitigate the environmental harm were taken, and the lead agency is required to ensure that mitigation provisions will be implemented, for example as conditions imposed in grants or permits (9 Environmental Law Reporter pp. 10005-10).

Rivers and Harbors Appropriations Act

Alterations to "navigable waters" require permits under section 10 of the Rivers and Harbors Appropriations Act. In addition to navigation concerns, the general criteria for approval or denial of permits include potential effects of the proposed waterway alteration on fish and wildlife, conservation of environmental resources, pollution, aesthetics, the human environment, and the public interest. Section 10 jurisdiction extends shoreward to the mean high water mark (MHW). The Corps of Engineers is responsible for issuing section 10 permits.

Clean Water Act (33 USC § 1251 et seq.)

The Federal Water Pollution Control Act and Amendments of 1972 was renamed the Clean Water Act in 1977. Throughout this monograph, Clean Water Act (CWA) refers to both the 1972 and 1977 acts. The CWA addresses regulation of aquatic-area development. Section 404 of the congressional act, codified as section 1344 of the CWA, directs COE

and EPA to cooperate in developing guidelines regulating the discharge of dredged or fill material into aquatic areas. This legislation authorizes COE and EPA to prohibit the use of any aquatic area as a disposal site for dredged or fill materials whenever it is determined that:

> . . .the discharge of such materials into such area(s) will have an unacceptable adverse effect on municipal water supplies, shellfish beds, and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. (Sec. 404 and Title 33 USC § 1344 (b) and (c))

Further, the CWA legislation identifies acceptable alterations to aquatic areas as instances where:

> . . .flow and circulation patterns and chemical and biological characteristics of the navigable waters are not impaired, that the reach of the navigable waters is not reduced, and that any adverse effect on the aquatic environment will be otherwise minimized. (33 USC § 1344 (f) (1) (E))

Thus, section 404 jurisdiction extends beyond mean higher high water (MHHW) and applies to the upper limit of marsh vegetation, to the extent that such a delineation may be discretely defined. The CWA requires a permit for any discharge of dredged or fill material incidental to any activity meant to bring an aquatic area into a use to which it was not previously subject.

EPA and COE developed guidelines for implementing section 404 policies. The initial guidelines were promulgated in late 1975 (40 F.R. No. 173) and revisions were proposed in September 1979 to reflect changes made in the CWA of 1977. Although the comprehensive influence of 404 implementation guidelines is yet to be fully determined, it is apparent that the permit authority vested in COE, EPA, and other concerned federal and state resource agencies is central to decisions relating to the use of shoreline and aquatic-area resources. The existing 404 guidelines note the national importance attached to the degradation of aquatic resources by filling operations in wetlands.

Regulatory and resource-management agencies consider documentation of irreversible loss of aquatic resource properties due to fill in aquatic areas as scientifically and professionally problematic. However, the most controversial aspect of the 404 guidelines is the requirement that all feasible alternatives to discharges of dredged or fill materials have been evaluated and eliminated in favor of the project proposal. Section 230.10 (a) of the 1979 proposed EPA guidelines states:

> The discharge of dredged or fill material does not comply with the Guidelines if there is a practicable alternative to the proposed discharge that is environmentally preferable and will have less adverse impact on the aquatic ecosystem (44 Fed. Reg. p. 54233-4, 18 September 1979).

The importance of alternatives analysis was amplified by Executive Order 11990, "Protection of Wetlands," issued in May 1977. This order admonishes all federal agencies to fulfill Congressional mandates and apply the NEPA decision-making framework to activities affecting the nation's wetlands. It states that: (1) all practicable alternatives must be evaluated and contrasted; and (2) the proposed action must include all practicable measures to minimize harm to wetlands that may result from permitted activities.

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GLOSSARY OF ACRONYMS

CEQ	Council on Environmental Quality
COE	Army Corps of Engineers
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
CZMP	Coastal Zone Management Program
EIS	Environmental impact statement
EPA	Environmental Protection Agency
FPA	Forest Practices Act
FWCA	Fish and Wildlife Coordination Act
GHEMP	Grays Harbor Estuary Management Plan
GHRPC	Grays Harbor Regional Planning Commission
HPAL	Hydraulics Project Approval Law
LWRMP	Lower Willamette River Management Plan
MOU	Memorandum of Understanding
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
OCZM	Office of Coastal Zone Management
SEPA	State Environmental Policy Act
SMA	Shoreline Management Act
SMP	Shoreline Master Program
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
WDF	Washington Department of Fisheries
WDG	Washington Department of Game
WDNR	Washington Department of Natural Resources
WDOE	Washington Department of Ecology

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