

University of Massachusetts Boston

ScholarWorks at UMass Boston

Urban Harbors Institute Publications

Urban Harbors Institute

8-26-2002

Baseline 2000 Background Report: The Status of Integrated Coastal Management as an International Practice (Second Iteration)

Jens Sorensen

University of Massachusetts Boston, jens.sorensen@umb.edu

Follow this and additional works at: https://scholarworks.umb.edu/uhi_pubs



Part of the [Land Use Law Commons](#), [Water Law Commons](#), and the [Water Resource Management Commons](#)

Recommended Citation

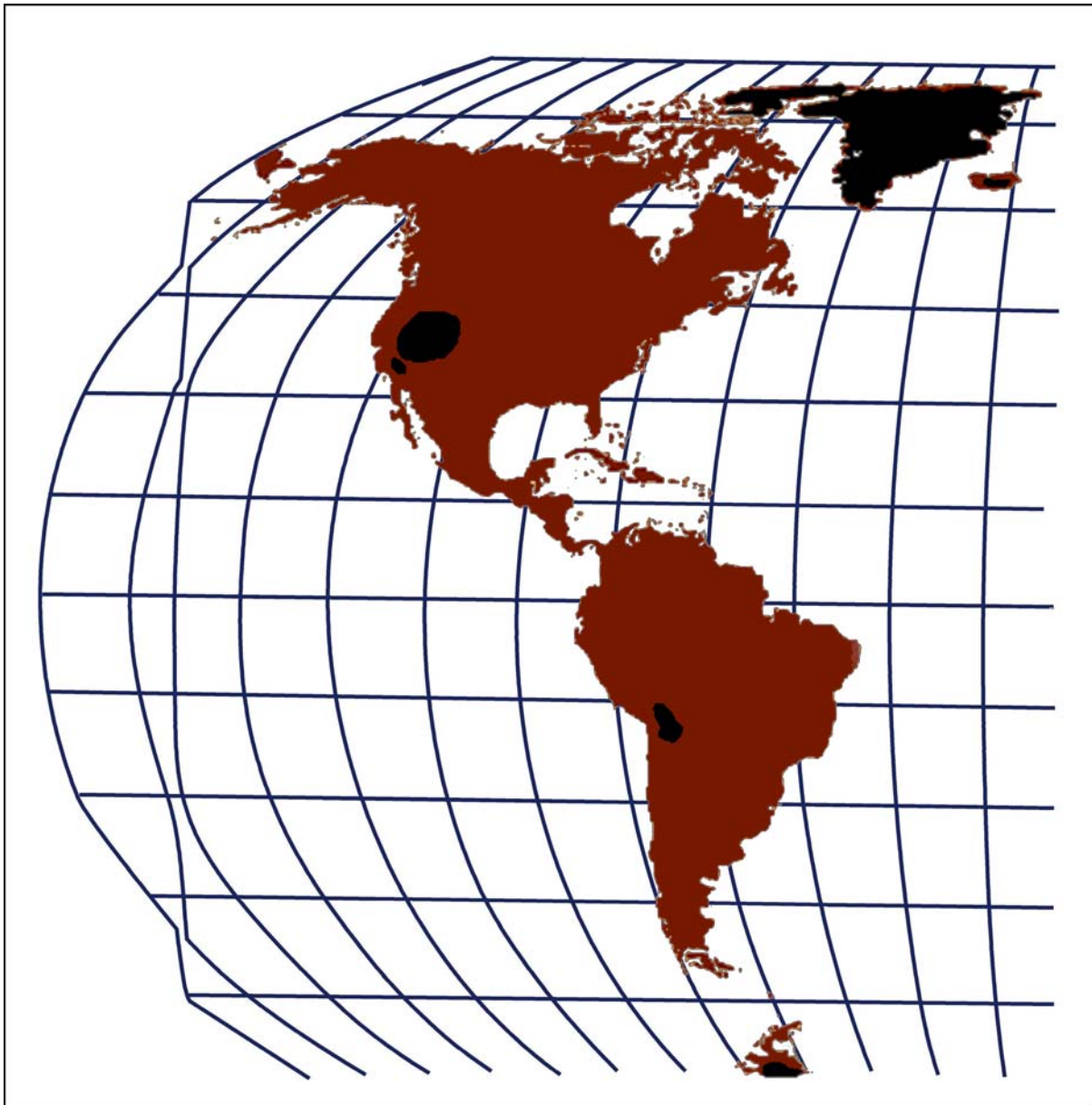
Sorensen, Jens, "Baseline 2000 Background Report: The Status of Integrated Coastal Management as an International Practice (Second Iteration)" (2002). *Urban Harbors Institute Publications*. 31.
https://scholarworks.umb.edu/uhi_pubs/31

This Research Report is brought to you for free and open access by the Urban Harbors Institute at ScholarWorks at UMass Boston. It has been accepted for inclusion in Urban Harbors Institute Publications by an authorized administrator of ScholarWorks at UMass Boston. For more information, please contact scholarworks@umb.edu.

BASELINE 2000 BACKGROUND REPORT

THE STATUS OF INTEGRATED COASTAL MANAGEMENT AS AN INTERNATIONAL PRACTICE

SECOND ITERATION – 26 AUGUST 2002



**BROWN AREA INDICATES THE EXTREME LANDWARD
BOUNDARIES OF THE WORLD'S COASTAL ZONE**

BASELINE 2000 BACKGROUND REPORT: The STATUS of INTEGRATED COASTAL MANAGEMENT as an INTERNATIONAL PRACTICE

Second Iteration. 26 August 2002

Jens Sorensen

**Harbor and Coastal Center, Urban Harbors Institute
University of Massachusetts, Boston
Boston, Massachusetts 02125 U.S.A.
jens.sorensen@umb.edu or 1 617 287-5570**

Preface on the composition, assembly, and production process

The Baseline 2000 Background Report (B2KBR) has only been produced as a pdf file in order to facilitate wide and non-costly distribution, as well enable periodic revisions, and additions. It is being produced during 2002 in three phases, or iterations. The First Iteration was posted on April 2nd. This Second Iteration is now being posted at the end of August and the Third, and final, Iteration, should be posted by the end of September. Each iteration consists of a number of largely self-contained Sections and their relevant Annexes. The Introduction describes how they all are interconnected in numerous ways. However, each Section (and databases where relevant and complete – but not yet finished as envisioned) can also be a stand-alone presentation. This Second Iteration includes approximately 75% to 80% of the total number of pages that will comprise the Third Iteration for 2002.

Readers of the C Annexes on the Global Index of ICM efforts will probably notice that there are many information boxes with different colors in Annex C-1: National and sub-national ICM efforts. The color-coding was done to facilitate the review and comment process. The colors correspond to institutions that usually have been involved in ICM over the course of many years at the national/sub-national and/or international levels. Some of them such as the Priority Action Programme for the Mediterranean Action Plan focus on an international region others such as the GEF, UNDP, the World Bank, and the University of Rhode Island's Coastal Resources Center are doing work all over the globe. It is planned that the Third Iteration will include feedback from these institutions that as well as all the ICM efforts listed that have an e-mail address or a website.

New text, as well as new figures have been added to First Iteration Sections.

The Report and the Baseline 2000 Discussion Paper were prepared with support from: Coastal Zone Canada Association, United States National Oceanic and Atmospheric Administration, Canada Department of Fisheries and Oceans, Environment Canada, the Province of New Brunswick, and the Urban Harbors Institute at the University of Massachusetts, Boston. Section 9, Evaluating ICM efforts, will be drawn from the work contracted by the World Bank, Environment Department.

TABLE OF CONTENTS

Preface and Acknowledgement (Third Iteration)

1. Introduction: Why Baseline 2000 was developed (First Iteration)

- 1.1. A brief history of ICM**
- 1.2. Organizing frameworks for information exchange and learning from experience**

2. Factors influencing and shaping ICM (First Iteration)

- 2.1. Environmental and socioeconomic factors**
- 2.2. Basic elements involved in managing coastal users, uses, resources, and environments**

3. International database of ICM efforts (First Iteration)

- 3.1. Findings derived from Table 3.1 and Annex C**
- 3.2. Future directions**

4. *Motivating issues (Third Iteration)*

- 4.1. *Types of motivating issues***
- 4.2. *Frameworks for international information exchange***

5. *Model planning approaches and model techniques for planning and/or management (Third Iteration)*

6. A comparison of ICM governance arrangements (Second Iteration)

7. Guidance literature on ICM (Second Iteration)

8. Common challenges to ICM (Second Iteration)

- 8.1. Challenges to all nations and sub-national units of government**
- 8.2. Additional challenges that commonly occur in developing nations**
- 8.3. ICM is not appropriate for many nations or sub-national units**

9. *Evaluating ICM efforts (Third Iteration)*

10. *Index of ICM topics (Third Iteration)*

- 10.1. *Sources and concepts***

11. *Concluding points (Third Iteration)*

Annexes

Annex A: Coastal areas, tiers, zone and boundaries (Second Iteration)

Annex B: Global coastline length and coastal zone (Third Iteration)

Annex C: The Four Tables on ICM efforts (First Iteration)

- ♦ Table C-1: Database of ICM efforts at the national and sub-national levels (except Canada and the U.S.A.)
- ♦ Table C-2: Database of national and sub-national ICM efforts in Canada
- ♦ Table C-3: Database of national and sub-national efforts in the U.S.A.
- ♦ Table C-4: Database of International ICM efforts

Annex D: Impact diagrams (Third Iteration)

Annex E: An example of using coastal geographic types to organize an international information exchange network: Modified Mega Deltas (Third Iteration)

Annex F: Content analysis of guidance literature on ICM as an international practice (Second Iteration)

Annex G: Case study of coastal access in California: The development of performance indicators and standards (Third Iteration)

Annex H: Proposed ICM topic index (Third Iteration)

Figures and Tables

Table 1.1: Some Significant Events in the History of ICM

Figure 1.1: Baseline 2000's Organizing Frameworks

Figure 2.1: Elements Involved in Managing Coastal Resources and Environments

Table 2.1: Fourteen Coastal Systems that Influence ICM Efforts

Table 3.1: ICM Efforts and Composition

Table 3.2: Lakes of International Significance, Land Locked Seas, Riparian Nations, and ICM Efforts

Table 3.3: Regional Distribution of ICM Efforts

Figure 3.1: International Efforts for Coastal Seas, Eastern Hemisphere

Figure 3.2: International Efforts for Coastal Seas, Western Hemisphere

Figure 3.3: ICM Efforts in Europe

Figure 4.1: Impact Chains and Networks (Third Iteration)

Figure 4.2: Ten Major Global Coastal and/or Marine Issues over the Next Ten Years (Third Iteration)

Figure 6.1: Types of Integrated Coastal Management Based on Geographic Coverage, Regulation, and Planning

Figure 9.1: Range of Performance Indicators (Third Iteration)

1. Introduction

The Coastal Zone Canada 2000 Conference occurred in Saint John, New Brunswick from September 17 to 22. All of the 600 registrants received a canvas packet that included four separately bound publications: the final conference program, the tradeshow program, Canadian Synopsis (a table of ICM efforts in Canada), and Baseline 2000.

The Coastal Zone Canada Association organized and administered the Conference as they had done for three previous Canadian based international CZ conferences (Victoria, British Columbia in 1998, Rimouski, Québec in 1996, and Halifax, Nova Scotia in 1994).

Two of the fundamental objectives of the Coastal Zone Canada Association (CZCA) and its Coastal Zone Canada (CZC) Conference Series, are that its meetings must build both on previous events *and* on multi-sectoral, multi-disciplinary, international gatherings that discuss and debate key challenges to integrated coastal management (ICM). The goal is to derive new guidance, tools and motivations to advance its practice.

While the CZCA's first three international conferences have, to a degree, achieved these two objectives and generated products of some value (i.e. CZC '94 Call for Action; CZC '96 Rimouski Declarations; CZC '98 Tool Kit), progress has been constrained by the absence of a baseline that is clear, coherent, well researched, and based on consensus.

The CZCA decided that a baseline paper should be prepared for CZC 2000 to provide an assessment of the existing 'state of the art' in the practice of ICM on an international basis. State-of-the-art in this context means both "the current stage of development of a practice" as well as "newest or best practices". If this information could be obtained by the project, then a baseline could be established in the year 2000 to enable periodic assessment (such as at biennial conferences) of a number of indicators to determine ICM's growth, development, success in overcoming challenges, and achievements. Furthermore, the information obtained from Baseline 2000 and the information obtained from the periodic assessments of changes in the ICM's baseline should improve the efficiency and effectiveness of the practice by providing the abilities to learn from experience, particularly what works, what doesn't work, and why.

Most of Baseline 2000 (or B2K) is directed at the current stage (or status) of development of ICM as an international practice. Newest or best practices can be derived from three of the organizing frameworks proposed by B2K: 1) issues and model approaches and techniques (Section 4), common challenges to ICM (Section 7), and the index of ICM topics (Section 10).

1.1. Brief history of ICM.

The practice of integrated coastal management extends back at least to 1965. Table 1.1. lists some of the notable occurrences in the evolution of ICM over the past 35 years. In the first decade, the practice was confined to the United States, Australia and UNEP's Regional Seas Programme. There was limited expansion of national and sub-national ICM efforts¹ in both developed and developing nations. The mid-eighties marked the start of ICM's escalation into a common global practice. The ICM literature, particularly conference proceedings, shows enthusiasm and optimism among those practitioners in the late 60s and early 70s who chose to

the follow that rising star.

Table 1.1: Some Significant Events in the History of ICM

1965	The first ICM program is established (The San Francisco Bay Conservation and Development Commission).
1968	Stratton Commission Report, "Our Nation and the Sea". A recommendation was made for the creation of a national coastal zone management program.
1972	Publication of the first academic journal devoted to ICM, the Coastal Zone Management Journal). The name is later changed to the Coastal Management Journal .
	Passage of the U.S. Coastal Zone Management Act (USCZMA).
1973	Until 1982 . Preparation by the United Nations of Law of the Sea Treaty.
	Creation of UNEP and its Regional Seas Programme.
1974	Creation of the U.S. National Estuaries Program within the U.S. EPA.
1977	Costa Rica becomes the first developing nation to initiate an ICM program.
	Washington State's CZM Program was the first program approved under the provisions of USCZMA.
1978	First US Coastal Zone Conference (CZ '78). It was held in San Francisco. Eleven subsequent conferences have been held.
1982	Law of the Seas Convention adopted by the United Nations. The process of adoption by the world's nations begins.
1983	USAID becomes the first international assistance institution to create an ICM program to assist developing nations. Ecuador, Sri Lanka, and Thailand were chosen for preparation pilot ICZM projects.
1984	First conference on ICM in South and Central America was convened in Mar del Plata, Argentina.
1986	First periodical newsletter, Coastal Area Protection and Management , (CAMP Network) devoted to ICM on an international basis. The name was later changed to InterCoast Network .
1989	The Journal of Ocean and Shoreline Management is established. The name was later changed to the Ocean and Coastal Management Journal .
1990	The first Environmental Management of Enclosed Coastal Seas (EMECS) conference was held in Kobe, Japan. Four subsequent conferences have been held.
1992	UN Conference on Environment and Development (UCED) was held in Rio de Janeiro. The Conference produced Agenda 21. Chapter 17 of Agenda 21 mainly focuses on ICM.
1993	World Coast Conference in Noordwijk, Netherlands. Delegates from 90 coastal nations, 20 international organizations, and 23 NGOs. National papers on the status of planning and managing coastal resources and hazards were presented. The "Noordwijk Guidelines on Integrated Coastal Zone Management " was the main product of the Conference
	First MEDCOAST Conference was held in Antalya, Turkey. Five subsequent conferences have been held.
	The first global listing of ICM efforts published (180 efforts in 57 coastal nations & semi-sovereign states).
1994	First CZ Canada Conference held in Halifax, Nova Scotia. Three subsequent conferences have been held.
	Global Conference on the Sustainable Development of Small Island Developing States was held in Barbados. The conference was recommended in Chapter 17 of Agenda 21.

1995	International Coral Reef Initiative (ICRI) UNESCO, IUCN, World Bank, IDB.
1996	The first international conference focused on assessing the successes and failures of ICM efforts was held in Xiamen, China.
1997	Canada enacts the National Oceans Act.
	European Commission (Directorate XI) initiates a major program on ICM.
	The first website and list server network (NetCoast) devoted to international ICM is put on line
1998	International Year of the Ocean.
1999	International Year of the Reef

Now ICM is practiced all over the globe and is part of the rhetoric for sustainable development. In the last decade presentations and dialogues at ICM conferences (now held all around the world) -- as well as some of the published literature -- indicates that most of those who have been following the ICM star for three decades, have either guarded optimism or pessimism about what ICM can accomplish, particularly in developing nations. In all nations long time practitioners have learned from experience that ICM is a very long and tiring swim against a continuous current of political and socioeconomic interests with short-term visions strongly tending to protect the status quo.

In recent years ICM has become the umbrella term for the various names for the practice, including: "coastal zone management", "integrated coastal zone management (and/or planning)", "coastal area management (and/or planning)", and "integrated coastal resources management"(and/or planning)". ICM should not include the terms, coastal management, or coastal resources managements.² These two terms do not imply any form of integration nor is the practice applied to a specific area or zone. In other words, the two terms are too general. This point is confirmed by searching web sites. The search terms, coastal management or coastal resources management, produces far more hits that are not ICM efforts than using the four terms included under the umbrella of ICM.

ICM can include the planning and management of just the ocean-side or just the landward side of the coastal zone (or even just the inter-tidal area). Integrated coastal zone management (ICZM) requires that the planning and management area must include a zone comprised of: 1) coastal and estuarine waters, 2) the adjoining and complete inter-tidal area, 3) and the supra-tidal coastal lands. The coastal lands should extend inland to at least the maximum highest tide and include directly connected coastal environments such as wetlands and dune systems. Section 5 and Annex A outline the different types of coastal boundaries, tiers and their associated areas. In particular, Section 5 and Annex A are intended to clarify the difference between ICM and coastal zone management (CZM) – also known integrated coastal zone management (ICZM).

A short definition of integrated coastal management is a: multidisciplinary process that unites levels of government and the community, science and management, sectoral and public interests in preparing and implementing a program for the protection and the sustainable development of coastal resources and environments. The overall goal of ICM is to improve the quality of life of the communities that depend on coastal resources as well as providing for needed development (particularly coastal dependent development) while maintaining the biological diversity and productivity of coastal ecosystems in order to achieve and maintain

desired functional and/or quality levels of coastal systems, as well as to reduce the costs associated with coastal hazards to acceptable levels.

1.2. Organizing frameworks for information exchange and to learn from experience.

One of the greatest needs -- if not the greatest need -- for advancing ICM's state-of-the-art is improving the effectiveness and efficiency of information exchange (particularly in respect to learning from experience) on the international, national and the sub-national levels.

Currently (as of last February) the practice of ICM is learning relatively little from its 35 years of experience involving approximately 698 ICM efforts at all levels of governance, in all parts of the world, in all types of political regimes, in all types of environments, and at all levels of national economic development. ICM practitioners appear to have little time (and often facilities) for information searches and reading to find answers to specific questions they have to design or improve their program. ICM specialists and/or coordinators in international assistance institutions are also similarly pressed for time. At present there are only a few online information exchange networks devoted to ICM -- all with limitations -- that can expedite finding specific information needed by practitioners and international assistance coordinators to design, build, revise or otherwise improve a program or project.³ As a result, practitioners and ICM specialists in international assistance institutions are learning only a portion of what they could learn from the more than three decades of history and rich experience of successful as well as failed ICM efforts or components of ICM efforts. This situation has two evident consequences:

- The ratio of failed or ineffective programs to successful programs is much higher than it could be;
- The same well known and -- for the most part -- avoidable mistakes are continuously being repeated and, concomitantly, ICM efforts continually fail to incorporate the information from other efforts with analogous situations on the specifics that they need for building successful programs, particularly the means to overcome the challenges confronting each stage and aspect of ICM program development and implementation (see Section 8).

The failure to learn from experience is exacerbated by the fact that many practitioners don't appear to believe that information from one nation or sub-national unit is of direct relevance to the practitioner's own situation. Furthermore, the literature presents relatively few lessons on overcoming challenges common to ICM. The relatively few means to overcome challenges are built mostly on non-systematic observation or hypothesis testing; observer/reporter bias is common (see Sections 8 and 9). There is an almost complete lack of independent assessments of ICM programs.

Every ICM effort can be a learning opportunity; not just for the participants involved in the particular effort but also for ICM practitioners elsewhere who are in similarly situated circumstances, as well as ICM specialists in the international assistance community. For example, what can be learned from the terminations or transformations of many ICM efforts. Review of the Tables on ICM efforts (Annex C) indicates that approximately 25 of them have been terminated or transformed into another type of environmental management program. One can often learn more from determining why an effort failed than from assessing an effort that is merely plodding along.

Baseline 2000 was built on the assumption that both tracking the status of ICM and improving the state-of-the-art largely depends on improving global and national information exchange, particularly in respect to learning from the wealth of experience acquired over the last thirty-five years. This report presents seven frameworks to organize and facilitate information exchange to track the status of ICM as an international practice as well improve the state-of-the-art. Figure 1.1 places the seven organizing frameworks in context with the different sections of the text and depicts the connections to other components of ICM.

The seven organizing frameworks used to establish Baseline 2000 are:

- **Global database for ICM efforts,**
- **An index and networks of the issues that have commonly motivated the initiation of ICM efforts,**
- **An index of model planning approaches and techniques for planning and/or management,**
- **Comparative assessment of guidance literature,**
- **An index of common challenges to ICM (as well as other types of environmental planning and management),**
- **The application of performance assessment to evaluate and improve ICM programs,**
- **Global database of ICM topics.**

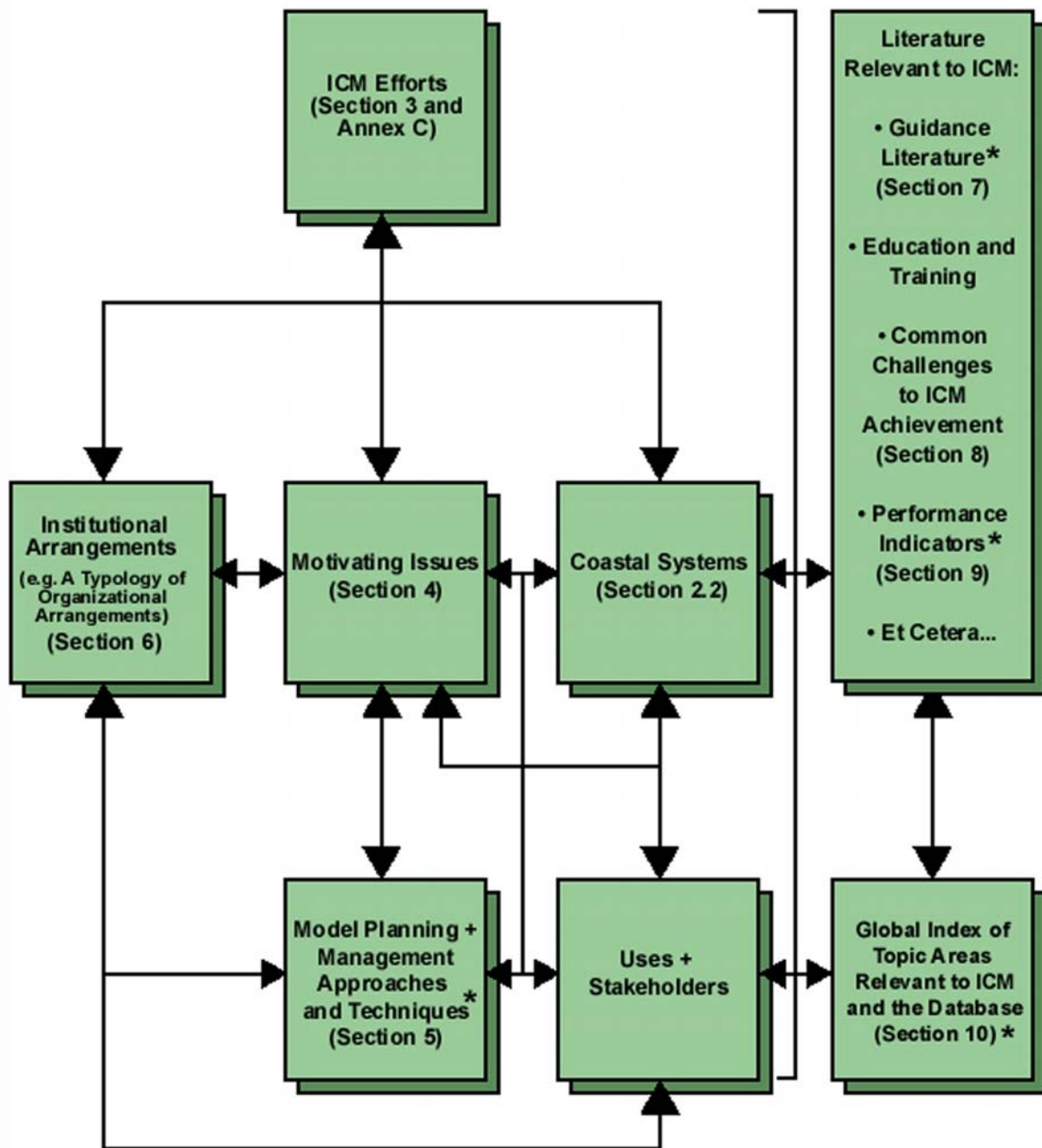
Comparison of Figure 1.1 to Figure 2.1 (Components of Coastal Management) and its explanatory text (in Section 2.2) as well as a perusal of the entire text should clarify the relationships and interconnections depicted.

The global database of ICM efforts is a key-organizing framework, as depicted by Figure 1.1. The information from this database of ICM efforts is derived from all the other boxes shown on Figure 1.1. It also provides information to all boxes shown in the Figure. The global index of topic areas relevant to ICM is expected to be the other key-organizing framework. It is the last organizing framework presented in this Report since it has a reciprocal connection with all the other boxes in Figure 1.1.

The Figure also depicts that “Literature relevant to ICM” has a reciprocal connection to all the other boxes. The literature box encloses only three topics: Guidance literature (Section 7), Common challenges to ICM achievement (Section 8), and Measuring ICM efforts and performance indicators (Section 9). The “et cetera” in the literature box is meant to indicate the obvious: the literature relevant to ICM includes many more than the three topics (as outlined in Section 10 and Annex H). These three topics are organizing frameworks

Section 5, A Comparison of ICM governance arrangements, was not summarized in the Baseline 2000 Discussion Paper. The section was added in order to demonstrate one means of doing a comparative assessment of ICM governance arrangements.

Figure 1.1: Baseline 2000's Organizing Frameworks and their Interconnections



* Denotes an Organizing Framework

The next section highlights a number of dimensions and aspects of the world's coasts that affect the planning and management of its resources and environments at all levels of governance -- as well as to provide a context for the Report's seven organizing frameworks.

This Report clearly shows that further work is needed to develop each of the organizing frameworks to make each of them fully operational -- and thereby -- achieve their potential to improve the practice of ICM. Proposals will have to be prepared in order to obtain funding to complete information input into each framework and make it operational and easily accessible to ICM practitioners, ICM specialists in international assistance institutions and specialists in fields or interests directly relevant to the practice. The frameworks were developed (by means of design and the inputting of information) far enough to achieve the objectives of Baseline 2000.

Endnotes

¹ The word, effort, is used to include ICM programs and feasibility or pilot projects.

² There is no consensus in the literature in respect to the terms, coastal management or coastal resources management. They are catch-all terms with no specific meaning.

³ ICM information exchange websites or servers include: Netcoast, European Union for Coastal Conservation, I-Coast, NOAA's Coastal Service Center, and Wise Coastal Practices for Sustainable Human Development. The URLs for each are on google.com/.

2. Factors influencing Coastal Management

2.1. Environmental and socioeconomic factors.

Approximately 70% of the Earth's non-frozen land surface ultimately drains into coastal waters and oceans¹. The Report's two covers illustrate the global drainage pattern. It is an illustration of the common observation -- and lament -- that coastal waters and the oceans are the planet's ultimate sink. The ultimate inland boundary of the coastal zone could theoretically extend back into much of the tan area depicted on the covers if the concept is applied that "all lands, the uses of which have, or could have, an "impact" on coastal waters (including coastal resources and environments) should be within the coastal zone".² Floating plastic debris (such as the clear plastic used to bind six packs of soda or beer) can -- and does -- travel from the headwaters of the Mississippi and Missouri River system --1,000 to 1,500 kilometers inland -- into the Gulf of Mexico. Once in the Gulf the plastic six pack binders have been ingested by marine turtles, often causing their demise (sea turtles mistake small floating pieces of plastic for jellyfish, a preferred food item). The cover maps show the ultimate inland limit of the coastal zone. The map of the world's total drainage area, comprising thousands of watersheds and drainage basins emptying into all the oceans and the seas is also an illustration of one of 14 coastal systems that are the root causes (or primary forcing factors) for the practice of Integrated Coastal Management (see Section 2.2). The covers are also in illustration of one of the greatest challenges to coastal zone management; where to set the inland boundary of the coastal zone.

At the moment, there are 173 sovereign nations that either: 1) open on an ocean, sea, gulf, bay,³ or land-locked sea or lake of international significance⁴ or both.⁵ There are also approximately 35 coastal semi-sovereign states (e.g. Bermuda, Marshall Islands, and Palau) or overseas states (e.g. Martinique and Reunion) that have been given the legal power by their metropolitan nation to manage their own natural resources and lands -- such as creating an ICM program. Twenty-seven land-locked nations have shared boundaries in large lakes (e.g. Lake Victoria, Lake Geneva, and Lake Titicaca) or landlocked seas (e.g. the Caspian and Aral Seas) that do -- or could have -- ICM programs that are in almost all respects similar to the ones in the Great Lakes (see Section 3 and Table 3.2, as well as the Tables of ICM Efforts in Annex C).

The coastal zone has the greatest aggregation of environmental, resource, and physical systems in comparison to any of the earth's other types of bio-geographic units (e.g. continental mountain systems, great plains, rain forest regions). At least fourteen coastal systems interact with one another, although usually not all at the same place and at the same time (see Section 2.2). Many of the systems are very complex and difficult to model (e.g. estuaries, watersheds, littoral cells) and, therefore, in the coastal zone it is usually difficult and costly to make reasonably accurate environmental or socioeconomic impact predictions for proposed development projects or to comparatively assess proposed policy options or plans.

The coastal zone has the highest concentration of natural hazards in the world. The coastal zone commonly has the following hazards: coastal erosion, landslides, river or estuary flooding, storm surge flooding and winds from ocean borne storm events (e.g. hurricanes, cyclones, and typhoons), earthquakes, tsunamis, and volcanic eruptions. For example, the "Pacific Rim of Fire" roughly correlates to the Pacific coastal zone rim.

In general, the coastal zone of any nation is its most valued and its most contentious area of real estate. This situation is attributable to at least six factors: 1) the CZ's small size, 2) High population density, 3) the number of uses competing for coastline and coastlands space, 4) the concentration of resources, 5) the sensitivity of coastal environments to damage and degradation, and 6) the concentration of coastal hazards. A very compelling argument can be made that the coastal zone is the most difficult part of earth's surface in which to prepare and implement any type of environmental planning or management program.

Approximately 70% of the world's coastal zone is the under the jurisdiction of developing nations or nations in transition from a centralized to a market economy (see Section 3). Given the difficulty that these nations have -- and will continually encounter -- in implementing an ICM effort, there is little reason for optimism about the future of most of the world's coastal resources and environments (the topic of Section 7). This bleak situation is particularly true for tropical coastal resources and environments such as aggregations of corals, coral formed lagoons, sea grass systems, and mangroves. Ninety five percent of the tropics are within the jurisdiction of developing nations. Most of these nations are at the lowest or lower end of the world's national income scale (see Section 3).

Approximately 50 % of the world's population⁶ lives within 150 kilometers of a coastline and it is compressed into an area that consists of only 8% of the world's terrestrial surface that is habitable.⁷ In most coastal nations, particularly developing nations, the population growth rate within the coastal zone is significantly higher than for inland areas. In developing nations, the majority of growth in coastal zone populations is among the lowest income groups. It is an axiom that attempting to meet the basic needs of impoverished people almost inevitably means exploitation of natural resources and environments to levels of irreversible environmental degradation such as species extinction, permanent loss of soil productivity, or elimination of fisheries (the Malthusian syndrome⁸).

Important tropical coastal resources and environments -- specifically corals reefs, mangroves, sea-grass beds and coastal-dependent fisheries -- continue their downward spirals of degradation, non-sustainable levels of exploitation, and even permanent loss of once viable fisheries. The actual rates of these downward spirals throughout the world are not presently known. In 1993, it was estimated that about 10% of tropical coral reefs had already been degraded beyond recovery and another 30% were likely to decline significantly in the next twenty years (World Resources Institute's [WRI] website). Apparently, there has not been a global inventory taken of tropical coral reefs since 1993 and therefore the predicted trend of decline since 1993 is unknown. The coral reefs are also in serious decline from bleaching due to excessive water temperatures from global warming.

It is estimated that mangrove forests once covered $\frac{3}{4}$ of the coastlines of tropical and subtropical countries. Today less than 50% of that coverage remains, and of the remaining forest, over 50% is degraded and not in good productive condition (WRI and Conservation International). Once again, there is no assessment of the current global rate of mangrove loss and degradation.

The catches of almost all coastal fisheries in tropical and subtropical nations are in continual decline as a function of over-exploitation, habitat loss, and coastal pollution. Of the estimated 51 million fishers in the world, 95% are from developing countries. Over 98 percent of these 51 million fishers are small-scale operators (WRI and Conservation International). The great majority of small-scale fishery operators is in the tropics. The great majority of fishers in the

tropics depend on dwindling coastal stocks to provide basic sustenance (particularly protein) for their family, as well provide a meager and sporadic income.

2.2. Basic elements involved in managing coastal uses, users, resources, and environments.

All nations and semi-sovereign states -- expect those presently in anarchy or near anarchy (e.g. Angola, Somalia, Liberia, Sierra Leone, and the Democratic Republic of Congo) -- at least manage (or attempt to manage) at least one coastal resource and its associated users (such as fisheries and fishers). The full spectrum of coastal resources management -- from management of just one coastal resource (such as fisheries) to the preparation and implementation of an ICM effort -- involves five discrete elements. These five elements are all interconnected into a very dynamic and system. Figure 2.1 portrays these five elements and the system they form. To reiterate, the system portrayed in Figure 2.1 applies to all levels of governance that attempt to plan or manage one or more coastal resources. Figure 2.1 is not just specific to any or all units of government that are engaged in ICM efforts. All coastal nations or SSSs have most of the fourteen systems.

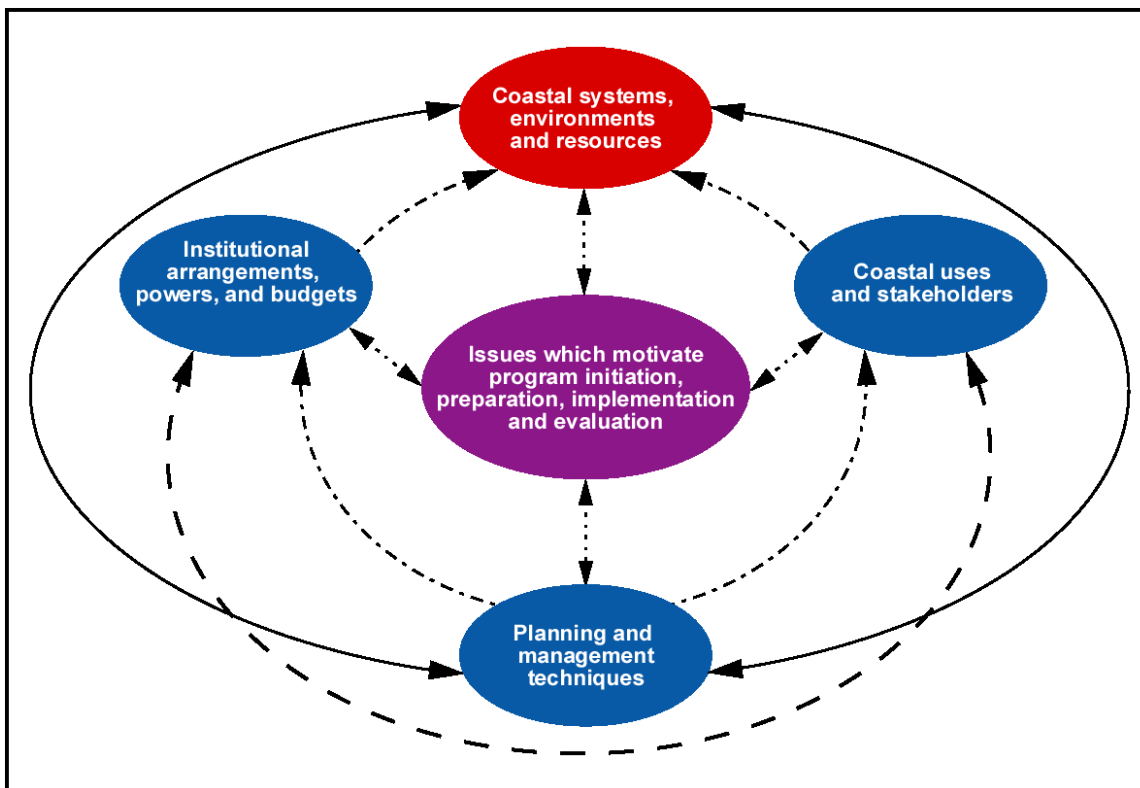
In Figure 2.1, the coastal systems oval is the only element printed in red. The coastal systems (Section 2.2) set ICM apart from all other types of integrated environmental planning or management. The other four elements are inherent to all types of environmental planning and management efforts including national conservation strategies, integrated rural development, or the integrated planning and management of river basins, mountain ranges, desert systems, or great-plains. The coastal issues oval is printed in purple as well as placed in the center of the graphic to illustrate that it is both a combination of the three elements in blue and the systems oval in red (blue and red create purple) and it is the keystone (or the hub) of an ICM effort or any other type of integrated environmental planning and/or management effort.

2.2.1. Coastal Systems

ICM was created -- and has been sustained -- by the necessity to plan and manage coastal systems. For example, the first two ICM efforts were for planning and managing bay-estuary systems (San Francisco Bay in 1965 and Port Phillip Bay [Australia] in 1966). One of the major lessons learned from the history of ICM is that horizontal and vertical integration among government units are necessary if coastal systems are to be effectively and efficiently planned and managed.⁹ It is the coastal systems that largely determine the quantity, quality and distribution of coastal resources and environments. Table 2.1 is a listing of 14 systems that -- individually or in combination -- have shaped the great majority issues that have motivated the initiation and preparation of ICM efforts (See section 4).

A basic concept of ICM is that the planning and management of coastal resources and environments should be done in a manner that is based on the physical, socioeconomic, and political interconnections both within and among the dynamic coastal systems. It is the coastal systems in context with the motivating issues that when aggregated together, define a coastal zone (as reiterated in the next subsection).

Figure 2.1: Elements involved in managing coastal resources and environments



It is obvious that coastal systems and environments do not manage themselves, they react to both the natural and the anthropogenic forces upon them. ICM is about managing a society's (as expressed by an aggregation of stakeholders) direct impact, indirect impact, or cumulative impact on coastal systems and environments. Figure 2.1 illustrates that stakeholders are an essential element in the coastal management and planning system.

Another characteristic of most of the 14 coastal systems listed in Table 2.1 is that they combine into at least nine moderate to large scale coastal geographic systems.¹⁰ ICM efforts have been directed at most of these types of coastal geographic systems. This is the topic Section 4.2.3.

Table 2.1: Fourteen coastal systems that influence ICM efforts

- Large scale geomorphic units. (plate tectonics and sea level rise)
- Large marine systems (oceanic currents)
- Enclosed seas, gulfs, channels, bays (enclosed coastal water bodies)
- Estuary watersheds (e.g. point and non-point pollution)
- Estuary circulation systems (e.g. salinity mixing, tidal exchange).
- Aquifers (e.g. salt water intrusion, withdrawal greater than recharge, subsidence).
- Coral reef and lagoon systems.
- Longshore circulation cells, coastal erosion and deposition (littoral cells).
- Air basins (this system is usually not a generator of ICM issues).
- Populations of valued species (commercial, sports, spectator, rare, endangered).
- Coastal habitats (e.g. wetlands, mangroves, beaches and dunes)
- Viewsheds. (i.e. area visible from roads, recreation areas and scenic communities).
- Public access to coastal attractions (includes transportation and parking).
- Public service systems (i.e. highway capacity, wastewater treatment capacity, water supply).

2.2.2. Issues

The specific problems and development opportunities that have motivated the initiation and the preparation of the great majority of ICM programs are very similar around the world. This similarity in motivating issue occurs despite the considerable variation among coastal nations in respect to socioeconomic and environmental conditions, geographic and climatic factors, laws, and institutional arrangements (see Section 4). The term, motivating issues, is commonly used to include: problems (such as adverse environmental impacts), development needs and opportunities, and socioeconomic needs (see section 4 and Annexes D and E). The word issue is also commonly used in the ICM literature to describe the challenges (or impediments) usually encountered in the processes involved an ICM effort, usually in the steps of program initiation, adoption, preparation, implementation, or evaluation. In this report these kind of issues are termed process issues – and are a topic in Section 8.

The precise boundaries of a coastal zone for an ICM effort depend on the nature of the issues that the effort was created and designed to resolve. For example if a major issue is recreation, tourism, and public access the inland boundary may not have to go further inland than a half-mile from the shorelands or coastline (see Annex A). A half-mile is the maximum distance most people are willing to walk to reach a recreational attraction on the shorelands or at the coastline. By contrast, if a major issue is the adverse impacts of non-point source pollution, the inland boundary -- at least for planning purposes -- should include all those lands -- the use of which, is polluting or may significantly pollute coastal waters.

The motivating issues are the anchor point of an ICM effort because they directly connect to almost all the program's components: the goals and objectives, the identification of the stakeholders who should be involved in program preparation and implementation, the determination of information and research needs, the design of the institutional arrangement, and the design of the monitoring and evaluation framework (section 9).

2.2.3. Uses and stakeholders

Coastal uses are utilization of coastal resources or environments for one or more of the following purposes: economic, recreation, aesthetic, education, science, religion, and culture. Stakeholders are individuals, organizations, or groups that have a vested interest (i.e. a social or economic stake) issue's outcome. Usually the issues are uses competing for the same resource (e.g. coastal abutting properties), use of a coastal resource (e.g. over-harvesting of a fishery) or the adverse (off site pollution) or beneficial (e.g. the visual quality afforded by coastal agriculture) impacts of one or more coastal uses upon one or more other coastal uses.

ICM is largely a practice of conflict resolution and environmental mediation. Most of the motivating issues for an ICM effort are conflicts among stakeholders. Many of the techniques commonly used in ICM such as impact assessment, permit letting, and land use plans are means to resolve conflicts among stakeholders. Effective conflict resolution requires a conception of public policy and decision making in which key stakeholders (including donor institutions, governmental agencies, and non-governmental organizations) have the opportunity to negotiate. The goal is to move away from a strategy of policy and decision making that produces winners and aggrieved losers, and moves towards one that generates mutual gains.

2.2.4. Institutional and governance arrangements

An institutional arrangement is a composite of laws, customs, budgets, staffing, and governance structure that are established by a society to allocate scarce resources among the competing interests of stakeholders. If a nation, or sub-national unit, has established a regime to manage even one its coastal resources or uses (e.g. fisheries, beaches, sub-tidal lands, or port areas) it has an institutional arrangement that involves the coast.¹¹ The arrangement may be only on paper -- such as laws that are ignored. The arrangement does not have to be specific to the coast, such as a nationwide pollution control law.

A key component of an institutional arrangement for an ICM effort is the specific governance arrangement used for planning and management. Section 6 presents a typology for making comparative assessments of governance arrangements used by ICM efforts.

2.2.5. Planning approaches and planning and management techniques

The governance arrangement for ICM uses planning and management approaches and techniques to resolve the motivating issues. An approach is a sequential process and series of steps used to derive a plan to resolve one or more issues. Planning and management approaches -- such as permit letting, land use planning, and protected areas -- are commonly

included as an institutional arrangement. However, because of the importance approaches and techniques hold in the practice of ICM, they have their own oval in Figure 2.1.

Institutional arrangements and planning and management approaches as well as many of the techniques have a number of common aspects (e.g. inter-sectoral and interdisciplinary), 2) principles (e.g. individuals, groups, or institutions significantly affected by a policy should partake in its formulation and implementation), 3) components (e.g. applied research), and 4) approaches (e.g. flood plain management) and 5) techniques (e.g. impact assessment). Common aspects, principles, components, approaches and techniques are discussed in Section 8.

Endnotes

¹ Exceptionally arid deserts (e.g. Shara, Atacama), interior drainage basins (e.g. the Great Basin, Gobi Desert) and permanently frozen polar lands (e.g. Antarctica, most of Greenland, arctic Canada, arctic Russia) comprise approximately 30% of the earth's surface. These areas either do not drain or have insignificant drainage into coastal waters and oceans.

² The U.S. Coastal Zone Management Act of 1972 as amended states that the inland boundary of the coastal zone should include all lands, the uses of which could have direct and significant impact on coastal waters. The underline has been added.

³ These are naturally formed bodies of water with at least an estuarine level of salinity (except for the coastal waters that may not have any measurable salinity because of the enormous volume of fresh water discharge from very large rivers [in respect to the discharge volume – such the Amazon, Congo, and Orinoco] and are directly connected to the global navigation network (i.e. not land-locked).

⁴ These are explained in Section 3.

⁵ See Table 3.1.

⁶ The percent of the world's population (somewhere between 40 and 60% -- depending on document) that lives within a number of kilometers (usually either 100 kms. or 150 kms. from the coastline) is far-and-away the most commonly used piece of data in the literature of ICM as an international practice. Until recently, the figure that was used was accepted as a given since it pumped up the need for ICM. The figure in the text comes from Cohen et al. (*Science*, November 14, 1997). Recently there has been criticism of this figure and a there is new calculation. The Second Iteration will address this demographic shibboleth.

Seventy-five kilometers from the coastline should be inland boundary used for measuring both the total population and the habitable/developable area in the world's coastal zone. There are two reasons using 75 kilometers boundary to make global estimates of the world's coastal zone. One of the axioms in the practice of ICZM, is that the issues that motivate the initiation of an effort are the anchor points of the effort. One of ICZM's global motivating issues is to provide as well as to improve the quality of coastal recreation opportunities for the public. On the average, in nations with a relatively good highway system, the time to travel seventy five kilometers (as well as the cost of fuel) from an inland location "directly" to the coast is approximately the maximum effort/cost that a day-use recreationist is willing to pay to enjoy one or more coastal recreational opportunities (this includes the relief from the high temperatures that commonly occur "well" inland and beyond the salubrious coastal climate. The second reason for selecting 75 kilometers is that the inland jurisdictional limit of most local governments that border on the coast are within this distance. One of the most common means – if not the most common means – of implementing an ICZM program is the requirement that local coastal governments prepare and implement local coastal plans according to specific policies and guidelines established by a higher level of government (e.g. state, regional, or national).

⁷ The Second Iteration will include an annex on the area extent of the world's "developable" or "habitable" coastal zone. In order to make this calculation, 75 kms will be used as the inland limit of the CZ. The challenge is how much to deduct from the world's total kilometers of coastline that border coast lands that are incapable of being developed or can only support a very low population density. At this point, the estimates of the world's total coastline vary from

a low of 504,000 kms. to a high of 885,032 kms. The terrestrial size of the world's coastal zone should be land that is habitable (or developable) without exceptional technology interventions (such as desalinization plants to bring water to the large portions of the world's coastline that is desert or very arid and wind swept plains). Similarly, the coastal zone of Antarctica, arctic Canada, arctic Russia, and Greenland could be made habitable with innumerable very large, heated, and weatherproof domes – a very unlikely prospect).

A second complication in deriving the total extent of the world's potentially habitable coastal zone (using 75 kms. as the inland boundary) is the fact that one hundred and nine coastal nations and semi-sovereign states, particularly island states, have an average width from the coast to coast of less than 150 kms. The average width of the island has to be at least 150 kms. (75 kms. from all sides of the island) otherwise; ocean areas will be counted as terrestrial areas.

A third complication is the accuracy of the measurement made of a nation's or SSS's coastline. The extent of consistency among nations and SSSs in the decision rules used to measure each nation's or SSS's coastline maybe a major complication (number 4) and source of error.

The eight percent figure used in the text is the first approximation. The Second Iteration will include an annex that lists each coastal nation's and SSS's: 1) Coastline (probably using the numbers in the CIA's Fact Book), 2) Coastlands (within 75 kms. of a coastline) that are habitable or developable (as in the case of extensive potential gas and oil resources), and 3). Population within 75 kms. of the coastline.

⁸ Two hundred years ago, Thomas Robert Malthus, wrote "An Essay on the Principle of Population". He argued that the world population would increase faster than the food supply, with disastrous results for the general human welfare. It is estimated that world's population of 250 million at the year 1 has now grown to 6.1 billion in spite of wars, plagues, famines, and epidemics. World food production has been keeping pace with population growth until recently. A world population of 10 to 11 billion by mid-century will have an individual allocation of 6 to 7 pounds per week, equivalent to the diet of today's members of society living in poverty.

⁹ Vertical and horizontal integration is one of ICM's greatest challenges (see section 7).

¹⁰ The coastal geographic systems are: 1) enclosed coastal seas, 2) continental currents, 3) enclosed bays, estuaries, or lagoons, 4) wetlands, 5) international lakes and landlocked seas, 6) Modified Mega-deltas, 7) large expanses of beaches, sand dunes, barrier beaches and barrier islands, 8) small island states, and 9) large coral systems. See Section 4.

3. International Database of ICM Efforts

ICM has proliferated over the past three and a half decades in respect to the total number of efforts, the total number of nations and semi-sovereign states (SSS) and the extent of global distribution. ICM is now practiced in all parts of the world and it is readily incorporated into part of the pervasive, international rhetoric on “sustainable development”.

In 1993, a roster was prepared of ICM efforts at the national and sub-national levels.¹ The search included all coastal nations with the exception of those in the US’s 30 coastal states.² The roster also did not include international efforts (define as efforts based on consensual agreements among nations). The 1993 roster indicated there were 142 ICM national and sub-national efforts in 57 coastal nations (with exception of the US) and SSSs.

The 1993 count of 142 ICM efforts did not include the 20 international efforts and the 55 ICM efforts in the U.S. at that time.³ Adding these two numbers to the 1993 total produces a sum of 217 ICM efforts. In 1993, approximately 75 nations and SSSs were involved in ICM at the national and/or sub-national levels.

Table 3.1 is a summary of the database of ICM efforts compiled. The numbers in Table 3.1 are derived from the four Tables that constitute Annex C.

- **Table C-1: ICM Efforts at National and Sub-national Levels, (except Canada and the U.S.A (455 efforts as of 28 February, 2002). 58 pages.**
- **Table C-2: ICM Efforts in Canada (57 efforts as of February 2, 2001). 7 pages.**
- **Table C-3: ICM Efforts in the United States (110 efforts as of February 28, 2002). 15 pages.**
- **Table C-4: International ICM Efforts (76 efforts as of 28 February, 2002). 13 pages.**

Table 3.1 indicates that at the beginning of 2002, 145 coastal nations and SSSs have initiated approximately 622 ICM efforts at the national and/or sub-national levels. In nine years, there has been almost a tripling of national and sub-national level ICM efforts (217 to 622), as well as almost a doubling in the number of nations and SSSs that have become involved with ICM (75 to 145) at the national and/or sub-national levels.⁴ Has ICM become something of a sustainable development fad – particularly among the international assistance institutions? When will this growth rate taper off? Another perspective is that to a large extent, the increase in numbers is attributable to the increase in data available on the Internet, as well as the momentum and skill of creating useful and informative websites. Many ICM efforts either existed or were in the pipeline in 1993 but could not be found without laboriously contacting many institutions by phone, fax, or in person. Furthermore, the total of ICM efforts now includes lakes of international significance and land-locked seas.⁵ Table 3.2 lists 12 efforts in these two categories, as well as 26 lakes that are shared by two or more nations, but without a notation (i.e. evidence) that there has been -- is or will be -- an ICM effort.⁶

Table 3.1: ICM Efforts and Composition. First Iteration. April 2 Draft.	
A. NATIONS + SEMI-SOVEREIGN STATES (S.S.S.)	
A.1. SOVEREIGN NATIONS THAT BORDER ON AN OCEANIC COAST	152
A.2. SOVEREIGN NATIONS THAT BORDER ON A LAKE OF INTERNATIONAL SIGNIFICANCE OR LAND-LOCKED SEA + THAT <u>DO NOT</u> BORDER ON AN OCEANIC COAST (e.g. Bolivia, Chad, Kazakhstan, Paraguay)	21
A.3. COASTAL SEMI-SOVEREIGN STATES (Self-governing except national defense, foreign relations and development assistance) (e.g. Aruba, Bermuda, Cook Islands, Jersey, and Guam).	27
A.4. COASTAL TERRITORIES WITH LIMITED SELF-GOVERNANCE (e.g. Anguilla, Christmas Island, Mayotte, Montserrat, Norfolk Island, and Tokelau)	8
TOTAL	208
B. NATIONS + S.S.S. WITH EFFORTS	
B.1. COASTAL NATIONS + NATIONS +/-or BORDERING INTERNATIONAL LAKES + S.S.S. THAT HAVE, OR HAVE HAD, ONE or MORE ICM EFFORTS at the NATIONAL +/-or SUB-NATIONAL LEVELS	134
B.2. DEVELOPING NATIONS and SEMI-SOVEREIGN STATES THAT HAVE, OR HAVE HAD, ONE or MORE ICM EFFORTS	99

C. INTERNATIONAL ICM EFFORTS	76
> EFFORTS THAT FOCUS ON ENCLOSED COASTAL SEAS	22
> EFFORTS THAT FOCUS ON LARGE MARINE OFFSHORE CURRENTS	7
> EFFORTS FOCUS ON ENCLOSED OR SEMI-ENCLOSED BAYS, GULF, OR ESTUARIES	9
> EFFORTS THAT FOCUS ON LAKES OF INT. IMPORTANCE OR LAND LOCKED SEAS	8
D. ICM EFFORTS at NATIONAL & SUB-NATIONAL LEVELS	622
> EFFORTS AT THE NATION-WIDE or S.S.S.-WIDE LEVEL	140
> EFFORTS AT THE SUB-NATIONAL or SUB-S.S.S.-WIDE LEVEL	481
> NATIONAL and SUB-NATIONAL EFFORTS in DEV. NATIONS, S.S.S., and TERRITORIES	284
> EFFORTS THAT FOCUS ON ESTUARIES, BAY, OR LAGOONS	215
> EFFORTS THAT FOCUS ON INTERNATIONAL LAKES OR LAND-LOCKED SEAS	24
> NUMBER OF EFFORTS THAT FOCUS ON OFFSHORE ECOSYSTEMS (e.g. LME's)	25
> NUMBER OF EFFORTS THAT FOCUS ON CORAL SYSTEMS	16
> NUMBER OF EFFORTS ON RELATIVELY SMALL ISLANDS	99
> NUMBER OF EFFORTS IN THE TROPICS	208
INTERNATIONAL, NATIONAL & SUB-NATIONAL EFFORTS	698
S.S.S. = Semi-sovereign states LME = Large Marine Ecosystems	

Table 3.2: Lakes of International Significance, Land-locked Seas, Riparian Nations, and ICM Efforts First Iteration. April 2 Draft.

LAKES of INTERNATIONAL SIGNIFICANCE or LAND-LOCKED SEAS	RIPARIAN NATIONS on LAKES of INTERNATIONAL SIGNIFICANCE or LAND-LOCKED SEAS	INTEGRATED MANAGEMENT EFFORT
Area Sea	Kazakhstan and Uzbekistan	Environmental Management in Aral Sea Basin (Table C-4)
Bodensee	Austria, <i>Germany</i> , and Switzerland	
Caspian Sea	Azerbaijan, <i>Iran</i> , Kazakhstan, <i>Russia</i> and Turkmenistan	The Caspian Action Plan (Table C-4)
Daryachen-ye Sistan or Hamun e Saberi	Afganistan and <i>Iran</i>	
Dead Sea	<i>Israel and Jordan</i>	Cooperative Program: Israel & Jordan (Table C-4)
Great Lakes system	<i>Canada and the United States</i>	See Tables C-2, C-3 and C-4
Lac Kivu	<i>Congo Democratic Republic</i> and Rwanda	
Lac Lemman (Lake Geneva)	<i>Italy</i> and Switzerland	<i>Management Program for Lake Geneva? (Table C-4)</i>
Lac Selingue	<i>Guinea</i> and Mali	
Lago Buenos Aires or General Carrera	<i>Argentina and Chile</i>	
Lago Cochrane or Pueyrredon	<i>Argentina and Chile</i>	
Lago Lugano	<i>France</i> and Switzerland	
Lago Maggiore	<i>Italy</i> and Switzerland	
Lago O'Higgins or San Martin	<i>Argentina and Chile</i>	
Lagoa Mirim	<i>Brazil and Uruguay</i>	
Lago Titicaca	Bolivia and <i>Peru</i>	Conservation in the Lake Titicaca Basin (Table C-4)
Lake Albert	<i>Congo Democratic Republic</i> and Uganda	
Lake Baikal (Ozero Baykal)	<i>Russia</i>	Lake Baikal Project (Table C-1)
Lake Chad	Chad, <i>Cameroon</i> , Niger, and <i>Nigeria</i>	Integrated Management of Lake Chad Basin. (Table C-4)

LAKES of INTERNATIONAL SIGNIFICANCE or LAND-LOCKED SEAS	RIPARIAN NATIONS on LAKES of INTERNATIONAL SIGNIFICANCE or LAND-LOCKED SEAS	INTEGRATED MANAGEMENT EFFORT
Lake Champlain	<i>Canada and the United States</i>	Bi-state Planning + Management Program (Table C-3)
Lake Edward	<i>Congo Democratic Republic + Uganda</i>	
Lake Kariba	Zambia and Zimbabwe	
Lake Nasser	<i>Egypt and Sudan</i>	
Lake Malawi or Nyasa	Malawi, <i>Mozambique, and Tanzania</i>	Lake Malawi - Nyasa Conservation Project (Table C-4)
Lake Tahoe	<i>United States</i>	Tahoe Regional Planning Agency (Table C-3)
Lake Tanganyika	Burundi, <i>Congo D.Republic, + Tanzania</i>	Implementing the Lake Tanganyika Program (Table C-4)
Lake Turkana or Rudolf	<i>Kenya</i> and Ethiopia	
Lake Victoria	<i>Kenya, Tanzania, and Uganda</i>	Lake Victoria Environ. Management Project (Table C-4)
Lake of the Woods	<i>Canada and the United States</i>	
Mikri Prespa	<i>Albania and Greece</i>	
Narvskoye Vdkhr	<i>Estonia and Russia</i>	
Neueusiedler See or Ferto	Austria and Hungary	
Ohridsko ezero	<i>Albania</i> and Macedonia	
Ozero Khanka	<i>China and Russia</i>	
Ozero Pskovkoye or Lake Peipus	<i>Estonia and Russia</i>	
Prispansko ezero	<i>Albania and Greece</i>	
Represa Itaipu	<i>Brazil</i> and Paraguay	
Skadarsko	<i>Albania and Montenegro/Yugoslavia</i>	
<i>Nations in italics and blue font have an oceanic coast <u>and</u> one or more international lake(s) and/or land-locked sea(s)</i>		

Both the total number of efforts at the national and sub-national levels, as well as the number of nations and semi-sovereign states with ICM efforts, may increase when more ICM practitioners, as well as ICM specialists in international assistance agencies, have had an opportunity to review Tables C-1 and C-4. However, the numbers could also decrease because: 1) a number of efforts may never have actually occurred, 2) there may be double counting (it appears that a number of efforts may be a simple extension of an existing effort vs. a new phase such as program implementation), and 3) a number of the efforts do not fit the criteria of an ICM study, project or program (see the introduction to Annex C on the challenges of drawing the line between what is, and what is not an ICM effort).

The primary purpose of the database of ICM efforts is to provide a means of inter-connecting ICM practitioners, staff in international assistance organizations, and specialists in topics directly relevant to ICM, who are all addressing coastal issues with an integrated approach (both vertical and horizontal integration). The primary purpose of the database is not to keep an accurate count of ICM efforts. Therefore, it is not imperative to make an exact separation between what is, or is not an integrated coastal management effort. Other types of environmental planning and management efforts, such as marine protected areas or nation-wide integrated environmental action plans, commonly address many of same issues in the same ways as ICM efforts. Updating the count of ICM efforts (both additional efforts, as well as efforts that have terminated or transformed), and determining the nations involved in ICM, as well as the composition patterns of both efforts and nations is an important, but secondary, benefit of the database.

3.1. Findings derived from Tables 3.1, 3.2, 3.3, and Annex C.

3.1.1. There are great variations among ICM efforts. “Numbers can be deceiving” is an axiom. In the Tables of ICM efforts for example, the California Coastal Management Program (CCMP), the Bluenose Atlantic Coastal Action Program (BACAP) in Canada, and the Exe Estuary Partnership in the U.K. are all given a “one” in the count of efforts. Although these efforts are counted in the tally as equals, they represent a spectrum with respect to the two major indicators that are commonly used to make comparative assessments among institutions; the resources and authorities (or powers). In respect to these two indicators; the CCMP is at the top end of the spectrum, the BACAP is well below the middle, and the Exe Estuary Partnership as at the low end of the spectrum. The wide variation among ICM efforts in respect to powers and extent of geographic jurisdiction (another important comparative indicator among institutions) the topic of Section 6.

The California Coastal Management Program was enacted by law in 1972. Over the last 29 years, the California Coastal Commission (CCC), the executing institution of the CCMP, has spent approximately \$174 million (USD) to prepare and implement its Program. The number of the Commission’s full time paid staff has varied between 110 and 150 over the last 29 years. The extent of the CCC’s powers includes the approval, denial or setting conditions on any significant development proposal⁷ within its geographic jurisdiction -- which can extent up to five miles inland. The CCC also has the powers to require all local units of government that border on the coast to prepare and implement a Local Coastal Plan (LCP)⁸. These LCPs must be prepared according to the Commission’s very specific regulations and guidelines. The Commission also has the powers to approve or deny LCPs or make recommendations about changes that must be made in order produce an acceptable LCP.

The Bluenose Atlantic Coastal Action Program (BACAP) was created as an NGO in 1993 and has no legal standing. The staffing is two full-time employees who are supported by dozens of volunteers, and the total budget expended over the past nine years has been approximately \$1.5 million (USD).⁹ BACAP can only advise and inform government units with regulatory or planning powers. In 1995, the Exe Estuary Partnership (EEP) was formed. It employs one full-time officer, who is occasionally given administrative support from partner organizations. Students assist with the research and, over the past 4 years, the Partnership has spent approximately \$180,000 (USD). Like the BACAP, the EEP has only advisory “powers”. The staff member offers advice to a Joint Advisory Committee and a number of statutory and non-statutory stakeholder organizations associated with the Exe Estuary.

It should be noted that an institution, despite very limited powers and resources, may be more effective and efficient in achieving the same objective than an institution with broad regulatory powers and extensive resources. For example, the Exe Estuary Partnership may be more effective in the conservation and/or restoration of its one estuary when compared to the California Coastal Commission achieving its mandate to conserve and/or restore any one of the very many estuaries within its very large jurisdictional area.

3.1.2. Between 1973 and 2000, all but one of the world’s sovereign coastal (oceanic)¹⁰ nations have, at one time or another, participated or are participating in one or more international ICM efforts - at least on paper. Table C-4 indicates that there have been 76 efforts for planning and/or management of international open coastal “seas” (e.g. Gulf of Guinea), enclosed coastal seas (e.g. Baltic Sea), international land-locked seas (e.g. Caspian Sea), international gulfs (e.g. Gulf of Fonseca), and lakes of international significance (e.g. Great Lakes and Lake Baikal).

It is important to make a distinction between ICM efforts at the national and/or sub-national levels and international ICM efforts. The former, with few exceptions, are ICZM (CZM) efforts that involve a significant commitment of money, staff resources, and time by the nation or the sub-national unit to prepare and implement a program that resolves the motivating issues.¹¹ By contrast, international ICM efforts are consensual agreements among nations.¹² Consequently, they have little or no monitoring and enforcement powers or even modest funds for program monitoring and evaluation. Consequently, for most of the international ICM agreements (particularly the 13 Regional Sea Action Plans initiated by the UN Environment Programme (UNEP) to which 127 nations are participants at least on paper), there is almost nothing to lose for a nation to be a participant, and there should be something to gain.

The benefits for a nation to be a signatory on a UNEP Regional Sea Convention and/or Action Plan include: 1) acquiring useful information about its sea or seas, 2) increasing the capability of its scientists in conduct coastal and ocean related research, 3) increasing the amount and quality of applied ocean and coastal sciences research and inventory in its EEZ and/or territorial waters, 4) sensitizing stakeholders (particularly the ruling elites) about the values of its sea(s), as well as the present level of degradation of environmental quality and resources, 5) receiving technical assistance and grants for projects such as pollution control, ICM pilot or demonstration area efforts, establishing marine or coastal protected areas, and recovery plans for rare and endangered species, and 6) attending international meetings and workshops, as well as networking among peers and colleagues. There appear to be only two downsides of being a signatory to a UNEP Regional Sea Convention or Plan and not making any significant commitments or actions to achieving its objectives: 1) acquiring a bad reputation among the signatories of the international effort that are making significant commitments and actions to

achieve the objectives of the Action Plan and 2) preclude or decrease, perhaps to zero, the six benefits just enumerated.

A comparison of Table C-1 to C-4 indicates that twenty-six coastal nations of the 127 nations that have participated in one or more UNEP Regional Sea Programmes do not have an ICM effort at either the national or the sub-national level.¹³ This fact appears to be a function of one or more of the following three situations: 1) the nation has no compelling socioeconomic issues that could be effectively resolved by an ICM effort (see Section 8.3), 2) the nation does not have the governance capacity necessary to prepare, much less implement, an ICM effort (see Section 8.3), or 3) a nation chooses not to use ICM as a means to resolve one or more compelling nation-wide or region-wide coastal issues (see the Introduction to Annex C). For example, a number of small island states have chosen to resolve coastal issues by means of a National Environmental Action Plan.

The great majority of international ICM efforts usually have had woefully inadequate budgets. As to be expected, the numerous limitations and constraints of international coastal ICM efforts have created the situation that many, if not most, efforts have been ineffective attempts to resolve their motivating issues. It was also inevitable that a number of international ICM efforts are now either moribund or have been discontinued.

3.1.3. In many coastal nations, particularly large ones, the focus of ICM is at the sub-national level. Delegation of a national ICM program to one or more sub-national units offers numerous advantages. The three most evident ones are the ability to: 1) tailor national policies and guidelines to fit and accommodate local variations in environmental and socio-economic conditions, 2) address the specific priority issues of concern to stakeholders at the local level, and 3) enable and encourage local stakeholders to buy-in to the preparation and implementation of local coastal plans. Table 3.1 indicates that there are over three times as many ICM efforts at the sub-national level (481) than efforts at the national level (140).¹⁴ The ratio of sub-national efforts to national efforts would further increase if all the coastal plans prepared by local units of government were included in Tables C-1, C-2, and C-3 (see Section 3.2).

The total of 223 includes nine international ICM efforts for estuaries, lagoons and enclosed coastal bays.¹⁵ At present, there is also no global ICM information exchange network for the planning and management of estuaries, lagoons, and bays. This point is addressed in Section 4.2.3.

3.1.4. A significant number of ICM efforts focus on islands. Table 3.1 indicates that 99 efforts have focused on small island nations or semi-sovereign island states. The Tables in Annex C indicate that 35 small island nations or semi-sovereign states are, or have been, involved in these 99 efforts. Relatively small islands are essentially wrap-around coastal zones, and are therefore appropriate for ICM programs if they have been extensively developed and have motivating issues. Large islands such as Jamaica, Cuba, and New Guinea are sizeable enough to have inland bio-geographic areas that have relatively few direct and significant impacts of coastal resources and environments. Two notable exceptions, however, are non-point pollution and river flooding, particularly in the area where the river and the coast interconnect.¹⁶

The number of ICM efforts on small islands would be significantly higher if ICM had not been precluded or incorporated into many islands' nation-wide or statewide comprehensive environmental planning programs (such as national or state environmental action plans). On small islands, ICM objectives, concepts, approaches and techniques can in theory be easily folded into a nation or statewide comprehensive planning program. This point is addressed in the introduction to Annex C.

3.1.5. Since 1990, developing nations as well as developing semi-sovereign states have accounted for the great majority of the increase in number of nations and SSSs involved in ICM at the national and/or sub-national levels. Table C-1 in Annex C indicates that 99 developing nations (including countries in transition from communism to democracy and capitalism) have now initiated one or more ICM efforts at the national and/or sub-national levels. The total number of national or sub-national efforts in developing nations now stands at 284 or 45% of the total number of such efforts in the world.

With only a few exceptions, all ninety-nine developing nations or states received substantial support (usually as non-reimbursable grants) from the cadre of multi-lateral and bilateral international assistance institutions (e.g. World Bank, Inter-American Development Bank and Canadian International Development Agency) for the initiation and preparation of an ICM effort. Developing nations commonly obtain international assistance to support implementing the ICM effort. The support for implementation, however, usually is provided as a loan and not as a grant.

3.1.6. The international regions and continents on which developed nations are concentrated have a disproportional large percentage of ICM efforts at the national and sub-national levels. This disparity is illustrated by Table 3.3. In respect to ICM efforts at the national or sub-national levels; Europe (133), (North America (167), and Australia (46) have a combined total of 346 efforts, or 49% of the 698 global total. If the total efforts of the USA (104), Canada (57), Australia (46) and the United Kingdom (45) are combined, the total is 252 or 36% of the 698 global total. In comparison, the nations with the next largest numbers of efforts are: Philippines (18), Indonesia (13), Mozambique (10), Ecuador (9), India (9), South Africa (9) and Brazil, Mexico, Malaysia, each with 7. It is reasonable to expect that the archipelagic nations of Indonesia and Philippines would have a relatively large number of ICM efforts.

The 1993 Roster of ICM efforts had the same skew of ICM efforts to developed nations and those international regions and continents in which they are located. Section 8.2 lists most of the reasons why developing nations and semi-sovereign states -- as well as international regions or continents in which they are located -- have disproportionately fewer ICM efforts.

It must be reiterated again that numbers of efforts as well as the numbers of nations or SSS with ICM efforts can be deceiving. The database is a clear example that "quantity is not quality". However, in the first stage of developing a global database of ICM efforts it is the first data that can be collected and analyzed. One must start an ICM global data base, as outlined in Annex C, with the location, name, address, and contact points of each past, present, and "in the pipeline" effort.

Clearly, the two best indicators of the relative amount and intensity of ICM activity and actions by a nation/SSS, or by an international region, or by a continent, is: 1) the cumulative commitment of resources (e.g. budget, time period, competent professional staff, technology, and technical assistance) and, 2) a summarization of the powers and jurisdictional areas of the efforts in a nation/SSS, or in a international region, or in a continent. Without both of these indicators, a global database of ICM efforts will fail to capture the real global geo-politic of the practice, nor be able to provide the information necessary to assess program performance and effectiveness (see section 9).¹⁷

3.1.7. Approximately 55% of the ICM efforts at the national and sub-national levels (exclusive of the 110 efforts in the USA) have reached the implementation stage. In the U.S., the implementation level reaches 95%. The high implementation rate in the U.S. is a function of both the twenty-six-year time span to develop and implement the efforts, and the continual Federal support for program implementation. However, as Section 9 points out, there is very little information on the extent to which efforts in the implementation stage are achieving their objectives with respect to measurable, on the ground, accomplishments. The fact that an ICM effort is going through the implementation process, such as issuing permits, approving local land use plans, and designating marine protected areas, does not necessarily mean that these actions are resolving the motivating issues.

3.2. Future Directions

Eventually the database of ICM efforts should be taken down to the local government level (e.g. coastal municipalities, counties, or cantons). In the U.S., at least ten of the state CZM programs require local units of government to prepare a local coastal plan based on state guidelines. In California, for example, the 73 local jurisdictions that border the coast have a legal obligation to prepare Local Coastal Plans (LCPs).¹⁸ These LCPs must be approved by the (state-wide) California Coastal Commission, before implementation is delegated to the local jurisdiction.

Expanding the database to include local coastal plans in the U.S. and other nations will require considerable work. Nevertheless, expanding the database to local coastal plans will provide the opportunity for direct communication among local governments that commonly confront the same types of issues (such as the planning and management of urban beaches, public access, waterfront development and/or redevelopment, and the provision of coastal dependent uses). Beach recreation planning and management in the City of Los Angeles has the same set of issues, stakeholders, and options for management techniques as it does in Tel Aviv, Nice, Sydney, and Toronto. Information exchange among similar levels of government has more transferability and more credibility since it is done among counterparts ("Only local government officials can understand how things really work and don't work in local governance."). The concept of grouping a similar level and scale of governance is reflected in the Intergovernmental Oceanographic Commission's (IOC) program on ICM in large metropolitan areas.¹⁹

Table 3.3: Regional Distribution of ICM Efforts

First Iteration. April 2 Draft.

World Region	Total
AFRICA - EAST and SOUTH (AFES)	
Burundi (1,0)*, Comoros (2,3), Djibouti (2,0), Eritrea (3,1), Kenya (4,2), Madagascar (3,2), Malawi (1,0), Mauritius (2,3), Mayotte (0,0), Mozambique (4,10), Reunion (1,0), Seychelles (2,2), Somalia (3,0), South Africa (5,9), Tanzania (5,4), Uganda (1,0), Zambia (1,0).	
International efforts	10
National and sub-national efforts	36
AFRICA - NORTH (AFN)	
Algeria (1,1), Cape Verde (2,0), Chad (1,0), Egypt (3,3), Libya (1,0), Mauritania (2,1), Morocco (2,2), Niger (1,0), Sudan (2,0), and Tunisia (1,3).	
International efforts	4
National and sub-national efforts	10
AFRICA - WEST and SOUTHWEST (AFWS)	
Angola (2,0), Benin (2,1), Cameroon (3,1), Congo D Republic (1,0), Côte d'Ivoire (2,1), Equatorial Guinea (1,0), Gabon (1,0), Gambia (2,3), Ghana (2,0), Guinea (1,2), Guinea-Bissau (2,3), Liberia (1,0), Namibia (2,1), Nigeria (3,1), Sao Tome and Principe (1,1), Senegal (2,1), Sierra Leone (1,0), Togo (1,1).	
International efforts	4
National and sub-national efforts	16
AMERICA - CARIBBEAN (CAR)	
Anguilla (1,0), Antigua and Barbuda (2,1), Aruba (0,0), Bahamas (2,1), Barbados (2,2), British Virgin Islands (1,1), Cayman Islands (1,0), (Cuba (2,3), Dominica (2,1), Dominican Republic (2,5), Grenada (2,1), Guadeloupe (1,0), Haiti (2,3), Jamaica (2,6), Martinique (1,0), Montserrat (1,0), Netherlands Antilles, Puerto Rico (1,3), St. Kitts and Nevis (2,2), St. Lucia (2,3), St. Vincent-Genadines (2,1), Trinidad and Tobago (2,1), U.S. Virgin Islands (1,1).	
International efforts	3
National and sub-national efforts	35
AMERICA - CENTRAL (CA)	
Belize (4,6), Costa Rica (6,4) El Salvador (6,1), Guatemala (4,1), Honduras (9,6), Nicaragua (8,4), and Panama (5,1).	
International efforts	12
National and sub-national efforts	23
AMERICA - NORTH (NA)	
Bermuda (0,0), Canada (3,57), Greenland (0,0), Mexico (3,7), St. Pierre and Miquelon (0,0) and United States (6, 104 - the 104 does <u>not</u> include American Samoa, Guam, Hawaii, Northern Marianas, Puert Rico, and the U.S. Virgin Islands).	
International efforts	6
National and sub-national efforts	167
AMERICA - SOUTH (SA)	
Argentina (3,2), Bolivia (1,0), Brazil (1,7), Chile (1,1), Colombia (2,5), Ecuador (1,9), French Guinea (1,0) Guyana (1,2), Paraguay (0,0), Peru (2,1), Suriname (1,2), Uruguay (3,2), and Venezuela (1,3).	
InternationalEfforts	6
National and sub-national efforts	34

ASIA - EAST (EA)	
China (7,7), Japan (2,2), North Korea (3,1), Russia (1,0 - other Russian efforts in EUR and WANE), South Korea (6,1), and Taiwan (0,0).	
International efforts	4
National and sub-national efforts	11
ASIA - SOUTH (AS)	
Andaman/Nicobar Isles (0,1), Bangladesh (2,2), India (2,9), Maldives (2,2), Pakistan (2,0), Sri Lanka (2,2).	
International efforts	2
National and sub-national efforts	16
ASIA - SOUTHEAST (SEA)	
Brunei Darussalam (3,1), Cambodia (4,2), Indonesia (5,13), Malaysia (5,7), Myanmar (1,0), Philippines (5,18), Singapore (3,1), Thailand (4,5), and Vietnam (4,6).	
International efforts	4
National and sub-national efforts	53
ASIA - WESTERN and NEAR EAST (WANE)	
Azerbaijan (1,1), Bahrain (1,0), Iraq (1,0), Iran (2,1), Israel (1,2), Jordan (2,1), Kazakhstan (2,1), Kuwait (1,0), Lebanon (1,2), Oman (1,1), Palestine (0,1), Qatar (1,0), Russia (1,1 - exclusive of EUR and WANE), Saudi Arabia (4,1), Syria (1,1), Turkmenistan (1,1), United Arab Emirates (1,0), Uzbekistan (1,0), and Yemen (4,2).	
International efforts	8
National and sub-national efforts	16
ATLANTIC - SOUTH (ATS)	
Falkland Islands (0,0), St. Helena and dependencies, Ascension and Tristan de Cunha (0,0)	
International efforts	0
National and sub-national efforts	0
EUROPE (EUR)	
Albania (1,1), Alderney (0,0), Azores (0,0), Belgium (3,1), Bulgaria (1,2), Canary Islands (1,0) Croatia (1,4), Cyprus (1,1), Denmark (7,2), Estonia (3,5), Faroe Islands (1,0), Finland (2,3), France (5,6), Germany (5,1), Georgia (1,2), Greece (3,8), Guernsey (0,0), Iceland (1,0), Ireland (4,4) Italy (3,5), Isle of Man (1,0), Jersey (0,0), Latvia (4,2), Lithuania (4,3), Madeira (0,0), Malta (1,1), Monaco (0,0), Montenegro-Yugoslavia (1,0), Netherlands (5,3) Norway (4,4), Poland (4,3), Portugal (4,6) Romania (1,3), Russia (2,4 - excluding WANE, and EA), Spain (5,3), Slovenia (1,3), Sweden (4,2), Switzerland (1,0), Turkey (2,3), Ukraine (1,4), United Kingdom (8,45).	
International efforts	17
National and sub-national efforts	133
OCEANIA	
American Samoa (1,1), Australia (3,46), Cook Islands (4,1), Federated States of Micronesia (4,6), Fiji (4,1), French Overseas Departments and Territories of French Polynesia, New Caledonia, (1,0), Guam (1,1), Hawaii (0,1), Kiribati (4,1), Marshall Islands (4,1), Nauru (4,1), New Zealand (0,1), Niue (4,0), Northern Marianas (1,1), Palau (4,0), Papua New Guinea (2,2), Samoa (3,1), Solomon Islands (1,3), Tonga (4,0), Tuvalu (4,1), and Vanuatu (4,0).	
International efforts	6
National and sub-national efforts	69

The compilation of ICM efforts at the international, national, and sub-national levels is only the first stage of database development. The successive three stages of developing the database depend on obtaining funding.²⁰ In the near future, a proposal will be submitted to obtain support for the second, third, and fourth stages of database development. The second stage would be the distribution of a standardized survey questionnaire to each ICM effort. The survey would seek to determine at least the following information: the priority issues, planning and management approaches, techniques employed, institutional arrangements, budget/staff resources, and outputs that should be of international interest.²¹ The third stage is data analysis and formatting. Information derived from the survey, as well as follow-up communications, would be organized into a database that could be searched according to many dimensions, including: nations, international regions, priority issues, techniques, planning approaches, institutional arrangements, budget and staff resources, and donor support. The design of a website or a website component and data input is the fourth stage.

Another potential improvement in the database of ICM efforts is linkage to on-screen maps that indicate the location of ICM efforts. Figures 3.1 and 3.2 show the location of most of the planning and management efforts for international coastal seas. ICM initiatives in Europe are depicted in Figure 3.3.

It is a relatively easy process to construct a GIS that would enable an individual to pull up a map of an international region – or a coastal nation – and use the cursor to quickly identify geographic information that pertains to ICM. The GIS could determine if there is an ICM effort (as well as its status and a complete profile) within or adjacent to the area or point defined by the cursor. More importantly, the GIS could also provide both website information and hyperlinks to many topics of direct relevance to ICM planning and management. These could include:

- ◆ Major coastal currents,
- ◆ National claims to an EEZ and territorial seas,
- ◆ Geographic boundaries of international fishery treaties,
- ◆ A signatory to international treaties or conventions that are directly relevant to ICM such as the International Maritime Organization, Law of the Sea, and CITIES,
- ◆ Oceanic and coastal resources such as phytoplankton productivity, fisheries catch by area, per cent of GNP derived from coastal tourism, and producing or potential oil and gas resources,
- ◆ Marine protected areas, coastal parks, or reserves,
- ◆ Demographic and socioeconomic information such as population density within different distances from the coastline, population growth rate, and different income indicators.

Figure 3.1: International Efforts for Coastal Seas, Eastern Hemisphere

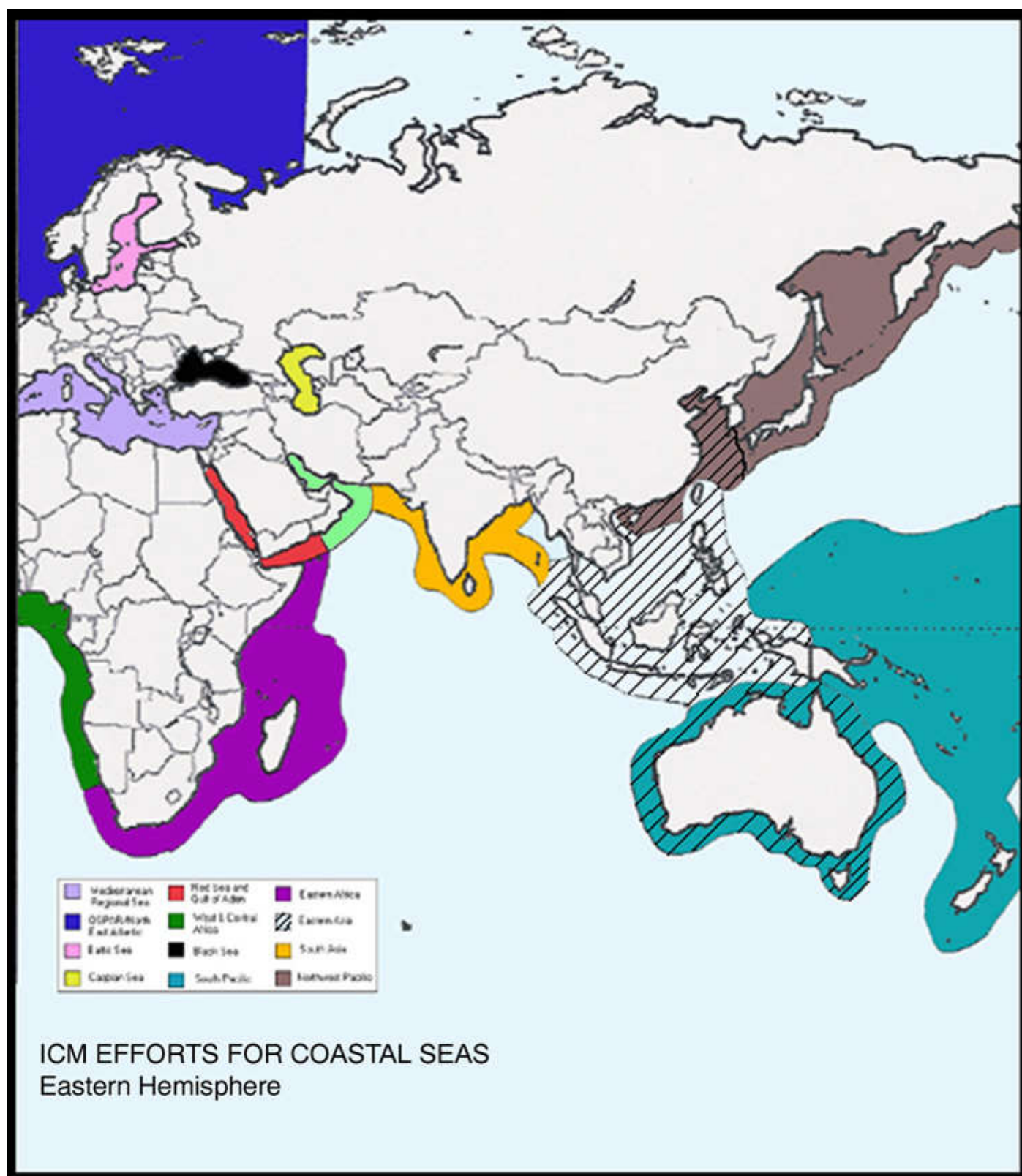


Figure 3.2: International Efforts for Coastal Seas, Western Hemisphere

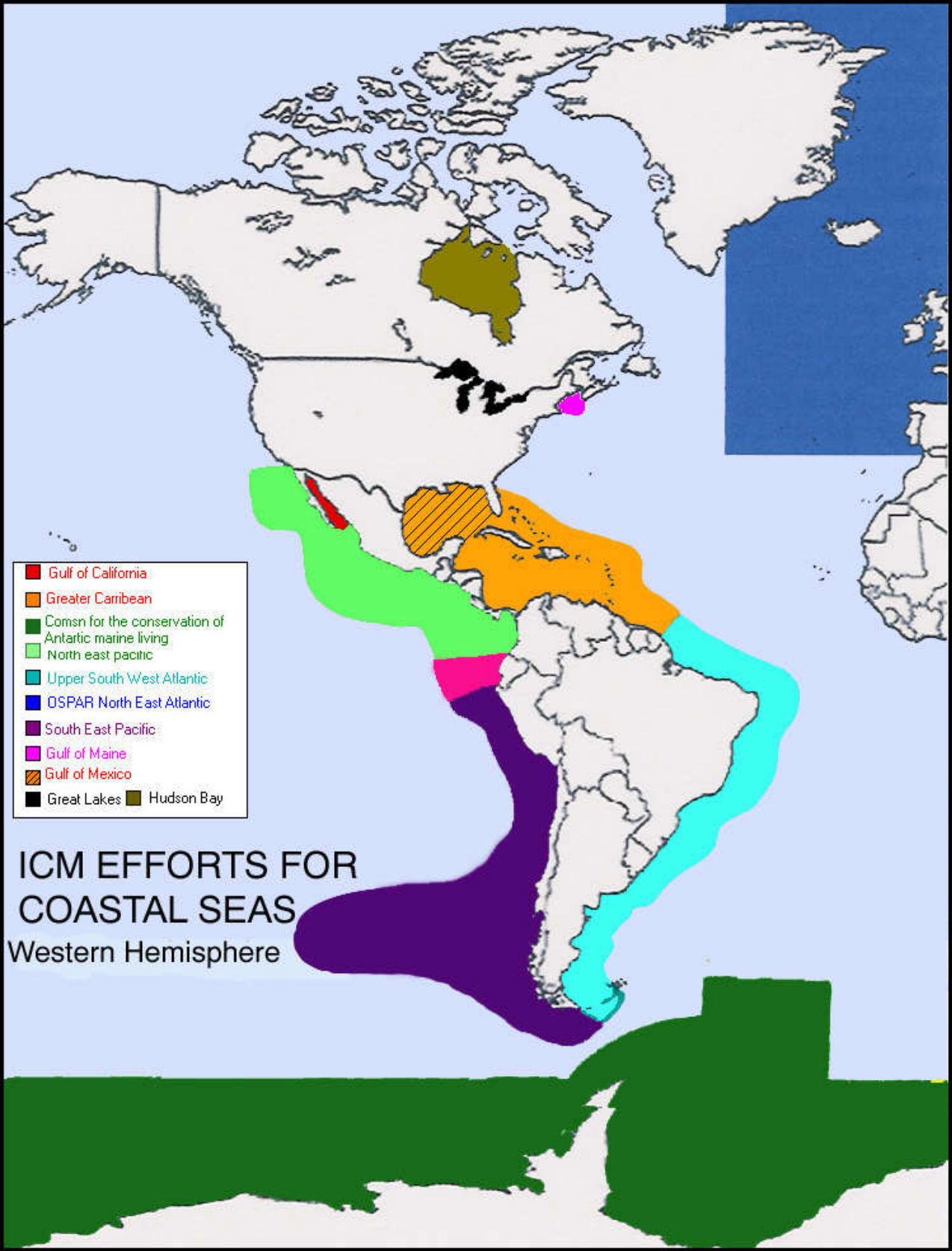
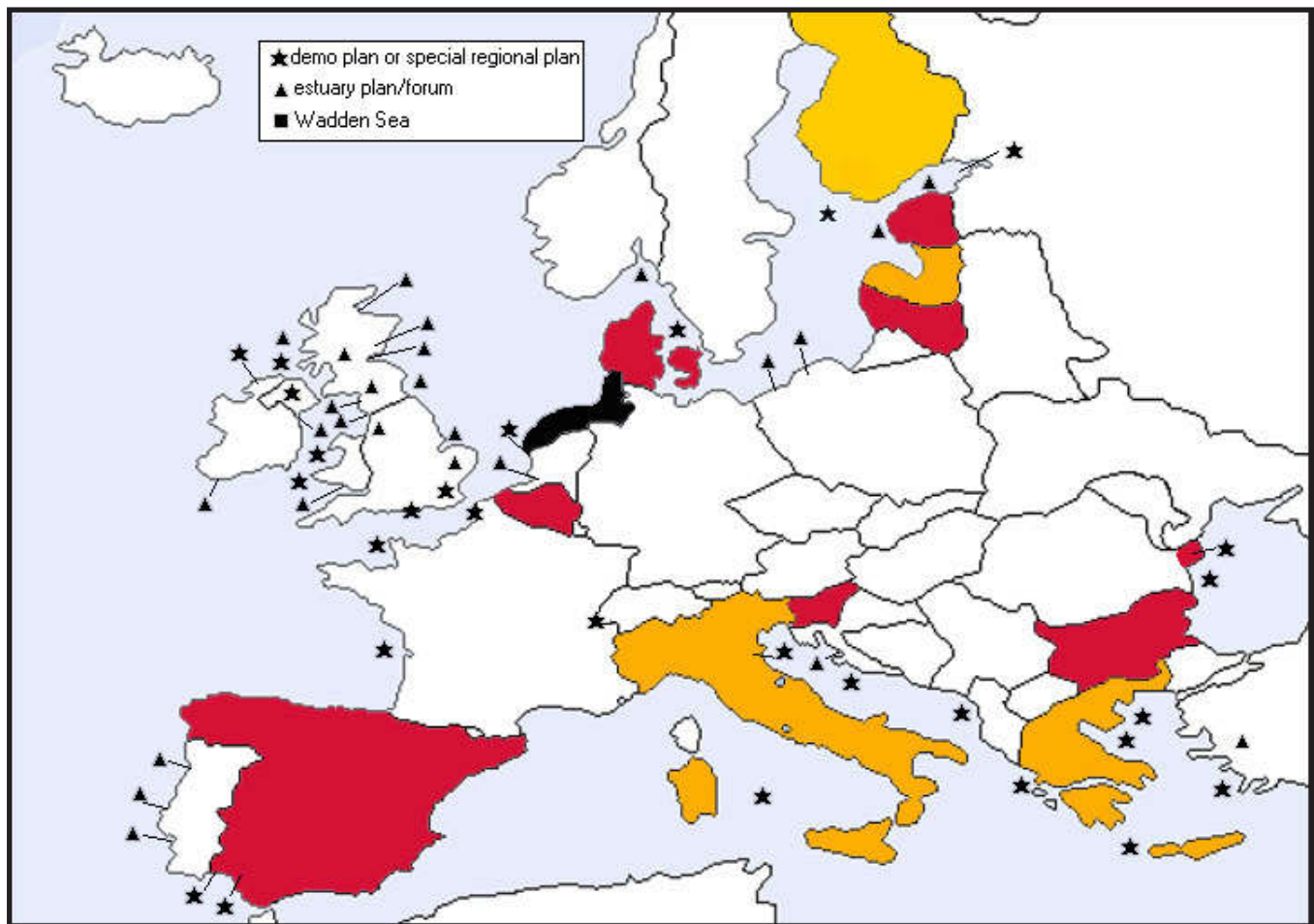


Figure 3.3. ICM Efforts in Europe (not complete)



Endnotes

¹ Sorensen, J. 1993. "The International Proliferation of Integrated Coastal Zone Management Efforts", **Oceans and Coastal Management** 21(1-3):45-80.

² The compilation of the 1993 roster did not have the advantage of using Internet searches nor were there informative websites, particularly websites that cover international regions (e.g. EUCC, SEACAM, PEMSEA, UNMAP-PAP), websites for nation-wide efforts that are composed of a large number of sub-national efforts (e.g. Australia, Canada, the United Kingdom, and the United States) and the websites of international assistance institutions that have supported many ICM efforts in developing nations (e.g. GEF, UNDP, World Bank, UNEP, IADB, ADB, and IUCN). The websites that identify many ICM efforts are apparent in the Tables C-1, C-2, C-3, and C-4, particularly in the fourth column.

³ The 1993 roster did include the five CZM programs in the U.S. territories (i.e. American Samoa, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands) that were prepared and implemented under the U.S. Coastal Zone Management Act (USCZMA). The 1993 roster did not include: the 30 statewide CZM programs done under the CZMA (administered by NOAA), the National Estuary Programs (administered by EPA), the National Estuary Research Reserves, and the National Marine Sanctuaries (both administered by NOAA).

⁴ In September 2000, the B2K Discussion Paper listed 345 ICM efforts at the national and sub-national levels. The increase of 267 efforts presented in this Report is largely attributable to at least three factors: 1) the addition of many ICM efforts in Canada (the complete list of Canadian ICM efforts, as of August 2000, was submitted after the Baseline 2000 Discussion Paper went to the printers), 2) the initiation of many new efforts in the last 17 months (for example, Australia's new national Coastal and Marine Planning Program generated 30 efforts last year), and 3) the increase in both the number and informative quality of websites and databases that list ICM efforts (for example the World Bank has compiled a database of 202 efforts covering the last five years, as well as many efforts in the pipeline that are either direct ICM studies, projects, or programs or indirectly relate to ICM, such as broad scope sectoral efforts (e.g. coastal water pollution control and water supply projects) or marine protected areas).

⁵ The 17 sub-national efforts on lakes of international significance includes the State CZM Programs of Indiana, Michigan, Minnesota, and Ohio as well 2 National Estuarine Research Reserves (one on Lake Superior and one on the St. Lawrence River). The State CZM Programs of New York and Pennsylvania were not included in the count although their programs front on Lake Ontario and Erie, respectively. However, both New York and Pennsylvania's Programs also front on the Atlantic coast. The extensive planning and management efforts for Lake Baikal and Lake Tahoe are also included in Table 3.2. Both of these lakes have international significance both because of their exceptional environmental characteristics and resources as well as the important role they have played in planning and management of lakes and their associated drainage basins.

⁶ There may be a number of ICM efforts among these 26 lakes. Research work was not done to determine if any of these lakes had an ICM effort.

⁷ A permit can be required, for example, for the proposed construction of a new or a significantly modified garage or outbuilding to an existing house.

⁸ The intention of including local coastal plans, such as the 73 that are a major component of the California Coastal Management Program is mentioned in the Introduction to Annex C.

⁹ The disparity in the staffing and total budgets is to a large degree, a function of the differences in the size of the respective planning areas as well as the size of the population within of the planning areas. The planning and regulatory area of the California Coastal Management Program is 6,500 km², and includes a population of approximately a million people. Bluenose ACAP, by comparison has a planning area of 325 km² and approximately 8,000 people within the planning area.

¹⁰ Coastal nations or states can include those that border on lakes of international significance, such as the "coastal states" that are within the U.S. Coastal Zone Management Program, but only border on the Great Lakes or Lake Champlain (i.e. Indiana, Michigan, Minnesota, Ohio, Vermont, and Wisconsin). An "oceanic coastal" nation or state, by contrast, borders on an estuary or marine water body that has open maritime access (i.e. not constricted by a canal, or an extensive system of river channels) to the world's oceans and seas.

¹¹ However, in developing nations, the funding for program initiation, preparation, and adoption usually comes as non-reimbursable grants from international assistance institutions. Sections 8 and 9 raise the point that when “free” foreign assistance (funds and as well as technical expertise) is largely responsible for the preparation of a nation’s (or sub-national unit’s) ICM program, there is a high likelihood that the program will not be sustained by the nation (and/or sub-national units) with its own resources into the long and politically charged implementation phase if free foreign assistance is no longer the program’s major source of support.

¹² Sovereign nations, almost always, are the only signatories to international agreements. For example, in Table C-4, France, Netherlands, and the United Kingdom are the signatories on behalf of their semi-sovereign states or states (e.g. Turks and Caicos, Montserrat, Aruba, Bonaire, Martinique, and Guadeloupe) in the Caribbean Environmental Program.

¹³ Angola, Bahrain, Bosnia, Cameroon, Cape Verde, Congo Democratic Republic, Congo Republic, Djibouti, Equatorial Guinea, Gabon, Ghana, Iraq, Kuwait, Monaco, Liberia, Libya, Myanmar, Pakistan, Qatar, Somalia, Sudan, Sierra Leone, Tonga, United Arab Republic, Vanuatu, and Yugoslavia/Montenegro.

¹⁴ Over the last two years, the Center for the Study of Marine Policy at the University of Delaware, in conjunction with NOAA, IOC, World Bank, and GPA, has posted a listing of nations and descriptions of national ICM efforts on NOAA’s website. The section’s title is: “Integrated Coastal Management: An International Priority”. Most of the information on the ICM efforts are from coastal nations’ “Sustainable Development Reports” that were submitted to the United Nations Commission on Sustainable Development in 1998. The “required” section on coastal and ocean management in the Sustainable Development Reports is usually short and sketchy or absent. More important, each coastal nation’s report focuses, with very few exceptions, on what is occurring at the national level of governance. Rarely is any mention made of sub-national ICM efforts. This is an obvious shortcoming since one of the major findings derived from the database of ICM efforts is that there are over three times as many ICM efforts at the sub-national levels of governance than at the national level. For example, Australia’s entry is a four-page history of ICM initiatives by the Commonwealth. There is no mention in Australia’s entry of the 18 ICM efforts that are occurring at sub-national levels (see Table C-1). Similarly, the entry for the United Kingdom is a three page descriptive history of a few national actions and laws that have varying degrees of relevance to ICM. There is no mention in U.K.’s entry of the 34 ICM efforts that are occurring at sub-national levels (see Table C-1). It should be noted, however, that many of the ICM efforts at the sub-national levels in Australia and the U.K. had not been initiated at the time when each nation’s Sustainable Development Report was written in 1997 or 1998.

¹⁵ The Esturiales Program, Gulf of Fonseca, Gulf of Naples, Puget Sound and Georgia Basin, Rio Plata, Schelde Estuary, St. Croix River, San Juan River, and the Tijuana Drainage Basin, River and Estuary.

¹⁶ Generally almost all rivers and streams on small “high “ islands are short and have a steep gradient. If these islands are subject to heavy rainfall events, it is imperative to the plan and manage all the islands watersheds in order to the prevent massive inputs of nutrient and sediment pollution into coastal waters, This is particularly true if the coastal waters (and associated beaches and/or corals) are the island’s primary touristic and recreational attraction as well as important fishery areas.

¹⁷ Section 9 will be the Third Iteration of this Report.

¹⁸ The California Coastal Commission jurisdiction does not include San Francisco Bay. Most of California’s 73 coastal jurisdictions are divided into planning segments. Presently, there are 125 segments.

¹⁹ The Intergovernmental Oceanographic Commission and UNESCO have funded a program on mega-cities and ICZM.

6. A comparison of ICM governance arrangements

Over the last twelve years, a number of practitioners and academics have sought a typology (or organizing framework) that would delineate comparative strengths and weaknesses among ICM governance arrangements. An international review of ICM efforts at the national and sub-national levels indicates two important variables that can be used to make comparative assessments among ICM governance arrangements:

- ◆ **Regulatory and planning boundaries, and,**
- ◆ **Reliance on planning, or on regulation, or a combination of planning and regulation.**

In respect to regulatory and planning boundaries, Figure 6.1 presents four divisions (or tiers) that have commonly been used by ICM efforts.¹ Annex A explains each of these tiers in more detail.

- **A. Coastal waters:** the area measured oceanward from a tidal and/or tidal influence mark and/or salinity mark to an offshore boundary.
- **B. Coastline (shoreline):** generally, the area between mean high and mean low tides. A number of ICM efforts have expanded this area by extending it ocean-ward to average extreme low tide and extending it inland to the average limit of extreme high tides and/or coastal flooding and/or the inland extent of beach and/or dune vegetation (i.e. to the seaward extent of permanent vegetation).
- **C. Immediate coastlands** (commonly called shorelands): the area extending landward from inland limit of the coastline to an arbitrary distance inland set by law. In ICM efforts, the arbitrary distance inland varies between 8 and 1,000 meters in order to achieve one or more of the following benefits: provide long-shore and cross-shore public access, provide a public recreation area with exceptional amenities, control pollution of coastal waters (e.g. septic tanks), protect, restore or enhance visual quality, or reduce/prevent the costs associated with shoreline erosion (the retreat option).
- **D. Interior coastlands:** the area in which land uses can have a direct and significant impact on coastal resources or environments. Ideally the inland limit would be all the lands in a coastal watershed -- the use of which would have a direct and significant impact(s) on coastal waters.

The division of a coast into four tiers enables the distinction between an integrated coastal management program (ICM) and an integrated coastal zone management effort (ICZM). ICM is the most inclusive name for the management of coastal waters and/or coastlines, and/or coastal lands. The jurisdiction of an integrated coastal management effort can include planning and/or regulation of just the coastal, or just the coastline, or just the immediate coastlands. ICM can also include the planning and/or regulation of two, three, or four adjoining tiers. By contrast, an integrated coastal zone management (ICZM) or coastal zone management program (CZM)

must include three tiers: a coastal waters area, the coastline, and at least the immediate coastlands area.

The four tiers depicted in Figure 6.1 should be placed in context with legal boundaries (as set by international conventions or national laws), as well as boundaries not set by law or international conventions but commonly used around the world. This is illustrated in Figure A-1, Annex A.

Figure 6.1: Types of Integrated Coastal Management based on Geographic Coverage, Regulation and Planning

	1 Integrated Direct Regulation Only	2 Integrated Planning and Direct Regulation	3 Integrated Planning and Indirect Regulation	4 Integrated Planning Only
A Interior Coastlands (beyond 1000 meters)				Costa Rica Israel Maine Michigan Minnesota S.F.B.C.D.C. S. Carolina Sri Lanka Washington Wisconsin
B Immediate Coastland Shorelands (beyond 1000 meters)				Great Barrier Reef
C Coastline (between Tides)	Spain Turkey	Costa Rica	Connecticut Florida Massachusetts	Baltic Sea Brazil Gulf of Maine Mediterranean Sea Priority Action Plans (P.A.P.) Venice Lagoon
D Coastal Waters (below low tide- seaward)		Great Barrier Reef Netherlands		North Sea Regional Seas (Non P.A.P.) Wadden Sea Costa Rica

The second factor depicted by the Figure is the extent to which an ICM or ICZM effort is involved in regulation and/or planning. Four distinctions are made:

- 1. Integrated direct regulation only (e.g. Spain's and Turkey's program),
- 2. Integrated planning and **direct** regulation (e.g. Great Barrier Reef Marine Park Authority [GRMPA] and many of the state CZM programs done under the USCZMA),
- 3. Integrated planning and **indirect** regulation (such as state CZM programs in Connecticut, Florida, and Massachusetts), and
- 4. Integrated planning only (such as the planning program for the Venice Lagoon and watershed and UNEP's Regional Sea Action Plans).

The distinction between direct and indirect regulation is whether the lead unit of government directly issues permits for proposed coastal development or depends (i.e. indirect) on permit letting by other agencies in order to implement its ICM or CZM plans and policies. In the U.S., a CZM program with indirect regulation by the lead agency is commonly referred to as a networking arrangement.

Figure 6.1 produces the following nine types of ICM or ICZM efforts:

1. Integrated direct regulation **only** of the immediate coastland, the coastline and inshore waters (e.g. Spain and Turkey).
2. Integrated planning and direct regulation of only the coastline, inshore waters, and an offshore area (e.g. the Great Barrier Reef Marine Park Authority),
3. Integrated planning and direct regulation of the coastline and all coastal waters to the limit of the Exclusive Economic Zone (e.g. Netherlands program for managing its total ocean area, which is the same as its EEZ),
4. Integrated planning and direct regulation includes only the coastline and immediate coastlands and integrated planning only extends into the interior coastlands. No regulation or planning for inshore waters (e.g. Costa Rica),
5. Integrated planning and direct regulation extends across the immediate coastlands, the coastline, and into the coastal waters and integrated planning only extends into interior coastlands (e.g. Israel, Washington State, and the San Francisco Bay Conservation and Development Commission [SFBCDC], and Sri Lanka), and
6. Integrated planning and direct regulation extends across all four tiers (e.g. California, Fraser River Estuary, North Carolina),
7. Integrated planning and indirect regulation extends across all four tiers (e.g. Connecticut, Florida and Massachusetts),
8. Only integrated planning extends across all four tiers (e.g. Brazil, Venice Lagoon, the Baltic Sea Program, and Priority Action Plans of the Mediterranean Regional Seas Programme), and
9. Integrated planning extends only from the coastline into coastal waters (e.g. most of the UNEP's Regional Seas Programs).

In the Figure, it should be noted that in types 3, 4, and 5, there are ICM efforts that are listed twice in different parts of the diagram. The efforts that are located in two places in Figure 6.1 are in *italics font*. The placement in two parts of the diagram and in *italic font* indicates that the ICM effort has a split between tiers where it has regulatory and planning authority and another tier or two where it only has integrated planning authority. There are three types of splits: 1) direct regulation in coastline and immediate coastlands (e.g. Costa Rica) or 2) direct regulation in coastal waters and the coastline (e.g. GBRMPA) or 3) direct regulation of coastal waters, the coastline and the immediate coastland and only integrated planning in interior coastlands (e.g. Washington State) with the exception of GRMPA, that conducts only integrated planning in both the immediate and interior coastlands. Another type of governance arrangement (for a total of 10 types) could be added for ICM efforts that only plan and regulate the coastline usually for

erosion and flood control. An example is shorelines management in the Canadian Great Lakes.
2 3

This proposed typology, like almost all typologies has limitations. The listing of nine types of ICM governance is based on only two variables. As Section 8 (common challenges) points out, there are many more variables that influence the success and failure of ICM efforts. For example, one of the most important differences among ICM efforts is the scope and powers of direct regulation, particularly permit-letting. A few programs require a permit for all significant development in their area of direct regulation (e.g. California Coastal Commission and the GBRMPA). It is much more common, however, for exemptions to be made in direct regulation for projects of a small size or a particular type of development, such as agriculture. Washington State, for example, exempts single-family houses in the immediate coastland (200 feet inland from MHT) from obtaining a permit. In North Carolina, agricultural development is usually exempt from the State's CZM regulation.⁴

Despite the limitation of using only two variables to create the typology, it can be used to make comparative assessments of the some of the important strengths and weaknesses among different governance arrangements used by ICM efforts. Clearly, a governance arrangement that can only engage in integrated planning, but does not have direct or indirect regulatory authority to implement their plans and policies, have had -- and will have -- implementation problems, such as UNEP's Regional Seas Programme.⁵

Furthermore, a governance arrangement that has direct regulatory authority should have greater potential for having their plans and policies implemented than institutions that must rely on the regulatory authority of other institutions (the network approach). However, an analysis of the perceptions of the performance of state coastal zone management programs in the United States indicated that there was no significant difference in performance between networking states (type 5) and states with programs based on a single comprehensive coastal law (type 6).⁶

ICM efforts -- such as in Turkey and Spain -- that rely only on direct and/or indirect regulation and do not engage in integrated planning can not adequately manage coastal systems -- particularly the control of cumulative impacts. Planning is also needed as the means to build community-based support for a program.

Endnotes

¹ The four-tier division is based on the results of a global survey of ICZM efforts done by the Coastal Resources Center at the University of Rhode Island in 1995. This survey was also the source for most of the information on national or sub-national differences in respect to regulation, indirect regulation, and planning.

² Lawrence and Nelson, 1992.

³ Shoreline is used in this Report for freshwater bodies and coastline for tidal saltwater bodies.

⁴ Color could be used in the diagram to indicate the degree that the ICM efforts offer exemptions. For example, an ICM effort's name in red would indicate very few exemptions. If the name is in blue, it indicates that the regulatory power applies only to a few types of development. Also, endnote numbers could be given to each ICM effort listed in Figure 6.1. The endnote would specify the scope and/or exemptions in the regulatory authority.

⁵ Jacobsenn, 1995, and Sorensen, 1995.

⁶ Knecht, Robert, Cicin-Sain, and Fisk, 1996.

7. Guidance literature on ICM as an international practice

During the 1990s, a significant body of general guidance literature on ICM as an international practice was produced. Annex F is a content analysis of 29 such documents, articles or books. The pattern of repetition in the Annex indicates that an ICM “dogma” has emerged over the last thirteen years.

The primary purpose of 18 (of the 29) documents was to provide comprehensive guidance for ICM as an international practice. Seven documents provide international guidance in context with a particular topic, such as institutional arrangements, applied science and ICM, and lessons learned from ICM efforts in the tropics. Two of the documents are textbooks on ICM.

Content analysis of the 29 documents leads to the following conclusions:

- ♦ The directives and findings (collectively termed dimensions) in the guidance documents can be divided into six groupings: 1) inherent aspects, 2) principles, 3) steps in ICM cycle¹, 4) general components, 5) specific techniques (or means), and 6) challenges (or impediments, or process issues),
- ♦ There is general consensus on ICM's inherent aspects, principles, and steps in the cycle of program development and redevelopment,²
- ♦ Most of the ICM international guidance dogma is simply conventional wisdom and best practices in respect to integrated planning and democratic governance. Almost of all the dimensions listed in Annex are equally applicable to all the other types of integrated environmental planning and/or sustainable development,
- ♦ In general, the twenty-two principles in Annex are not built on testable hypotheses. The great majority of the guidance dogma has not been systemically evaluated using well-known social science techniques. The dogma can be characterized as "based on our experience, we believe our paradigm is right, it usually works, and we do not know of any other paradigm that would be more effective or efficient." Relatively little of the ICM dogma has been questioned, much less refuted, at least in print,³
- ♦ With the exception of challenges (impediments), most of the dimensions are being repeated in the general guidance literature. Most of the documents make it appear that most dimensions identified are the authors' discoveries and that relatively few dimensions had been previously identified and addressed in the literature,
- ♦ International assistance institutions have commissioned or written most of the international guidance literature. Most of the dogma was written for developing nations - although most of it is also applicable to developed nations. This is an understandable situation, given the basic investment concern of a donor that “good” guidance is needed to design, prepare, and implement the ICM efforts that they fund in order to increase the probability of success (as the donor defines success). The donor, of course, wants to claim that their investment in ICM efforts was money well spent,
- ♦ Many challenges to ICM (outlined in Section 8) are not listed in Annex. The majority of

the guidance documents, particularly those before 1996, only expressed what should be done and why. They did not identify -- and perhaps they did not know -- the many challenges that would be encountered in the course of following (or trying to follow) the guidelines. The next Section makes the point that there is a significant difference between the relatively few challenges confronting all coastal nations and states, and the many additional challenges confronting developing nations and states (the latter are Dimensions I-7 through I-30 in Annex F).

- ♦ There is little further need for additional general and comprehensive guidance documents on ICM as an international practice in respect to inherent aspects, principles, and steps in the development cycle. There is now an established dogma on these three types of dimensions. Ideally, if an institution or an author wishes to prepare another general guidance document on ICM as an international practice, Annex F (or its successors) should be used as a reference point. If there are any new documents on the subject, they should address the question: Are there additional aspects, principles, or steps that either should be added, refuted, or the significant changes be made to the wording?

Annex F should be distributed to the authors of the 29 documents for their review and comments. It is expected that both a number of x's will be added and deleted in the matrix, as well as a number of dimensions will be added or reworded. The authors will also probably suggest a number of documents that should be added to the Annex. Moreover, several new guidance documents on ICM as an international practice were produced since the content analysis was done in the spring of 2000.

The review and comment process should also ask the author(s) to check those dimensions that were not identified in their document but should be in the matrix.⁴ The response to this question may produce a matrix with most cells filled with connection symbols. If this occurs it would indicate that there is both a high degree of consensus among ICM specialists and demonstrate that an ICM dogma has formed.

A listing of ICM dimensions should be very useful in national and international information exchange. For example, in Annex F, each cell in the matrix that indicates a connection between a document and a dimension can be keyed by number to indicate if the document has an in-depth discussion of the particular dimension, or merely identifies and briefly discusses the dimension. Also an endnote number could be added to each dimension in the matrix. The endnote would identify the key literature on that particular dimension. Furthermore, those ICM dimensions with information exchange networks should be added to the Index of ICM Topics (see Section 10).

Although there is little further need for additional general guidance on ICM as an international practice, there is a need in most coastal nations -- particularly developing nations -- for guidance on:

- ♦ General types of development (uses) and/or associated actions/activities (e.g. dredging and dredging spoil disposal) that routinely generate adverse environmental or socio-economic impacts within the coastal zone. Coastal tourism, mariculture, urban expansion, second-home subdivisions, coastal forestry, agricultural practices in coastal watersheds, dredging and dredge spoil disposal, sewage treatment, and oil and gas exploitation are currently, and will continue to be, the types of development or

actions/activities generating the most significant and pervasive impacts in the world's coastal zone,⁵

- ♦ Planning and/or engineering options to reduce or eliminate the devastation wrought by different types of coastal hazards. The control of coastal erosion and protection from the devastation wrought by ocean-born storms (particularly hurricanes, cyclones and typhoons) are -- by far -- the most common reason for building most coastal engineering works -- with their attendant adverse environmental impacts, and⁶
- ♦ Planning and management for the common types of coastal environmental systems (e.g. coral atolls, mangroves, beaches and dunes, estuaries) or climatic regions (e.g. tropics, polar). The guidelines should include development types and their associated actions/activities that commonly occur in a type of coastal environment -- such as coral and lagoon systems in context with tourism, recreation, sport fishing, commercial fishing, and research or mangrove systems in context with sustainable forestry, mariculture, tourism, and sustainable use of mangrove resources and associated fisheries or wildlife as sustenance and income for local communities.⁷

The guidelines should be connected to current examples that illustrate in real world terms (such as non-biased case studies) how development and engineering can be planned and constructed in concert with best ICM principles and practices. Since there already are a number of guidance publications on specific types of coastal development, types of coastal engineering, and types of coastal environments; the drafting of new guidance materials should build on this work. An assessment should be done to determine to what extent the guidelines should be different for developing nations, given limited funds and technical expertise, such as low-tech means for hazard control or the need to mitigating adverse environmental impacts.

Nations with a large length of coastal zone that contain a mix of extensive types of development and natural resources, relatively pristine environments, and a highly varied coastal geography -- such as Brazil -- should consider preparing their own set of guidelines to cover the relevant topics listed above.

All guidelines specific to types of coastal development, control of coastal hazards, or types of coastal environments should be entered in the Index of ICM Topic's database (Section 10). It is also expected that all the types of guidelines listed above would be incorporated into the Index of Issues, model planning approaches, and model techniques for planning and/or management (see Section 5).

Endnotes

¹. For some reason I can't get rid of end note i.

² The cycle consists of initiation, preparation, adoption and funding, implementation, evaluation, and revision. The revision step may be the start of a new cycle (with the except of the initiation step).

³ Expand this endnotes on why consultants and practitioners are: too busy to write critical assessments, usually there is no money in writing critical assessment and therefore it is an opportunity cost, don't bite the hand that feeds you. Refer to section 9.

⁴. These additions would be marked with a different symbol (i.e. not an x).

⁵ ADD examples as footnotes or as an annex such as New Brunswick's Guidelines on mariculture. Is there an adequate set of guidelines now (i.e. existing ones adequate and/or are there common types of coastal development or associated actions/activities without guidelines)?

⁵ ADD examples as an annex. Is there an adequate set of guidelines now on hazard control and management (i.e. existing ones adequate and/or are there common types of coastal hazards or hazard control techniques without guidelines)?

8. Common challenges to ICM

After thirty-five years of ICM efforts around the world, the practice has developed a reasonably good understanding of the approaches, key principles and guidelines, frameworks and techniques for organizing and implementing programs, and it is beginning to benefit from collective experience. However, in comparison to other forms of planning and management, ICM -- in the Year 2000 -- is faced with a rather extensive list of challenges that must be overcome, if ICM, as a distinct form of environmental planning and management, is to produce desired outcomes that are needed in our coastal zones.

These major challenges are organized into eight groupings. The listing of challenges was intended to focus discussions in the workshops at Coastal Zone Canada 2000. Common challenges could also be used at international and national workshops, conferences and academic analyses that are convened to improve the practice of ICM.

Defining the common challenges and the means to overcome them

ICM is a long and tiring swim against a continuous current of political and socio-economic interests with short-term visions, usually tending to protect the status quo. Program initiation, preparation, adoption, and implementation invariably will take far longer and require far more financial and non-financial resources than originally expected and planned. Review of the ICM literature, environmental planning literature and international development literature indicates that there are many challenges to preparing and implementing integrated plans of any kind, particularly in developing nations.

Most of the challenges are common to good governance for all public sectors (e.g. health care or education). In the list below, the challenges to good governance in general are marked with an asterisk. Many of the challenges are specific to environmental planning and management (no asterisk). None of the challenges are specific to ICM, with the possible exception that ICM involves planning and managing the greatest number of physical systems, as well as some of the most complex environmental systems in existence.

8.1. Challenges to all nations and sub-national units of government

Information and predictability

- ◆ **Modeling complex systems in order to make adequate impact assessments.** There is usually inadequate time series data, as well as an absence of appropriate accurate predictive models, to assess with reasonable certainty: the potential impacts of development proposals, the consequences of alternative planning or management policies, or to monitor and evaluate completed or ongoing programs and projects.*

Costs, benefits and their incidence among stakeholders.

- ◆ **The "tragedy of the commons".** Many coastal resources are common property (such as fish, coastal aquifers, and coastal waters) and therefore selfishly exploited without appropriate regard for other users, or for maintaining a level of sustainable use.
- ◆ **Placing socioeconomic values on not-directly-measurable qualities** (e.g. rare and endangered species, bio-diversity, and esthetics). These not-directly-measurable qualities are usually benefits. Non-quantifiable benefits are usually at a disadvantage -- or dismissed -- at public policy and decision-making meetings when they are compared with the costs that are usually directly measurable and have evident political implications (e.g. employment, income generation).
- ◆ **The incidence and significance of benefits and costs among stakeholders.** Usually the costs are large and significant (such as a reduction in property value or diminished profits anticipated if proposed coastal development were allowed) to a small number of influential stakeholders [commonly elites]. By contrast, the benefits are usually spread broadly to the public at-large and/or to relatively non-influential stakeholders (since they are usually not organized into institutions with skillful lobbying capabilities).
- ◆ **The disparity in the flow and appearance of costs and benefits over time.** Costs are usually immediate (such as loss of existing or potential employment) and benefits that usually takes years to become evident (such as rebuilding a fishery or an endangered species' population). *
- ◆ **Elected governments' reluctance to consider costs and benefits beyond their term in office.** Many -- if not most -- of the benefits from integrated environmental planning and management take many years to demonstrate results that the public can readily see and appreciate, such as reforested watershed or matured mangrove plantations. ICM -- like integrated environmental programs, in general, do not have the immediate "turn key effect" of a highly visible structure or products -- such as politicians gathered around for a photo opportunity as they flip the switches that release the water from the new reservoir (and the new dam built to create it) to shoot into generators that can light up a town. *
- ◆ **Lack of high-level support for ICM -- particularly in terms of powers and budget --** because the benefits of the effort are not conveyed in compelling socioeconomic terms that resonate with the interests of voters and the officials they elect.

Institutional and legal arrangements

- ◆ **Vague and/or contradictory language in laws, decrees, or regulations.** Vague and/or contradictory language in enabling acts often create programs with objectives that are not sufficiently specific to establish indicators for monitoring and evaluating programs and projects. *
- ◆ **The laws and regulations are inadequate** to provide the ICM program with: 1) an institutional arrangement that can achieve all the necessary dimensions of integration, 2) a set of clear, measurable and non-conflicting objectives to resolve the motivating issues, and 3) the necessary powers and budget to resolve the motivating issues. *

- ♦ **The ICM institutional arrangements and resources are not adequate** to break through empire-building and competitive strategies by sectors of government and their supporting stakeholders who perceive that ICM threatens their vested interests. *
- ♦ **Weak cross-sectoral institutional arrangements.**
- ♦ **Over-reliance on the command-and-control approach for program implementation.**
- ♦ **Planning is fragmented into arbitrarily-politically established geographic areas,** especially without adequate regard to the boundaries and dynamics of environmental systems (e.g. watersheds).
- ♦ **Inadequate annual budget.** The government's annual budget making process provides the ICM effort with funds that are far lower than requested in order to adequately prepare and/or implement the effort.

Distribution and access to power

- ♦ **Pro-development institutions have far greater access to decision-makers and policy-makers than do pro-conservation groups and institutions.**
- ♦ **Pro-development institutions usually dominate over pro-conservation institutions in public fora** since they can afford to pay staff and hire experts to continually represent their interests at public and private meetings. *
- ♦ **Laws to protect private property rights constrain planning and implementation options.**
- ♦ **Laws, procedures, and costs deter public interest groups from taking actions to enforce environmental protection and quality laws.**

8.2. Additional challenges that commonly occur in developing nations and newly industrialized nations.

Demographics

- ♦ **The nation's governance capacity is severely constrained by many and often deep divisions among its population** (e.g. race, religion, ethnic group, linguistic group, socio-economic class, or desire for regional autonomy). *
- ♦ **Basic human survival needs (e.g. adequate food, adequate shelter) for the most impoverished populations often preclude almost any attempts to conserve coastal resources and protect coastal environments.** Furthermore the impoverished classes (particularly squatters) often can find space to build their "shelters" only in hazard prone areas (e.g. steep hillsides prone to landslides, river flood plains, or immediate shoreland areas that are periodically swept clean by ocean born storms).

- ◆ **Increases in population among the lowest income groups nullify socioeconomic and environmental gains achieved by planning, management and development improvements.**

The culture of decision-making and the implementation of decisions

- ◆ **The governance is dominated by a relative small group of elites who control the majority of the nation's capital and productive land. ***
- ◆ **The governance is characterized by a closed culture of decision-making by the elites who actively discourage open and transparent decision-making. ***
- ◆ **Absence of a free press as well as access to "public" information. ***
- ◆ **High illiteracy rates limit public understanding of, and involvement in, governance. ***
- ◆ **Relatively little decentralization of power to lower levels of governance**, particularly the local communities and/or resource users, who usually ultimately determine the success or failure of sustainable development efforts. *
- ◆ **Many or most governing elites are concerned with maximizing short-term profits and not with the benefits that will accrue from resources conservation over the long term. ***
- ◆ **Environmental issues are a low priority among the governing elite compared to all development opportunities that will increase their family's wealth and power.**
- ◆ **Many forms of corruption strongly influence all aspects of governance, particularly decisions made in "the public interest."** Government service is seen mainly as an opportunity to gain wealth and power. *
- ◆ **Little or no tradition with establishing and sustaining democratic institutions** (such as public participation arrangements) and practices (e.g. public hearings) that may threaten the status quo. *
- ◆ **Small and relatively weak or no non-governmental organizations for conservation and sustainable development** since they have -- or will -- threaten the status quo. Furthermore, it is against the law in many "peoples democratic" nations to establish any type of NGO that is only within the nation. Usually in such nations, international NGOs -- such as IUCN and WWF -- are allowed to have project offices but not to form or support a semi-autonomous constituency organization within the nation. Obviously in nations where either: 1) NGO's are closely monitored so that they do not openly demonstrate or speak out against the initiation of programs or projects that will have evident and significant adverse environmental, socioeconomic, and equity impacts or 2) autonomous or semi-autonomous NGO can not be formed, it is difficult, if not impossible, to form a large and broad based constituency for natural resources conservation and the protection of naturally functioning ecosystems, as well as sustainable development.

- ◆ **Lax enforcement of and compliance with laws and regulations, particularly those that adversely affect elites. ***

Institutional capacity

- ◆ **Government institutions responsible for environmental quality and natural resources conservation were largely created at the behest of one or more members of the international assistance community.** These national or sub-national institutions are relatively weak and powerless compared to the much older, well staffed, and politically well-entrenched units of government that advocate development which will benefit their own bureaucratic self-interests as well as the elites and the status quo. *
- ◆ **Weak or no cross-sectoral institutional arrangements, and therefore no successful analogs or capability building in cross-sectoral integration.**
- ◆ **Difficulty in hiring competent in-country staff because of low pay and poor working conditions.** Individuals with needed skills and education go abroad for education and experience and usually stay abroad ("brain drain"). *
- ◆ **Difficulty in hiring competent and skilled in-country program managers** (low wages and/or inadequate education/training).
- ◆ **Over-reliance on the skills and inputs of foreign consultants.** The foreign assistance program does not build adequate local capacity to sustain the program when donor assistance is decreased or withdrawn -- and the foreign consultants leave the country.
- ◆ **Lack of appropriate technology required for planning, management, monitoring and evaluation** (e.g., GIS, equipment and laboratory for water quality and pollution assessment) and/or staff capable of using it and/or maintaining it. *

Information base

- ◆ **Land tenure is difficult to establish, survey and map.**
- ◆ **Absence of basic valid information needed for planning and management** (e.g. topographic contour maps, or appropriate, valid water quality and pollution data, or demographic data).

The list of challenges in developing nations provides a very clear demonstration of why ICM efforts usually spend considerable time and resources on building institutional and professional capacity. In many programs the resources expended on resolving the issues that motivated program initiation are drained away for capacity building activities. Capacity building takes time, particularly if it is community-based. Capacity building usually requires a long term involvement of ICM practitioners with the local coastal stakeholders so that: 1) they "own" the ICM planning and management arrangement since it was built on community consensus and, 2) they have a very good understanding why their local ICM plan is in their families' and communities' best long term interests.

The list of challenges also explains why there are so few -- if any -- successful ICM self-sustaining efforts in developing nations, particularly after international assistance is phased down or terminated.

One true test of the worth of an ICM effort is the willingness of government units (national, state/provincial, regional, and/or local) to fund the program if and when external assistance funds are phased out.

Almost all public policy programs make compelling arguments about how a significant increase in budget would result in an effective and efficient achievement in program objectives. Compared to national and international budgets for many worthy objects such as family planning or city and regional planning, the ICM program usually has a comparatively small budget (when measured at either the national or international level). There are a number of reasons for ICM's budget despair.

The ICM community has not made a compelling socioeconomic case for its needs to individuals and organizations that control or strongly influence the funding of the ICM program.¹

The ICM community has not developed a performance assessment process and system that can place the program in a higher standing than competing programs. There has been a general reluctance to constructively work with the private sector to produce joint gains in sustainable development projects and programs. At a national or a sub-national level, it is usually difficult -- and often nearly impossible -- to organize and maintain a large and multi-interest influential support constituency for ICM.

Salt water is not a glue that can join all the stakeholders that have a vested interest in coastal resources and environments. It will always be a challenge to find a common ground between stakeholders with vested interests in the non-sustainable development and exploitation sectors (e.g. ports, oil and gas, intensive tourism, mariculture, large scale commercial fisheries, and hazard protection works) and pro-conservation stakeholders that promote sustainable development and protected areas. Furthermore, within most of the coastal-oriented sectors there are deep conflicts such as among different types of fishing operations, between industrial and artisanal fisheries, between commercial fishing and sport fishing, between "hard" and "soft" approaches to coastal erosion and/or flood control, among different types of coastal tourism, and between uses allowed in protected areas. Coastal waters and shorelands are, in fact, ideal incubators for breeding conflicts among stakeholders. Salt water is, in fact, a solvent.

8.3. ICZM is not appropriate for many nations or states

One or more politically compelling, environmental or socioeconomic conditions are needed in a nation or sub-national unit as a precondition for initiating and preparing an ICM effort. In many coastal nations or sub-national units, an ICM effort would not be a prudent investment in resources because of the absence of the socioeconomic conditions that are needed to justify the considerable costs and long time period required to prepare and implement an ICM program.² A coastal nation or sub-national unit should not prepare an ICM program if one or more of the following factors does not have a strong influence on its economy and culture:

- ◆ Coastal dependent fisheries and fishers,
- ◆ Mariculture or mariculture development potential,

- ◆ Coastal tourism (international) and recreation, and/or the potential for international coastal tourism,
- ◆ Mangrove forestry,
- ◆ Coastal environments (e.g. wetlands, estuaries or coral systems) of international importance (such a important habitats for migratory birds, rare and endangered species, and areas of exceptional biodiversity) and,
- ◆ Coastal hazards.

Of course, the compelling socioeconomic and political importance of CZM to a nation or sub-national unit increases both with the number of factors and the relative political and socioeconomic importance of each factor.

In a number of developing nations, political, social, and economic conditions (such as civil strife/war or pandemic corruption) reduce the governance capacity far below the minimum level necessary for ICM.

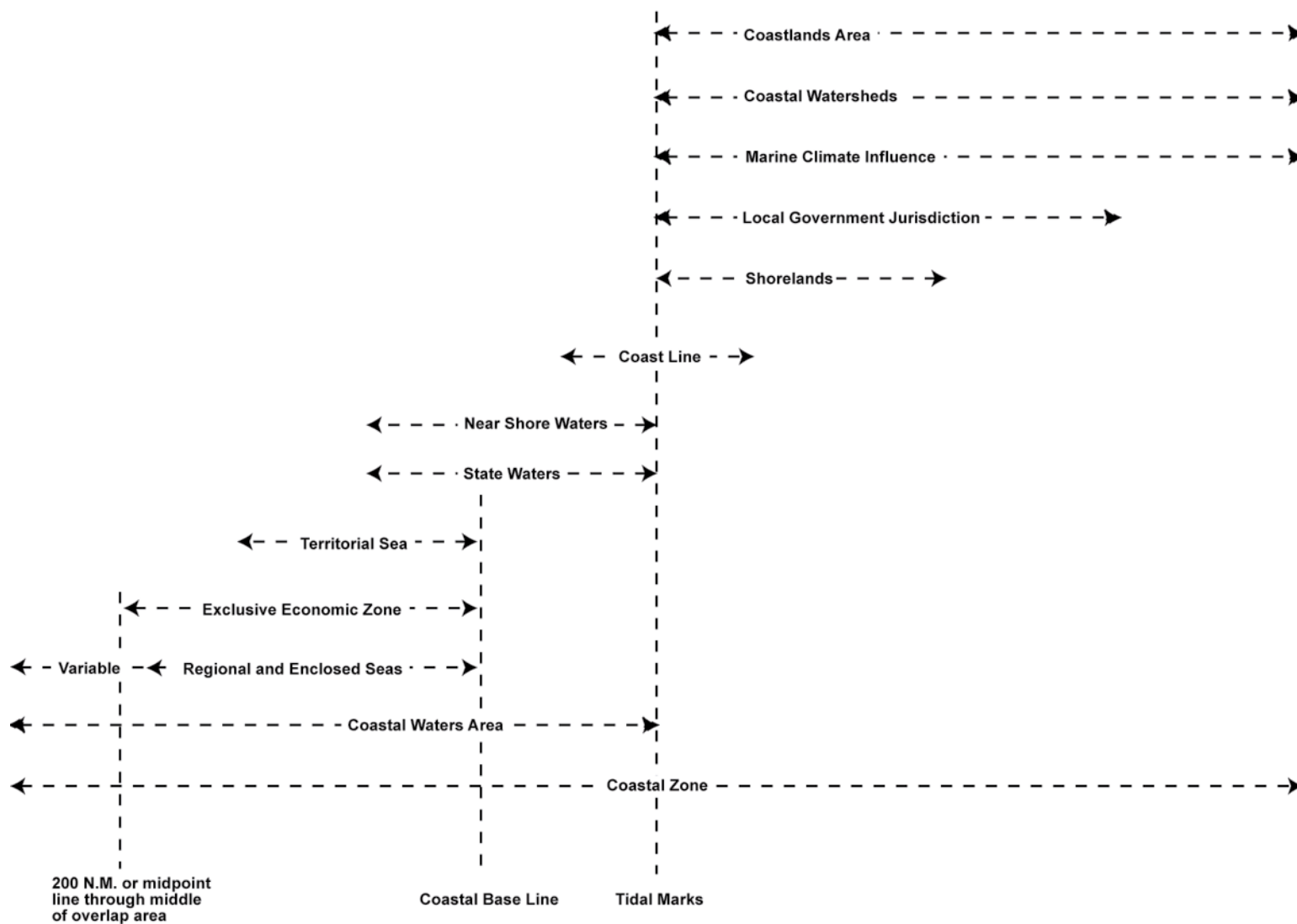
In most nations or sub-national units, ICM requires democratic institutions for the successful preparation and implementation of a program, particularly if it is to be largely sustained by the nation and/or sub-national unit(s) with their own resources when international donor support is significantly reduced or terminated. Democratic institutions are also required if the program is going to use community-based management as an approach for the preparation and implementation of plans, policies, and programs.

Endnotes

¹ . In the final – or next edition – there will be a graphic on the socioeconomic benefits of ICZM.

² . This point will be connected with the information noted in the endnote above.

Figure A-1: Relationship between types of coastal areas and a coastal zone



ANNEX C: Introduction to the four Tables on ICM efforts

What has been included as an ICM effort.

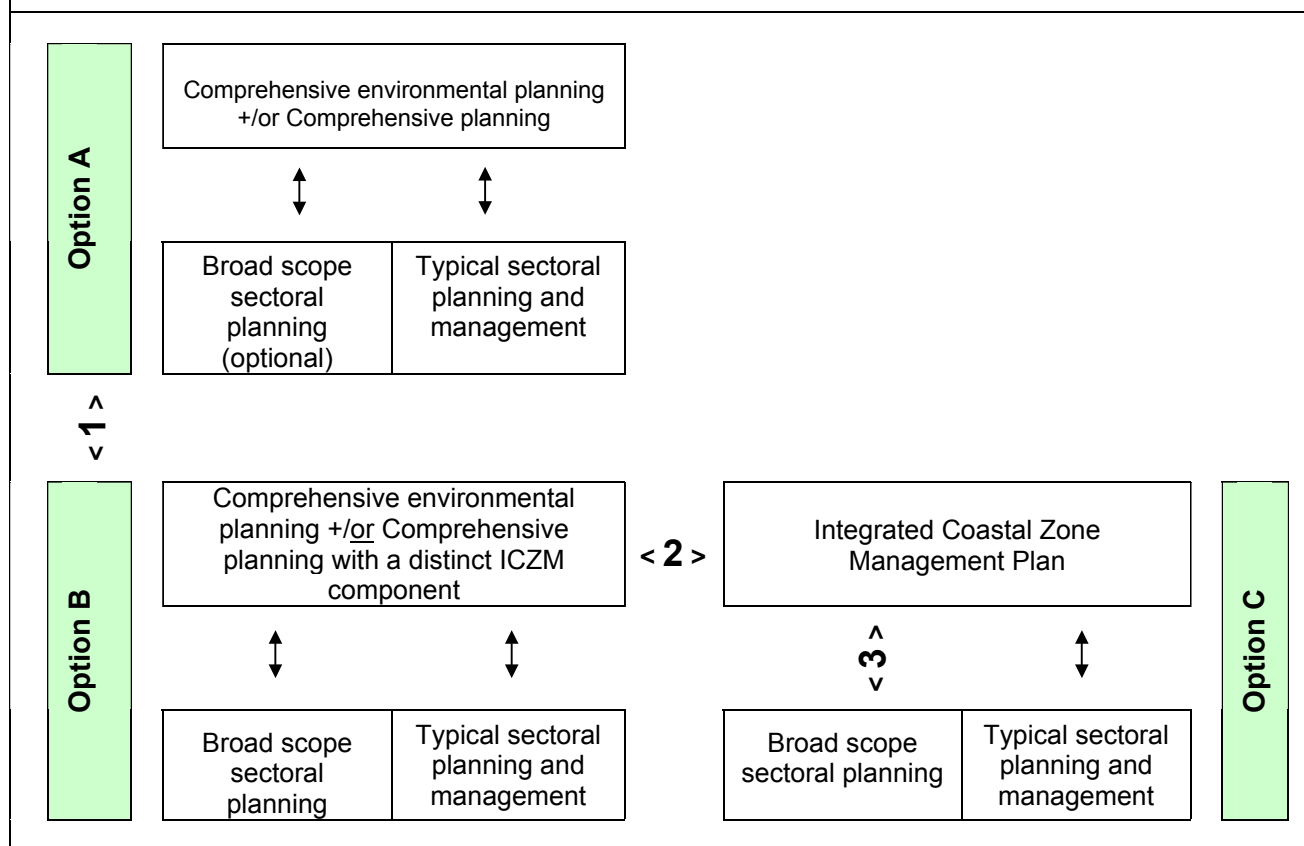
The four Tables now include any effort with a title (and, to a large extent description of variable length) that indicates the focus was – is -- or will be (i.e. in the pipeline) -- an integrated coastal and/or ocean management/planning project or program or extensive inquiry/study or recently enacted law.¹ These then, are self-proclaimed efforts, and consequently a number of them may prove to be just wishful thinking, empty promises, or paper exercises. However, making lists of efforts recorded in the literature and/or websites is the only way to start building a database. Entries with a question mark were not included in the total count of ICM efforts or the total count of coastal nations². Each effort with a question mark will be contacted to establish their existence and status. The great majority of the 698 listings in the Tables are real efforts, not just a name since they are well known projects or programs that are connected with a well-recognized institution(s).

Section 3 mentions the continual (and inherent) challenge of distinguishing an ICM effort from both broad scope sectoral planning/management and comprehensive environmental planning/management. Actually, as depicted by Figure C.1, the determination out what is -- and what is not -- an ICM effort usually requires deciding what options a nation or sub-national government have selected to resolve the motivating issues. Figure C.1 depicts the three most common options. The selection of the letters A, B, and C to distinguish among the three options has no meaning either in respect to priority or to relative frequency.

Option A. Comprehensive environmental planning program (such as a National Environmental Action Plan) or Comprehensive Planning (in general) with environmental planning as an integrated component. Common examples are Town and Country Planning in the U.K and most of the British Commonwealth nations and SSSs). At the present time, Table C-1 does usually does not include efforts in which ICM has been totally, or almost totally subsumed into a nation-wide, state-wide, or sub-state comprehensive planning/management program. In Figure C.1, this is Option A. It appears to be the most common option employed by small island nations or state to resolve coastal issues.³ This arrangement is common used for “coastal” planning and management on small island nations and states since it is difficult, if not impossible, to set an inland boundary for the coastal zone. As pointed out in Section 3, small island nations or states are essential a coastal zone that has been wrapped around the island’s entire terrestrial lands and coastal waters.

With the exception of a number of is small island nations or SSSs, Tables C-1, C-2 and C-3, in this First Iteration, do not include comprehensive general planning /management or comprehensive environmental planning programs. There are many continental coastal locations such as the Cape Cod Commission and the Cape Cod Plan or the Long Island Regional Planning Authority and various land use and zoning plans that address coastal management issues. With the exception of islands nations or states – perhaps coastal nations with a relative short coastline -- It is conjectural whether comprehensive general planning and management efforts – even if they “effectively address and resolve all significant coastal issues -- a will be inputted into either Iteration Two or the Interactive Online Database of ICM Efforts.

Figure C.1: The distinction among ICZM planning and management approaches.



The inclusion of Option A programs -- particularly General Comprehensive Plans and Programs -- is function of additional resources needed to cover the considerable amount of time to identify such efforts because of both their vast number and determining the extent to which each effort has -- or does not have -- policies, plans and powers to adequately address and effectively resolve all the significant coastal management issues that occur within unit of government's area of jurisdiction.

Option B. Comprehensive environmental planning program (such as a National Environmental Action Plan) or Comprehensive Planning with ICM as a distinct component. A well-known example of this option is the coastal counties in the U.K (e.g. Cornwall, Devon, Dorset, Durham, Essex and Kent) that have created an ICM component within the context of the County's (and their respective local coastal Councils) Town and Country Planning and Management Program (as mandated by national law). The State of Oregon (in the USA) has a state-wide law that requires all local governments to prepare and implement a land use plan its associated zoning ordinances. The local land use plans and zoning ordinances are prepared and implemented according to the State's specific objectives and policies. The city and county governments on Oregon's coastal zone have an additional set of policies to follow and specific objectives to achieve. The Oregon approach is one of the three

specific means provided in the U.S. Coastal Zone Management Act of 1972 for states or territories may use implement their CZM program.

The Second Iteration's database of ICM efforts will include more national environmental planning/management programs that include ICM as an integral but **distinctive** component. Particular attention will be devoted out identify Option B efforts in small islands nations and states.

Option C. A separate (or stand-alone) ICZM Program or Project. In this option the ICM effort is not a distinct component of a comprehensive environmental planning and management program or subsumed into a general comprehensive planning and management program. If the nation or state has either a comprehensive general and/or environmental planning/management program does exist, it is imperative that the ICM/ICZM program or project is integrated with it (as the word, Integrated Coastal Management, obviously implies).

Some notable examples of this arrangement around the world are; Canada's Atlantic Coastal Action Program and the 14 "local" Management Programs or Projects, the California Coastal Commission and the Coastal Management Program, the Costa Rican Institute of Tourism and the Planning and Management of the Marine and Terrestrial Zone (as required by law), Sri Lanka's Department of Coastal Conservation and the National Coastal Zone Management Program (created by law in 1976), the Great Barrier Reef Marine Park Authority and the Strategic Plan and Zoning of the Great Barrier Reef, and in the Federated States of Micronesia, the Pohnpei State Environmental Protection Agency and the Pohnpei Coastal Resources Management Plan.

Making distinction between Options A and B and between Options B and C.

Tables C-1, C-2, and C-3 have not been reviewed, yet, in order to count how many of the 622 national or sub-national ICM efforts are an Option B or an Option C arrangement. For many -- if not most -- of the listings in the Tables, however, it will be no be possible -- at this time -- to make such a distinction. The type of institutional arrangement(s) a nation or state has for ICM planning and management will be determined in the survey stage of developing the interactive database of ICM efforts (as outlined in Section 3).

Figure C-1 indicates that a decision is needed at points 1 and 2 to determine whether the ICM effort is an Option A, B, or C, approach. Distinction 1 between Options A and B has been -- and should be -- relatively easy to make. Either there is a separate section (containing objectives, policies, and the specific means [such as land use plans and zoning] to resolve the significant coastal issues confronting the governance system) within the general comprehensive planning/management effort and/or the comprehensive environmental planning/management effort, or there is not.

Making the distinction (indicated by number 2) between whether an ICM effort is Option B or C is, generally, an easy decision. An Option C, the separate integrated coastal zone management effort usually has all -- or most -- of the following set of distinguishing components.

- A law or specific decree (usually from the executive head of the government [e.g. president, prime minister, king] or a specific mandate from the government's legislature, or a combination of both, that is specific to the initiation, preparation and implementation of an ICZM plan or program,

- The law or decree specifies the governance arrangement (particularly the lead institution) which has the specific responsibility for initiating, preparing, and implementing the coastal zone management plan and/or program,
- A set of goals and objectives that coastal zone management plan and/or program should achieve,
- A jurisdiction area for planning (usually the landward and oceanward boundaries of the coastal zone),
- Regulatory powers (usually on an interim basis) to control proposed development in the coastal zone or jurisdictional area,
- A deadline, or series of deadlines, for the completion of the plan or program for review and a decision by the executive head of government and/or its legislature to act upon its adoption, rejection, or recommendations for revisions in order to produce a program and or/plan that could or might be adopted, and,
- A budget for at least the initiation, preparation and of the program and/or plan. In developing nations and SSSs the total budget or the majority of the budget is provided by one or more multilateral and bilateral international assistance institutions, (e.g. the Global Environmental Facility, the World Bank, Asia Development Bank, UNDP, USAID, SIDA, ODA, or DANIDA).

Typical sectoral planning/management vs. broad scope sectoral planning and management.

The most difficult distinction and decision to make is not the characterization an ICM effort as one of the three options. The most difficult distinction and decision to make is what is an ICM effort (particularly Option A or B) and what is a broad scope sectoral planning and management effort. Figure C-1 illustrates that both sectoral planning/management (as “typically” practiced – or “typical sectoral planning/management”) and broad-scope sectoral planning/management can be inputs into all three options. Broad-scope sectoral planning/management often does not occur in Option A. By contrast, broad scope sectoral planning should occur -- to the extent possible -- in Options B and C.

Making the distinction between what is an ICM effort and what is a broad scope sectoral planning and management effort for a coastal related sector (such as coastal and marine protected areas, fisheries, point and non-point coastal pollution, coastal tourism and recreation, or coastal hazards) will always be major challenge. Sectoral planning/management efforts are increasingly being done as a broad-scope (or enhanced) program or project.⁴ For example, many plans and management arrangements for coastal or marine protected areas are multi-sector efforts (such as a combination of bio-diversity, fishing, and eco-tourism) and should be included (and are included) as an ICM listing in the Tables and the database.⁵ Furthermore, practitioners involved in broad-scope planning and management of coastal related sectors should be included in ICM information exchange networks since much -- if not most -- of their information needs and/or their information resources are directly pertinent to practitioners operating in "recognized" ICM programs. Once again, the primary purpose of a online, interactive database of ICM efforts is international information exchange, not monitoring the

number or dynamics of ICM efforts, an important -- but secondary -- benefit.⁶ Given this primary purpose, for those coastal nations or SSSs for which even one definite ICM effort could not be verified (in other words there would be no effort listed for the nation or the SSS), the policy was, to the extent possible, to identify either a comprehensive general planning and management program or a comprehensive environmental planning and management program that may have either subsumed the ICM approach or included as a defined component. This policy at least provides a contact point to the nation or the SSS to determine in Iteration Two if a bona-fide ICM effort exists, has occurred, or is in the pipeline.

The manageability of the proposed online interactive database is the main reason why broad scope planning of coastal related sectors is not included in the Tables. Imagine how large the database would become if all the broad scope planning and management efforts for coastal related sectors were added. The solution to maintaining information exchange among ICM practitioners and practitioners in the planning and management of coastal related sectors is linkages to separate databases. For example, there is a plan to construct an international database of all marine protected areas.⁷ Every major coastal related sector (or specialization) has developed its own international information exchange networks, including databases. This organizing framework of coastal topic areas is described in Section 10.

Inclusion of landlocked nations.

Table C-1 includes ten nations that are considered landlocked.⁸ In the practice of ICM, however, the concept of landlocked nations or states has limited relevance. The inclusion of the five Great Lakes states -- with only coastal frontage on one or more of the five Great Lakes -- in the USCZM Program has demonstrated that there are relatively few differences between ICM programs for very large lakes (particularly international lakes) and marine coasts. Most of the issues are the same, and consequently there is a great similarity in planning and management approaches, techniques, and institutional arrangements.⁹

Inclusion and the exclusion of nations and semi-sovereign states that appear not have any ICM efforts at the national and/or sub-national levels.

At the present time, Table C-1 includes 45 nations and semi-sovereign states that do not appear to have one or more ICM efforts or have only one or more listings that are questionable (as indicated by a question mark). As previously mentioned the efforts in italics and with a question mark are not included in Table 3.1's summary counts. The inclusion of these 45 nations and semi-sovereign states in Table C-1 was done to alert reviewers of information gaps. In other words, these nations or SSSs either have an ICM effort now (which was not detected by the extensive search) or could be expected to have within the near future an ICM effort or a national environmental planning program with an ICM component. By contrast, the 14 nations and semi-sovereign states listed at the end of Table C-1 are not expected to engage in ICM in the near future. There are three reasons for this exclusion expectation: 1) the nation's or semi-sovereign state's turbulent political and socio-economic conditions (e.g. no capacity to engage in ICM or any other form of integrated planning and management), 2) the absence of a compelling coastal issue that would motivate the initiation of a program or, 3) a combination of 1 and 2.

Sources

Many of the listings in Table C-1 derive from the 1993 Roster. In addition, between 150 and 200 web sites were reviewed and many of the listings came from these sources.¹⁰ Using the google.com search engine also was a very effective and efficient means for identifying a specific effort in a nation or an SSS, as well as a specific effort in a particular enclosed coastal water body or land-locked sea or lake of international significance. The Second Iteration of ICM efforts will provide a listing of the most informative web sites for identifying and following efforts. It was expected that the web sites of international institutions, which provide assistance to ICM programs and projects would be a good source of information on ICM efforts.¹¹ To date, this has not been the case. A number of colleagues recommended the national reports to the Sustainable Development Commission be reviewed to identify ICM efforts.¹² The information in Table C-3 was mainly derived from NOAA and EPA web sites and associated links.

Additional points

The total budget for the Baseline 2000 project could easily have been expended on a further identification of ICM efforts at the national and sub-national levels and the preparation of an interactive database.

Efforts that have terminated or been transformed from an ICM effort to something else between 1993 and 2000 will also be included in Table C-1. The comparison between the efforts listed in the 1993 Roster and Table C-1 indicates that at this time approximately 17 efforts either were terminated or were incorporated into other programs -- such as NEAPs. We need to know what becomes of ICM efforts over time, and more importantly the reasons, why there are demises and transformations -- if we are going to decrease the high percentage of failures associated with program adoption and/or implementation.

Endnotes

¹ The laws, decrees, and executive orders -- as well as ICM initiatives by international assistance institutions, with or without official standing provided by national laws, decrees, or executive orders -- have generated at least four types of ICM efforts.

- Nation-wide or state-wide studies to determine if the government should initiate an ICM program or modify one or existing programs in order to resolve apparent coastal issues that are of national and state-wide significance. Such studies take many months or a year or more and conclude with findings and recommendations. They usually include an action plan and an associated set of policies. Notable examples are studies and inquiries done in Australia (as well as number of Australian States), Ireland, South Africa, and the United Kingdom. Tables C-1, C-2, and C-3 will be reviewed to determine how many of these studies have resulted in: 1) Initiation of a full scale ICM program, or 2) Feasibility or case studies, or 3) Pilot, demonstration areas, or learning areas, or 4) Recommendations that an ICM program is not justified and the coastal management issues should be resolved by modifications of existing government programs, policies, laws, or regulations. In the Second Iteration, a figure and explanation will be added on the typical evolution of ICM from the initial awareness stage in a nation or SSS through to implementation and evaluation stage (or the decision at the initiation stage or early stages of preparation [such as pilot or feasibility studies that ICM is an inappropriate]). The figure now appears in Institutional Arrangements for the Planning and Management of Coastal Resources and Environments (Sorensen and McCreary, 1990)].

-
- Feasibility studies, and case studies were done for Buenos Aires Province, Colombia's Caribbean coast, and the ASEAN pilot projects in Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand.
 - Pilot areas, demonstration areas, learning areas. A large percentage of ICM efforts in the 1993 Roster as well as Tables C-1 and C-2 are this type. By definition, these types of efforts were not undertaken with the primary purpose of **adopting** and **implementing** a set of policies (such as an action plan) to ultimately resolve, at a statewide or nation-wide scale, the coastal issues that motivated the ICM initiative. The concept is that pilot, demonstration, or learning areas are a necessary prelude (testing of the waters) to the initiation of a full-scale national or sub-national ICM program. It appears, however, that many -- if not most -- pilot studies, demonstration areas, or learning areas have remained within their original geographic boundaries. Many have failed and ceased to exist -- at least as an ICM effort. More have become local or small substate, full-scale ICM programs by evolving into the adoption and implementation phases. Concomitantly, almost all -- or all -- of these local or sub-state efforts that have evolved into their own ICM programs have not been "scaled-up" to a statewide or nation-wide program. And as stated, the scaling-up to a nation-wide or statewide ICM program was one of the primary reasons for initiating ICM in the pilot, demonstration, or learning areas. The apparent reasons for the scaling-up problem are discussed in Section 8, Common Challenges to ICM.
 - Programs are established to follow the full policy formulation, adoption and implementation cycle. A law or an executive order initiated the great majority of these "full-scale" programs.

In many cases, it is difficult to determine whether: 1) An ICM effort is either a national or state wide study or a feasibility or case study, or 2) An ICM effort is either a feasibility or case study or a pilot study, a demonstration area, or a learning area. In other words, these three types of ICM efforts are clusters on a spectrum.

² If the coastal nation or semi-sovereign state only has ICM efforts with question marks.

³ Five French Overseas Departments (i.e. states) are also included in Table 1 (French Guinea, Guadeloupe, Martinique, New Caledonia, Reunion). They were included because of their island situation and overseas status, and as such, could engage in their own ICM effort apart from what is being done in continental France.

⁴ Broad scope (or enhanced) sectoral planning considers the actual and potential environmental and socio-economic impacts from other sectors as well as the environmental and socio-economic impacts it may generate on other sectors and interests. Broad scope sectoral planning and management was learned the hard and costly way over the last three decades: a multitude of experiences from countless, costly and largely avoidable adverse socioeconomic and environmental impacts generated by "traditional" (often characterized as tunnel-visioned or myopic) sectoral planning and management.

⁵ For example, three marine sanctuaries (i.e. marine protected areas) in the United States are included in Table C-3: Florida Keys National Marine Sanctuary, Monterey Bay Marine Sanctuary, and Olympic Peninsula Marine Sanctuary. These were included for two reasons: 1) They are all large and border many kilometers of coastline (the Florida Keys National Marine Sanctuary also surrounds hundreds of large and small islands [keys]) and 2) the set goals and objectives for each of these Sanctuaries can not be achieved without the integration of a number of broad scope sectoral planning and management efforts -- such as the control of land based pollution, the planning and management of multiple types of fisheries, [both commercial and sport], the planning and management of recreation activities in marine and coastal waters [that often conflict with one another], and the control and protection of scientific research reserves in both marine and coastal waters.

⁶ The objectives for constructing a global database of ICM efforts include:

- Determining what have been the various approaches taken to the integrated planning and management of coastal resources and environments. Are there distinctly different types of efforts (approaches), and if so, what are their comparative advantages and disadvantages? What works, what does not work and why?
- Learning from experience in respect to: 1) identification and analysis of motivating issues, 2) common planning and management approaches for addressing an issue, 3) common techniques (e.g. GIS, impact assessment, land use plans/zoning), 4) common institutional arrangements (centralized v. networked, advisory v. mandatory/regulatory), 5) inter-governmental units and common challenges associated with each step of the program cycle (e.g. getting on and remaining on the agenda, constituency building and maintenance, 6)

monitoring and assessing achievement, and 7) sustainability as direct foreign aid diminishes. Why have a large number of ICM efforts not been implemented or inadequately implemented?

- Linking all jurisdictions at all levels of governance that share a common coastal system (e.g. drainage basins of estuaries and bays, migratory bird flyways, trans-boundary fishery stocks and migration routes, large scale marine ecosystems (currents and/or enclosed coastal seas), littoral drift cells, and coastal aquifers.
- Determining trends in the global practice of ICM. It is clearly growing, as well as diversifying, and the rate of expansion is different among global regions. Since 1993, there has been a rapid expansion in Africa (particularly East and Southeast) and in Europe (particularly as a function of the EU ICZM Demonstration Programmes).

Identifying and inter-connecting ICM efforts directed at the same type of ecosystem, such as: estuaries/lagoons/bays and their associated watershed areas, coral reef systems, small island states, modified mega-deltas, enclosed coastal seas, and large scale marine currents.

⁷ At the present time a number of national and international government and non-government organizations with a coastal/marine orientation have joined together to produce an online, interactive database on all "officially declared" marine protected areas around the world.

⁸ Azerbaijan, Bolivia, Kazakhstan, Switzerland, Turkmenistan, Uganda, and Uzbekistan. A future iteration in the development of the database will include a table that depicts the following distinctions: sovereign marine coastal nations, semi-sovereign marine coastal states, coastal marine states (French Overseas Departments), and sovereign coastal nations on landlocked seas or international lakes.

⁹ Large lakes and totally enclosed seas (Caspian and Aral Seas) do have a number of particular issues -- such as rising and falling lake levels and impacts of introduced species. An information exchange network of ICM for international lakes should be developed if one does not exist.

¹⁰ Most of these web sites are on; www.coastalmanagement.com/icm.xls/. The site lists seventy-four web sites associated with ICM.

¹¹ For example, a few months ago the World Bank prepared a database of 204 ICM efforts (both direct and indirect [generally, indirect ICM efforts are broad scope sectoral plans/programs that are intended to produce multiple benefits for the sustainable development of coastal resources and environments and/or minimize the costs associated with coastal hazards.

¹² One hundred and twenty nations submitted reports to the UN Commission on Sustainable Development. Every report was to contain a section on oceans and coasts. Understandably, the eighteen non-coastal nations in the UN either submitted nothing in respect to ocean or coasts or less than half page (essentially a list of ocean related international agreements to which they are a signatory). The median length of a report's ocean and coast section is three pages. The U.S. section is only two pages. Many nations with well-recognized national ICM programs failed to mention the effort in their report. Only 15 of the national reports mentioned an ICM effort, and with one exception, it was only a national-level effort. For example, the Australia report is mute on ICM efforts in the six states and the Northern Territory. Tables C-1, C-2, and C-3 -- as well as Table 3.1 -- demonstrate that most ICM efforts are at the sub-national level.

Table C-1: ICM Efforts at National and Sub-National Levels
(except Canada and the U.S.A.) First iteration. February 28, 2002

Nation, Semi-sovereign state, Territory or State	Name of Effort	Address and Contacts	Sources and Comments
ALBANIA			
Nation-wide	Coastal Area Management Program for the Albania Coast	<p align="center"><i>Is this still correct?</i> Kraj sv. Ivana 11, HR - 21000 Split, Croatia Ph: 385 21 343 499, +385 21 591 171, Fax: 361 677 http://pap.-thecoastcentre.org/activities.html</p>	UNEP MAP, PAP/RAC PAP w/s 1/02
ALDERNEY ISLAND (Self-governing & U.K.responsible for foreign affairs & national defense)			
ALGERIA			
Nation-wide?	Coastal Area Management Program for the Algerian Coastal Zone	<p align="center">Ministry of Physical Planning and Environment <i>What are the local contact points and person?</i> http://pap.-thecoastcentre.org/activities.html</p>	UNEP MAP, PAP/RAC PAP w/s 1/02
ANDAMAN and NICOBAR ISLANDS (India Union Territory)			
Andaman and Nicobar Islands	Management of Coral Reef Ecosystems of Andaman and Nicobar Islands	<i>Need name of contact person, address and contact points.</i>	GEF w/s 1/02 Biodiversity
ANGOLA			
Benguela Current	Integrated Management of the Benguela Current Large Marine Ecosystem	See Table C-4: International ICM Efforts	
ANGUILLA (Overseas territory of the U.K.)			
	<i>Coastal Management Project (1996)?</i>	<i>Need name of contact person, address and contact points.</i>	Funding by UK (BDDC)

ANTIGUA and BARBUDA			
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean		GEF/UNEP/UNDP funding GEF w/s 1/02
ARGENTINA			
Nation-wide	Coastal Biosphere Reserves Program of Argentina	Coordinator Coordination Unit of UNESCO MAB Program of Argentina. Secretaria de Política Ambiental y Desarrollo Sustentable, San Martin 459, 4th Floor, 1004 Buenos Aires, Argentina. Ph: 54 11 4348 8399. areca@medioambiente.gov.ar	Source: Aldo Brandani
Nation-wide	Maritime Management Project (Southeast South American Shelf Large Marine Ecosystem - shared with Argentina and Brazil)	See Table C-4: International ICM Efforts (In the pipeline)	GEF-WB Project International Waters Source: WB ICM database 12/01
Patagonia	ICM Program for Patagonia (Patagonia II)	Program Officer UNDP. Esmeralda 130 piso 13 (1035) Buenos Aires, Argentina. Ph:+54-11-4320-8715. eduardo.rodriguez@undp.org.ar	GEF-WB Project Biodiversity GEF database 1/02
Estuary of the Rio de la Plata	Strategic Action Plan for the Rio Plata and its Maritime Front, (In conjunction with Uruguay)	See Table C-4: International ICM Efforts	
ARUBA (Self-governing island, Netherlands responsible for defense and foreign affairs)			
AUSTRALIA			
Nation-wide	Australia Coasts and Clean Seas Program (ACCSP)	Coastal Strategy Section, Environment Australia GPO 787, Canberra, ACT 2601 Australia Ph: 61 2 6274-1111, Fax: 6272-1123, www.environment.gov.au/marine/coast_clean_seas/main.html	ACCSP w/s 7/01
Nation-wide	Australia's Ocean Policy and National Coastal and Marine Planning Program (CMPP) (Enacted by law in 1999)	The Director. National Oceans Office GPO Box 2139, Hobart, Tasmania 7000 Ph: 61 (0)3 6221 5000, fax: 6221 5050, office@oceans.gov.au www.oceans.gov.au/home/jsp	Australia CMPP w/s 1/02 also CSD Report 2/99
Great Barrier Reef	The 25 Year Strategic Plan for the Great Barrier Reef World Heritage Area (1994)	Great Barrier Reef Marine Park Authority PO Box, 1379 Townsville, Queensland 4810 Australia Ph: 61 7 4750-0700, Fax: 4772-6093, http://www.gbrrmpa.gov.au	
New South Wales	New South Wales Coastal Policy (1997)	Executive Officer NSW Coastal Council julie.conlon@duap.nsw.gov.au / www.coastalcouncil.nsw.gov.au	

Bass Point (New South Wales)	Bass Point Regional Aboriginal Heritage and Marine Reserve Management Plan (Coastal and Marine Planning Program)	Coordinator Shellharbour City Council Ph: 61 (0)2 422-6140, philcock@shellharbor.nsw.gov.au	Australia CMPP w/s 1/02
Bega area (New South Wales)	Bega Valley Shire Coastal Planning and Management Strategy (Coastal and Marine Planning Program)	Coordinator Bega Valley Shire Council Ph: 61 (0)2 6499-2148, council@begavalley.nsw.gov.au	Australia CMPP w/s 1/02
Botany Bay (New South Wales)	Framework for Integrated Planning of Botany Bay Catchment (Coastal and Marine Planning Program)	Coordinator South Sydney Regional Organization of Councils 61 (0)2 9317 2811, mg@ssroc.nsw.gov.au	Australia CMPP w/s 1/02
Byron Bay (New South Wales)	Byron Coastline Management Plan Sustainable Use and Repair (Coastal and Marine Planning Program)	Coordinator Byron Shire Council Ph: 61 (0)2 6626 7033, Alex.Caras@byron.nsw.gov.au	Australia CMPP w/s 1/02
Eurobodalla Shire (New South Wales)	Eurobodalla Coastal Environment Capacity Planning - Coastal Open Space Planning (Coastal and Marine Planning Program)	Coordinator Eurobodalla Shire Council Ph: 61 (0)2 4474-1216, Deb.Lenson@eurocoast.nsw.gov.au	Australia CMPP w/s 1/02
Manly (New South Wales)	Plan of Management for Cabbage Tree Bay (Coastal and Marine Planning Program)	Coordinator Manly Council Ph: 61 (0)2 9976 1610, melinda.lerace@manlycouncil.nsw.gov.au	Australia CMPP w/s 1/02
Nowra district (New South Wales)	Estuary/Catchment Management Planning in Lower Shoalhaven (Coastal and Marine Planning Program)	Coordinator Shoalhaven City Council Ph: 61 (0)2 4429 3133, dalmazzo@shoalhaven.nsw.gov.au	Australia CMPP w/s 1/02
Sydney Region (New South Wales)	Sydney Regional Coastal Management Strategy - Wetland Protection (Coastal and Marine Planning Program)	Coordinator Sydney Coastal Councils Group Inc. Ph: 61 (0)2 9411-8215, sccg@region.net.au	Australia CMPP w/s 1/02
Northern Territory	Northern Territory Coastal Management (1982)	Coordinator Dept. of Lands, Planning and Environment P.O. Box 30, Palmerston, NT 0831 Australia Ph: 61 8 8999-4507, Fax: 8999-4445. carolynne.yates@nt.gov.au1993	1993 Roster of ICM efforts
Darwin Harbour (Northern Territory)	Darwin Harbour - Strategic Plan for Beneficial Uses (Coastal and Marine Planning Program)	Coordinator Department of Lands, Planning, and Environment Ph: 61 (0)8 8999-4426, michael.lawton@lpe.nt.gov.au	Australia CMPP w/s 1/02
Queensland	State Coast Management Plan Regional Coastal Management Plans	Coastal Planning Unit Environmental Protection Agency PB Box 155, Brisbane Albert Street, Queensland 4002, Australia http://www.env.qld.gov.au/environment/coast/management	
Brisbane River and Moreton Bay (Queensland)	Brisbane River and Moreton Bay Study, 1998 Waterways Plan	Brisbane River Management Group Secretariat PO Box 155, Brisbane Albert Street Queensland 4002, Australia Ph: 61 7 3227-7767, Fax: 3221-0768, http://www.brmbwms.qld.gov.au	ACCSP w/s 7/01

Broadsound Shire (Queensland)	Broadsound Coastal Land Use and Infrastructure Plan (Coastal and Marine Planning Program)	Coordinator 61 (0)7 4964-5400, severnlea@bigpond.com	Australia CMPP w/s 1/02
Caboolture region (Queensland)	Deception Bay to Caloundra Bar Coastal Management and Rehabilitation Action Plan (Coastal and Marine Planning Program)	Coordinator Caboolture Shire Council Ph: 61 (0)7 5420-0234, ThomasG@caboolture.qld.gov.au	Australia CMPP w/s 1/02
Gulf of Carpentaria (Queensland)	Multiple Use Strategic Plan for the Southern Gulf of Carpentaria (Coastal and Marine Planning Program)	Coordinator Queensland Department of State Development 61 (0)7 3222-2841, pat.vidler@sd.qld.gov.au	Australia CMPP w/s 1/02
Gladstone Harbour (Queensland)	Gladstone Harbour Rehabilitation Strategy	Coordinator Environmental Protection Agency 61 (0)7 4936-0582, nadeine.milton@env.qld.gov.au	Australia CMPP w/s 1/02
Hervey Bay (Queensland)	Hervey Bay Coastal Management Plan (Coastal and Marine Planning Program)	Coordinator Hervey Bay City Council Ph: 61 (0)7 4125-0229, lecha@herveybay.qld.gov.au	Australia CMPP w/s 1/02
Karumba region (Queensland)	Karumba Coastal Management Plan (Coastal and Marine Planning Program)	Coordinator Carpentaria Shire Council 61 (0)7 4745-1166, matthewm@carpentaria.qld.gov.au	Australia CMPP w/s 1/02
Southern Moreton Bay Islands (Queensland)	Southern Moreton Bay Islands Planning Study	Joint project between the Redland Shire Council and Queensland Department of Communications, Information, Local Government, and Planning www.redland.net.au/bayislands/default.asp	
Great Australian Bight (South Australia)	Great Australian Bight 1000 - West Coast Strategy (Coastal and Marine Planning Program)	Coordinator District Council of Streaky Bay 61 (0)8 8626-1001, ellisdavid@streakybay.sa.gov.au	Australia CMPP w/s 1/02
Port Willunga (South Australia)	Port Willunga Linear Park Wetlands Concept (Coastal and Marine Planning Program)	Coordinator City of Onkaparinga Ph: 61 (0)8 8384-0792, tersut@onkaparinga.sa.gov.au	Australia CMPP w/s 1/02
South East Coast (Victoria Border to the Murray River) (South Australia)	South East Coastal Management Strategy (Coastal and Marine Planning Program)	Coordinator South East Local Government Association Ph: 61 (0)8 8723-1057, selga@seedb.seol.net.au	Australia CMPP w/s 1/02
Western Eyre Peninsula (South Australia)	Great Australia Bight 1000 - West Coast Strategy	Coordinator District Council of Streaky Bay Ph: 61 8 8626-1001	Source?

Tasmania	State Coastal Policy	Coordinator Dept. of Environment and Land Management Coastal and Marine Programme 39 Murray St., GPO 510 E, Hobart, TAS 7001 Australia vcc@nre.vic.gov.au	
D'Entrecasteaux Channel & Catchment (Tasmania)	Integrated Land and Marine Planning in the D'Entrecasteaux Channel and Catchment (Coastal and Marine Planning Program)	Coordinator Kingborough Council Ph: 61(0)3 6211-8106, G.Phillipskingborough.tas.gov.au www.tased.edu.au/tasonline/mking	Australia CMPP w/s 1/02
Derwent Estuary and immediate catchment (Tasmania)	An Integrated Environment Strategy for the Derwent Estuary and The Derwent Estuary Program - Foreshore Management Concept (Coastal and Marine Planning Program)	Coordinator Dept. of Primary Industries, Water, and the Environment GPO 44A, Hobart, Tasmania, 7001 Australia Ph: 61 (0)3 6233-6547 christc@dpiwe.tas.gov.au/ www.derwentriver.tas.gov.au	Australia CMPP w/s 1/02 ACCSP w/s 7/01
Dorset, Break O'Day and Glamorgan / Springbay Councils (North East and East Tasmania)	Implementing the Marine and Coastal Management Strategy for the North East and East Coasts of Tasmania (Coastal and Marine Planning Program)	Coordinator Break O'Day Council Ph: 61 (0)3 6376-1281, bodc@biz.net.au	Australia CMPP w/s 1/02
South East Coast (Tasmania)	South East Coast - Tasmania, Integrated Coastal Management Strategy (Coastal and Marine Planning Program)	Coordinator Sorell Council Ph: 61 (0)3 6245-8600, crowland@ccc.tas.gov.au	Australia CMPP w/s 1/02
Tamar Estuary (Tasmania)	Tamar Estuary 2000 - Implementing the Perfect Vision (Coastal and Marine Planning Program)	Coordinator West Tamar Council Ph: 61 (0)3 6336-2818, lizw@rpdcc.tas.gov.au	Australia CMPP w/s 1/02
West North West Tasmanian Coast (Tasmania)	West North West Tasmanian Coastal and Marine Strategy Management Plan and the West North West Coastal Management Project (Coastal and Marine Planning Program)	Coordinator Cradle Coast Authority Ph: 61 (0)3 6424-7344, devcorp@dcc.tas.gov.au	Australia CMPP w/s 1/02
Victoria	Victorian Coastal Strategy	Executive Officer Victorian Coastal Council Department of Natural Resources and the Environment vcc@nre.vic.gov.au www.dce.vic.gov.au	
Gippsland coastline (Victoria)	Integrated Coastal Planning for Gippsland (Coastal and Marine Planning Program)	Coordinator Gippsland Coastal Board Ph: 61 (0)3 5153-0456, gcb@net-tech.com.au	Australia CMPP w/s 1/02
Great Ocean Road, Point Lonsdale and Marengo area (Victoria)		Coordinator Ph: 61 3 5261-0600 Has the project evolved into the Surf Coast/ Central West Coast project?	Source: ACCSP w/s 7/01

Port Phillip Bay (Victoria)	Integrated State and Local Government Coastal Planning Approach for the Protection of the Coastal and Marine Environment of Port Phillip Bay (Coastal and Marine Planning Program)	Coordinator Gippsland Coastal Board Ph: 61 (0)3 5153-0456, gcb@net-tech.com.au	Australia CMPP w/s 1/02
South West Victoria (Victoria)	Integrated Strategic Coastal Plan, South West Victoria (Coastal and Marine Planning Program)	Coordinator City of Port Phillip Ph: 61 (0)3 9209-6416, dharper@portphillip.vic.gov.au	Australia CMPP w/s 1/02
Surf Coast - Central West Coast (Victoria)	Coastal and Marine Planning Program: Central West Coast of Victoria (Coastal and Marine Planning Program)	Coordinator Surf Coast Shire 61 (0)3 5261-0677, mgm@surfcoast.vic.gov.au www.surfcoast.vic.gov.au/environmental/coastal	Australia CMPP w/s 1/02
Western Australia	Coastwest / Coastcare Program (Initiated in 1995) Coastal and Marine Planning Program (CMPP)	Executive Officer Coastal Council, West Australia Planning Commission 469 Wellington Street, Perth, WA 6000 Australia Ph: 61 8 9264-7833 pattemov@planning.wa.gov.au / www.planning.gov.au	
Batavia Coast (Western Australia)	Batavia Coast - Coastal and Marine Planning Strategy (Coastal and Marine Planning Program)	Coordinator Ministry of Planning Ph: 61 (0)8 9921-7574, panizza@planning.wa.gov.au	Australia CMPP w/s 1/02 ACCSP w/s 7/01
Carnarvon Shire (Western Australia)	Carnarvon Town Planning Scheme Review (Coastal and Marine Planning Program)	Coordinator Shire of Carnarvon Ph: 61 (0)8 9941-1706, kpearson@carnarvon.wa.gov.au	Australia CMPP w/s 1/02
North West Shelf (Western Australia)	North West Shelf Environmental Management Strategy (Coastal and Marine Planning Program)	Coordinator Department of Environmental Protection, Western Australia Ph: 61 8 9222-7134	ACCSP w/s 7/01
Perth (Western Australia)	Perth Coastal Waters Environmental Management Strategy	Coordinator Department of Environmental Protection, Western Australia Ph: 61 8 9222-7134	ACCSP w/s 7/01
South Coastal Region (Western Australia)	Western Australia South Coast Regional Strategy - Phases 1 and 2 (Coastal and Marine Planning Program)	Coordinator Department of Conservation and Land Management Ph: 61 (0)8 9842-4546, barbarag@calm.wa.gov.au	Australia CMPP w/s 1/02
AZERBAIJAN			
Caspian Sea (Nation-wide)	National Component of the Caspian Action Plan	Chairman Committee for Ecology and Impact on Natural Resources St 31 Istiglelyat, Baku 370001 Azerbaijan Ph: 994 12 924173, Fax: 971786	CasEP w/s 6/00
AZORES (Self-governing Island Region of Portugal)			

BAHAMAS			
Nation-wide	<i>"Bahamas has planned a national policy on oceans and a integrated coastal area management Programme"?</i>	<i>Need name of contact person, address and contact points.</i>	CSD Report, 6/98
Nation-wide	<i>Development of an environmental management policy and the institutional strengthening of the BEST Commission? (1999)</i>	<i>The Bahamas Environment, Science, and Technology (BEST) Commission</i>	Source: BEST w/s Funding from IADB
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	<i>(In the pipeline)</i>	GEF/UNEP/UNDP funding GEF w/s 1/02
BAHRAIN			
	<i>National study for ROPME?</i>		CSD Report 2/99
BANGLADESH			
Nation-wide	Developing the (National) Integrated Coastal Zone Management Program (1999-2003)	Program Development Office for Integrated Coastal Management (PDO-ICZM) Water Resources Planning Organization Saimon Centre (6th floor) House 4/A, Road - 22, Gulshan-1 P.O. Box 6009, Dhaka-1212, Bangladesh Ph: 880 2 881-1370, fax: 882-1891, pdo@bangla.net www.iczmpbangladesh.com	Financed by Netherlands
Sundarbans	Biodiversity Conservation in the Sundarbans Reserved Forest (1998)	Need local contact person, address, and contact points	Joint WB/ADB Project Source: WB ICM database 12/01
BARBADOS			
Nation-wide	Integrated Coastal Zone Management Plan	Coastal Zone Management Unit Oistins Government Complex, Oistins, Christ Church, Barbados Ph: 246 428 5945	CSD Report 4/97
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	<i>(In the pipeline)</i>	GEF/UNEP/UNDP funding GEF w/s 1/02

BELGIUM			
Nation-wide	Integrated management of the Flemish coast (West Flanders) (EU ICZM Demonstration Programme)	Coordinator Ministry of the Flemish Community Administration of inland waterways and infrastructures Coastal waterways section Vrijhavenstraat 3, 8400 Ostend, Belgium Ph: 32 59 554-211, Fax: 507-037, peter.dewolf@lin.vlaanderen.be	EU TERRA CZM Programme EC ICZM Demo w/s 1/02 See also CSD Report 1/99
BELIZE			
Nation-wide	Belize Coastal Zone Management Program	<i>Coastal Zone Management Project PO Box 1884, Belize City, Belize GEF, UNDP and IADB project.</i>	1993 Roster of ICM efforts <i>contact IADB</i>
Nation-wide	Conservation and Sustainable Use of the Barrier Reef Complex	Coordinator Latin America and Caribbean Program, World Wildlife Fund 1250 Twenty-Forth St. NW, Washington, DC 20037, USA Ph: 202 778-9624, miguel.jorge@wwfus.org	GEF w/s 1/02 (Biodiversity) InterCoast #34
Nation-wide?	Sustainable Development and Management of Biologically Diverse Coastal Resources (1993-1998?)	<i>Need name of contact person, address and contact points.</i>	GEF/UNDP funding GEF w/s 1/02 (Biodiversity)
Barrier Reef area	Changing land use practices and their impact on near-shore environments, Belize Barrier Reef (EC project B7-6200/97-02/ENV)	<i>Need name of contact person, address and contact points.</i>	EC Sustainable Development w/s 1/02
Gulf of Honduras	Pilot projects along Belize's coast on the Bay of Honduras. (See also Guatemala and Honduras) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator for Belize's part of the Bay of Honduras?</i>	PROARCA - Costas w/s 1/02
Sarstoon-Temesh area	Community Managed Sarstoon-Temash Conservation Project (2001)	Need local contact person, address, and contact points	GEF-MSP Project WB ICM database 12/01
BENIN			
Nation-wide	<i>The Ministry of Environment has established a Technical Committee for the Management of the Coast (5/99)?</i>	<i>Need name of contact person, address and contact points.</i>	CSD Report 5/99

Nation-wide?	Coastal Zone Integrated Management Program	<i>(In the pipeline)</i> Need local contact person, address, and contact points	GEF/WB funding WB ICM database 12/01
Nation-wide	Gulf of Guinea Large Marine Ecosystem Project	See Table C-4: International ICM Efforts	
BERMUDA (Overseas territory of the U.K.)			
BOLIVIA			
Lake Titicaca	Conservation of Biodiversity in the Lake Titicaca Basin	See Table C-4: International ICM Efforts	
BONAIRE (Self-governing component of the Netherlands Antilles)			
BRAZIL			
Nation-wide	National Coastal Zone Management Plan (1988) (State CZM plans?)	Coastal Zone Management Integration Group (GERC) Interministerial Commission for Marine Resources (CIRM)	CSD Report 2/99 contact Marcus Polette
Nation-wide?	Coastal Zone Management Project	<i>(In the pipeline)</i>	GEF funded project WB ICM database 12/01
Nation-wide	Maritime Management Project (Southeast South American Shelf Large Marine Ecosystem - shared with Argentina and Brazil)	See Table C-4: International ICM Efforts <i>(In the pipeline)</i>	GEF-WB Project International Waters WB ICM database 12/01
Ceará State	Coastal Zone Management for the state of Ceará	Coordinator Programa de Gestão Integrada da Zona Costeira da AQUASIS aquasis@aquasis.org	Source: Gerenciamento Costeiro Integrada 12/01
Rio de Janeiro State	Name of effort?	Chefe de Operações do IEF Instituto Estadual de Floresta Abrao, Ilha Grande de Angra dos Reis, RJ, Brazil. Ph. 55 21 533 0353/262-9292, falecomief@hotmail.com	Source:Aldo Brandani
Sao Paulo State	State ICZM Program (in the late 1980's)		1993 Roster of ICM Efforts contact Marcus Polette
Tamandare, Pernambuco to Paripueira, Alagoas	Coastal Management Program for Tamandare-Paripueira region (Initiated 1/98)	Centro de Pesquisa e Estansão Pesqueira do Nordeste Universidade federal de Pernambuco, Departamento de Oceanografia Tamandaré, Brazil Ph: 55 81 986-1588, mmaida@ibama.gov.br	IADB w/s 1/02

Patos Lagoon	Integrated Management of Patos Lagoon	<i>(Project approved 3/01 #ATN/JF-735) File will not open</i>	IADB w/s 1/02
<i>Rio Grande Estuary</i>	<i>Rio Grande Estuary Management Program? (TC9811854)</i>	<i>According to IADB w/s (1/02) the project is in the pipeline as of September 1999 . Project file did not open.</i>	IADB w/s 1/02
<i>Coverage?</i>	<i>Community Based Marine Conservation Program?</i>	<i>IADB project ATN/SF 4948-BR</i>	IADB w/s
BRITISH VIRGIN ISLANDS (Overseas Territory of the U.K.)			
Nation-wide	Coast Conservation and Management Program	<i>Need name of contact person, address and contact points.</i>	1993 Roster of ICM efforts Contact IRF, CEP
BRUNEI DARUSSALAM			
Nation-wide	Integrated Coastal Management Plan for Brunei Darussalam	<i>What has happened to this project? Pilot Site of the ASEAN Coastal Resources Management Program (1986-1992) CSD Report stated: "Plan implementation is currently under review" (12/98)</i>	CSD Report 12/98 1993 Roster of ICM efforts
BULGARIA			
Nation-wide	National ICZM Assessment Report and National Black Sea Strategic Action Plan	Coordinator 67 W. Gladstone Str., Sofia 1000 Bulgaria Ph: 359 2 881-440, Fax: 521-634	BSEP w/s CSD Report 4/99
Asparouhovo-Galata	Local Integrated Coastal Management Program	<i>Need name of contact person, address and contact points.</i>	<i>Get specifics from EUCC and Konstantin Galabov</i>
BURUNDI			
Lake Tanganyika	Implementing the Lake Tanganyika Action Program and Convention	See Table C-4: International ICM Efforts	
CAMBODIA			
Nation-wide	Targeted Coastal Zone Management in Cambodia	Ministry of Environment	Funded by DANIDA DHI w/s
Sihanoukville	Sihanoukville Integrated Coastal Management Project	2nd Vice Governor Ministry of the Interior Municipality of Sihanoukville, Kingdom of Cambodia Ph: 63 012 872-801, Fax: 34 933-417, www.pemsea.org	PEMSEA w/s 1/02

CAMEROON			
Nation-wide		"A study for sustainable management of marine and coastal ecosystems with support from UNDP and Canada"?	CSD Report 4/97
Nation-wide	Gulf of Guinea Large Marine Ecosystem Project	See Table C-4: International ICM Efforts	
Lake Chad	Integrated Management of the Lake Chad Basin	See Table C-4: International ICM Efforts	
CANADA (see Table C-2)			
CANARY ISLANDS (Island Province of Spain)			
CAPE VERDE			
CAYMAN ISLANDS (Self-governing Overseas Territory of the U.K.)			
CHAD			
Lake Chad	Integrated Management of the Lake Chad Basin	See Table C-4: International ICM Efforts	
CHILE			
Nation-wide?	<i>"National Commission on the Use of the Coastal Border"?</i>	<i>Need name of contact person, address and contact points.</i>	CSD Report 12/99 contact Gonzalo Cid
Two Multiple Use Marine Coastal Protected Areas (to be determined)	Conserving Globally Significant Biodiversity along the Chilean Coast	<i>(In the pipeline)</i>	GEF/UNDP funding GEF w/s 1/02
CHINA			
Nation-wide	The Marine Area Use Management Program	Bureau of Marine Comprehensive Management State Oceanic Administration, Beijing, China or Chen Degong Coordinator of China Integrated Coastal Zone Legislation and Management China Institute for Marine Development Strategy 8 Dahuisi St. Haidian District, Beijing 100081, China Is this project still active or has it transformed to something else or been terminated?	1993 Roster of ICM Efforts

Northern South China Sea	ICZM Capacity Building in the northern South China Sea Four demonstration areas: Hailing, Fangchenggang, Xiamen, & Qinlan Bay (UNDP #CPR/96/319/A/01/99)	Contact person and contact points needed China International Technical Exchange Center and the State Oceanic Admin. Support provided by UNDP.	UNDP projects w/s 1/02
Bohai Sea	Subregional Sea Areas and Pollution Hot Spots Demonstration Site	Director General Dept. of International Cooperation, State Oceanic Administration 1 Fuxingmenwai Avenue, Beijing 100860 China Ph: 86 10 6804-2695/6803-2211, fax: 6803-0799 depicsoa@public.east.cn.net, www.pemsea.org	PEMSEA w/s 1/02
Bohai Sea area	North China Marine Culture and Coastal Resources Management Project (No project # on the w/s)	To what extent has this project funded the effort listed above and/or another project(s)?	ADB w/s 12/01 Contact ADB
Fujian, Jiangsu, Shancong, and Liaoning Provinces	Sustainable Coastal Resource Development Project (1997)	Need local contact person, address, and contact points	IBRD Project WB ICM database 12/01
Jiangsu Province	Jiangsu Province CZM Program	Coordinator China Institute for Marine Development Strategy 8 Dahuisi St., Haidian District, Beijing 10008, P. R. China or Mao Xianghai, Director, Oceanic Administration Bureau Jiangsu Province Commission of Science and Technology Nanjing, Province, P. R. China Is this project still active or has it transformed to something else or been terminated?	1993 Roster of ICM efforts
Hainan	Sino-British Coastal Zone Environmental Enhancement? British Overseas Development Agency. Did this occur?		CZ 99
Xiamen	Xiamen Integrated Coastal Management Demonstration Site during the Pilot Phase	Local contact person and contact points needed www.pemsea.org	PEMSEA w/s 1/02
CHRISTMAS ISLAND (External Territory of Australia)			
Eastern Coasts	Plan of Management for the East Coast Beaches (Coastal and Marine Planning Program)	Coordinator Shire of Christmas Island Ph: 61 (0)8 9164-8300, soci@iocomm.com.au	Australia CMPP w/s 1/02
COLOMBIA			
Nation-wide	Plan de Ordenamiento Ambiental de la Zona Costera	Coordinator Comision Colombiana de Oceanografia Santafe de Bogota, D.C, Colombia	Contact Francisco Arias

Caribbean Sea	The Development and Administration of the Coastal Zone in the Caribbean Sea	<i>Need name of contact person, address and contact points.</i>	1993 Roster of ICM efforts Contact Francisco Arias
Colombia Archipelago?	Caribbean Archipelago Biosphere Reserve: Regional Marine Protected Area Systems (2000)	What Colombian archipelago(s) is the project focus, (e.g. San Andros, Providencia, Rosaio, etc) or all? Need local contact person, address, and contact points.	WB funded Project WB ICM database 12/01
Gulf of Morrosquillo	Sustainable Development of the Gulf of Morrosquillo	Need local contact person, address, and contact points and International Institute for Aerospace Study and Earth Sciences P.O. Box 6, Hengelosestraat 99, 7500 AA Enschede, Netherlands Ph: 31 53 4874 305, fax: 4874 336, e-mail ags@itc.nl	Source: www.itc.nl/ags/projects
Serrania del Baudo	Conservation and Sustainable Use of Serrania del Baudo (2000)	Need local contact person, address, and contact points	GEF funded project WB ICM database 12/01
COMOROS			
Nation-wide?	Integrated Planning of the Coastal Zone (1995)	Contact SEACAM. Was the project initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
Nation-wide	Conservation of Biodiversity and Sustainable Development in the Federal Islamic Republic of Comoros (1995-2002?)	<i>Need name of contact person, address and contact points.</i>	GEF/UNDP funded GEF w/s (Biodiversity)
Grande Comore Island	Project for the Protection and Planning of the Coastal Zone and Marine Area (1998-2000)	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
CONGO DEMOCRATIC REPUBLIC (Formerly Zaire)			
Lake Tanganyika	Implementing the Lake Tanganyika Strategic Action Program and Convention	See Table C-4: International ICM Efforts	
COOK ISLANDS (Self-governing and free association with New Zealand)			
Nation-wide	Land and sea resources management capacity component of the National Environmental Management Strategy (to be completed in 1997)	Need local contact person, address and contact points	<i>SPREP w/s 1/02 Contact SPREP</i>
COSTA RICA			
Nation-wide	The Planning and Management of the Marine and Terrestrial Zone	<i>Need name of contact person, address and contact points.</i>	1993 Roster of ICM efforts Contact Robert Chaverri

Nation-wide	National Marine and Coastal Program (1995)	<i>Need name of contact person, address and contact points.</i>	CSD Report 4/97
Caribbean coast corridor between Bocas los Toro (Panama) + the northern boundary of Refugio Nacional de Vida Silvestre Gondoca-Manzanillo (Costa Rica)	Pilot projects along Costa Rica's section of the coastal corridor (See also Panama) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator of Costa Rica's part of the coastal corridor ?</i>	PROARCA - Costas w/s 1/02
North Caribbean coast and estuary of the San Juan River	Formulation of a Strategic Action Program for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and its Coastal Zone	See Table C-4: International ICM Efforts	GEF-UNDP-OAS funded GEF w/s 1/02
COTE d' IVOIRE			
Nation-wide	Gulf of Guinea Large Marine Ecosystem Project	See Table C-4: International ICM Efforts	
Abidjan Lagoon	Management Program for Abidjan Lagoon	<i>Need name of contact person, address and contact points.</i>	1993 Roster of ICM efforts Contact Chidi Ibe
CROATIA			
Nation-wide	Coastal Area Management in Croatia Report (date?)	<i>To what extent was this report/study implemented?</i>	EUCC ICM Progress w/s 1/02
Primorje-Gorski kotar Province	Study on the protection of marine and coastal zone of Primorje-Gorski kotar Province	<i>To what extent was this report/study implemented?</i>	EUCC ICM Progress w/s 1/02
Kastela Bay	The Bay of Kastela Coastal Area Management Programme	<i>Is this still correct?</i> Office for the Adriatic State Directorate for Environment, Republic of Croatia http://pap.-thecoastcentre.org/activities.html	UNEP Med. Action Plan, PAP/RAC w/s 12/01
Cres-Losinj Archipelago	<i>Environmental Management Plan for the Cres-Losinj Archipelago?</i>	<i>Is this correct?</i> Office for the Adriatic-Rijeka State Directorate for Environment, Republic of Croatia	<i>Contact PAP/RAC CSD Report 8/99</i>

CUBA			
Nation-wide	Coastal Zone Management Program and proposed Coastal Zone Management Act	Coordinator Direccion de Politica Ambiental, Industria y San Jose Capitolio Nacional, Habana , Cuba Ph: 537 570-615 dpa@ceniai.inf.cu	CSD Report 8/99
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Developing States in the Caribbean	<i>(In the pipeline)</i>	GEF/UNEP/UNDP funding GEF w/s 1/02
Gulf of Batabano and southern coastal area of Havana Province	Socio-economic and environmental evaluation and management of the south coast of Havana Province	Coordinator Dept. of Scientific and Technical development Physical Planning Directorate of Havana Province Calzada de Managua Km 4.5, Mantilla, Habana, Codigo Postal 10 900 Cuba Ph: 537 99 1556 ext 360, 57 8378, dppfhab@ceniai.inf.cu	CSI w/s 1/02
CURAÇAO (Self-governing component of the Netherlands Antilles)			
CYPRUS			
Nation-wide	Coastal Zone Management Project	Coordinator Coastal Unit, Public Works Department Ministry of Communication and Works, Nicosia, Cyprus Ph: 357 2 806620/22, Fax: 498934 xenia@logos.cy.net	
DENMARK			
Nation-wide	The Planning Act of 1994 and its provisions for a coastal planning zone	Need name of contact person, address and contact points.	CSD Report 4/97 Contact Jan Ronberg
Skagerrak		See Table C-4: International ICM Efforts	
Wadden Sea area		See Table C-4: International ICM Efforts	
Storstrom County	Coastlink Storstrøm County (EU ICZM Demonstration Programme)	Coordinator Storstrøm Amt, Dept. of Technology and the Environment Parkvej 37, 4800 Nykøbing F, Denmark Ph: 45 54 823-232, Fax: 855-684, kis@npk.stam.dk	EU ICZM Demo w/s 1/02
DJIBOUTI			

DOMINICA			
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	(In the pipeline)	GEF/UNEP/UNDP funding GEF w/s 1/02
DOMINICAN REPUBLIC			
Nation-wide	Integrated Management of Coastal-Marine Resources for the Sustainable Development of the Tourism Sector	Program for the Coastal - Marine Environment Subsecretary of Natural Resources	CSD Report 6/99 Contact Jennifer McCann
Nation-wide?	Conservation and Management in the Coastal in the Coastal Zone of the Dominican Republic (1993-1997?)	Chief Technical Adviser A.P. 1424, Calle Ramon del Orbe #23 Mirador Sur, Santo Domingo, Republica Dominicana biodiversidad@codetel.net.do www.gef.biodiversidad.do	UNDP SDNP SIOCAM w/s 1/02
Nation-wide?	Biodiversity Conservation and Management in the Coastal Zone of the Dominican Republic (1992-1997)	Need name of contact person, address and contact points.	GEF/UNDP funding GEF w/s 1/02
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	(In the pipeline)	GEF/UNEP/UNDP funding GEF w/s 1/02
Semana Bay	Semana Bay	Coordinator Integrated Fund Promatura Apartado (P.O. Box) 21714, Santo Domingo, Dominican Republic	CRC to verify
ECUADOR			
Nation-wide	Coastal Resources Management Program (PMRC) Includes six special management zones (ZEMs): Atacames-Sua Muisne, Bahia-San Vicente, San Pedro-Valdivia, Posorja - Pto. El Morro, Machala-Pto.Bolivar, and Galapagos. (Initiated in 1984) (Each ZEM will have its own listing in a future iteration)	PMRC Avenida Quito y Padre Solano, edificio del Ministerio de Agricultura y ganaderia, piso 20 P.O. Box 09-01-5820 Ph: 593 4 281-144; fax 285-038 Guayaquil, Ecuador pmrc@lib@gye.sanet.net http://www.pmrc.org.ec/principal.htm	First funded as an AID pilot project. Support now provided by IADB. CSD Report 1/99 CRC w/s 1/02 IADB w/s 1/02
Esmeraldas, Manabi, and Guayas Provinces	Wetlands Priorities for Conservation Action (1999)	Need local contact person, address, and contact points	GEF Project WB ICM database 12/01
Galapagos Archipelago	Galapagos Environmental Management Program (EC-0134)	Project approved Sept. 2000. Name of local contact person needed as well as address and contact points.	IADB w/s 1/02

EGYPT			
Nation-wide	Framework Programme for Development of a National ICZM Plan (Red Sea & Med. Sea)	Need name of contact person, address and contact points.	Contact Mahmoud Sayed CZ99 and PAP/RAC
Ras Shukeir to the Sudan border Red Sea	Egyptian Red Sea Coastal and Marine Resource Management Project (UNDP project EGY/95/010/A/01/99 (1995-1999?))	Need name of contact person, address and contact points.	UNDP projects w/s 1/02 Proposed for GEF funding
Fuka to Matrouh area	The Integrated Coastal Area Management Planning Study for the coastal area of Fuka-Matrouh	Is this still correct? : M. A. Fawzi Egyptian Environmental Affairs Agency Water and Coastal Areas Protection Department 17, Teiba St.-El Mohandeseen, Giza, Cairo, Egypt http://pap.-thecoastcentre.org/activities.html	UNEP Med. Action Plan, PAP/RAC w/s 12/01
EL SALVADOR			
Gulf of Fonseca	Pilot projects along El Salvador's coastal area of the Gulf of Fonseca. (See also Honduras and Nicaragua) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	Is there a local coordinator for El Salvador's part of the Gulf of Fonseca?	PROARCA - Costas w/s 1/02
Nation-wide?	Management and Conservation of Coastal Zones? (ES0117)	According to IADB w/s (1/02) Project in the Pipeline as of September 1999 . Project file did not open.	
Nation-wide?	Coastal Resources Management Program? (TC9811143)	According to IADB w/s (1/02) Project in the Pipeline as of September 1999. Project file did not open.	
EQUATORIAL GUINEA			
ERITREA			
Nation-wide	Conservation management of Eritrea's coastal marine and island biodiversity		GEF-UNDP w/s 1/02 (Biodiversity)
ESTONIA			
Nation-wide	A coastal plan for Estonia (started 1998)	Funding from WWF and Sweden	EUCC ICM progress w/s 1/02 CSD Report 11/98
Nation-wide	Integrated Coastal Zone Management in the Baltic States and Poland	Integrated Coastal Zone Management in the Baltic States and Poland	EU PHARE funded CSD Report 11/98 EUCC w/s 1/02

Hiiumaa Island	ICZM pilot project	<i>Need contact person, address and contact points</i>	Funding from PHARE EUCC ICM progress w/s 1/02
Matsalu Wetland	Management Plan for the Matsalu Wetland	Coordinator Matsalu Nature Reserve alx@matsalu.ee	EUCC ICM progress w/s 1/02
Kaina Bay	ICZM project for Kaina Bay	Coordinator West Estonian Archipelago Biosphere Reserve toomas@hiiumaa.ee	EUCC ICM progress w/s 1/02
FAROE ISLANDS (Self-governing Island Region of Denmark)			
FIJI			
	<i>Proposed ICM Pilot Project?</i>	<i>Demonstration of the CRC's two track approach?</i>	Coastal Resources Center University of R. I. w/s www.crc.uri.edu
Nation-wide?	Strategic Level for ICM in context with the National Environmental Management Strategy	<i>If still underway, Need local contact person, address, and contact points.</i>	SPREP w/s 1/02
FINLAND			
Nation-wide	National Policy on Oceans	<i>Need contact person, address and contact points</i>	CSD Report 11/98 Contact Erkki Siirila
Nation-wide	Shore Conservation Programme	"Nearly 100 master shore plans have been completed or are in the process of being drafted"	CSD Report 11/98
Southern Coast (Usimaa, Itä-Usimaa, and Kymenlaakso regions)	Coastal Planning on the Gulf of Finland	Coordinator Uusimaa Regional Environment Centre PO Box 36, 00521 Helsinki, Finland Ph: 358 9 148 881 Fax: 148-88295, Rolf.Nystrom@vyh.fi	Funded by EU Life Programme EU ICZM Demonstration Programme w/s 1/02
FRANCE			
Nation-wide	<i>"Coastal law to limit urban expansion on coast and pres- ervation of exceptional areas"?</i>		CSD Report 6/99 Contact EUCC
Nation-wide	Planning, Protection, and Develop- ment of Coastal and Shores Space	Conservatoire de l'espace littoral et des rivages lacustres <i>Need contact person, address and contact points</i>	CSD Report 6/99 1993 Roster of ICM efforts
English Channel, Haute Normandie, Isle of Wight	ArcManche: Environmental and Coastal Management Programme	See Table C-4: International ICM Efforts	

Cote d'Opale	Cote d'Opal: Concentration Coordination and Cooperation (EU ICZM Demonstration Programme)	Coordinator Syndicate mixte de la Côte d'Opale C.U.D. Perthuis de la Marine BP 5/530 59386 Dunkerque Cedex, France Ph: 33 3 28 627-088, Fax: 627-144, cudgd-defurnes@netinfo.fr	EU Life Programme EU ICZM Demo. w/s 1/02
Arcachon	Cooperation, integrated management and sustainable development in the coastal zone of Gironde	Coordinator Conseil General de la Gironde Tour croise du Palais, 33074 Bordeaux Cedex, France Ph: 33 5 5699-3423, Fax: 5699-5737	EU Terra Programme EU ICZM Demo w/s 1/02
Rade de Brest	Integrated development and management of the Bay of Brest and its catchment area (EU ICZM Demonstration Programme)	Coordinator Communauté Urbaine de Brest 24, rue Coat Ar Gueven, B.P.883 29200 Brest Cedex, France Ph: 33 2 9833-5263, Fax: 9880-2342, florence.senechal@cub-brest.fr	Life Programme EU ICZM Demo w/s 1/02
Gironde Estuary	Management Program for the Gironde Estuary	Coordinator Conseil General de Gironde, Esplanade Charles de Gaulle 33 074 Bordeaux Cedex France Ph: 33 5 569-93429, Fx: 569-93559, reodolphe.gautronneau@estualies.org, www.estuariales.org.fr	Estuariales Network
Loire Estuary	Management Program for the Loire Estuary	Coordinator ACEL- Association for the Communautaire de L'estuarire de la Loire 10 rue Chales Brunnelliere, 44 100 Nantes, France Ph: 33 2 406-92720, Fx: 407-39992, gaelle.rougeron@estuariales.org/ www.estuariales.org.fr	Estuariales Network
Lake Geneva	Management Program for Lake Geneva	See Table C-4: International ICM Efforts	
FRENCH GUIANA (Overseas Department [i.e. state] of France)			
FRENCH POLYNESIA (Overseas Territory of France)			
GABON			
GAMBIA			
Nation-wide?	Coastal Protection Study and Coastal Zone Management Study	Need local contact person, address, and contact points and WL / Delft Hydraulics Rotterdamseweg 185, P.O. Box 177, 2600 MH Delft, Netherlands Ph: 31 15 285 8582, fax: 285 8582, info@wldelft.nl	Source: www.wldelft.nl
Nation-wide	"Technical Working Group on Coastal and Marine Environment was launched in August 1995"?	Need name of contact person, address and contact points.	CSD Report 2/98

Nation-wide and southern coastal region	Coastal Profile and proposed ICM Strategy	Need local contact person, address, and contact points	Consultation provided by UNEP Med. Action Plan PAP/RAC w/s 12/01
GEORGIA			
Nation-wide	Integrated Coastal Zone Management Program (1998)	Coordinator ICZM Centre, Ministry of Environment 2nd Floor, 78 Paliashvili St., T'bilisi, Georgia Ph: 995 32 951-003, Fax: 1 419 791-6651, Phasis@iczm.org.ge	WB funded Project WB ICM database 12/01
Nation-wide	National ICZM Assessment Report and National Black Sea Strategic Action Plan	(See above)	BSEP w/s 1996
GERMANY			
Nation-wide	<i>"ICM Program to encompass marine activities within EEZ"?</i>	"ICM Program to encompass all marine activities in the EEZ"?	CSD Report 11/98
Wadden Sea	Wadden Sea Management Plan	See Table C-4: International ICM Efforts	
Schleswig-Holstein	Integrated Coastal Management Project K.E.R.N. Region: A Pilot Study	State Regional Planning Authority of Schleswig-Holstein	EUCC ICM Progress w/s 1/02
GHANA			
Nation-wide	Gulf of Guinea Large Marine Ecosystem Project	See Table C-4: International ICM Efforts	
	<i>Draft Integrated Coastal Zone Plan?</i>	<i>Need name of contact person, address and contact points.</i>	CSD Report 4/99
GREECE			
Nation-wide	National Programme for the Sustainable Development of Greek Islands and Coasts	Coordinator University of the Aegean, Department of Environmental Studies 30 Voulgaroktonou, 11472 Athens, Greece Ph: 30 1 680-0051 Fax: 680-0053 hkok@aegean.gr, enpl@env.aegean.gr www.aegean.gr/enpl/newpage118.htm	
Rhodes	The Island of Rhodes Coastal Area Management Programme	What are the local contact points and who is the contact person? http://pap.-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP w/s 1/02
Saronic Gulf	Strategies for management and cooperation in the metropolitan and peri-urban coastal zones of the Saronic Gulf - Athens (EU ICZM Demo Programme)	Coordinator Athens Environmental Management and Protection Organization 2 Panormou Street, 11523 Athens, Greece Ph: 30 1 643-0709 x124, Fax: 646-4365, orlana1@ath.forthnet.gr	EU ICZM Demo w/s 1/02

Ipiros Area	Integrated management of the coast of Ipiros (EU ICZM Demonstration Programme)	Yannis Houliaras Ipiros Region, Voriou Ipirou 20, 45333 Ioannina, Greece Ph: 30 65172165, Fax: 32224, ipiregio@otenet.gr	EU ICZM Demo w/s 1/02
Cyclades	Programme for integrated coastal zone management: The case of Cyclades (EU ICZM Demonstration Programme)	Coordinator Notio Aigio (South Aegean), University of the Aegean Department of Environmental Studies Ph: 30 1 680-0051 Fax: 680-0053 hkok@aegean.gr, enpl@env.aegean.gr www.aegean.gr/enpl/newpage118.htm	EU ICZM Demo w/s 1/02
Magnesia	Information, cooperation, requirements for the sustainable development of Magnesia's coastal zones (EU ICZM Demonstration Programme)	Coordinator Magnesia Development Company (ANEM S.A.) Metamorfoseos 27, 38333 Volos, Greece Ph: 30 421 23563, Fax: 23439/ ifigenia@anem.gr/ www.anem.gr	EU ICZM Demo w/s 1/02
Strymonikos	Concerted Actions for the Management Strymonikos Coastal Zone (EU ICZM Demonstration Programme)	Coordinator Natural Agriculture Research Foundation (NAGREF) Fisheries Research Institute, 64007 Nea Peramos, Kavala, Greece Ph: 30 594 22691, Fax: 22222 fri@mail.otenet.gr/ www.pref-kavala.gr/guide/alieyten.htm	EU Life Program EU ICZM Demo w/s 1/02
Kavala	Integrated management of the Kavala coast (EU ICZM Demonstration Programme)	Coordinator Prefecture of Kavala - Planning Department Ethnikis Antistasis 20, 65110 Kavala, Greece Ph: 30 51 291-332, Fax: 291-379, grpap@pref-kavala.gr	Funded by the TERRA CZM Programme EU ICZM Demo w/s 1/02
GRENADA			
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Developing States in the Caribbean	<i>(In the pipeline)</i>	GEF/UNEP/UNDP funding GEF w/s 1/02
GUADELOUPE, Saint BARTHÉLEME, and Saint MARTIN ISLANDS (Overseas Department of France)			
GUATEMALA			
Gulf of Honduras	Pilot projects along Guatemala's coast on the Bay of Honduras. (See also Belize and Honduras) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator for Guatemala's part of the Bay of Honduras?</i>	PROARCA - Costas w/s 1/02
Pacific Coast	<i>Proposed project for integrated management of coastal resources on the Pacific Coast?</i>	<i>Need name of contact person, address and contact points.</i>	Windevoxhel

GUERNSEY ISLAND (Self-governing with the U.K. only responsible for foreign affairs and national defense)			
GUINEA			
Nation-wide?	Guinean Coastal Zone Integrated Management and Preservation of Biodiversity	Need local contact person, address, and contact points (In the pipeline)	WB funded Project WB ICM database 12/01
Conarky, Dubreka, and Forecariah	Coastal Profiles prepared for the pilot areas of Conakry, Dubreka, and Forecariah	Need name of contact person, address and contact points.	Contract work done by UNEP MAP, PAP/RAC PAP w/s 1/02
GUINEA-BISSAU			
Nation-wide?	Coastal Planning Project	"Initiated in 1989 with support from IUCN and Swiss Directorate of Development Cooperation Also there is a National Office of Coastal Planning"	CSD Report 4/97 1993 Roster of ICM Efforts
Nation-wide?	Coastal Zone Management (2002)	Need local contact person, address, and contact points	GEF Project WB ICM database 12/01
Nation-wide?	Coastal and Biodiversity Management Program	To what extent does this differ from the project above? Need local contact person, address, and contact points (In the pipeline)	WB funded project WB ICM database 12/01
GUYANA			
Nation-wide?	Design & Feasibility Study for the Shorezone Management Program (ATN/SC-4469-GY) (Approval date March, 1994)	Was this project completed and if so what became of it?	IADB w/s CSD Report 4/97
Nation-wide?	Coastal Management Program Was this project completed? (GY0030, 1996)	Ministry of Agriculture	Funded by IADB SIDS w/s
HAITI			
Nation-wide?	Initiation of a national integrated coastal management program (in 1998)	Ministere de l' Environnement 181 Ave. Jean-Paul II, Haut de Turgeau Port-au-Prince, Haiti Ph: 509 45-0309, fax: 45-7360	IADB w/s 1/02
Nation-wide	Coasts of Haiti: Resource assessment and management needs (1996)	Coastal Regions and Small Islands (CSI) Unit UNESCO, 1 rue Miollis, 75732 Paris Cedex 15, France Fax: 33 1 45 685-808, csi@unesco.org, www.unesco.org/csi	CSI w/s 1/02
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	(In the pipeline)	GEF/UNEP/UNDP funding GEF w/s 1/02

HONDURAS			
Bay Islands	Bay Islands National Marine Park	Coordinator Latin America and Caribbean Program, World Wildlife Fund, 1250 Twenty-Forth St. NW, Washington, DC 20037 Ph.: 202 778 9624, miguel.jorge@wwfus.org	InterCoast #34
Bay Islands	Bay Islands Environmental Management Project (938/SF-HO, approval 1994))	Project completed. One of the components and outputs were strategies and policies for the planning and implementation program for Bay Islands National Park	Source: IADB w/s 1/02
Bay Islands	Environmental Management Program for the Bay Islands (Second Phase) (HO-0198) (Information from Profile 1, 23 July 01)	Coordinator IADB, Washington D.C.	IADB and GEF support IADB w/s 1/02
Gulf of Fonseca	Pilot projects along Honduras' coastal area of the Gulf of Fonseca. (See also El Salvador and Nicaragua) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator for Honduras' part of the Gulf of Fonseca?</i>	PROARCA - Costas w/s 1/02
Gulf of Honduras	Pilot projects along Honduras' coast area on the Bay of Honduras. (See also Belize and Guatemala) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator for Honduras' part of the Bay of Honduras?</i>	PROARCA - Costas w/s 1/02
Miskito Coast (between Cabo Cameron in Honduras and Laguna de Perlas in Nicaragua)	Pilot projects along Honduras' coastal area of the Misquito Coast (See also Honduras) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator for Honduras' part of the Mosquito coast ?</i>	PROARCA - Costas w/s 1/02
ICELAND			
INDIA			
Nation-wide	Coastal Regulation Zones and Rules - 1991	Coastal Zone Management Authority Ministry of Environment and Forestry and Department of Ocean Development	Ocean & Coastal Journal 43 CSD Report 2/99
Nation-wide	Integrated Coastal and Marine Area Management Project	ICMAM Project Directorate Department of Ocean Development 2nd Floor, NIOT Campus, Velacherry-Tambaram Main Road Pallikaranai, Chennai 601302 India Ph: 91 44 246-0276, Fax: 246-0657, http://linux.tn.nic.in/icmam/main.htm	

Nation-wide?	Indian-Netherlands Water and Coastal Management Cooperative Programme (8/2001-12/2003)	Project Coordinator CZM Centre RIKZ The Hague, The Netherlands Ph: 31 70 311-4380, fax: 311-4380, E.M.vGrol@rikz.rws.minvenw.nl www.netcoast.nl/projects	netcoast.nl/projects w/s 1/02
Gulf of Mannar	Conservation and Sustainable Use of the Gulf of Mannar Biosphere Reserve's Coastal Biodiversity	M.S. Swaminathan Research Foundation	GEF w/s 1/02 Biodiversity
Chennai; Pulicat Lake to Mahabalipuram	Model ICMAM Plan	See ICMAM address and contacts	
Chilika Lagoon	Integrated Resource Management Project	Chilika Development Authority chilika@chilika.com / www.chilika.com	
State of Goa and the Gulf of Kachchh	Model ICMAM Plan	See ICMAM address and contacts	
Andhra Pradesh State	ICZM component of the World Bank financed Cyclone Hazard Mitigation Project	Coordinator Andhra Mitigation Project, Hyderabad Andhra Pradesh, India Ph: 91 40 339 5056 bert.widelft@sol.net.in	Source: Marcel Marchand
Karnataka State	Karnataka Urban Development and Coastal Environmental Management Project (Loan No. 1704 and IND 30303-01)	Local contact, address, and contact points needed	ADB w/s 12/01
INDONESIA			
Nation-wide	The Indonesian Coastal Resources Management Project Field Programs in North Sulawesi, Lampung, and East Kalimantan	Chief of Party Proyek Pesisir, Coastal Resources Management Project Ratu Plaza Building 18th Floor, Jl. Jenderal Sudiman 9 Jakarta Selatan 10270 Indonesia Ph: 62 21 720 9596, fax: 720-7844, crmp@cbn.net.id http://crc.uri.edu/field/asia/indonesia/index.htm	CRC w/s 1/02
Lampung	Lampung Field Program	(see address and contacts above)	
East Kalimantan	East Kalimantan Field Program	(see address and contacts above)	
North Sulawesi	North Sulawesi Field Program	(see address and contacts above)	
Nation-wide	The Marine Resources Evaluation and Planning Project (MREP)	Need name of contact person, address and contact points.	Kay & Alder, 1999 Contact Rob Kay
Nation-wide?	Coral Reef Rehabilitation and Management	Coordinator Natural Resources peking@adb.org www.adb.org/work/projects/profiles/loan	ADB w/s 12/01 Contact ADB

Nation-wide?	<i>Helping Local Government in Indonesia Take Over Coastal Resource Management? (No project # on w/s)</i>	<i>To what extent has this project funded the efforts listed in this Table for the Indonesia? No specific locations mentioned on w/s description of the project.</i>	ADB w/s 12/01 Contact ADB
Five eastern provinces What five provinces?	Coral Reef Rehabilitation and Management Project COREMAP (1997)	Is this project the same or different from the ADB project above? If so, need local contact person, address, and contact points.	UNDP-WB funded project WB ICM database 12/01
Nation-wide?	Coral Reef Management and Rehabilitation (1998, #36048)	Is this project the same or different from the projects above? If so, need local contact person, address, and contact points.	Multi-donor funded project WB ICM database 12/01
Bali	Bali Integrated Coastal Management Project	Head BAPEDALDA Jl. Hayam Wuruk No. 69, Denpasar 80233 Indonesia Ph: 62 361 235-402/244-070, fax: 235-402 zulhasni@indosat.net.id, www.pemsea.org	PEMSEA w/s 1/02
Central Java	Integrated Management Plan for Segara-Cilacap	Pilot Site of the ASEAN Coastal Resources Management Program (1986-1992) What has happened to this project?	1993 Roster of ICM efforts
Greater Berbak-Sembling ecosystem	Berbak-Sembling Integrated Coastal Wetlands Conservation Project	Need local contact person, address, and contact points (In the pipeline)	WB funded project WB ICM database 12/01
Komodo islands	Komodo National Park Collaborative Management Initiative	Need local contact person, address, and contact points (In the pipeline)	GEF/WB/IFC funded GEF w/s 1/02 WB ICM database 12/01
IRAN			
Caspian Sea coast	National Component of the Caspian Action Plan	Coordinator Marine Environmental Research Bureau P.O. Box 5181, Nejatoldh Ave., Tehran Iran Ph: 98 21 880-8776, Fax: 890-7223, parvin@crosswinds.net	CasEP w/s 7/01
IRELAND			
Nation-wide	Coastal Zone Management: A Draft Policy for Ireland - Main Report 1998	Principal Officer Coastal Zone Administration Division Lesson Lane, Dublin 2, Ireland Ph: 1 619 9200, fax. 1 661 3817	Contact Darius Bartlett
County Donegal	Implementing alternative strategies in Irish beach and dune management: involvement in sustainable coastal development (EU ICZM Demonstration Programme)	See Table C-4: International ICM Efforts	EU ICZM demo w/s 1/02

Dublin Bay	Dublin Bay Water Quality Management Plan	Coordinator Environmental Protection Agency St. Martin's House, Waterloo Road, Dublin 4 Ireland	Source?
Bantry Bay	The Development of a Consensus Based Integrated Coastal Zone Management Strategy for Bantry Bay (EU ICZM Demonstration Programme)	Coordinator Cork County Council Courthouse, Skibbereen County Cork, Ireland Ph: 353 28 21299, fax: 21995, klynchbb@gofree.indigo.ie www.ucc.ie/ucc/research/crc/pages/Life/pages/index.html	EU ICZM Demo. w/s 1/02
ISLE of MAN (British Crown Dependency)			
ISRAEL			
Mediterranean Coast	National Outline Scheme for the Mediterranean Coast (1983)	Coordinator Environmental Planning, Ministry of the Environment 5 Kanfei Nesharim St., Givat Shaul, Jerusalem, Israel valerie@environment.gov.il	1993 Roster of ICM Efforts
Mediterranean Coast	Coastal Area Management Programme for Israel	What are the local contact points and who is the contact person? http://pap.-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP w/s 1/02
Eilat Coast	Eilat Coast ICM Plan?		Contact Reuven Ortal
Gulf of Aqaba (Egypt, Israel, Jordan)	Proposed Marine Peace Park?		
ITALY			
Nation-wide	Management of Coastlines for Marine and Terrestrial Protected Areas	Coordinator National Technical Board for Marine Protected Areas, Ministry of Environment, Via C. Colombo 44 00147, Rome, Italy Ph: 39 06 5722-3436, Fax: 5722-3474. cinquepalmi.federico@minambiente.it	
Nation-wide	National Coastal Plan	Director Marine Environment Research Center, ENEA (National Agency for Energy and Environment), Santa Teresa, La Spezia, Italy Ph 39 0187 978 260 fax +39 0187 978 213 scabbia@estof.santateresa.enea.it	
Venice	Venice Lagoon Safeguard Program	Coordinator Consorzio Venezia Nuova S. Marco 2803, 30124 Venezia, Italy	Contact Federico Cinquepalmi
Abruzzi	Rational for Integrated Coastal Area Management -RICAMA (EU ICZM Demonstration Programme)	Coordinator Regione Abruzzi Piazze S. Giusta - Palazzo Centi, 67100 L'Aquila, Italy Ph: 39 862 364-503, Fax: 364-565	EU ICZM Demo w/s 1/02

Gulf of Naples	Territorial coordination scheme for the harbour system and coast of the Gulf of Naples Also The focal point for the Posidonia Project involving Athens, Barcelona, Palermo, and Taranto. (EU ICZM Demonstration Programme)	Project manager Naples Provincial Authority, 293 via dei Tribunali, 80138 Napoli, Italy 39 81 552-0552, fax: 551-2575 Also, See Table C-4: International ICM Efforts for the Posidonia Project	Terra Programme EU ICZM Demo w/s 1/02
JAMAICA			
Nation-wide	The Jamaica Coral Reef Action Plan	Coordinator Caribbean Coastal Area Management (CCAM) Foundation 7 Lloyds Close, Kingston 8, Jamaica, W.I. Ph: 876 978 4050, Fax: 876 978 7641 pespeut@daffodil.infochan.com	Contact Peter Espeut CZ 97 and 99
Nation-wide	National Integrated Coastal Zone Management Programme (1996-)	Natural Resources Conservation Authority	Jamaica Sustainable Development Networking Programme w/s 1/02
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	<i>(In the pipeline)</i>	GEF/UNEP/UNDP funding GEF w/s 1/02
South Coast	South Coastal Sustainable Development Project (JA-0112) Proposed Project 10/01	<i>Has the local director been selected? If so, need address and contact points.</i>	IADB w/s 1/02 <i>Eduardo Figueroa, Project leader</i>
Kingston Harbour	The Study of the Kingston Harbour Area?	Need name of contact person, address and contact points.	Jamaica Sustainable Development Networking ws 1/02
Portland Bight	Portland Bight Sustainable Development Area	Coordinator Caribbean Coastal Area Management (CCAM) Foundation 7 Lloyds Close, Kingston 8, Jamaica, W.I.. Ph.: 876 978 4050, Fax: 876 978 7641. pespeut@daffodil.infochan.com	CZ 97 and 99
Portland Bight	Coastal Zone Management in Portland Bight	Continuation of the above project? <i>(In the pipeline)</i>	GEF/UNDP/IADB funded GEF w/s 1/02
JAPAN			
Nation-wide	Outline of Guidelines for Integrated Coastal Zone Management Plans (for local authorities to build ICZM plans (Promulgated February 2000?))	Ocean Affairs Office Planning and Coordination Bureau, National Land Agency Ph: 81 3 3593-3311 x 7312, fax: 3593-8414, q731201@nla.go.jp www.nla.go.jp/keika/substract_eng.htm	
Seto Inland Sea	Basic Plan for the Conservation of the Environment of the Seto Inland Sea	Need name of contact person, address and contact points.	CSD Report 11/98 www.nla.go.jp/welcome-e.html to be translated. Contact Harvey Shapiro

JERSEY ISLAND (Self-governing with the U.K. only responsible for foreign affairs and national defense)			
JORDAN			
Nation-wide	Gulf of Aqaba Environmental Action Plan	GEF Programme Aqaba, Jordan Ph: 962 3 201 9405, Fax: 201-2406	GEF-WB funded GEF w/s 1/02
KAZAKHSTAN			
Caspian Sea (Nation-wide)	National Component of the Caspian Action Plan	Coordinator Minister of Ecology and Natural Resources Karl Marx Street, Kokshetau, Kazakhstan Ph: 7 3272 5 4242, Fax: 50620, sakhmetov@koksh.kz	CasEP w/s
Aral Sea	Water and Environmental Management in the Aral Sea Basin	See Table C-4: International ICM Efforts	
KENYA			
Nation-wide	The Coastal Resources Management Project (CRM II)	<i>What has happened to this nation-wide effort? Any local contact for a national effort?</i> or Coordinator Coastal Resources Center, URI Bay Campus, Kingston R.I. Ph: 401 874-6224, fax: 789-4670, tgbayer@gso.uri.edu, www.crc.uri.edu	CRC w/s 1/02 CZ 99,
Nyali-Bamburi-Shanzu area	Integrated Coastal Area Management Initiative	<i>Who is local contact, address, and contact points?</i> or Coordinator Coastal Resources Center, URI Bay Campus, Kingston R.I. Ph: 401 874-6224, fax: 789-4670, tgbayer@gso.uri.edu, www.crc.uri.edu	CRC w/s 1/02 SEACAM w/s 12/01
Lake Victoria	Lake Victoria Environmental Management Project (LVEMP)	See Table C-4: International ICM Efforts	
KIRIBATI			
Nation-wide	Land and sea resources management capacity component of the National Environmental Management Strategy (to be completed in 1997)	<i>Need local contact person, address and contact points</i>	SPREP w/s 1/02 Contact SPREP

KOREA			
Nation-wide	National Ocean Management System, Coastal Management Act	Coordinator Marine Policy Center Korea Ocean Research & Development Institute Ansan, P. O. Box 29, Seoul 425-600, South Korea	CZ 99 Contact Dosoo Jang
KUWAIT			
	National study for ROPME?		
LATVIA			
Nation-wide?	The Latvia Coast (EU ICZM Demo Program)	Coordinator Ministry of the Environment & Regional Development Peldu St. 25, 1494 Riga, Latvia Ph: 371 7 026411, Fax: 820442, BITE@novell.varam.gov.lv	EU Phare Programme support EU ICZM Demo w/s 1/02
Nation-wide	Coastal Investment Strategy	Integrated Coastal Zone Management in the Baltic States and Poland	EU PHARE funded CSD Report 11/98 EUCC w/s 1/02
Lake Kanieris and Kemerī National Park	Conservation Project for Lake Kanieris and Kemerī National Park	Need local contact person, address, and contacts Latvian Fund for Nature Riga, Latvia	Work done by EUCC as a demo project EUCC w/s 1/02
LEBANON			
Nation-wide	Integrated Coastal Zone Management Program	Council for Development and Reconstruction. Program to 'be funded by the World Bank (deadline for submission of proposals pending)	CSD Report 4/99 Contact PAP
Khaldeh to the Southern border with Israel	Coastal Management Programme for Lebanon	What are the local contact points and who is the contact person? http://pap.-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP w/s 1/02
LIBYA			
LITHUANIA			
Nation-wide	National Strategy on Integrated Coastal Zone Management	Need name of contact person, address and contact points.	CSD Report 12/98
Nation-wide	The Lithuanian Coast (EU ICZM Demonstration Programme)	Coordinator Ministry of Environmental Protection Juozapaviciaus 9, Vilnius 2600, Lithuania Ph: 370 2 723432, Fax: 728020	Funded by EU PHARE EU ICZM Demo w/s
Nation-wide	Integrated Coastal Zone Management in the Baltic States and Poland	See Table C-4: International ICM Efforts	

Nemanus Delta and Rusne Island	Management plan for Rusne Island (1995-2001)	Need name of local contact persons, address, and contacts Lithuanian Fund for Nature Vilnius, Lithuania	Work done by EUCC as a demo project EUCC w/s 1/02
MADAGASCAR			
Nation-wide	Second Environment Program Support Project	Need local contact person, address, and contact points (In the pipeline)	UNDP, Bank/GEF-associated IDA Project WB ICM database 12/01
Menabe area	Master Plan for Coastal Zone Management	Menabe Regional Development Committee Need local contact person, address, and contact points	Support from EU(Rep-IOC/EU) Indian Ocean Cmsn Programme
MADEIRA (Self-governing Island Region of Portugal)			
MALAWI			
Lake Malawi/Nyasa	Lake Malawi/Nyasa Biodiversity Conservation Project	See Table C-4: International ICM Efforts	
MALAYSIA			
Nation-wide?	Malaysia Integrated Coastal Zone Management Project.National Policy Formulation, Pilot Projects in Penang, Sabah, and Sarawak (Project start 1996)	Economic Planning Unit Prime Minister's Department Jalan Sultan salahuddin 50622 Kuala Lumpur Ph: 60 3 293 3333/230 0133, Fax: 292 3115, Malaysia epu w/s	Funding from DANCED DANCED w/s
East coast	Conservation of Biodiversity in the Marine Parks of Peninsula Malaysia	(In the pipeline)	GEF/UNDP funded GEF w/s 1/02
Pinang	Panang Integrated Coastal Zone Management Pilot Project	Panang ICZM Unit State Economic Planning Unit, Chief Minister's Office Ph: 65 04 650 5413, fax: 261 1897, beck@pc.jaring.my	Funding from DANCED DANCED w/s
Sabah	Sabah Integrated Coastal Zone Management Pilot Project	Head of the ICZM Unit Ph: 60 088 268-589, fax: 222-557, iczmsab@tm.net.my www.iczm.sabah.gov.my	Funding from DANCED DANCED w/s
Sarawak	Sarawak ICZM Pilot Project	Sarawak ICZM Unit Sarawak State Planning Unit, Chief Minister's Department Ph: 65 082 492 273, fax: 440 506, elg@pc.jaring.my	Funding from DANCED DANCED w/s
Klang district	Klang district: National ICM Demonstration Project	Site Manager Klang ICM Project, Selangor Waters Management Authority 5th Floor, Bangunan, SSAAS, Shah Alam Selangor, Malaysia Ph: 60 3 5511-7143, fax: 5510-4494, www.pemsea.org	PEMSEA w/s 1/02

South Johore	South Johore Coastal Resources Plan	Pilot Site of the ASEAN Coastal Resources Management Program (1986-1992) What became of this project?	1993 Roster of ICM efforts NOAA w/s Contact PEMSEA
MALDIVES			
Nation-wide	Second National Environmental Action Plan (6/99)	Ministry of Home Affairs, Environment Section www.environment.gov.mv/index_2.htm	Source: Environment Maldives w/s
Nation-wide?	Conservation and Sustainable Use of Biodiversity Associated with Coral Reefs in the Maldives	(In the pipeline)	GEF/UNDP funded GEF w/s 1/02
MALTA			
Nation-wide	Coastal Area Management Programme for Malta	What are the local contact points and who is the contact person? Environmental Planning Department Ministry of Environment http://pap.thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP w/s 1/02
MARSHALL ISLANDS (Self-governing in free association with the United States)			
Majuro Atoll	Marshall Islands Coastal Management Project	Need name of contact person, address and contact points.	UNDP w/s
MARTINIQUE (Overseas Department of France)			
MAURITANIA			
Baie d'Arguin	Parc Nacional du Banc d'Arguin	Need name of contact person, address and contact points.	IUCN project
MAURITIUS			
Nation-wide	National Environmental Action Plan and pilot program to address coastal issues	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
Nation-wide	Management and the Protection of Endangered Marine Environment in Mauritius	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
Eastern Area	Programme for the Integrated Management of the Eastern Area of Mauritius	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01

MAYOTTE ISLAND (Territorial Collectivity of France)			
MEXICO			
Nation-wide	Special Program for the Sustainable Development of Beaches, the Federal Marine Lands and Reclaimed Areas, 1996-2000	Secretariat of Environment, Natural Resources, and Fisheries www.semarnap.gob.mx	SDA Report 2/99, CZ 99 Contact Martin Merino
Gulf of California		National Ecology Institute (INE)	CRC w/s 1/02
Gulf of California Bahia Santa Maria, Sinaloa	Bahia Santa Maria Vision for 2015 and Plan	Is there a local contact, address, and contact points? or Mexico Program Manager Coastal Resources Center, URI, Bay Campus, Narragansett, R.I. Ph: 401 874-6135, fax:789-4670, rubi@gso.uri.edu, www.crc.uri.edu	CRC w/s 1/02
Laguna de Terminos Campeche	Management Plan for Laguna de Terminos System	Program Director, EPOMEX University of Campeche AP 520, Campeche 24030, Mexico	1993 Roster of ICM efforts Contact: Alajandro Yanez-Arrancibia
Sian Kaan Quintana Roo	Management Program for Sian Kaan Biosphere Reserve	Need name of contact person, address and contact points.	World Heritage Site and Biosphere Reserve
Xcalak Peninsula Quintana Roo	Integrated Coastal Management for the Xcalak Peninsula	Is there a local contact, address, and contact points? or Mexico Program Manager Coastal Resources Center, URI, Bay Campus, Narragansett, R.I. Ph: 401 874-6135, fax:789-4670, rubi@gso.uri.edu, www.crc.uri.edu	CRC w/s 1/02
Chetumal Bay region, Quintana Roo	Coastal Management Network	Is there a local contact, address, and contact points? or Mexico Program Manager Coastal Resources Center, URI, Bay Campus, Narragansett, R.I. Ph: 401 874-6135, fax:789-4670, rubi@gso.uri.edu, www.crc.uri.edu	CRC w/s 1/02
MICRONESIA Federated States (Self-governing with free association to the United States)			
Nation-wide?	Strategic Level for ICM in context with the National Environmental Management Strategy	If still underway, Need local contact person, address, and contact points	SPREP w/s 1/02
Kosrae Island	Kosrae Shoreline Management Project	Coordinator Development Review Cmsn. PO Box DRC, Kosrae 96944 Federated States of Micronesia Ph: 691 370 2076, Fax: 370 3000, dramsav@mail.fm www.geocities.com/Rainforst/Jungle/3481/index.htm	

Kosrae Island	Kosrae Island Resources Management Plan (Adopted 1992)	Kosrae Sate Office of Budget and Planning	1993 Roster of ICM efforts Hawaii Sea Grant w/s
Phonpei Island	Pohnpei Coastal Resources Management Plan	Pohnpei State Environmental Protection Agency	1993 Roster of ICM efforts Hawaii Sea Grant w/s
Yap Island	Yap State Marine Resources and Coastal Management Plan	Director of Department of Resources and Development Yap State Government P.O. Box 336, Colonia, YAP Federal States of Micronesia 96943	1993 Roster of ICM efforts Contact Douglas Ramsey Hawaii Sea Grant w/s
Yap Island	Strategic Level for ICM in context with the National Environmental Management Strategy	<i>If still underway, Need local contact person, address, and contact points</i>	SPREP w/s 1/02 <i>Contact SPREP</i>
MONACO (Sovereign with French defense of independence as well as customs and monetary unity)			
	<i>Ocean Code of March 1998?</i>		SDA Report 11/98 <i>Contact PAP/RAC</i>
MONTserrat (Overseas Territory of the U.K.)			
MOROCCO			
	<i>"A strategy for the protection and integrated development of the coast is in the process of elaboration by the Department of the Environment" (August 1999?)</i>	<i>Is this what PAP is doing?</i>	CSD Report 8/99 <i>Contact PAP/RAC</i>
Nation-wide	Coastal Area Management Programme for Morocco	<i>What are the local contact points, address, and who is the contact person?</i> http://pap.-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP w/s 1/02
MOZAMBIQUE			
Nation-wide	National Program for Coastal Zone Management	Coordinator Ministry for the Co-ordination of Environmental Affairs Coastal Zone Management Unit P.O. Box 804 Maputo, Mozambique coastal@zebra.uem.mz	Contact SEACAM CZ 99
Nation-wide	Marine and Coastal Biodiversity Management Project (1999-2002)	<i>Contact SEACAM for local contact person, address, and contact points.</i>	SEACAM w/s 12/01
Nation-wide	Marine and Coastal Biodiversity Management Project (In the pipeline)	<i>Is this the same project as above and/or below? If so, need local contact person, address, and contact points</i>	GEF Project WB ICM database 12/01

Nation-wide	Coastal and Marine Biodiversity Management Project (1999)	Is this project the same or different from the projects above? If so, need local contact person, address, and contact points	WB funded project WB ICM database 12/01
Incomati River Basin and Adjacent Coastal Zone	Management of the Incomati River Basin and Adjacent Coastal Zone (2000-2005)	Coordinator Coastal Zone Management Centre, RIKZ See also Table C-4: International ICM Efforts www.netcoast projects w/s 1/02	Work done by the Dutch CZM Centre netcoast projects w/s 1/02
Lake Malawi/Nyasa	Lake Malawi/Nyasa Biodiversity Conservation Project	See Table C-4: International ICM Efforts	GEF Biodiversity w/s 1/02
Cabo Delgado Province	Mercufi Coastal Zone Management Program	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
Maputaland	Development-conservation strategies for integrated coastal management in Maputaland	See Table C-4: International ICM Efforts	
Beira	Integrated Coastal Zone Management Plan for the City of Beira (completed in 1999)	Contact SEACAM for local contact person, address, and contact points.	Work done by the Dutch CZM Centre SEACAM w/s 12/01 Netcoast projects w/s 1/02
Xai-xai District	Xai-xai District Coastal Management Program (1998-2000)	Contact SEACAM for local contact person, address, and contact points.	SEACAM w/s
Inhaca Island	Inhaca Island Development Project	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
NAMIBIA			
Erongo Region	Erongo Region Integrated Coastal Zone Management Project	ICZM Project Erongo Regional Council, P.O. Box 1230 Swakopmund, Namibia Ph and fax: 264 64 403-922, www.iczm-erongo.com.na	Funded by DANCED
Benguela Current (Nation-wide)	Integrated Management of the Benguela Current Large Marine Ecosystem	See Table C-4: International ICM Efforts	
NAURU			
Nation-wide	Coastal Protection Project	If still underway, Need local contact person, address, and contact points	SOPAC w/s 1/02
NETHERLANDS			
Nation-wide	A Coastal Zone Perspective: A Preparatory Study	Coordinator RIKZ, PO 20907, 2500 Ex Den Haag, Netherlands Ph: 31 70 311 4376, fax 311 4300	Contact: Frank van der Meulen

North Sea coast	Coastal Vision 2050	Coordinator Province of North Holland, Haarlem Ph: 31 23 514-3312 Titian Oterdoom Province of South Holland, The Hague Ph: 31 70 441-6388	Source: Marcel Marchand
Wadden Sea	Wadden Sea Management Plan:	See Table C-4: International ICM Efforts	
Schelde Estuary	Long Term Vision on the Schelde Estuary	Rijkswaterstaat, Directorate Zeeland J. Coosen Middelburg Ph: 31 118 686-6232	Marcel Marchand
NETHERLANDS ANTILLES (Self-governing islands, Netherlands for defense & foreign affairs)			
NEW CALEDONIA (Overseas Territory of France)			
NEW ZEALAND			
Nation-wide	National Coastal Policy Statement Regional Coastal Plans and Restricted Coastal Activities	The Coastal Section Department of Conservation P.O. Box 10-420, Wellington, New Zealand http://www.doc.govt.nz/cons/marine/restri.htm	Source: New Zealand Department of Conservation w/s
NICARAGUA			
Nation-wide	Action Plan for Natural Resources in Nicaragua's Coastal Zone Focus now on Fonseca, Estero Real, and Laguna de Perlas	Ministry of Environment and Natural Resources Support provided by Denmark in 1996	SDA Report 3/99 Check DANIDA and DANCED w/s
Gulf of Fonseca	Pilot projects along Nicaragua's coastal area of the Gulf of Fonseca. (See also El Salvador and Honduras) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator Nicaragua's part of the Gulf of Fonseca?</i>	PROARCA - Costas w/s 1/02
Miskito Coast (between Cabo Cameron in Honduras and Laguna de Perlas in Nicaragua)	Pilot projects along Nicaragua's coastal area of the Misquito Coast (See also Honduras) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator Nicaragua's part of the Mosquito coast ?</i>	PROARCA - Costas w/s 1/02

North Caribbean coast and estuary of the San Juan River	Formulation of a Strategic Action Program for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and its Coastal Zone	See Table C-4: International ICM Efforts	GEF-UNDP-OAS funded GEF w/s 1/02
Laguna de Perlas	<i>Coastal Area Monitoring Project (CAMP) Laguna de Perlas? Is this a component of PROARCA - Costas?</i>	<i>"Program spearheaded by MARENA"?</i>	<i>Contact Pam Rubinoff and Rafael Calderon</i>
NIGER			
Lake Chad	Integrated Management of the Lake Chad Basin	See Table C-4: International ICM Efforts	
NIGERIA			
Nation-wide	<i>"National Policy and Action Plan on Integrated Coastal Area Management"?</i>		<i>Source? Contact Larry Awosika</i>
Nation-wide	Gulf of Guinea Large Marine Ecosystem Project	See Table C-4: International ICM Efforts	
Lagos Lagoon	Rehabilitation and Management Program for Lagos Lagoon		Roster of ICM efforts (1993) <i>Contact Awosika</i>
Lake Chad	Integrated Management of the Lake Chad Basin	See Table C-4: International ICM Efforts	
NIUE (Self-governing Overseas Territory in free association with New Zealand)			
NORFOLK ISLAND (Territory of Australia)			
NORTH KOREA			
Nampo area	Nampo Integrated Coastal Management Demonstration Site	Division Director General Bureau for Cooperation with International Organizations Jungsong-dong, Central District, Pyongyang, Democratic People's Republic of Korea Ph: 8502 381-3174/3175, fax: 381-4461, www.pemsea.org	PEMSEA w/s 1/02

NORWAY			
Nation-wide	National Oceans Policy (Fully integrated with the National Strategy for Sustainable Development)	<i>Need name of contact person, address and contact points.</i>	CSD Report 4/97
Eighteen municipalities in Hegleland	Local management plans on the Norwegian coasts (EU ICZM Demonstration Programme 1997-99)	Coordinator Byrå Nord AS, Postbox 44, Soldjellsjøen 8820 Dønna, Norway Ph: 47 750 55300, Fax: 55320. torhenning@bnord.no	EU ICZM Demo w/s 1/02 EUCC ICM Progress w/s 1/02
Hordaland County	Hordaland County Plan for the Coastal Zone (1996)	Hordaland County	EUCC ICM Progress w/s 1/02
Oslofjord region	National Policy Guidelines for Planning in Coastal and Marine Areas in Oslofjord	<i>Need name of contact person, address and contact points.</i>	CSD Report 4/97
OMAN			
Nation-wide	Oman Coastal Zone Management Program (Seven year project completed in 1990)	Ministry of Environment Muscat, Oman	1993 Roster of ICM efforts Oman w/s Contact Rod Salm
PAKISTAN			
Nation-wide	<i>Coastal Environmental Management Plan for Pakistan? (1996)</i>	Environment and Natural Resources Management Division	Source?
PALAU (Constitutional self-governance in free association with the United States)			
PALESTINE NATIONAL AUTHORITY			
Gaza strip	Gaza Coastal and Marine Environmental Action Plan	Coordinator Palestinian Environmental Authority P. O. Box 296, Hebron, West Bank, Palestine <u>or</u> DHV Consultants and Delft Hydraulics	MedCoast 97 Contact Marcel Marchand
PANAMA			
Caribbean coast corridor between Bocas del Toro (Panama) + the northern boundary of Refugio Nacional de Vida Silvestre Gondoca-Manzanillo (Costa Rica)	Pilot projects along Panama's section of the coastal corridor (See also Costa Rica) (Component of the PROARCA-Costas program) (See also Table C-4: International Efforts)	<i>Is there a local coordinator of Panama's part of the coastal corridor ?</i>	PROARCA - Costas w/s 1/02

PAPUA NEW GUINEA			
Nation-wide?	Biodiversity Strategic Action Plan (1999)	Need local contact person, address, and contact points	GEF Project WB ICM database 1/02
Nation-wide	Strategic Level for ICM in context with the National Environmental Management Strategy	If still underway, Need local contact person, address, and contact points	SPREP w/s 1/02 Contact SPREP
Milne Bay Province	Community Based Coastal and Marine Conservation in Milne Bay Province	(In the pipeline)	GEF/UNDP funded GEF database 1/02
PERU			
Northwest	Collaborative Management for the Conservation and Sustainable Development of the Northwest Biosphere Preserve (1999)	Need local contact person, address, and contact points	GEF-MSB Project WB ICM database 12/01
Lake Titicaca	Conservation of Biodiversity in the Watershed of Lake Titicaca: Strategic Bi-national Plan	See Table C-4: International ICM Efforts	GEF/UNDP
PHILIPPINES			
Nation-wide	Coastal Resource Management Project Six learning areas: Palawan; San Vicente. Negros Oriental; Southeast Cebu; Olango area Bohol; NW area. Sarangani Bay. Davao del Sur; Malaga Bay. (Each area will be given a separate listing in a future iteration)	Coordinator Coastal Resource Management Project 5th floor CIFC Towers, North Reclamation Area Cebu City 6000, Philippines Ph: 633 2 232 1821, Fax: 1825. awhite@mozcom.com	CZ 99 and USAID w/s 1/02
Nation-wide	Integrated Coastal Resources Management (PPTA: PHI 33276-01)	(In the pipeline)	GEF/UNDP/ADB funded GEF w/s + ADB w/s 1/02
Mindanao	Coastal and Marine Biodiversity Conservation in Mindanao (1999)	Need local contact person, address, and contact points	WB funded project WB ICM database 12/01
Mindanao	Supplement to the Mindanao Rural Development Project	Need local contact person, address, and contact points (In the pipeline)	GEF Project WB ICM database 12/01
Macajalar Bay area Mindanao	Coastal Environment Management Plan for Macajalar Bay (Completed in 1996?)	Department of Environmental and Natural Resources	Funded by ESCAP
Bataan Peninsula	Integrated Coastal Management Parallel Site for the Bataan Peninsula	Director Bataan ICM Project c/o Provincial Government of Bataan Balanga, Bataan, Philippines Ph: 632 047 237-3488 / 791-2632, fax: 237-2413 gov@mozcom.com, www.pemsea.org	Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) w/s 12/01

Batangas Bay Region	Batangas Bay Integrated Coastal Management Demonstration Site (during the pilot phase)	Need local contact person and contact points www.pemsea.org	PEMSEA w/s 1/02
Laguna de Bay	Sustainable Development of the Laguna de Bay Environment	Coordinator Laguna Lake Development Authority Ph: 63 1 2552 or Delft Hydraulics and Haskoning Consultants Is this correct?	Source: Marcel Marchan
Lingayan Gulf	Integrated Coastal Management Plan for Lingayan Gulf	Pilot Site of the ASEAN Coastal Resources Management Program (1986-1992) What became of this project?	1993 Roster of ICM efforts
Manila Bay	Manila Bay Environmental Management Project	Director Manila Bay Environmental Project, DENR Visayas Avenue, Quezon City, Philippines 1165 Ph: 63 2 929-66-26 X 2102, mb_pmo@pemsea.org, www.pemsea.org	PEMSEA w/s 1/02
A province in central Philippines	Proposed ICM Pilot Project?	Demonstration of the CRC's two track approach	Coastal Resources Center University of Rhode Island w/s www.crc.uri.edu
Ulugan Bay, Puerto Princessa, Palawan	Coastal Resources Management and Sustainable Tourism (UNDP project #PHI/98/007A/01/13) (1998-1999)	What is the connection with the project below?	UNDP projects w/s 1/02
Ulugan Bay, Palawan	Coastal resources management and ecotourism: an intersectoral approach to localizing sustainable development. Ulugan Bay	Coordinator Marine Science Institute CS. U. of Philippines, Diliman 1101 Quezon City, the Philippines Ph: 63 2 922-3959, fax: 924-7678, fortesm@msi01.cs.upd.edu.ph	Support from UNESCO CSI Programme, www.unesco.org/csi
POLAND			
Nation-wide	Integrated Coastal Zone Management in Estonia, Latvia, Lithuania, and Poland	Integrated Coastal Zone Management in the Baltic States and Poland See also Table C-4: International ICM Efforts	EU PHARE programme funded CSD Report 11/98
Vistula Lagoon, Municipality of Tolkicko		Administered by the County Board of Vastmanland, Sweden	EUCC ICM Progress w/s 1/02
Oder Delta	General Vision and Management Plan for the Oder Delta	Coordinator EUCC Poland Bociania 9-B, 02-807 Warsaw, Poland krabski@mos.gov.pl	Work done by EUCC as a demo project EUCC w/s 1/02

PORTUGAL			
Algarve and Huelva, Spain	Integrated management of the Algarve-Huelva coast (EU ICZM Demonstration Programme)	Coordinator Asociacion de Municipios Hispano-Lusa Jornal do Algarve 24 C, 8900 Vila Real de Sto. Antonio, Portugal Ph: 351 281 511-488, fax: 511-663, np74bm@mail.telepac.pt Also see Figure C-4: International ICM Efforts	
The Region of Algarve and Ria Formosa	Algarve and Ria Formosa Coastal Zone Management Plan	Coordinator ANJE, Estrada da Penha, PT -8000, Faro, Portugal Ph: 351 289 862-902, fax: 862-907, anjefaro@mail.telepac.pt	EU TERRA Programme EU ICZM Demo w/s 1/02
Douro River and estuary	Management Program for the Douro estuary	Coordinator Area Metropolitana do Porto Avenida dos Aliados, no 133, 3, Porto, Portugal 351 22 339-2020, Fx 208-4099, manuel.lemos@esuriales.org/ antonio.taveres@esuriales.org www.esturiales.org.fr	Estuariales Network
Ria de Aveiro	Programme of integrated management for the Ria de Aveiro (EU ICZM Demonstration Programme)	Coordinator U. de Aveiro, Departamento Ambiente e Ordenamiento Campus Universitario 3810 Aveiro, Portugal Ph: 351 234 370-299, Fax: 29290, coelho@dao.ua.pt	EU Life Programme EU ICZM Demo w/s 1/02
Tagus River	Management Program for the Ria Tagus	Coordinator Area Metropolitana de Lisboa Rua Carlos Mayer no 2 r/c, 1700-102 Lisboa Portugal Ph: 351 21 842-8570, Fx: 842-8577, jose.fereira@esturiales.org/ www.esturiales.fr	Esturiales Network and w/s 7/01
Vale do Lima	Cooperation, integrated management and sustainable development in the coastal zone of Vale do Lima (EU ICZM Demonstration Programme)	Coordinator VALIMA Edf. Dos Antigos Pacos do Concelho, 1 4990 Ponte de Lima, Portugal Ph: 351 258 909-340, fax: 743-541	EU TERRA Programme EU ICZM Demo w/s 1/02
QATAR			
	<i>National study for ROPME?</i>		
REUNION (Overseas Department of France)			
ROMANIA			
Black Sea	National ICZM Assessment Report and National Black Sea Strategic Action Plan	Coordinator Romanian Marine Research Institute B-dul Mamaia N.300, 8700, Constanta 3 Romania Ph: 40 41 643-288, Fax: 831-274. jullyp@alpha.rmri.ro	CSD Report 11/98 BSEP w/s 1996
Danube Delta	Danube Delta Strategy and Management Plan	Danube Delta Authority Tulcea, Romania arbdd@tlx.ssiitl.ro	GEF supported project

Constanta County	ICZM and Investment Plan for Constanta County	World Bank	EUCC w/s 7/12
RUSSIA			
Nation-wide	Integrated Coastal Zone Management in Russia Project	Coordinator Department of Environmental Research Ministry of Science and Technology 11, Tverskaya Str., Moscow 103905, Russia Ph: 7 (095) 925 96 09, Fax: 7 (095) 229 02 82. mikhaylichenko@minstp.ru	Medcoast 97 Contact Yuri Mikhaylichenko
Black and Azov Seas coastline	Integrated Programme on Coastal Zone Management for the Black and Azov Seas (1998-2010)	Coordinator Krasnodar Regional Committee for Environmental Protection and Natural Resources 19 Krasnaya Str. Krasnodar, Russia Ph: 7 8612 570-431, fax 528-832. sed@priroda.kuban.su	CSD Report 1/99 Contact Yuri Mikhaylichenko and Leonid Yarmak
Black and Azov Seas coastline	National ICZM Assessment Report and National Black Sea Strategic Action Plan	Coordinator Krasnodar Regional Committee for Environmental Protection and Natural Resources 19 Krasnaya Str. Krasnodar, Russia Ph: 7 8612 570-431, fax 528-832. sed@priroda.kuban.su	BSEP w/s 1996 Contact Leonid Yarmak
Caspian Sea coastline	National Component of the Caspian Action Plan	Coordinator State Committee for Environmental Protection 123812 Moscow GSP Gruzinskaya St. 4/6 Ph: 95 254 6733, Fax: 8283. cip.rus@cityline.ru (c/o S Tikonov, CIP)	CasEP w/s 7/01
Baltic Sea coastline	Pilot project for the coastal zone of the Kingisepp District, Leningrad Oblast	Vice-President EUCC, Universitetskaya emb. 7/9, 99034 St. Petersburg, Russia pogrebov@VP4122.spb.edu	EUCC
Barents Sea coastline	The Barents Sea Region Sustainable Development	Murmansk Province State Committee on Environmental Protection and Natural Resources	Contact Yuri Mikhaylichenko or Raphael Vartanov
Palkin Bay (White Sea Area)	Regional Plan for Sustainable Coastal Development		CSI w/s 1/02
Glendjik Bay Black Sea	ICZM Pilot Project	Coordinator Krasnodar Regional Committee for Environmental Protection and Natural Resources 19 Krasnaya Str. Krasnodar, Russia Ph: 7 8612 570-431, fax 528-832. sed@priroda.kuban.su	Contact Leonid Yarmak
SABA (Component of the Netherlands Antilles)			
Saint HELENA, ASCENSION and TRISTAN de CUNHA (Dependent Territory of the United Kingdom)			

Saint KITTS (CHRISTOPHER) and NEVIS			
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	(In the pipeline)	GEF/UNEP/UNDP funding GEF w/s 1/02
Frigate Bay (St. Kitts) Pinney's Beach (Nevis)	Caribbean Planning for Global Climate Change (Component 8)	Need name of contact person, address and contact points.	Natural Resources Institute w/s 1/02
Saint LUCIA			
	Integrated Coastal Management Plan for the Castries area?	Proposed OECS and ODA ICZM Program	Contact OECS and Brian Nicholls
Nation-wide?	Coastal Wetland and Ecosystem Conservation and Sustainable Livelihoods Project	St. Lucia National Trust Need local contact person, address, and contact points (In the pipeline)	GEF-WB project WB ICM database 12/01
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	(In the pipeline)	GEF/UNEP/UNDP funding GEF w/s 1/02
Soufriere area	Soufriere Marine Management Area	Manager Soufriere Marine Management Area PO Box 305, Soufriere, St. Lucia, W. I. Ph: 758 459 5500; fax: 459 7799. smma@candw.lc www.smma.org.lc	
Saint PIERRE and MIQUELON (Self-governing Collectivity of France)			
Saint VINCENT and the GRENADINES			
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	(In the pipeline)	GEF/UNEP/UNDP funding GEF w/s 1/02
SAMOA			
Aleipata and Safata districts	Marine Biodiversity Protection and Management (1999)	Need local contact person, address, and contact points	WB funded project WB ICM database 12/01
SÃO TOMÉ and PRÍNCIPE			
Nation-wide?	Biodiversity Strategy and Action Plan (2000)	Need local contact person, address, and contact points	GEF-IBRD Project WB ICM database 12/01

SAUDI ARABIA			
Arabian/Persian Gulf	<i>National study for ROPME?</i>		
Red Sea	An Assessment of Management for the Saudi Arabian Red Sea Coastal Zone		1993 Roster of ICM efforts Contact John Clark, Rod Salm
SENEGAL			
Nation-wide?	Marine and Coastal Biodiversity Conservation	Need local contact person, address, and contact points (In the pipeline)	GEF-WB funded project WB ICM database 12/01
SEYCHELLES			
Nation-wide	Marine Ecosystem Management Project (2000)	Need local contact person, address, and contact points	GEF-IBRD Project WB ICM database 12/01
Grand Anse	Grand Anse ICZM Pilot Project (1998-2000)	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s
SINGAPORE			
Nation-wide?	Strategies for Urban Coastal Area Management	Pilot Site of the ASEAN Coastal Resources Management Program (1986-1992) What became of this project?	Contact PEMSEA
Sint EUSTACIUS (Component of the Netherlands Antilles)			
Sint MAARTEN (Component of the Netherlands Antilles)			
SLOVENIA			
Nation-wide	Slovenian Coastal Zone Management Project (EC project #ZZ96 03)	Could you provide me with the local contact person, address and points of contact?	EC DGIA PHARE Program funding EUCC ICM Progress w/s 1/02
Nation-wide	Slovenian Coastal Zone Management Project (Same as CAMP?)	Is this the same as below?	CSD Report 2/99. Contact PAP/RAC
Nation-wide?	Coastal Area Management Programme for Slovenia	What are the local contact points and who is the contact person? Ministry of Environment and Spatial Planning Ljubljana, Slovenia http://pap.-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC w/s 1/02

SOLOMON ISLANDS			
Nation-wide	Solomon Islands Community Resource Conservation and Development Project (Since 1991 - ?)	World Wildlife Solomon Islands Program	WWF w/s 12/01
Nation-wide	Land and sea resources management capacity component of the National Environmental Management Strategy (to be completed in 1997)	<i>Need local contact person, address and contact points</i>	SPREP w/s 1/02 <i>Contact SPREP</i>
Nation-wide?	Marine Resources Management and Conservation Project	<i>(In the pipeline)</i>	GEF/UNDP/ADB funded GEF w/s
SOUTH AFRICA			
Nation-wide	Coastal Management Policy Programme (1996-2000)	Coastal Management Office Dept. of Environmental Affairs and Tourism Private Bag X2, Roggebaai 8012, South Africa Ph: 27 21 402-3228, Fax: 418-2582 czm@sfri.wcape.gov.za http://sacoast.wcape.gov.za	
Nation-wide	South Africa Coastal and Marine Resource Management	<i>Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.</i>	SEACAM w/s 12/01
Benguela Current	Integrated Management of the Benguela Current Large Marine Ecosystem	See Table C-4: International ICM Efforts	
Maputaland	Development-conservation strategies for integrated coastal management in Maputaland	See Table C-4: International ICM Efforts	
Eastern Cape Province	Eastern Cape Province Coastal Management	<i>Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.</i>	SEACAM w/s 12/01
Eastern Cape	Eastern Cape Estuaries Management Programme (1998-2003)	<i>Contact SEACAM for local contact person, address, and contact points.</i>	SEACAM w/s 12/01
Cape Peninsula	Cape Peninsula Biodiversity Conservation Biodiversity Project (1998)	<i>Need local contact person, address, and contact points</i>	GEF Project WB ICM database 12/01
St. Helena Bay	Coastal Resources Management in St. Helena Bay	<i>Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.</i>	SEACAM w/s 12/01
Saldanha, West Coast	Coastal Resources Management in Saldanha, West Coast	<i>Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.</i>	SEACAM w/s 12/01
Dwesa and Cwebe	Management of the Dwesa and Cwebe Nature Reserves (1998-2000)	<i>Contact SEACAM for local contact person, address, and contact points.</i>	SEACAM w/s 12/01

SPAIN			
Nation-wide	The 1993-1997 Plan of Coasts	Coordinator Subdirector General de Gestion del Dominio, Publico Maritimo Terrestre Plaza San Juande la Cruz s/n 28071 Madrid, Spain Ph: 91 597-6046, Fax: 597-5948, sgdfmf@m.dgc.mma.es	
Valencia community area	Cooperation, integrated management, and sustainable development (Concercoast) (EU ICZM Demonstration Programme)	Coordinator Oficina de Gestion del Proyecto Concercoast de la Region de Valencia, Ajuntament de Gandia Passeig Germanias, 15 - esc A, ent 1, 4700 Gandia, Spain Ph: 34 96 287-5109, fax: 287-1495, xarxa-ccv@cessar.com	EU Demo ICZM w/s 1/02
Huelva and Algarve, Portugal	Integrated management of the Algarve-Huelva coast (EU ICZM Demonstration Programme)	Coordinator Asociacion de Municipios Hispano-Lusa Avda. de la Profesionalidad Edf. Escuela de Empresas, 21450 Cartaya, Huelva, Spain Ph: 34 5 939-0380, Fax: 939-3100, np74bm@mail.telepac.pt See also Table 4: International Efforts	EU Demo ICZM w/s 1/02
SRI LANKA			
Nation-wide	National Coastal Zone Management Program	Coordinator Coast Conservation Department Fourth Floor, Maligawatta Secretariat, Colombo 10 Sri Lanka Ph:941 449-7547, ccddcc@itmin.com	CRC w/s 1/02
Nation-wide?	Coastal Resource Management (SRI 31287-01)	<i>To what extent has this project funded the efforts listed above? No specific locations mentioned on w/s description of the project.</i>	ADB w/s 12/31/01 Contact ADB
SURINAME			
North Saramacca area	A feasibility study and management plan for the North Saramacca area	<i>Need name of contact person, address and contact points.</i>	Ramsar w/s 12/01
Commewijne- Marowijne area	Management Plan for the North Commewijne- Marowijne estuary area	<i>Has this project been funded?</i>	Funded by UNEP/Jamaica Ramsar w/s
SWEDEN			
			Contact Bengt-Owe Jansson
Nation-wide	Research Programme on Sustainable Coastal Zone Management of Marine Resources (SUCOZOMA, 2001-2003)	<i>Need name of contact person, address and contact points.</i>	EUCC ICM Progress w/s 1/02
Swedish Archipelagos	The Archipelago Project: Sustainable Development Project (1998-1999)	Seven County Administrative Boards involved	EUCC ICM Progress w/s 1/02

SWITZERLAND			
Lake Geneva	Management Program for Lake Geneva	See Table C-4: International ICM Efforts	
SYRIA			
Nation-wide	Integrated Coastal Resource Management Plan	What are the local contact points and who is the contact person? http://pap.-thecoastcentre.org/activities.html	UNEP MAP PAP/RAC w/s 1/02
TAIWAN			
TANZANIA			
Nation-wide	The Tanzania Coastal Management Partnership	Coordinator Tanzania Coastal Management Partnership PO Box 71686, Dar el Salaam, Tanzania Ph: 255 51 667-589, fax: 66861, jdaffa@epiq.or.tz , http://epiq.org.tz	CRC w/s 1/02, CZ 99
Tanga Island	Tanga Coastal Zone Conservation and Development Project (1994-2000)	Contact SEACAM for local contact person, address, and contact points.	SEACAM w/s 12/01
Zanzibar	Coastal Profile and Management Actions for Zanzibar	Contact SEACAM if the project was initiated, and if so, contact person, address, and contact points.	SEACAM w/s 12/01
Kunduchi	Kunduchi Integrated Coastal Management Project (1997-2000)	Contact SEACAM for local contact person, address, and contact points.	SEACAM w/s 12/01
Lake Victoria	Lake Victoria Environmental Management Project (LVEMP)	See Table C-4: International ICM Efforts	
Lake Tanganyika	Implementing the Lake Tanganyika Strategic Action Program and Convention	See Table C-4: International ICM Efforts	
Lake Malawi/Nyasa	Lake Malawi/Nyasa Biodiversity Conservation Project	See Table C-4: International ICM Efforts	GEF Biodiversity w/s 1/02
THAILAND			
Gulf of Thailand	Gulf of Thailand subregional sea and pollution hot spots demonstration site	No link to it on the PEMSEA w/s Is it national or international? Contact person, address, and contact points needed	PEMSEA w/s 1/02
Phuket Island	Phuket Island Action Plan	CRC - AID CRMP Project Terminated when? Any transformation into something else?	1993 Roster of ICM efforts Contact CRC

Sriracha and Chonburi Province	Chonburi: ICM Demonstration Site	Project Coordinator Chonburi ICM Site Mailing Address? Ph: 66 2 511-0212, mobile: 1 615-9709, fax: 38 312-607 apiradeesuja@hotmail.com, www.pemsea.org	PEMSEA w/s 1/02
Phangnga Bay and Ban Don Bay	Action Plan for the Upper South Sub-regions Coastal Zone	Pilot Site of the ASEAN Coastal Resources Management Program (1986-1992) What became of this project?	1993 Roster of ICM efforts
Surin Island	Indigenous People and Parks: the Surin Island Project	Regional Advisor for Culture UNESCO Office, Regional Advisor for Culture in Asia and the Pacific PO Box 967, Prakanong, Bangkok, Thailand Fax: 33 1 45 685-808, r.Englehardt@unesco-proap.org	CSI w/s 1/02
TOGO			
Nation-wide	Coastal Profile	Need contact person, address, and contact points	Consultation provided by UNEP MAP, PAP/RAC PAP/RAC w/s 1/02
TOKELAU ISLANDS (Overseas Territory of New Zealand)			
TONGA			
TRINIDAD and TOBAGO			
Nation-wide? Or one or more watersheds	Integrating Management of Watersheds and Coastal Areas in Small Island Dev. States in the Caribbean	<i>(In the pipeline)</i>	GEF/UNEP/UNDP funding GEF w/s 1/02
TUNISIA			
Nation-wide	Coastal Zone Management and Protection Program	Director General National Agency for Coastal Zone Management and Protection Les Berges du Lac Lot A, Zone Nord L'Aouina 2045 Ph: 216 861-188, fax: 861-391	
Sfax Region	Coastal Area Management Programme for the Sfax Region	What are the local contact points and who is the contact person? http://pap-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP/RAC w/s 1/02
Gulf of Gabes	Gulf of Gabes Marine and Coastal Resources Protection	Need local contact person, address, and contact points (In the pipeline)	WB funded project, Biodiversity WB ICM database 12/01

TURKEY			
Nation-wide	Definition, Use, and Planning of the Coastal Zone	National Law of 1990	1993 ICZM Roster Contact Erdal Ozhan
Black Sea coastline	National ICZM Assessment Report and National Black Sea Strategic Action Plan	EIA and Planning Department, Ministry of Environment Eskisehir Yolu, 8km, 06 100 Ankara, Turkey Ph: 90 312 287-9964 x 2013, Fax: 286-2271	BSEP w/s 1996 Contact Erdal Ozhan
Izmir Bay Black Sea	Coastal Area Management Programme for the Bay of Izmir	What are the local contact points and who is the contact person? http://pap.-thecoastcentre.org/activities.html	UNEP MAP, PAP/RAC PAP w/s 1/02
TURKMENISTAN			
Caspian Sea (Nation-wide)	National Component of the Caspian Action Plan	Director Institute for Desert Flora and Fauna 102 Kemine St. Ashgabat 744000, Turkmenistan Ph: 993 12 395407, Fax: 353716. crtctur@cat.glasnet.ru See also Table C-4: International ICM Efforts	CasEP w/s
TURKS and CAICOS (Self-governing Territory of the U.K.)			
Nation-wide	CZM for Turks and Caicos Islands	Coordinator Department of Environment and Coastal Resources Grand Turk, Turks and Caicos Islands, British West Indies	1993 Roster of ICM efforts
TUVALU			
Vaitupu, Nukulaelae, Fogafale, Amatuku, and Nukufetau Islands	Studies on coastal inshore dynamics in order to improve coastal management (1993-96)	Need local contact person, address, and contact points	SOPAC w/s
UGANDA			
Lake Victoria	Lake Victoria Environmental Management Project (LVEMP)	See Table C-4: International ICM Efforts	
UKRAINE			
Nation-wide	National ICZM Assessment Report and National Black Sea Strategic Action Plan	Coordinator Dept. for Regional Problems of Natural Resources 5 Kreschatik Str., Kyiv-1, Ukraine Ph: 380 44 228-5072, Fax: 229-8383. tkachov@regprob.ms.kiev.ua	BSEP w/s 1996
Black and Azov Seas	Biodiversity Conservation in the Azov-Black Sea Ecological Corridor (1998)	Need local contact person, address, and contact points	WB funded project WB ICM database 12/01

Black and Azov Seas	Project to conserve biodiversity and sustainable development in coast and upland sites of Black and Azov Seas	Need local contact person, address, and contact points (In the pipeline)	GEF funded project WB ICM database 12/01
Dnester Delta	Dnester Delta Demonstration Project (The project also includes Moldova) (1997-2001)	Need local contact person, address, and contact points	Work done by EUCC EUCC w/s 1/02
UNITED ARAB EMIRATES			
Nation-wide	National study for ROPME?		
UNITED KINGDOM			
Irish Sea (Ireland and U.K.)		See Table C-4: International ICM efforts	English Coast Forum w/s 1/02
Irish Beaches and Dunes (Ireland and U.K.)		See Table C-4: International ICM efforts	EU ICZM Demo 1/02 English Coast Forum w/s 1/02
England and Wales	Heritage Coast Program	Countryside Agency John Dower House, Crescent Place, Cheltenham, Glos, GL50 3RA U.K. Ph: 44 (0)1242 521-1381, fax: 584-4270, info@countryside.gov.uk	English Coast Forum w/s 1/02
England	English Coastal Forum	Coordinator English Coastal Forum 1/02 Temple Quay, 2 The Square, Temple Quay Bristol, BS1 CEB, U.K. Ph: 44 (0)117 372-8897, lucy.thomas@defra.gsi.gov.uk www.englishcoast.uk	English Coast Forum w/s 1/02
Dart Estuary (England)	Dart Estuary Environmental Management Plan	Dart Estuary Officer 35 Lower Street, Dartmouth, Devon TQ6 9AN, U.K. Ph: 44 1803 835-801, fax: 835-802, rayh@dartmouth.fg.co.uk www.dartmouth.force9.co.uk/frame.htm	CoastNet w/s 1/02 English Coast Forum w/s 1/02
Dee Estuary (England and Wales)	The Dee Estuary Strategy	The Dee Estuary Strategy c/o Metropolitan Borough of Wirral Education and Cultural Services Department Hamilton Building, Conway Street, Birkenhead, Wirral CH41 4FD U.K. jimlester@wirral.gov.uk www.deeestuary.org.uk	English Coast Forum w/s 1/02 Welsh Coast Forum w/s 1/02
Devon and Cornwall Counties (England)	Integrated management of a living Atlantic coastline (EU ICZM Demonstration Programme)	Project Officer Atlantic Living Coastlines IMS, University of Plymouth, Drake Circus, Plymouth Devon PL4 8AA, UK Ph: 44 0752 232-470, fax: 232-472 alc@plymouth.ac.uk www.alc.plymouth.ac.uk	EU ICZM Demo w/s 1/02 English Coast Forum w/s 1/02

Dorset County (England)	An integrated management strategy for an open coast	Coordinator Dorset County Council, Environment Services, County Hall, Colliton Park, Dorchester, Dorset DT1 1XJ, U.K. Ph: 44 1305 224-132, fax: 224-835, m.turnbull@dorset-cc.gov.uk www.dorsetcoast.com	EU Life Programme EU ICZM Demo w/s 1/02 English Coast Forum w/s 1/02
Duddon Estuary (England)	Duddon Estuary Management Strategy	Coordinator Duddon Estuary Partnership, Cumbria County Council County Offices, LA9 4RQ U.K. Ph: 44 1539773-427, Fax: 773-439 mike.smith@cumbriacc.gov.uk www.duddon-estuary.org.uk	English Coast Forum w/s 1/02
Durham Coast (England)	Turning the Tide: Programme for the Restoration of the Durham coast	Turning the Tide Environment and Technical Services Department Durham County Council, County Hall, Durham DH1 5UQ U.K. Ph: 44 (0)191 383-4096, turntide@durham.gov.uk www.turning-the-tide.org.uk	English Coast Forum w/s 1/02
Essex County (England)	Essex Coastal Strategy	Essex Coastal Strategy Planning Division, County Hall Chelmsford, Essex CM1 1LF U.K. www.essexcc.gov.uk/enviro/struct/coastsrt/struct1.htm	English Coast Forum w/s 1/02
Exe Estuary (England)	Exe Estuary Partnership	Exe Estuary Officer Lucombe House County Hall, Topsham Road Exeter, Devon EX2 4QW, U.K. Ph: 44 (0)1392 382236, nbarker@devon.gov.uk, www.exe-estuary.org	
Humber Estuary (England)	Humber Estuary Scheme of Management and Action Plan	Humber Forum 21 Marina Court, Castle St. Kingston upon Hull HU1 1TJ U.K. Ph: 44 (0)1482 596-777, fax: 596-799, info.humberforum.co.uk	CoastNet w/s 1/02
Isle of Wight (England)	Integrated management of Coastal Zones: Isle of Wight (EU ICZM Demonstration Programme)	Coordinator Isle of Wight Council, County Hall Newport, Isle of Wight PO33 2QA, UK Ph: 44 1983 823-770, Fax: 823-707, sjjewell@iweight.gov.uk or hroberts@iweight.gov.uk	EU Life Programme EU ICZM Demon w/s 1/02 English Coast Forum w/s 1/02
Kent County (England)	Integrated management of the Kent coast (EU ICZM Demonstration Programme)	Coordinator Kent County Council Springfield, Maidstone, Kent ME14 2LX, UK Ph: 44 1622 696-180, fax: 687-620, clive.gilbert@kent.gov.uk	EU ICZM Demo. w/s 1/02 English Coast Forum w/s 1/02
The Mersey Estuary and River (England)	Mersey Strategy	Coordinator Mersey Strategy c/o Dept. of Planning and Economic Development Wirral Metropolitan Borough Council Town Hall, Brighton Street, Wallasey CH44 8ED U.K. Ph: 44 151 691-8216, Fax: 691-8180 merseystrategy@zoom.co.uk/ www.livhope.ac.uk/ebs/merseystrategy/ www.merseybasin.org.uk	English Coast Forum w/s 1/02

Morecambe Bay (England)	Morecombe Bay Partnership and Strategy	Coordinator Morecambe Bay Partnership 32 Market Place, Kendal LA9 4TN U.K. Ph: 44 1539 773-447, Fax: 773-446 info@morecambebay.org.uk/ www.morecambebay.org.uk	English Coast Forum w/s 1/02
North West Coast (England)	North West Coastal Forum Local Government Association's National Coastal Strategy (2001)	Chair North West Coastal Forum Planning, Environment, and Regional Policy Coordination Group Government Office for the North West, Sunley Tower, Piccadilly Plaza, Manchester M1 4BE, U.K. Ph: 44 0 161 952-4242, fax: 952-4255 ehughes.gonw@go-regions.gsi.gov.uk/ www.go-nw.gov.uk/nwcf	English Coast Forum w/s 1/02
Ribble Estuary (England)	Ribble Estuary Partnership and Strategy	Chairman Ribble Estuary Steering Group Lancaster County Council sea@virginnet.co.uk/ www.ribble-estuary.co.uk	CoastNet w/s 1/02 English Coast Forum w/s 1/02
Rye Bay (England)	The Rye Bay Management Plan and Camber Sands Management Plan (1996)	The Rye Bay Countryside Project 111b High Street, Rye, East Sussex, TN31 7JF 44 (0)1797 233-753	CoastNet w/s 1/02 English Coast Forum w/s 1/02
Sefton Coast (England)	Sefton Coast Management Plan	Sefton Coast Partnership Formby Council Offices, Freshfield Road, Formby Merseyside L37 3PG U.K. Ph: 44 151 934-2959, Fax: 934-2955 info@seftoncoast.org.uk/ www.seftoncoast.org.uk www.merseyworld.com/sclife	EU LIFE Programme support English Coast Forum w/s 1/02
The Solent (England)	Solent Forum	Solent Forum Officer c/o Hampshire County Council, The Castle Winchester, SO23 8UE. U.K. Ph: 44 01962 846-027, Fax: 846-776. www.solentforum.hants.org.uk	English Coast Forum w/s 1/02
Tamar Estuary and the Port of Plymouth (England)	Tamar Estuaries Consultative Forum and Port of Plymouth Marine Liaison Committee	Coordinator Community Planning Services Civic Centre, Plymouth, Devon PL1 2EW Ph: 44 01752 304-339, fax: 304-294, coastal@plymouth.gov.uk www.tamar-estuaries.org.uk	English Coast Forum w/s 1/02
Teign Estuary (England)	Teign Estuary Management Plan	www.teignbridge.gov.uk/test/teignstd.html	Ribble Estuary Partnership English Coast Forum w/s 1/02
Thames Estuary (England)	Thames Estuary Partnership and Management Guidance for the Thames Estuary	Thames Estuary Partnership Geography Department, University College London Remax House, 31/32 Alfred Place, London, WC1EDP, U.K. Ph: 44 20 7679 5299, Fax: 7916 8546 tep@thamesweb.com/ www.thamesweb.com	English Coast Forum w/s 1/02

The Wash (England)	The Wash Management Plan	Coordinator Lincolnshire County Council Ph: 44 1522 553-040, Fax: 553-194 Graham King, Norfolk County Council Ph: 44 1603 222-762 Ian Paterson, English Nature Ph: 44 1476 68431, www.lincolnshire.gov.uk/yourcouncil/handp/wash.htm	English Coast Forum w/s 1/02
Wear Estuary (England)	Wear Estuary Management Plan	Coordinator Kingswood-BS15 2TR, U.K. Ph: 44 1 454 863-724, fx: 454 863 545, gillian.ellis-king@esturialies.org	Esturiales Network EnglishCoast w/s 1/02
County Down (Northern Ireland)	Integrated management of the coast of Down	Coordinator Down District Council, 74 Market Street Downpatrick, County Down BT30 6LZ, Northern Ireland, U.K. Ph: 44 1396 612-233, Fax: 612-350, econdor@downdc.gov.uk	CoastNet w/s 1/02 EU ICZM Demo w/s 1/02
County Down (Northern Ireland)	Implementing alternative strategies in Irish beach and dune management: involvement in sustainable coastal development (EU ICZM Demonstration Programme)	See Table C-4: International ICM efforts	CoastNet w/s 1/02
Strangford Lough (Northern Ireland)	Strangford Lough Management Scheme	Strangford Lough Management Committee www.eshi.gov.uk/NaturalHeritage/StaticContent/SLmanagementscheme.htm	CoastNet w/s 1/02
Scotland	Scottish Coastal Forum	Coordinator Scottish Coastal Forum 1 J - South, Victoria Quay, Edinburgh, EH6 6QQ, U.K. 44 131 244-1540, Fax: 244-4071 coastalforum@scotland.gov.uk or Martyn.Cox@scotland.gov.uk www.scotland.gov.uk/environment/coastalforum	ScotCoast w/s 1/02
Cromarty Firth	Cromarty Firth Liaison Group and Management Project (To join with Moray Firth Partnership as of 11/01)	Project Officer Cromarty Firth Liaison Group Ph: 44 (0)1349 855-510, frances.boynton@highland.gov.uk	ScotCoast w/s 1/02
Fair Isle (Scotland)	Fair Isle Marine Environment and Tourism Initiative	Coordinator Fair Isle, Shetland ZE2 9JU U.K. Ph: 44 1595 760-224, Fax: 760-252 nick.riddiford@fairisle.org.uk / www.fairisle.org.uk/FIMETI	ScotCoast w/s 1/02
Firth of Clyde (Scotland)	Management Strategy for the Firth of Clyde	Project Officer Firth of Clyde Forum Caspian House, 2 Mariner Court, 8 South Avenue Clydebank Business Park, Clydebank, G81 2NR, U.K. clydeforum@snh.gov.uk / www.clydeforum.org	ScotCoast w/s 1/02 Esturiales Network

Forth Estuary (Scotland)	Forth Estuary Forum (EU ICZM Demonstration Programme)	Coordinator The Forth Estuary Forum Exmouth Building, Port of Rosyth, Rosyth, Fife KY11 2XP U.K. Ph: 44 1383 420-104, Fax: 418-468 stephen.midgley@forthestuaryforum.co.uk www.forthestuaryforum.co.uk	EC ICZM Demo w/s 1/02 ScotCoast w/s 1/02
Loch Ryan (Scotland)	Loch Ryan Management Strategy	Coordinator Loch Ryan Advisory Management Forum Dumfries and Galloway Council, Env. and Infrastructure Newall Terrace, Dumfries DG1 1LW U.K. Ph: 44 1387 260-215 euanH2@dumgal.gov.uk/ scotland.gov.uk/environment/coastalforum/lochryan.asp	ScotCoast w/s 1/02
The Minch (Scotland)	Minch Project	Coordinator The Minch Project ptyler@w-isles.gov.uk/ or 106334.3425@compuserve.com www.hebrides.com/org/minch	ScotCoast w/s 1/02
Moray Firth (Scotland)	Management Guidelines and Action Programme for the Moray Firth	Coordinator The Moray Firth Partnership 27 Ardconnet Terrace, Inverness IV2 3AE U.K. Ph: 44 1463 225-530, Fax: 225-207 ben.leyshon@snh.gov.uk or mfp@snh.gov.uk www.morayfirth-partnership.org	ScotCoast w/s 1/02
Solway Firth and Coast (Scotland and England)	Solway Coast Management Plan	Project Officer The Solway Firth Partnership Scottish National Heritage, Carmont House Dumfries, DG1 4ZF U.K. Ph: 44 01387 247-010. Fax: 259-247 sfp@snh-du.demon.co.uk/ www.abdn.ac.uk/sfp/ www.solway-ems.co.uk	ScotCoast w/s 1/02 EnglishCoast w/s 1/02
Tay Estuary (Scotland)	Tay Estuary Forum	Project Officer The Tay Estuary Forum Ewing Building, University of Dundee, Dundee DD1 4HN U.K. www.dundee.ac.uk/crsem/TEF/forum.htm	ScotCoast w/s 1/02
Wales	Wales Coastal Forum	Coordinator Wales Coastal Forum Coordination of Coastal Policy in Wales, Planning Division 4 National Assembly for Wales, Cathays Park, Cardiff CF10 3NQ U.K. Ph: 44 (0)29 2082-3725, christopher.g.morgan@wales.gsi.gov.uk www.welshcoast.co.uk	Wales Coastal Forum w/s 1/02
North Wales	North Wales Coastal Forum	Coordinator North Wales Coastal Forum Tanrallt, Rhostryfan, Caernarfon, Gwynedd LL54 7NT Wales U.K. Ph: 44 (0)1286 830-312, john-nicholson@ntlworld.com	Wales Coastal Forum w/s 1/02

Cardigan Bay (Wales)	Cardigan Bay Forum	Cardigan Bay Forum Cardigan Bay Marine Wildlife Centre, Unit 2 Patent Slip Glanmor Terrace, New Quay, Ceredigion, Wales SA45 9PS U.K. Ph. and fax: 44 1545 560-032 cardiganbayforum@tinet.com www.tinet.com/cardigan_bay_forum	Wales Coastal Forum w/s 1/02
Severn Estuary (Wales and England)	Severn Estuary Strategy	Project Manager The Severn Estuary Strategy Dept. of Earth Sciences, Cardiff University PO Box 914, Cardiff CF10 3YE, UK Ph: 44 29 20 874-713, fax: 874-295 severn@cardiff.ac.uk/ www.severnestuary.org.uk	English Coastal Forum w/s 1/02 Wales Coastal Forum w/s 1/02
Severn Estuary (Wales and England)	Severn Estuary Management Program	Coordinator Planning and Development Department Bristol City Council, Wilder House - Wilder St., Bristol BS2 8BH, U.K. Ph: 44 1 17 903-6865, Fx: 903-6859, sara.eckerley@esturiales.org, www.esturiales.orf	English Coastal Forum w/s 1/02 Wales Coastal Forum w/s 1/02 Esturiales Network
Pembrokeshire Coast (Wales)	Long Term Strategy and Action Plan for the Pembrokeshire Coast	Pembrokeshire Coastal Forum Steering Committee www.pembrokeshirecoastalforum.org.uk	Wales Coast Forum w/s 1/02
UNITED STATES (See Table C-3)			
URUGUAY			
Nation-wide	Maritime Management Project (Southeast South American Shelf Large Marine Ecosystem - shared with Argentina and Brazil)	See Table C-4: International ICM Efforts <i>(In the pipeline)</i> Could not find this in the WB ICM database.	GEF-WB Project International Waters GEF database 12/01
Bay of Montevideo	Maritime Management Project	Need local contact person, address, and contact points <i>(In the pipeline)</i>	GEF-IBRD Project WB ICM database 12/01
Estuary of the Rio de la Plata	Strategic Action Plan for the Rio Plata and its Maritime Front, Frente de Rio Plata (in conjunction with Argentina)	See Table C-4: International ICM Efforts	
Rio de la Plata coast from Punta Colonia to Punta del Este	ECOplata Project: Towards an integrated management of the coastal zone of the Rio de la Plata.	ECOplata Avda. Brazil 2653-55 esq. Baltasar Vargas 11300 Montevideo, R.O. del Uruguay Ph: 598 2 709 2550, fax: 709 6176, ecoplata@adinet.com.uy www.ecoplata.orguy	

UZBEKISTAN			
Aral Sea	Water and Environmental Management in the Aral Sea Basin	See Table C-4: International ICM Efforts	
VANUATU			
VENEZUELA			
Isla de Margarita	Coastal Planning Arrangement for Isla de Margarita		1993 Roster of ICM efforts Contact IRF, CZM Dir of PR
Lake Maracaibo	Program for the Control and Conservation of Maracaibo Lake Basin	Coordinator Institute for Control and Conservation of Lake Maracaibo Basin (ICLAM) Fax: 58 061 221-702 / 923-782	
Vargas State	Pilot Project for the Coastal and Marine Area in Vargas State and development of a National Coastal Law	Coordinator Coordinator of Marine, Coastal and Island Areas Ministerio del Ambiente y de los Recursos Naturales Caracas, Venezuela jrdelgadopvzia@hotmail.com	Source: Gerenciamiento Costeiro Integrada 12/01
VIETNAM			
Nation-wide	Vietnam Integrated Coastal Zone Management Project	Department Head Pollution Control, National Environment Agency, Ministry of Science, Technology, Environment Government of Vietnam, Hanoi	Expected to start in the second half of 2000 Source of funds ADB?
Nation-wide?	Assessment and Strengthening of Coastal Zone Management Institutions (VIE 34342-01)	To what extent has this project funded the efforts listed in this Table for Vietnam, such as the one above? No specific locations mentioned on w/s description of the project.	ADB w/s 12/01
Southern Vietnam and Mekong Delta	Coastal Wetlands Protection and Development Project	Need local contact person, address, and contact points (In the pipeline)	GEF-IBRD Project WB ICM database 12/01
Nation-wide?	Coastal Wetlands Protection and Development Project (2000, #42568)	To what extent is this project different from the one above? If so, need local contact person, address, and contact points	IDA is funding Entity Source: WB ICM database 12/01
Con Dao National Park	Biodiversity Conservation and Sustainable Use of the Marine Resources at Con Dao National Park	(In the pipeline)	GEF-UNDP Project GEF w/s Jan 01
Danang Municipality	Integrated Coastal Management Demonstration Project at Danang	Director Danang Dept. of Science, Technology and Environment 15 Quang Trung, Danag City, Vietnam Ph: 84 511 837-735, fax: 822-864 cminh@dng.vnn.vn or icmdng@dng.vnn.vn, www.pemsea.org	PEMSEA w/s 1/02

WALLIS and FUTUNA ISLANDS (Self-governing Overseas Territory of France)			
YEMEN			
Gulf of Aden coast	Coastal Zone Management along the Gulf of Aden	See Table C-4: International ICM Efforts	UNEP/CBD w/s 1/02
Red Sea coast	Protection of the Marine Ecosystems of the Red Sea Coast		UNDP SDNP SIOCAM w/s 1/02
Socotra Archipelago	Conservation and Sustainable Use of the Biodiversity of Socotra Archipelago (1997- ?)	<i>Need name of contact person, address, and contact points</i>	UNEP/CBD w/s 1/02
ZAMBIA			
Lake Tanganyika	Implementing the Lake Tanganyika Strategic Action Program and Convention	See Table C-4: International ICM Efforts	
Coastal nations and semi-sovereign states not listed as this time.			
<p> BOSNIA HERZEGOVINA CONGO REPUBLIC EAST TIMOR FALKLAND ISLANDS GREENLAND (Self-governing Overseas Division of Denmark) IRAQ LIBERIA MYANMAR (BURMA) SIERRA LEONE SOMALIA SUDAN SVALBARD WESTERN SAHARA (Legal status of the territory and sovereignty is in dispute) YUGOSLAVIA (MONTENEGRO) </p>			

Abbreviations used in Tables C-1 and C- 4

ACCSP: Australia Clean Coasts and Seas Program
ADB: Asian Development Bank
BDDC: British Development Division of the Caribbean
BSEP: Black Sea Environmental Programme
CasEP: Caspian Environment Programme
CATIE: Tropical Agricultural Research and Higher Education Center
CCAD: Central American Commission on Environment and Development
CEP: Caribbean Environment Program
CMPP: Coastal and Marine Management Program (Australia)
CoastNet: The Coastal Network site established by the School of Conservation Science, Bournemouth University, U.K.
CRC: Coastal Resources Center, Bay Campus, University of Rhode Island
CSD: UN Commission on Sustainable Development . National Reports submitted in 1998-1999
CSI: Environment and development in coastal regions and small islands (a unit in UNESCO)
CZ 97 or 99: Proceedings of the U.S. Coastal Zone 1997 and/or.1999 Conferences
DANCED: Danish Cooperation for Environment and Development
DANIDA: Danish Development Agency
DFID: U. K. Department for International Development
DHI: Danish Hydraulic Institute
EC ICZM w/s: Web site for the EU Demonstration Programme on ICZM (1997-99)
ESCAP: U.N. Economic and Social Commission for Asia and the Pacific
Esturiales: A network connecting ICM efforts in the Duoro, Gironde, Loire, Severn, Tejo and Wear, estuaries. (See Table C-4)
EUCC: European Union for Coastal Conservation
FAO: U.N. Food and Agriculture Organization
GEF: Global Environment Facility
Gerenciamento Costeiro Integrada: A periodical for integrated coastal management in Portuguese speaking nations.
IADB: Inter-American Development Bank
IBRD: International Bank for Reconstruction and Development
IOC: Intergovernmental Oceanographic Commission (a unit in UNESCO)
IRF: Islands Resources Foundation
InterCoast: The International Newsletter of Coastal Management
IUCN: International Union for the Conservation of Nature and Natural Resources
Kay/Alder: Coastal Planning and Management (1999), Routledge Publishing, London
LME: Large Marine Ecosystems
MEDCOAST 97: Proceedings of the MEDCOAST 97 Conference
NOAA w/s: NOAA website, the section, "ICM, An International Priority"
OECD: Organization for Economic Cooperation and Development
OECS: Organization of Eastern Caribbean States
PAP/RAC: Priority Action Programme, Regional Activity Center, UNEP Mediterranean Action Plan

PEMSEA: Partnerships in Environmental Management for the Seas of East Asia

PHARE: European Communities assistance programme to countries in Central Europe (former nations of the Warsaw Block)

PROARCA: Regional Environmental Programme for Central America

Ramsar: Ramsar International Convention on Wetlands (1971)

ROPME: Regional Organization for the Protection of the Marine Environment (of the Arabian/Persian Gulf)

Roster of ICM efforts (1993): From the article, "International Proliferation of Integrated Coastal Management," **Oceans and Coastal Management**, 1993

SDNP: Sustainable Development Networking Programme (a unit of UNDP)

SEACAM: Secretariat for Eastern African Coastal Area Management

SIOCAM: Strategic Initiative for Ocean and Coastal Area Management (a program in UNDP)

SIDS: Small Island Developing States

SOPAC: South Pacific Applied Geoscience Commission

SPREP: South Pacific Regional Environment Programme

TNC: The Nature Conservancy

UNDP: United Nations Development Programme

UNEP: United Nations Environment Programme.

UNIDO: United Nations Industrial Development Organization

USAID: U.S. Agency for International Development

WB: World Bank

Windevoxhel: "Situation of Integrated Coastal Zone Management in Central America: Experiences of IUCN Wetlands and Coastal Zone Conservation Program, an article in ????.
Date 1997?

w/s: web site

WWF: World Wildlife Fund

Table C-2: ICM Efforts in Canada First iteration. February 2, 2001

Location	Name of Effort	Address and Contacts	Program
NATIONAL			
(Nation-wide)	Toward Canada's Oceans Strategy: Discussion Paper	Integrated Management Office Fisheries and Oceans Canada, Oceans Directorate, 200 Kent Street, Ottawa, Ontario, Canada K1A 0E6 Ph: (613) 990-0308, halep@dfo-mpo.gc.ca www.dfo-mpo.gc.ca	
(Nation-wide)	Integrated Management Program	Integrated Management Office Fisheries and Oceans Canada, Oceans Directorate, 200 Kent Street, Ottawa, Ontario, Canada K1A 0E6 Ph: (613) 990-0308, halep@dfo-mpo.gc.ca www.dfo-mpo.gc.ca	
(Nation-wide)	Marine Protected Areas	Marine Protected Areas Fisheries and Oceans Canada, Oceans Directorate, 200 Kent Street, Ottawa, Ontario, Canada K1A 0E6 Ph: (613) 990-1575, kurvitst@dfo-mpo.gc.ca www.dfo-mpo.gc.ca	
(Nation-wide)	Marine Environmental Quality	Marine Environmental Quality Fisheries and Oceans Canada, Oceans Directorate, 200 Kent Street, Ottawa, Ontario, Canada K1A 0E6 Ph: (613) 991-9021 michelc@dfo-mpo.gc.ca www.dfo-mpo.gc.ca	
(Nation-wide)	Oceans Management Strategy	Ocean Management Strategy Fisheries and Oceans Canada, Oceans Directorate, 200 Kent Street, Ottawa, Ontario, Canada K1A 0E6 Ph: (613) 990-0659 chudczak@dfo-mpo.gc.ca www.dfo-mpo.gc.ca	
(Nation-wide)	Ecosystem Initiatives Program (EIP)	Environment Canada 351 St. Joseph Blvd. 6th Floor, Hull Quebec K1A 0H3 Ph: (819) 997-5079, SharonLee.Smith@ec.gc.ca See: Atlantic Coastal Action Program, Saint-Laurent Vision 2000 (Quebec), Great Lakes 2000 Program (Ontario), Georgia Basin Ecosystem Initiative (British Columbia), Northern Ecosystem Initiative (Yukon Territory, Northwest Territories, Nunavut, Quebec, Labrador)	EIP
INTER-PROVINCE and TERRITORY REGIONAL			
Western Arctic	Western Arctic Integrated Management	DFO Central and Arctic Region, 501 University Ave, Winnipeg Manitoba R3T 2N6 Ph: (204) 983-5155, Fax: 984-2403, mathiasj@dfo-mpo.gc.ca See Yukon Territory and Northwest Territories	
Pan-Arctic	Northern Ecosystem Initiative (NEI)	National Coordinator Northern Ecosystems Initiative, Environment Canada Suite 301, 5204 - 50 Avenue, Yellowknife, Northwest Territories X1A 1E2 Ph: 867 669-4737, Fx: 873-8185, carey.ogilvie@ec.gc.ca (see Northwest Territories, Nunavut, Quebec, Labrador, Yukon)	EIP

Atlantic Coast	Atlantic Coastal Action Program (ACAP)	Sustainable Communities & Ecosystems Division Environment Canada, 16th Floor, Queen Square, 45 Alderney Drive Dartmouth, Nova Scotia, B2W 4Z6 Ph: (902) 426-2131; fax 426-6348; larry.hildebrand@ec.gc.ca www.atl.ec.gc.ca/community/acap/index_e.html See: New Brunswick, Newfoundland/Labrador, Nova Scotia, Prince Edward Island	EIP and ACAP
Bay of Fundy	Bay of Fundy Ecosystem Partnership	Acadia Centre for Estuarine Research, Acadia University Box 115, Wolfville, NS POP 1X0 Ph: (902) 585-1113, Fx: 585-1054, anne.mercer@acadian.ca www.auracom.com/~bofep See New Brunswick and Nova Scotia	
Gulf of St. Lawrence	Southern Gulf of St. Lawrence Coalition on Sustainability	SGSLCS 26 rue Acadie Street, Bouctouche N.B. E45 2S2 Ph: (506) 743-7437, Fax: 743-7229 See New Brunswick, Nova Scotia, Prince Edward Island, Quebec	
Hudson Bay	Hudson Bay Cooperative Project	DFO, Central and Arctic Region 501 University Ave, Winnipeg Manitoba R3T 2N6 Ph: (204) 983-5155, Fax: 984-2403 See Manitoba, Ontario, and Quebec	
BRITISH COLUMBIA			
Province-wide	Provincial Coastal Zone Position Paper (1998)	Land Use Coordination Office Ph: 250-356-7721, don.howes@gems7.gov.bc.ca www.luco.gov.bc	
Puget Sound and Georgia Basin	Puget Sound/Georgia Basin Environmental Initiative	See Table C-4: International ICM efforts	
Fraser River Estuary	Fraser River Estuary Management Program	Fraser River Estuary Management Program 5945 Kathleen Ave., Suite 501, Burnaby B.C. V5H 4J7 Ph: (604) 775-5756, Fax: 775-5198, bieapfrempp.org www.bieapfrempp.org	
Georgia Basin	Georgia Basin Ecosystem Initiative	Environment Canada C300 - 555 West Hastings Street, Vancouver, BC V6B 5G3 (604) 713-9529, georgiabasin@ec.gc.ca www.pyr.ec.gc.ca/Georgiabasin/gbi_eIndex.htm	EIP
Central Coast	Central Coast Integrated Management Initiative	300-555 West Hastings Street, Vancouver, BC V6B 5G3 Ph: (604) 666-3902, hietkamp@df-mpo.gc.ca	
West Vancouver Island	Vancouver Island Aquatic Management Process	Oceans Directorate, Department of Fisheries and Oceans 3225 Stephenson Point Road, Nanaimo, B.C. Ph: (250) 756-7001, Fax: 756-7020, masson@df-mpo.gc.ca <u>or</u> 300 - 555 West Hastings Street, Vancouver, BC V6B 5G3 Ph: (604) 666-0604, dragseth@df-mpo.gc.ca	

Burrard Inlet	Burrard Inlet Environmental Action Program	Burrard Inlet Environmental Action Program 5945 Kathleen Avenue, Suite 501, Burnaby BC, V5H 4J7, Ph: (604) 775-5756, Fax: 775-5198, www.bieapfrempp.org	
MANITOBA			
Arctic Region	Western Arctic Integrated Management Project	Central and Arctic Region Department of Fisheries and Oceans, 501 University Ave., Winnipeg, Manitoba R3T 2N6 Ph: (204) 983 5155, Fax: 984-2403, mathiasj@dfo-mpo.gc.ca	
Arctic Region	Hudson Bay Co-operative Management Project	Central and Arctic Region Department of Fisheries and Oceans, 501 University Ave. Winnipeg, Manitoba R3T 2N6 Ph: (204) 984 3483, Fax: 984-2403, fasth@dfo-mpo.gc.ca	
Hudson Bay	Integrated Management for the Hudson Bay Shoreline	Manitoba Department of Conservation, Resources Division, Ph. 204-945-6829, mshoesmith@nr.gov.mb.ca (see also Nunavut and Quebec)	
NEW BRUNSWICK			
Province-wide	Proposed Coastal Areas Protection Policy for New Brunswick (2001)	New Brunswick Department of Environment and Local Government PO Box 6000, Fredericton NB E3B 5H1 Ph: (506) 444-5749, Fax: 453-5210, coastalareas-zonecotieres@gnb.ca	
Bay of Fundy	Bay of Fundy Ecosystem Partnership	See Inter Province and Territory Regional Efforts	
Gulf of St. Lawrence	Southern Gulf of St. Lawrence Coalition on Sustainability	See Inter Province and Territory Regional Efforts	
St. Croix Estuary	St. Croix Estuary Project	See Table C-4: International ICM Efforts	ACAP
Saint John Harbour	ACAP Saint John	ACAP Saint John Inc., 76 Germain Street Box 6878, Station ASaint John, New Brunswick E2L 4S3 Ph: (506) 652-2227, Fax: 633-2184, acapsj@fundy.net http://user.fundy.net/acapsj	ACAP
Miramachi River	Miramachi River Environmental Assessment Project	Miramichi River Environmental Assessment Committee (MREAC) 133 Newcastle Blvd., Miramichi, NB E1V 2L9 Ph:: (506) 778-8591, Fax: 773-9755, mreac@nbnet.nb.ca	ACAP
Madawaska River and Lake Temiscouata	Aménagement de la rivière Madawaska et du lac Temiscouata	Société d'aménagement de la rivière Madawaska et du lac Témiscouata inc., 116, rue Victoria, Edmundston, Nouveau Brunswick E3V 2H6 Ph:: (506) 739-1992, Fax: 739-1988, sarmlt@nbnet.nb.ca www.francoPh.net/sarmlt/	ACAP
Eastern Charlotte Estuaries	Eastern Charlotte Waterways Inc.	Eastern Charlotte Waterways Inc. 17 Main Street, St. George's, New Brunswick E0G 2Y0 Ph: (506) 755-6001, Fax: 755-6187, ecwinc@nbnet.nb.ca www.cardsaqua.com/ecwinc/home1.htm	ACAP
Gulf of Maine	Gulf of Maine Program	See Table C-4: International ICM efforts	

NEWFOUNDLAND and LABRADOR			
Labrador-wide	Northern Ecosystem Initiative	See Inter Province and Territory Regional Efforts	
Avalon Peninsula	Avalon Peninsula Integrated Management Project	Marine Environment and Habitat Management Newfoundland Region, Department of Fisheries and Oceans, P.O. Box 5667, St. John's, NFA1C 5X1 Ph: (709) 772-2852 Fax: 772-5562, andersont@dfo-mpo.gc.ca	
Bay of Islands	Bay of Islands	Marine Environment and Habitat Management Newfoundland Region, Department of Fisheries and Oceans, P.O. Box 5667, St. John's, NFA1C 5X1 Ph: (709) 772-2852 Fax: 772-5562, andersont@dfo-mpo.gc.ca	
Conception Bay	Coastal Management Plan for the Conception Bay South Area	Marine Environment and Habitat Management Newfoundland Region, Dept. of Fisheries and Oceans, P.O. Box 5667, St. John's, NF A1C 5X1 Ph: (709) 772-2852, Fax: 772-5562, andersont@dfo-mpo.gc.ca	
Placentia Bay	Placentia Bay Management Program	Marine Environment and Habitat Management Newfoundland Region, Department of Fisheries and Oceans, P.O. Box 5667, St. John's, NFA1C 5X1 Ph: (709) 772-2852 Fax: 772-5562, andersont@dfo-mpo.gc.ca	
Humber Arm	Humber Arm Environmental Association	Humber Arm Environmental Assoc. Inc. P. O. Box 564, Suite 4024, Forest Center, University Dr., Corner Brook, Newfoundland A2H 6E6 Ph: (709) 637-7309/7305, Fax: 634-0255, acapha@thezone.net, www.cornet.nf.ca/web/acapha	ACAP
St. John's Harbour	St. John's Harbour ACAP	St. John's Harbour ACAP Inc. 6 Bruce Street, Mount Pearl, Newfoundland A1N 4T1 Ph: (709) 747-4973, Fax: 772-6309, stjacap@lss.ns.ec.gc.ca www.thezone.net/stjacap	ACAP
NORTHWEST TERRITORIES			
Territory-wide	Northwest Territories Northern Ecosystem Initiative	Coordinator of Northwest Territories NEI NWT Department of Resources, Wildlife and Economic Development 600, 5102 50th Avenue, Yellowknife, NWT X1A 3S8 Ph: 867-873-7654, emery_paqun@gov.nt.ca	NEI
NOVA SCOTIA			
Gulf of Maine	Gulf of Maine Program	See Table 4: International ICM efforts	
Bay of Fundy	Bay of Fundy Ecosystem Partnership	See Inter Province and Territory Regional Efforts	
Gulf of St. Lawrence	Southern Gulf of St. Lawrence Coalition on Sustainability	See Inter Province and Territory Regional Efforts	
Bras d'or Lakes	Community-Based Ecosystem Management	Oceans Act Coordination Office, Maritimes Region Bedford Institute of Oceanography, DepT. of Fisheries and Oceans 1 Challenger Dr. P.O. Box 1006, Dartmouth, N.S.B2Y 4A2 Ph: (902) 426-8398 Fax: 426-3479 or 426-1489, rutherfordb@mar.dfo-mpo.gc.ca	

Mahone Bay-Lunenburg	Bluenose Atlantic Coastal Action Program	Bluenose Atlantic Coastal Action Program P.O. Box 10, Mahone Bay, Nova Scotia B0J 2E0 Ph: (902) 624-9888, Fax: 624-9818, bacap@auracom.com www.auracom.com/~bacap	ACAP
Sable Island	Sable Island Preservation Trust	Sable Island Preservation Trust 1657 Barrington St., Halifax: NS B3J 2A7 Ph: (902) 425-7225, Fax: 425-4793, coordinator@sabletrust.ns.ca www.sabletrust.ns.ca	ACAP
Pictou Harbour	Pictou Harbour Environmental Protection Project	Pictou Harbour Environmental Protection Project P.O. Box 414, 111 Provost Street, New Glasgow, Nova Scotia B2H 5E5 Ph and Fax: (902) 928-0305, phepp@fox.nstn.ca	ACAP
Annapolis River	Clean Annapolis River Project	Clean Annapolis River Project P.O. Box 395, Annapolis Royal, Nova Scotia B0S 1A0 Ph: (902) 532-7533, Fax: 532-3038, c.a.r.p@ns.sympatico.ca http://fox.nstn.ca/~carp/	ACAP
Cape Breton	ACAP Cape Breton	ACAP Cape Breton Inc., Centre for Sustainable Communities 588 George Street, Box #28, Station A, Sydney, Nova Scotia B1P 6G9 Ph/Fax: (902) 567-6282, acapcb@fox.nstn.ca http://ccen.uccb.ns.ca/acapcb	ACAP
Eastern Scotian Shelf	Eastern Scotian Shelf Integrated Management Program	Maritime Region, Bedford Institute of Oceanography Department of Fisheries and Oceans, 1 Challenger Dr. P.O. Box 1006, Dartmouth, N.S. B2Y 4A2 Ph: (902) 426-2009 Fax: 426-3479 or 426-1489	
NUNAVUT			
Territory-wide	Integrated system of management for marine areas	Director, Nunavut Wildlife Service, Ph. 867-975-5902, satkinson@gov.nu.ca	
Territory -wide	Northern Ecosystem Initiative	See Inter Province and Territory Regional Efforts	
ONTARIO			
Great Lakes	The Great Lakes Water Quality Agreement	See Table 4: International ICM Efforts	
Great Lakes	Great Lakes 2000 Program	Great Lakes Environment Office, Environment Canada 4095 Dufferin St., Downsview, Ontario M3H 5T4 Ph: 416 739-4937, Fx: 739-4804, susan.nameth@ec.gc.ca www.on.ec.gc.ca/glimr/intro-e.html	EIP
PRINCE EDWARD ISLAND			
Province-wide	Coastal Area Policy for Prince Edward Island	Department of Provincial Affairs and Attorney General Province of Prince Edward Island, P.O. 2000, 11 Kent Street, Charlottetown, P.E.I., Canada C1A 7N8	
Province-wide	Coastal Zone Development Policy (1993)	Water Resources Division, PEI Department of Fisheries, Aquaculture and Environment, PO Box 2000, Charlottetown, PEI-C1A 7N8, Ph: 902-368-5036, Fax: 902-368-5830, ccmurphy@gov.pe.ca	

Gulf of St. Lawrence	Southern Gulf of St. Lawrence Coalition on Sustainability	See Inter Province and Territory Regional Efforts	
Bedeque Bay	Bedeque Bay Management Program	Bedeque Bay Environmental Management Association Inc. 370 Water Street, Summerside, PEI C1N 1C4 Ph and Fax: 902 436-7090, bbema@pei.aibn.com www.peisland.com/bbema	ACAP
Cardigan Bay	Cardigan Bay Management Program	Southeast Environmental Association Southern Kings and Queens Service Centre, P.O. Box 1500, PEI COA-1RO Ph: 902 835-3351, fax: 838-0610, sea@pei.aibn.com www.pei.aibn.com/~sea	ACAP
QUEBEC			
Arctic	Northern Ecosystem Initiative	See Inter Province and Territory Regional Efforts	
Gulf of St. Lawrence	Southern Gulf of St. Lawrence Coalition on Sustainability	See Inter Province and Territory Regional Efforts	
St. Lawrence River	Saint Lawrence Action Plan Saint Laurent - Vision 2000	Environment Canada and Environnement du Québec SLV 2000 Coordination Office 1141 route de l'Église, P.O. Box 10100, 6th Floor, Sainte-Foy, Québec G1V 4H5 www.slv2000.qc.ec.gc.ca/slv2000 and Ministère de l'Environnement du Québec 675, boul. René-Lévesque Est, Box 88, Québec (Québec) G1R 5V7	EIP
Gulf of St. Lawrence, and St. Lawrence River and Estuary	Programme Zones d'intervention prioritaire (ZIP)	ZIP Coordinator Environment Canada, Centre Saint-Laurent 105 rue McGill, 7th floor, Montreal Quebec H2Y 2E7 Ph: 514 496-2898, yolaine.st-jacques@ec.gc.ca	ZIP
Gulf of St. Lawrence	Îles-de-la-Madeleine ZIP	Comite Îles-de-la-Madeleine ZIP C.P. 819, Cap-aux-Meules (Québec), 330, chemin Principal G0B 1B0 Ph: (418) 986-6633, Fax: 986-6633, zipidlm@duclos.net	ZIP
Casapedia Bay Gulf of St. Lawrence	Is Casapedia Bay the name of the effort?	Fish Habitat Management, Ministère des Pêches et des Océans Institut Maurice-Lamontagne, 850, route de la mer, C.P. 1000, Mont-Joli, Québec G5H 3Z4 Ph: (418) 775-0873, Fax: 775-065, dalcourtmf@dfo-mpo.gc.ca	Not listed as a ZIP
Gulf of St. Lawrence	Chaleurs Bay ZIP	Comite Baie des Chaleurs C.P. 1001, Maria (Québec) G0C 1Y0 Ph: (418) 759-5880, Fax: (418) 759-3817, zonebdc@globetrotter.qc.ca	ZIP
Gulf of St. Lawrence	North Gulf Coast ZIP	Comite ZIP Cote-Nord du Golfe 350, rue Smith, bur. 200, C.P. 340, Sept-Iles (Québec) G4R 4K6 Ph: (418) 962-5661, Fax: (418) 962-4161, zipcn@bbsi.net www.zipcote-nord.qc.ca	ZIP
St. Lawrence River	Rive Nord de l'Estuaire ZIP	Comite ZIP Rive Nord de l'Estuaire 9, Place LaSalle, local 101, Baie-Comeau (Québec) G4Z 1J8 Ph: (418) 296-0404, Fax: (418) 296-8787, zipnord@globetrotter.net www.zipnord.qc.ca	ZIP

St. Lawrence River	Jacques-Cartier ZIP	Comite Jacques-Cartier ZIP 2570, rue Nicolet, bureau 314, Montréal (Québec) H1W 3L5 Ph: (514) 527-9262, Fax: 527-0836, zip_jc@cam.org	ZIP
St. Lawrence River	Lac Saint-Pierre ZIP	Lake Saint-Pierre Zip Committee École de la culture, Ville de Louiseville, 100, avenue St-Jacques, Louiseville (Québec) J5V 1C2 Ph: (819) 228-1384, Fax: 228-1385, zip_lsp@mail.atou.qc.ca	ZIP
St. Lawrence River	Quebec and Chaudière-Appalaches ZIP	Quebec City and Chaudière-Appalaches Zip Committee 295, boul. Charest Est, bureau 099, Édifice de La Fabrique, Québec (Québec) G1K 3G8 Ph: (418) 522-8080, Fax: (418) 522-4664, zipquebec@qbc.clic.net	ZIP
St. Lawrence River	Haut-Saint-Laurent ZIP	Haut-Saint-Laurent Zip Committee 28, rue Saint-Paul, bureau 206, Salaberry-de-Valleyfield (Québec) J6S 4A8 Ph: (450) 371-2492, Fax: 371-7599, zip_hsl@rocler.qc.ca www.rocler.qc.ca/zip_hsl/zipacc.htm	ZIP
St. Lawrence River	Ville-Marie ZIP	Ville-Marie Zip Committee 1751, rue Richardson, suite 6503, Montréal (Québec) H3K 1G6 Ph: (514) 934-0884, Fax: (514) 934-0247, zip_vm@cam.org	ZIP
St. Lawrence River	Les Deux Rives ZIP	Les Deux Rives Zip Committee 3450 boul. Royal, bureau 200, Trois-Rivières (Québec) G9A 4M3 Ph: (819) 694-1748, Fax: (819) 374-5328, cre04.zip2r@crd-mauricie.qc.ca	ZIP
Saguenay River	Alma-Jonquière ZIP	Comite ZIP Alma-Jonquière 425, rue Sacré-Cœur Ouest, suite 2, Alma (Québec) G8B 1M4 Ph: (418) 668-8181, Fax: 668-3466: zipalma@qc.aira.com www.sagamie.org/zip	ZIP
Saguenay River	Des Seigneuries ZIP	Saguenay Zip Committee C.P. 1242, La Baie (Québec) G7B 3P4 Ph: (418) 544-5813, Fax: (418) 544-6411, zip@royaume.com	ZIP
YUKON TERRITORY			
Territory-wide	Northern Ecosystem Initiative	See Inter Province and Territory Regional Efforts	
	Is this an ICM effort?	Yukon Renewable Resources, Box 2703, Whitehorse, Yukon, Y1A 2C6, Ph: 867 667-5865; don.hutton@gov.yk.ca	

Table C-3: ICM Efforts in the United States First iteration. February 28 2002

State or Territory	Name of Effort	Address & Contacts	Program
NATIONAL			
(Nation-wide)	National Coastal Zone Management Program (CZMP)	U.S. NOAA, Coastal Programs Division N/ORM3, 1305 East-West Highway, Silver Spring, MD 20910 Ph: 301 713-3155, Fax: 713-4367, john.king@noaa.gov www.ocrm.nos.noaa.gov/cpd Also Coastal States Organization (CSO) Hall of the States, Suite 322, 444 North Capitol Street NW, Washington, D.C. 20001 Ph: 202 508-3860, Fax: 508-3843, cso@sso.org www.sso.org/cso	CZMP w/s 2/02 CSO w/s 2/02
(Nation-wide)	National Estuarine Research Reserve System (NERRS)	U.S. NOAA, Estuarine Research Reserve Division 1305 East-West Highway, Silver Spring, MD 20910 Ph: 301 713-3155 x158, Fax: 301 713-4012 Theresa.Shearer@noaa.gov www.ocrm.nos.noaa.gov/nerr.html	NERRS w/s 2/02
(Nation-wide)	National Estuary Program (NEP)	U.S. EPA, (4504F), Oceans and Coastal Protection Division 401 M St. SW, Washington DC 20460 Ph: 202 260- 6426, Fax: 202 260-9960, OWOW-web@epamail.epa.gov www.epa.gov/OWOW/estuaries/links.htm Also Association of Association of National Estuary Programs St. Johns River Water Management District, P.O. Box 1429 Palatka FL 32178 Ph: 904 312-2318, 329-4329 (web site in progress)	NEP w/s 2/02
(Nation-wide)	National Marine Sanctuaries Program (NMSP)	U.S. NOAA, National Marine Sanctuaries 1305 East-West Highway, 11th Floor, Silver Spring, MD 20910 Ph: 301 713-3125, Fax: 713-0404, nmscomments@noaa.gov www.sanctuaries.nos.noaa.gov	NMSP w/s 2/02
(Nation-wide)	Coastal zone planning, management and restoration projects	Coastal America (CA) Coastal America Reporters Building, Suite 680, 300 7th Street SW, Washington, D.C. 20250 202 401-9928, fax: 401-9821, wandabrown@usda.gov www.coastalamerica.gov	CA w/s 2/02
(Nation-wide)	Service to ICM efforts (particularly NOAA's) in the U.S.A including support of its own ICM efforts	NOAA Coastal Services Center (CSC) 2234 South Hobson Avenue, Charleston, SC 29405-2413 Ph: 843 740-1200, fax 740-1224, csc@csc.noaa.gov www.csc.noaaa.gov	CSC w/s 2/02

INTER-STATE REGIONAL			
Chesapeake Bay	Chesapeake Bay Program (Maryland, Virginia, and Pennsylvania)	Chesapeake Bay Program Office (CBP), U.S. EPA 410 Severn Avenue, Suite 109, Annapolis, MD 21403 Ph: 410 267-5700, Fax: 267-5777, www.chesapeakebay.net	EPA + CBP w/s 2/02
Lower Columbia River	Lower Columbia River Estuary Partnership (Washington and Oregon)	Lower Columbia River Estuary Program 811 SW Nation Parkway, Suite 120, Portland, OR 97204 Ph: 503 226-1565, Fax: 226-1580 www.lcrep.org	NEP w/s 2/02
Delaware Bay	Delaware Estuary Program (Delaware, New Jersey, and Pennsylvania)	Delaware Estuary Program, Delaware River Basin Commission P.O. Box 7360, West Trenton, NJ 08628 Ph: 609 883-9500 ext. 217, Fax: 883-9522, fkineon@drbc.state.nj.us	NEP w/s 2/02
Great Lakes	Great Lakes National Program (Indiana, Minnesota, Michigan, New York, Ohio, Pennsylvania, and Wisconsin)	Great Lakes National Program Office (GLNP) 77 West Jackson Boulevard., Chicago, IL 60604 Ph: 312 886-4040, Fax: 353-2018, www.epa.gov/glnpo	GLNP + EPA w/s 2/02
Great Lakes	Great Lakes Basin Compact (Indiana, Minnesota, Michigan, New York, Ohio, Pennsylvania, and Wisconsin)	Great Lakes Commission (GLC) 400 Fourth Street., Ann Arbor, MI. 48103-4878 Ph: 734 665-9135, Fax: 665-4370, glc@great-lakes.net glc@greatlakes www.glc.org	GLC w/s 2/02
Great Lakes	Great Lakes Water Quality Agreement (Indiana, Minnesota, Michigan, New York, Ohio, Pennsylvania, Wisconsin and Ontario Province, Canada)	See Table C- 4: International ICM Efforts	
Gulf of Maine	Gulf of Maine Program	See Table C- 4: International ICM Efforts	
Gulf of Mexico	Gulf of Mexico Program (Alabama, Florida, Louisiana, Mississippi, and Texas)	Gulf of Mexico Program Office (GMP) EPA/GMPO, Building 1103, Stennis Space Center, MS 39529-6000 Ph: 228 688-3726, Fax: 668-2709, giattina.jim@epa.gov www.epa.gov/gmpo	GMP w/s 2/02
Lake Champlain	Lake Champlain Basin Program (New York and Vermont)	Lake Champlain Basin Program PO BOX 204, 54 West Shore Road, Grand Isle, VT 05458 Ph: (802) 655-6382, lcbp@anrmail.anr.state.vt.us , http://www.lcbp.org	NEP w/s 2/02
Long Island Sound	Long Island Sound Study (New York and Connecticut)	Long Island Sound Study 888 Washington Boulevard, Stamford, CT 06904-2152 Ph: 203 977-1541, Fax: 977-1546 www.epa.gov/region01/eco/lis	NEP w/s 2/02
Mississippi River Basin	St. Louis Compact and Mississippi River Basin Program	Mississippi River Basin Program (MRB) c/o Gulf of Mexico Program Office, Building 1103, Room 202 Stennis Space Center, MS 39529-6000 Ph: 228 688-1843, vanpelt.marybeth@epa.gov www.epa.gov/msbasin	MRB w/s 2/02
Narragansett Bay	Narragansett Bay Project (Massachusetts and Rhode Island)	Narragansett Bay Estuary Program, Office of Water Resources 235 Promenade Street, Providence, RI 02908-5767 Ph: 401 222-4700, Fax: 521-4230, riabb@dem.state.ri.us www.nbep.org/contact	NEP w/s 2/02

New York and New Jersey Harbor	New York and New Jersey Harbor Estuary Program	New York-New Jersey Harbor Estuary Program 290 Broadway, 24th Floor, New York, NY 10007 Ph: 212 637-3816, Fax: 637-3889, info@harborestuary.org www.harborestuary.org	NEP w/s 2/02
ALABAMA			
(State-wide)	Alabama Coastal Area Management Program	Coastal Programs Office Department of Economic and Community Affairs, 1208 Main Street, Daphne, AL 36526 Ph: 334 626-0042, Fax: 626-3503, phinsley@surf.nos.noa.gov www.adeca.state.al.us/science/cps-coastal-zone.html	CZMP w/s 2/02
Gulf of Mexico	See Inter-state programs		
Mobile Bay	Mobile Bay National Estuary Program	Mobile Bay National Estuary Program 4172 Commanders Drive, Mobile AL 36615 Ph: 251 431-6409, Fax: 431-6450, mbnep@mobilebaynep.com www.mobilebaynep.com	NEP w/s 2/02
Weeks Bay	Weeks Bay National Estuarine Research Reserve Management Plan	Weeks Bay NERR Department of Economic and Community Affairs 11300 U.S. Highway 98, Fairhope, Alabama 36532-5476 Ph: 334 928-9792, Fax: 928-1792, weeksbay@gulftel.com www.ocrm.nos.noaa.gov/nerr/reserves/nerrweeks.html	NERRS w/s 2/02
ALASKA			
(State-wide)	Alaska Coastal Program	Division of Governmental Coordination P.O. Box 110030, Juneau, Alaska 99811-0030 Ph: 907 465-3562, Fax: 465-3075, gabrielle_laroche@gov.state.ak.us www.alaskacoast.state.ak.us	CZMP w/s 2/02
Kachemak Bay	Kachemak Bay National Estuarine Research Reserve Management Plan	Kachemak Bay National Estuarine Research Reserve 2181 Kachemak Drive, Homer, AK 99603 Ph: 907 235-6377, Fax: 267-4794 www.ocrm.nos.noaa.gov/nerr/reserves/southcentralalaska.html	NERRS w/s 2/02
AMERICAN SAMOA			
(Territory-wide)	American Samoa Coastal Program	American Samoa Coastal Management Program Department of Commerce, Government of American Samoa Pago Pago, American Samoa 96799 Ph: 684 633-5155, Fax: 633-4195 www.government.as/commerce.html	CZMP w/s 2/02

CALIFORNIA			
(State-wide with the exception of San Francisco Bay)	California Coastal Management Program	California Coastal Commission 45 Fremont Street, Suite 2000, San Francisco, CA 94105-2219 415 904-5200, Fax: 904-5400, pdouglas@coastal.ca.gov www.coastal.ca.gov/index.html	CZMP w/s 2/02
(State-wide)	San Francisco Bay Management Program and California Coastal Management Program	California Coastal Conservancy 1330 Broadway, 11th Floor, Oakland, CA 94612-2530 Ph: 510 286-1015, Fax: 286-0470, www.coastalconservancy.ca.gov	CZMP w/s 2/02
San Francisco Bay	San Francisco Bay Management Program	S.F. Bay Conservation and Development Commission 50 California St., Suite 2600, San Francisco, CA 94111 Ph: 415 352-3600, Fax: 352-3606, info@bcdca.gov www.bcdca.gov	CZMP w/s 2/02
San Francisco Bay	San Francisco Estuary Project	San Francisco Estuary Project Association of Bay Area Governments Ph: 510 464-7900 www.abag.ca.gov/abag/people/committee/SanFranciscoEstuaryProject.html	NEP w/s 2/02
Components of northern San Francisco Bay	Proposed San Francisco Bay National Estuary Research Reserve	S.F. Bay NERR, Romberg Tiburon Center for Environmental Studies PO Box 855, Tiburon, CA 94920 Ph: 415 338-6063	NERRS w/s 2/02
Monterey Bay	Monterey Bay National Marine Sanctuary	Monterey Bay National Marine Sanctuary 299 Foam Street, Monterey, California 93940 Ph: 831 647-4201, Fax: 647-4250, montereybay@noaa.gov www.mbnms.nos.noaa.gov	NMSP w/s 2/02
Moro Bay	Moro Bay National Estuary Program	Headquarters, Visitor Center, and Volunteer Center 601 Embarcadero, Suite 11, Moro Bay, CA 93442 Ph: 805 772-3834, Fax: 772-4162, mnep@mbnep.org, www.mbnep.org	NEP w/s 2/02
Santa Monica Bay	Santa Monica Bay Restoration Project	Santa Monica Bay Restoration Project 320 W. 4th Street, Suite 200, Los Angeles, CA 90013 Ph: 213 576-6615, Fax: 576-6646, www.smbay.org/10.htm	NEP w/s 2/02
Elkhorn Slough	Elkhorn Slough National Estuarine Research Reserve Management Plan	Elkhorn Slough National Estuarine Research Reserve California Department of Fish and Game 1700 Elkhorn Road, Watsonville, CA 95076 Ph: 831 728-2822, Fax: 728-1056 www.ocrm.nos.noaa.gov/nerr/reserves/nerrelkhorn.html	NERRS w/s 2/02
Tijuana Drainage Basin, River, and Estuary	Tijuana River National Estuarine Research Reserve Management Program	Tijuana Estuary Headquarters and Visitor Center 301 Caspian Way, Imperial Beach, CA 91932 Ph: 619 575-3613, fax: 575-6913 www.ocrm.nos.noaa.gov/nerr/reserves/nertijuana.html	NERRS w/s 2/02
Tijuana watershed, River, and Estuary		See Table C-4: International ICM Efforts	

CONNECTICUT			
(State-wide)	Connecticut Coastal Management Program	Office of Long Island Sound Programs, Dept. of Environmental Protection , 79 Elm Street, Hartford, CT 06106-5127 Ph: 860 424-3034, Fax: 424-4054, charles.evans@po.state.ct.us http://dep.state.ct.us/olisp/index.htm	CZMP w/s 2/02
Long Island Sound	See Inter-state programs		
DELAWARE			
(State-wide)	Delaware Coastal Management Program	Division of Soil and Water Conservation Dept. of Natural Resources and Environmental Control, 89 Kings Highway, Dover, DE 19903 Ph: 302 739-3451, cbernmat@dnrec.state.de.us or barcher@dnrec.state.de.us http://www.dnrec.state.de.us/DNREC2000/Divisions/Soil/Soil.htm	CZMP w/s 2/02
Rehoboth Bay, Indian River Bay, Little Assawoman Bay	Delaware Inland Bays Program	Delaware Center for Inland Bays 467 Highway One, Lewes, DE 19958 Ph: 302 645-7325, Fax: 645-5765 www.udel.edu/CIB	NEP w/s 2/02
Delaware Bay	See Interstate Programs		
St. James River Blackbird Creek	Delaware National Estuarine Research Reserve Management Plan	Delaware National Estuarine Research Reserve 818 Kitts Hummock Road, Dover, DE 19901 Ph: 302 739-3436, Fax: 739-3446, www.ocrm.nos.noaa.gov/nerr/reserves/nerrdelaware.html	NERRS w/s 2/02
FLORIDA			
(State-wide)	Florida Coastal Management Programs	Florida Coastal Management Program Department of Community Affairs, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100 Ph: 850 922-5438, Fax: 487-2899, ralph.cantral@dca.state.fl.us www.dca.state.fl.us/ffcm	CZMP w/s 2/02
Gulf of Mexico	See Interstate Programs		
South Florida (south of Kissimmee River)	Integrated plan for ecosystem restoration, protection, and maintenance	South Florida Initiative (EPA-SFI) U.S. EPA Region 4, 400 North Congress Street, Suite 400, West Palm Beach, Florida 33401 Ph: 561 615-5292, Fax: 615-6959, harvey.richard@epa.gov www.epa.gov/region4/programs/cbep/southfl.html	EPA - SFI w/s 2/02
Charlotte Harbor	Charlotte Harbor National Estuary Program	Charlotte Harbor Estuary Program 4980 Bayline Drive 4th Floor, North Fort Myers, FL 33917-3909 Ph: 941 995-1777, Fax: 941 656-7724, rrudolph@swfrcp.org www.charlotteharbornep.com	NEP w/s 2/02
Indian River Lagoon	Indian River Lagoon National Estuary Program	Indian River Lagoon National Estuary Program www.epa.gov/owow/oceans/lagoon	NEP w/s 2/02
Sarasota Bay	Sarasota Bay National Estuary Program	Sarasota Bay Natural Estuary Program 5333 N. Tamiami Trail, Suite 104, Sarasota, FL 34234 Ph: 941 359-5841, Fax: 359-5846, bmuniz@ci.sarasota.fl.us www.sarasotabay.org	NEP w/s 2/02

Tampa Bay	Tampa Bay National Estuary Program	Tampa Bay Estuary Program 100 8th Avenue, SE, MS I-1/NEP, St. Petersburg, FL 33701 Ph: 727 893-2765, Fax: 893-2767, saveit@tbep.org www.tbep.org	NEP w/s 2/02
Florida Keys	Florida Keys National Marine Sanctuary	Florida Keys National Marine Sanctuary P.O. Box. 500368, Marathon, FL 33050 Ph: 305 743-2437, Fax: 743-2357, floridakeys@nms.noaa.gov www.flknms.nos.noaa.gov/html	NMSP w/s 2/02
Guana, Tolomato and Matanzas Rivers	Guana Tolomato Matanzas National Estuarine Research Reserve Management Plan	Guana Tolomato Matanzas NERR Department of Environmental Protection 9741 Ocean Shore Blvd., Marineland, St. Augustine, FL 32080 Ph: 904 461-4054, Fax: 461-5056, kenberk@aug.com www.ocrm.nos.noaa.gov/nerr/reserves/nerrgtm.html www.dep.state.fl.us/coastal/sites/northeast/gtmnerrl/info.htm	NERRS w/s 2/02
Apalachicola River	Apalachicola National Estuarine Research Reserve Management Plan	Apalachicola Reserve NERR Dept. of Environmental Protection, 350 Carroll Street, Eastpoint, FL 32328 Ph: 850 670-4783, Fax: 670-4324, rogles@digitalexp.com www.ocrm.nos.noaa.gov/nerr/reserves/nerapalachicola.html	NERRS w/s 2/02
Rookery Bay	Rookery Bay National Estuarine Research Reserve Management Plan	Rookery Bay National Estuarine Research Reserve Department of Environmental Protection, 300 Tower Road, Naples, FL 34113 Ph: 941 417-6310, fax: 417-6315 www.ocrm.nos.noaa.gov/nerr/reserves/nerrrookery.html	NERRS w/s 2/02
GEORGIA			
(State-wide)	Georgia Coastal Management Program	Coastal Resources Division, Dept. of Natural Resources One Conservation Way, Suite 300, Brunswick, GA 31520-8687 Ph: 912 264-7218, Fax: 262-3143, stuart@ecology.dnr.state.ga.us www.dnr.state.ga.us/dnr/coastal	CZMP w/s 2/02
Sapelo Island	Sapelo Island National Estuarine Research Reserve Management Plan	Sapelo Island NERR Department of Natural Resources, P.O. Box 15, Sapelo Island, GA 31327. Ph: 912 485-2251, fax: 485-2141 fhay@ocean.nos.noaa.gov www.ocrm.nos.noaa.gov/nerr/reserves/nerrsapelo.html	NERRS w/s 2/02
GUAM			
(Territory-wide)	Guam Coastal Management Program	Coastal Management Program, Bureau of Planning, P.O. Box 2950, Agana, Guam 96910 Ph: 671 472-4201, Fax: 477-1812, mham@saba.kuentos.guam.net	CZMP w/s 2/02

HAWAII			
(State-wide)	Hawaii Coastal Zone Management Program	Coastal Zone Management Program, Office of Planning Department of Business, Economic Development, and Tourism P.O. Box 2359, Honolulu, HI 96804 Ph: 808 587-2809, Fax: 587-2899, solive@dbedt.hawaii.gov www.hawaii.gov/dbedt/czm/index.html	CZMP w/s 2/02
INDIANA			
(State-wide)	Indiana Coastal Coordination Program	Department of Natural Resources, Division of Water 402 W. Washington, Room W264, Indianapolis, IN 46204-2748 Ph: 317 233-0132, www.state.in.us/dnr/lakemich/index.html	CZMP w/s 2/02
Great Lakes	Great Lakes Basin Compact	See Inter-state programs	
Great Lakes	Great Lakes National Program	See Inter-state programs	
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts and Inter-state Regional Efforts	
LOUISIANA			
(State-wide)	Louisiana Coastal Resources Program	Coastal Management Division Dept. of Natural Resources, P.O. Box 44487, Baton Rouge, LA 70804 Ph: 225 342-7591, Fax: 342-9439, terryh@dnr.state.la.us http://www.dnr.state.la.us/crm/coastmgt/cmdpage.html	CZMP w/s 2/02
Gulf of Mexico	See Inter-state programs		
Barataria-Terrebonne Estuarine Complex	Barataria-Terrebonne National Estuary Program	Barataria-Terrebonne Estuary Program P.O. Box 2663, Nicholls State University, Thibodaux, LA 70310 Ph: 504-447-0868 or 800-259-0869, Fax: 504-447-0870, matt@btnep.org http://mail.btnep.org	NEP w/s 2/02
MAINE			
(State-wide)	Maine Coastal Management Program	Coastal Programs, State Planning Office, State House Station #38, Augusta, ME 04333 Ph: 207 287-3261, Fax: 287-8059, http://www.state.me.us/spo/mcp/mcp.htm	CZMP w/s 2/02
Casco Bay	Casco Bay Estuary Project	Casco Bay Estuary Project, University of Southern Maine, P.O. Box 9300, Portland, ME 04104-9300 Ph: 207-780-4820, Fax: 207-780-4913 bbsmith@usm.maine.edu www.cascobay.usm.maine.edu www.muskie.usm.maine.edu/cascobay/index.html	NEP w/s 2/02
Little River Estuary	Wells National Estuarine Research Reserve Management Plan	Wells National Estuarine Research Reserve 342 Laudholm Farm Road, Wells, ME 04090 Ph: 207 646-1555, fax: 646-2930, wellsnnerr1@cybertours.com www.ocrm.nos.noaa.gov/herr/reserves/nerwells.html www.wellsreserve.org	NERRS w/s 2/02

Gulf of Maine		See Table C-4: International ICM Efforts	
MARYLAND			
(State-wide)	Maryland Coastal Zone Management Program	Coastal Zone Management Division Dept. of Natural Resources, Tawes State Office Building, E-2 580 Taylor Avenue, Annapolis, MD 21401 Ph: 410 974-2784, Fax:?, director@mdcoastalbays.org www.dnr.state.md.us/bay/czm	CZMP w/s 2/02
Chesapeake Bay	See Inter-state programs		
Isle of Wight, Assawoman Bay, Sinepuxent Bay, Newport Bay, Chincoteague Bay	Maryland Coastal Bays Program	Maryland Coastal Bays Program Ph: 410 260-8638, cwazniak@dnr.state.md.us www.dnr.state.md.us/coastalbays	NEP w/s 2/02
Jug Bay, Otter Point, Creek, Monie Bay	Chesapeake Bay National Estuarine Research Reserve-Maryland Management Plan	Chesapeake Bay NERR - Maryland Maryland Department of Natural Resources, Tawes State Office Building, E-2 580 Taylor Avenue, Annapolis, MD 21401 Ph: 410 260-8730, fax: 260-8739, kbuppert@dnr.state.md.us www.ocrm.nos.noaa.gov/nerr/reserves/nerrchesapeakemd.html	NERRS w/s 2/02
MASSACHUSETTS			
(State-wide)	Massachusetts Coastal Zone Management Program	Office of Coastal Zone Management, 251 Causeway Street, Suite 900, Boston, MA 02114-2119 Ph: 617 626-1200, Fax: 617 626-1240, mczm@state.ma.us	CZMP w/s 2/02
Buzzards Bay	Buzzards Bay Project	Buzzards Bay Project 2870 Cranberry Highway, East Wareham, MA 02538 Ph: 508 291-3625, Fax: 291-3628, tracy.warncke@state.ma.us www.buzzardsbay.org	NEP w/s 2/02
Cape Cod Bay Massachusetts Bay	Massachusetts Bays Program	Massachusetts Bays Program 251 Causeway Street, Suite 900, Boston, MA 02114-2151 Ph: 617 626-1230, Fax: 626-1240, massbays@state.ma.us www.state.ma.us/massbays	NEP w/s 2/02
Narragansett Bay	See Inter-state programs		
Gulf of Maine		See Table C-4: International ICM Efforts	
Waquoit Bay	Waquoit Bay National Estuarine Research Reserve Management Plan	Waquoit Bay National Estuarine Research Reserve Program P.O. Box 3092, Waquoit Bay, MA 02536 Ph: 508 457-0495; Fax: 617 727-5537, wbnerr@capecod.net www.ocrm.nos.noaa.gov/nerr/reserves/nerrwaquoitbay.html	NERRS w/s 2/02
MICHIGAN			
(State-wide)	Michigan Coastal Zone Management Program	Land & Water Management Division, Department of Natural Resources Box 30028, Lansing, MI 48909-7958 Ph: 517 373-1950, Fax: 335-3451, cunninggc@state.mi.us www.deq.state.mi.us	CZMP w/s 2/02

Great Lakes	Great Lakes National Program	See Inter-state regional programs	
Great Lakes	Great Lakes Basin Compact	See Inter-state regional programs	
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts and Inter-state Efforts	
Thunder Bay	(Proposed) Thunder Bay National Marine Sanctuary	Thunder Bay National Marine Sanctuary 2205 Commonwealth Blvd., Ann Arbor, MI 48105-2945 Ph: 734 741-2270, Fax: 741-2176, ellen.brody@noaa.gov www.glerl.noaa.gov/glsr/thunderbay	NMSP w/s 2/02
MINNESOTA			
(State-wide)	Minnesota Coastal Program and Lake Superior Coastal Program	Department of Natural Resources, Division of Waters, 1201 E. Highway 2, Grand Rapids, MN 55744 Ph: 218 327-4417, Fax:, www.dnr.state.mn.us/waters/czm/index.html Lake Superior Coastal Program Ph: 218 834-6625, tricia.ryan@dnr.state.mn.us Are these two separate programs?	CZMP w/s 2/02
Great Lakes	Great Lakes National Program	See Inter-state programs	
Great Lakes	Great Lakes Basin Compact	See Inter-state programs	
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts and Inter-state Regional Efforts	
MISSISSIPPI			
(State-wide)	Mississippi Coastal Program	Department of Marine Resources 1141 Bayview Avenue, Suite 101, Biloxi, MS 39530 Ph: 228 374-5000, Fax: 374-5008, soivanki@datasync.com www.dmr.state.ms.us	CZMP w/s 2/02
Gulf of Mexico (State-wide)	See Inter-state programs		
Grand Bay	Grand Bay National Estuarine Research Reserve Management Plan	Grand Bay NERR Department of Marine Resources, 6005 Bayou Heron Road, Moss Point, MS 39562 Ph: 228 475-7047, Fax: 475-8097, phoar@metro.net www.ocrm.nos.noaa.gov/nerr/reserves/nerrmississippi.html	NERRS w/s 2/02
NEW HAMPSHIRE			
(State-wide)	New Hampshire Coastal Program	Coastal Program Office, Office of State Planning 2-1/2 Beacon Street, Concord, NH 03301 Ph: 603 271-2155, Fax: 271-1728, dhartman@osp.state.nh.us http://webster.state.nh.us/coasta	CZMP w/s 2/02

Great Bay, Little Bay Hampton Harbor	New Hampshire Estuaries Project	New Hampshire Estuaries, 152 Court Street, Portsmouth, NH Ph: 603-433-7187, Fax: 603-431-1438 cynthia.lay@rscs.net	NEP w/s 2/02
Great Bay	Great Bay National Estuarine Research Reserve Management Plan	Great Bay National Estuarine Research Reserve Department Fish and Game, 225 Main Street, Durham, NH 03824 Ph: 603 868-1095, Fax: 868-3305 www.ocrm.nos.noaa.gov/nerr/reserves/nerrgreatbay.html	NERRS w/s 2/02
Gulf of Maine		See Table C-4: International ICM Efforts	
NEW JERSEY			
(State-wide)	New Jersey Coastal Management Program	Office of Coastal Planning and Program Coordination Dept. of Environmental Protection, 401 East Street, Box 418, Trenton, NJ 08625 Ph: 609 777-3251, Fax: ?, lschmidt@dep.state.nj.us www.state.nj.us/dep/landuse/coast/coast.html	CZMP w/s 2/02
Delaware Estuary	See Inter-state programs		
New York Harbor	See Inter-state programs		
Hackensack Meadowlands	Hackensack-Meadowlands Development Program	Hackensack Meadowlands Development Commission 1 DeKorte Park Plaza, Lyndhurst, NJ 07071 Ph: 201 460-1700, Fax: 460-1722, rceberio@hmhc.state.nj.us	
Barnegat Bay	Barnegat Bay Estuary Program	Barnegat Bay Estuary Program P.O. Box 2191, 129 Hooper Avenue, Toms River, NJ 08753 Ph: 732 286-7877, bscro@co.ocean.nj.us www@bbep.org/contract.html	NEP w/s 2/02
Mullica River - Great Bay	Jacques Costeau National Estuarine Reserve Management Plan	Jacques Costeau National Estuarine Reserve Institute of Marine and Coastal Sciences, Rutgers University 71 Dudley Road, New Brunswick, NJ 08901 Ph: 732 932-6555, 932-8578, mcdonnel@ahab.rutgers.edu www.ocrm.nos.noaa.gov/nerr/reserves/nerrmullica.html	NERRS w/s 2/02
NEW YORK			
(State-wide)	New York Coastal Management Program	Division of Coastal Resources Department of State, 41 State Street, Albany, NY 12231-0001 Ph: 518 474-6000, Fax: 473-2464, coastal@dos.state.ny.us www.dos.state.ny.us/cstl/cstlwww.html	CZMP w/s 2/02
Great Lakes	Great Lakes National Program	See Inter-state programs	
Great Lakes	Great Lakes Basin Compact	See Inter-state programs	
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts and Inter-state programs	
Lake Champlain	See Inter-state programs		NEP w/s 2/02

New York-New Jersey Harbor	See Inter-state programs		NEP w/s 2/02
Peconic Bay	Peconic Estuary Program	Peconic Estuary Program, Suffolk County Department of Health Services, Office of Ecology Riverhead County Center, Riverhead, NY 11901 Ph: 631 852-2077 vito.minei@co.suffolk.ny.us www.co.suffolk.ny.us/health/eq/pep.html	NEP w/s 2/02
Long Island Sound	See Inter-state programs		
Hudson River	Hudson River National Estuarine Research Reserve Management Plan	Hudson River NERR Department of Environmental Conservation, c/o Bard College Field Station Annandale, NY 12504-5000 Ph: 845 758-7010, fax: 758-7033, bablair@gw.dec.state.ny.us www.ocrm.nos.noaa.gov/nerr/reserves/nerrhudsonriver.html	NERRS w/s 2/02
Town of Waddington	Proposed St. Lawrence River National Estuarine Research Reserve	Division of Coastal Resources and Waterfront Revitalization Department of State, 41 State Street, Albany, NY 12231 Ph: 518 473-2459, Fax: 473-2464, gstafford@dos.state.ny.us www.dos.state.ny.us/cstl/cstlwww.html	NERRS w/s 2/02
NORTH CAROLINA			
(State-wide)	North Carolina Coastal Management Program	Division of Coastal Management, Department of Environment and Natural Resources 1638 Mail Service Center, Raleigh, NC 27699-1638 Ph: 919 733-2293, Fax: 733-1495, donna.moffitt@ncmail.net http://dcm2.ehnr.state.nc.us	CZMP w/s 2/02
Albermarle-Pamlico Sounds	Albermarle-Pamlico National Estuary Program	APNEP Program Office Division of Water Quality - Planning 1617 Mail Service Center, Raleigh, NC 27699-1617 Ph: 919-733-5083 ext. 585, Fax: 919-715-5637 guy.stefanski@ncmail.net http://h2o.enr.state.nc.us/nep	NEP w/s 2/02
Currituck Banks, Rachel Carson, Masonboro Island, Zeke's Island	North Carolina National Estuarine Research Reserve Management Plan	North Carolina National Estuarine Research Reserve 1 Marvin Moss Lane, Wilmington, NC 28409 Ph: 910 962-2470, Fax: 962-2410, ncner@starfishnet.com www.ocrm.nos.noaa.gov/nerr/reserves/nerrnorthcarolina.html	NERRS w/s 2/02
NORTHERN MARIANAS ISLANDS			
(State-wide)	Northern Mariana Islands Coastal Resources Management Program	Coastal Resources Management Office, Office of the Governor 2nd Floor Morgan Building, San Jose Saipan, Mariana Islands 96950 Ph: 670 234-6623, Fax: 234-0007, crm.pbarlas@saipan.com	CZMP w/s 2/02
OHIO			
(State-wide)	Ohio Coastal Management Program	Coastal Management Program, Department of Natural Resources Building C-2, Fountain Street, 1952 Belcher Drive, Columbus, OH 43224-1386 Ph: 614 265-6395, Fax: 267-2981, mike.colvin@dnr.state.oh.us www.dnr.state.oh.us/coastal	CZMP w/s 2/02

Great Lakes	Great Lakes National Program	See Inter-state programs	
Great Lakes	Great Lakes Basin Compact	See Inter-state programs	
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts and Inter-state Regional Efforts	
Old Woman Creek	Old Woman Creek National Estuarine Research Reserve Management Plan	Old Woman Creek National Estuarine Research Reserve 2514 Cleveland Road East, Huron, OH 44839 Ph: 419 433-4601, 433-2851, lfeix@ocean.nos.noaa.gov www.ocrm.nos.noaa.gov/nerr/reserves/nerroldwoman.html	NERRS w/s 2/02
OREGON			
(State-wide)	Oregon Coastal Management Program	Coastal and Ocean Management Program Department of Land Conservation and Development 800 N.E. Oregon Street, #18, Portland, Oregon 97232 Ph: 503 731-4065, Fax: 731-4068, eldon.hout@state.or.us www.lcd.state.or.us/coast/ocmphome.htm	CZMP w/s 2/02
Lower Columbia River	See Inter-state programs		
Tillamook Bay	Tillamook Bay National Estuary Project	Tillamook Bay National Estuary Project 613 Commercial Avenue, PO Box 493, Garabaldi OR 97118 Ph: 503 322-2222, Fax: 322-2261, rfelley@co.tillamook.or.us www.co.tillamook.or.us/gov/estuary/homepage.htm	NEP w/s 2/02
South Slough	South Slough National Estuarine Research Reserve Management Plan	South Slough National Estuarine Research Reserve Division of State Lands, P.O. Box 5417, Charleston, OR 97420 Ph: 541 888-5558, fax: 888-5559, tgaskill@harborside.com www.ocrm.nos.noaa.gov/nerr/reserves/nerrsouthslough.html	NERRS w/s 2/02
PENNSYLVANIA			
(State-wide)	Pennsylvania Coastal Zone Management Program	Coastal Zone Management Program Dept. of Environmental Protection, P.O. Box 8555, Harrisburg, PA 17105-8555 Ph: 717 787-5259, Fax: 787-9549, tabor.james@al.dep.state.pa.us www.dep.state.pa.us/dep/deputate/watermgt/WC/Subjects/czmp.htm	CZMP w/s 2/02
Great Lakes	Great Lakes National Program	See Inter-state programs	
Great Lakes	Great Lakes Basin Compact	See Inter-state programs	
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts and Inter-state efforts	
Chesapeake Bay	See Inter-state programs		
Delaware Estuary	See Inter-state programs		

PUERTO RICO			
(Commonwealth-wide)	Puerto Rico Coastal Management Program	Bureau of Reserves, Refuges, and Coastal Resources Department of Natural and Environmental Resources Puerta de Tierra, Box 9066600 San Juan, Puerto Rico 00906-6600 Ph: 787 721-7593, Fax: ?, prczmp@caribe.net	CZMP w/s 2/02
San Juan Bay	San Juan Bay Estuary Program	San Juan Bay Estuary Program 400 Fernandez Juncos Avenue, 2nd floor, San Juan, PR 00901-3299 Ph: 787 725-8162, Fax: 725-8164, www.estuariosanjuan.org	NEP w/s 2/02
Jobos Bay	Jobos Bay National Estuarine Research Reserve Management Plan	Jobos Bay National Estuarine Research Reserve Department of Natural and Environmental Resources, Call Box B, Aguirre, P.R. 00704 Ph: 787 853-4617, Fax: 853-4618, cgonzalez@ocean.nos.noaa.gov www.ocrm.nos.noaa.gov/nerr/reserves/nerrjobos.html	NERRS w/s 2/02
RHODE ISLAND			
(State-wide)	Rhode Island Coastal Management Program	Coastal Resources Management Council Stedman Building, 4808 Tower Hill Road, Wakefield, RI 02879 Ph: 401 783-3370, Fax: 783-3767, ricrmc@ricconnect.com www.state.ri.us/manual/data/queries/stdept	CZMP w/s 2/02
Narragansett Bay	See Inter-state programs		
Prudence Island Patience Island Hope Island	Narragansett Bay National Estuarine Research Reserve Management Plan	55 South Reserve Drive, Prudence Island, RI 02872 Ph: 401 683-6780 (on-site), Fax: 682-1936 401 277-6605 (Rhode Island Dept. of Environmental Management) www.ocrm.nos.noaa.gov/nerr/reserves/nerrnarragansett.html	NERRS w/s 2/02
SOUTH CAROLINA			
(State-wide)	South Carolina Ocean and Coastal Resource Management Program	Office of Ocean and Coastal Resource Management Department of Health and Environmental Control 1362 McMillian Avenue, Suite 400, Charleston, SC 29405-2029 Ph: 843 744-5838, Fax: 744-5847, brookscl@chast www.scdhec.net/eqc/ocrm/html/main.html	CZMP w/s 2/02
Ace Basin	Ace Basin National Estuarine Research Reserve Management Program	Ace Basin NERR South Carolina Department of Natural Resources P.O. Box 12559, Charleston, SC 29412 Ph: 803 762-5062, fax: 762-5412, wcmillan@ocean.nos.noaa.gov www.ocrm.nos.noaa.gov/nerr/reserves/nerrace.html	NERRS w/s 2/02

North Inlet-Winyah Bay	North Inlet-Winyah Bay National Estuarine Research Reserve Management Plan	North Inlet-Winyah Bay NERR Baruch Marine Field Laboratory, University of South Carolina P.O. Box 1630, Georgetown, SC 29442, Ph: 803 546-6219, fax: 546-1632 www.ocrm.nos.noaa.gov/nerr/reserves/nerrwinyah.html	NERRS w/s 2/02
TEXAS			
(State-wide)	Texas Coastal Management Program	Coastal Division, Texas General Land Office Stephen F. Austin Bldg., 1700 North Congress Street, Austin, Texas 78701 Ph: 512 463-5054, Fax: 475-0680, diane.garcia@glo.state.tx.us www.glo.state.tx.us/coastal/cmp.html	CZMP w/s 2/02
Gulf of Mexico (State-wide)	See Inter-state programs		
Corpus Christi Bay	Corpus Christi Bay National Estuary Program	Coastal Bend Bays and Estuaries Program 1305 N. Shoreline Blvd., Suite 201, Corpus Christi, TX 78401 Ph: 361-885-6202, 361-885-7801, Fax: 361-883-7801 rallen@cbbep.org , http://www.sci.tamucc.edu/ccbnep	NEP w/s 2/02
Galveston Bay	Galveston Bay Estuary Program	Galveston Bay Estuary Program, 711 West Bay Area Boulevard, Suite 210, Webster, TX 77598 Ph: 281 332-9937, Fax: 332-8590, gbep@tnrcc.state.tx.us http://gbep.tamug.tamu.edu	NEP w/s 2/02
South Texas	Coastal Bend Bays and Estuaries Program	Coastal Bend Bays and Estuaries Program asanchez@cbbep.org http://tarpon.tamucc.edu	
VERMONT			
Lake Champlain Basin	See Inter-state programs		
VIRGIN ISLANDS			
(Territory-wide)	Virgin Islands Coastal Zone Management Program	Coastal Zone Management Program Dept. of Planning and Natural Resources, Cyril E. King Airport, 2nd Floor, St. Thomas, VI 00802 Ph: 340 774-3320, Fax: 775-5706	CZMP w/s 2/02
VIRGINIA			
(State-wide)	Virginia Coastal Program	Virginia Coastal Program, Department of Environmental Quality 629 East Main Street, 6th Floor, Richmond, VA 23219 Ph: 804 698-4320, lbmckay@deq.state.va.us www.deq.state.va.us/coastal	CZMP w/s 2/02
Chesapeake Bay	See Inter-state programs		

Four components in the York River basin	Chesapeake Bay National Estuarine Research Reserve in the Virginia Management Plan	Chesapeake Bay National Estuarine Research Reserve in Virginia Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, Virginia 23062 Ph: 804 684-7135, Fax: 684-7120, cbnerr@vims.edu www.ocrm.nos.noaa.gov/nerr/reserves/nerrchesapeakeva.html www.vims.edu/cbnerr	NERRS w/s 2/02
WASHINGTON			
(State-wide)	Washington Coastal Zone Management Program	SEA Program Washington Department of Ecology, P.O. Box 47600, Olympia, WA 98504 Ph: 360 407-6000, Fax: tsea461@ecy.wa.gov www.ecy.wa.gov/programs/sea/shorelan.html	CZMP w/s 2/02
Puget Sound	Puget Sound Estuary Program	Puget Sound Water Quality Action Team Puget Sound Estuary Program, P.O. Box 40900, Olympia, WA 98504-0900 Ph: 360 407-7300, Fax: 407-7333 nmckay@psat.wa.gov www.wa.gov/puget_sound	NEP w/s 2/02
Puget Sound and Georgia Basin		See Table C-4: International ICM Efforts	
Columbia River Estuary	See Inter-state programs		
Olympic Coast	Olympic Coast National Marine Sanctuary	Olympic Coast National Marine Sanctuary 138 West First Street, Port Angeles, Washington 98362 Ph: 360 457-6622, Fax: 457-8496, olympiccoast@noaa.gov www.ocns.nos.noaa.gov	NMSP w/s 2/02
Padilla Bay	Padilla Bay National Estuarine Research Reserve Management Plan	Padilla Bay National Estuarine Research Reserve 10441 Bayview-Edison Road, Mount Vernon, WA 98273-9668 Ph: 360 428-1558, fax: 428-1491 alex@padillabay.gov www.ocrm.nos.noaa.gov/nerr/reserves/nerrpadilla.html	NERRS w/s 2/02
WISCONSIN			
(State-wide)	Wisconsin Coastal Management Program	Wisconsin Coastal Management Program Department of Administration, P.O. Box 7868, Madison, WI 53707-7868 Ph: 608 267-7982, Fax: 267-6931?, larsed@mail.state.wi.us www.doa.state.wi.us/dhir/boir/coastal	CZMP w/s 2/02
Great Lakes	Great Lakes Water Quality Agreement	See Table C- 4: International ICM Efforts	
Great Lakes	Great Lakes National Program	See Inter-state programs	
Great Lakes	Great Lakes Basin Compact	See Inter-state programs	

Table C- 4: International ICM Efforts* First iteration. February 28, 2002

World Region	Name of Effort	Address and Contacts	Program or Source
AFRICA - EAST and SOUTH (AFES)			
East and South Africa (Comoros, Eritrea, Kenya, Madagascar, Mauritius, Mozambique, Reunion, Seychelles, Tanzania and South Africa)	South and East Africa Coastal Area Management Program (SEACAM)	South East Africa Coastal Area Management Secretariat 874 Av. Amilcar Cabral, 1st Floor, Caixa Postal 4220 Maputo, Mozambique Ph: 258 1 300-641/2, fax: 300-638, seacam@virconn.com www.seacam.mz	SEACAM w/s 2/02
East Africa (Comoros, Kenya, Madagascar, Mauritius, Mozambique, Reunion, Seychelles, Somalia, Tanzania and South Africa)	Nairobi Convention and Action Plan for the East Africa Region (Adopted 1985, and the Convention entered into force in 1996) (UNEP RSP) (Twinning agreement with Baltic Seas Programme, 5/2000)	Coordinator Regional Coordinating Unit of the Eastern African Region (EAF/RCU), P.O. Box 487 Victoria, Mahé, Seychelles Ph: 248 324-525, fax: 324-5 73, uneprcu@seychelles.net	UNEP Regional Seas Program w/s 1/02
Agulhas Current (Madagascar, Mozambique, South Africa)	Argulhas Current Large Marine Ecosystem (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 401 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Name of local contact, address and contact points?	GEF/UNEP support LME w/s 1/02
Red Sea and Gulf of Aden (Djibouti, Egypt, Eritrea , Jordan, Saudi Arabia, Somalia , Sudan, and Yemen)	Action Plan for the Red Sea and Gulf of Aden and Jeddah Convention (Action Plan and Convention adopted 1982) (UNEP RSP)	Coordinator Red Sea and Gulf of Aden Environment Programme (PERSGA) P.O. Box 1358, Jeddah, 21431, Saudi Arabia Ph: (966) 2 651-4472, fax: 657-0945, persga@computec.com.bh www.unep.org/unep/program/natres/water/regseas/redsea.htm	UNEP Regional Seas Program w/s 1/02
Red Sea and Gulf of Aden (Djibouti , Egypt, Eritrea , Jordan, Saudi Arabia, Somalia , Sudan, and Yemen)	Strategic Action Programme for the Red Sea and the Gulf of Aden (RAB/95/G41)	Programme for the Environment of the Red Sea and Gulf of Aden (PERSGA) P.O. Box 1358, Jeddah, 21431, Saudi Arabia Ph: (966) 2 651-4472, fax: 657-0945, persga@computec.com.bh www.unep.org/unep/program/natres	GEF/UNDP/ UNEP/WB funding GEF Int. Waters w/s 1/02
Somali Current (Kenya, Tanzania)	Somali Current Large Marine Ecosystem (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 401 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Name of local contact, address and contact points?	GEF/UNEP support LME w/s 1/02

Maputaland (Mozambique and South Africa)	Development-conservation strategies for integrated coastal management in Maputaland	Name of local contact, address and contact points? <i>Could not find on w/s search.</i>	GEF/UNDP support GEF w/s 1/02
Lake Malawi or Nyasa (Malawi, Mozambique, Tanzania)	Lake Malawi (Nyassa) Biodiversity Conservation Project (started in 1992)	Malawi Ministry of Forestry, Fisheries, and Environmental Affairs Administered by the Southern African Development Community and the World Bank prc/geo.umn.edu/IDEAL/bulletin/wi97/hecky.html	GEF/WB/CIDA/ DFID funded GEF Biodiversity w/s 1/02
Lake Tanganyika (Burundi, Congo Democratic Republic, Tanzania and Zambia)	Implementing the Lake Tanganyika Strategic Action Program and Convention	Project Coordinator Lake Tanganyika Biodiversity Project P.O. Box 5956 Dar es Salaam, Tanzania Ph: 255 51 118-201, fax: 118-202, andrewm@unops.org www.ltbp.org	GEF/WB/UNDP funded GEF w/s 1/02
Lake Victoria (Kenya, Tanzania, Uganda)	Lake Victoria Environmental Management Project (LVEMP)	Regional Secretary LVEMP Regional/National Secretariat 4th floor, Patel Building, Maktaba Street, P.O. Box 78089, Dar-es-Salaam, Tanzania Ph 225 22 211-8417, fax: 211-0215, lvemp@cats-net.com gefweb.org/COUNCIL/coucil7/wp/lakevic/htm	GEF/WB/EU support GEF w/s 1/02
AFRICA - NORTH (AFN)			
Mediterranean Sea (Albania, Algeria , Bosnia, Croatia, Cyprus, Egypt , France, Greece, Israel, Italy, Lebanon, Libya , Malta, Monaco, Morocco , Slovenia, Spain, Syria, and Tunisia)	Mediterranean Action Plan (MAP) and Barcelona Convention (Action Plan adopted in 1975 and Convention signed in 1976) (UNEP RSP)	Coordinator Secretariat to the Barcelona Convention Mediterranean Action Plan of UNEP (UNEP/MAP) 48, Vassileos Konstantinou Ave., 11635 Athens, Greece Ph: (30) 1 727-3100, fax: 725-3196 unepmedu@unepmap.gr www.unepmap.org	UNEP Regional Seas Program w/s 1/02
Red Sea and Gulf of Aden (Djibouti, Egypt , Eritrea, Jordan, Saudi Arabia, Somalia, Sudan , and Yemen)	Action Plan for the Red Sea and Gulf of Aden (Plan adopted in 1982 and Jeddah Convention signed in 1982) (UNEP RSP)	Coordinator Programme for the Environment of the Red Sea and Gulf of Aden (PERSGA) P.O. Box 1358, Jeddah, 21431, Saudi Arabia Ph: (966) 2 651-4472, fax: 657-0945, persga@computec.com.bh www.unep.org/unep/program/natres/water/regseas/redsea.htm	UNEP Regional Seas Program w/s 1/02
Red Sea and Gulf of Aden (Djibouti, Egypt , Eritrea, Jordan, Saudi Arabia, Somalia, Sudan , and Yemen)	Strategic Action Programme for the Red Sea and the Gulf of Aden (RAB/95/G41)	Coordinator Programme for the Environment of the Red Sea and Gulf of Aden (PERSGA) P.O. Box 1358, Jeddah, 21431, Saudi Arabia Ph: (966) 2 651-4472, fax: 657-0945, persga@computec.com.bh www.unep.org/unep/program/natres <i>Is this an extension of the program above?</i>	GEF/UNDP/ UNEP/WB funding. GEF Int.Waters w/s 1/02
Lake Chad (Chad , Cameroon, Niger , and Nigeria)	Integrated Management of the Lake Chad Basin (RAF/95/G48)	Executive Secretary Lake Chad Basin Committee P.O. Box N'djemena, Chad, www.luemp.org	GF/UNEP w/s 1/02

AFRICA - WEST and SOUTHWEST (AFWS)

Benguela Current (Angola, Namibia, and South Africa)	Implementation of a Strategic Action Plan Toward Achievement of Integrated Management of the Benguela Current (1997- ?) (LME Programme)	Coordinator Ministry of Fisheries and Natural Resources P.O. Box 912, Swakopmund, Namibia http://undp.org/siocam/projects	GEF/UNDP funded sdnp.undp w/s 1/02
Canary Current (Cape Verde, Canary Islands, Gambia, Guinea Bissau, Mauritania, Morocco, and Senegal)	Canary Current Large Marine Ecosystem (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 401 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Need name of local contact, adress, and contacts.	GEF/UNEP funded IUCN + IOC partner institutions LME w/s 1/02
Gulf of Guinea (Benin, Cameroon, Côte d'Ivoire, Ghana, and Nigeria)	Gulf of Guinea Large Marine Ecosystem: Water Pollution Control and Biodiversity Conservation Programme: Integrated Coastal Area Management Component (LME Programme)	Regional Coordinator Regional Coordination Centre, GEF/GOG-LME c/o CRO B.P. V18, Abidjan, Côte d'Ivoire Ph: (225) 35 50 14 /35 58 80; Fax: 35 11 55 also Michael Moore, Project Manager GEF/GOG-LME Project Ph: (43) 1 26026 3363, fax: 26026 6819 mmoore@unido.org , www.unido.org/Search.htmls	Funded by GEF/UNIDO/ UNDP/ UNEP UNIDO w/s 1/02
West and Central Africa (Angola, Benin, Cameroon, Cape Verde, Congo Democartic Rep, Congo Republic, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Namibia, Nigeria, Sao Tome and Principe, Senegal, Sierra Leone, and Togo)	West and Central Africa Action Plan amd Abidjan Convention (Adopted 1981 and entered into force in 1984) (UNEP RSP)	Dixon Wauringe, Focal Point for West and Central Africa Regional Coordinating Unit for the West and Central African Action Plan (WACAF/RCU) Ministère de l'Environnement et de la Forêt, Côte d'Ivoire 20 BP 650, Abidjan 20 Ph: 20 21 1183/0623, fax 21 0495, bidiv@africaonline.co.ci	UNEP Regional Seas Program w/s 1/02
Lake Chad (Chad, Cameroon, Niger, and Nigeria)	Integrated Management of the Lake Chad Basin (RAF/95/G48)	Abubakar Jauro, Executive Secretary Lake Chad Basin Committee P.O. Box N'djemena, Chad, www.uemp.org	GF/UNEP w/s 1/02

AMERICA - CARIBBEAN (CAR) (Not the Wider Caribbean)			
Antigua and Barbuda, Bahamas, Barbados, Belize, Caribbean Territories of France, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, U.S.A [Puerto Rico, U.S. Virgin Islands], Venezuela, and U.K. overseas territories.	Caribbean Environment Programme and Caribbean Sea Action Plan and Convention (Plan adopted in 1981 and convention adopted in 1993) (UNEP RSP)	Co-ordinator Regional Co-ordinating Unit for the Caribbean Environment Programme (CAR/RCU), UNEP, 14-20 Port Royal Street, Kingston, Jamaica Ph: 1 876 922-9267, fax: 922-9292, nac.uneprcuja@toj.com www.cep.unep.org	UNEP Regional Seas Program w/s 1/02
Wider? Caribbean Region	CEPNET-IDB Project: Strengthening the Capabilities for Managing Coastal and Marine Resources in the Wider Caribbean Region	Coastal and Ocean Management Unit Inter-American Development Bank, Washington. D.C Need name of local contact, addresses, and contacts	IADB w/s 1/02
Caribbean Region (Antigua-Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and Grenadines, and Trinidad/Tobago)	Integrating Management of Watersheds and Coastal Areas in SIDS (In the pipeline)	Co-ordinator Regional Co-ordinating Unit for the Caribbean Environment Programme (CAR/RCU), UNEP, 14-20 Port Royal Street, Kingston, Jamaica Ph: 1 876 922-9267, fax: 922-9292, nac.uneprcuja@toj.com www.cep.unep.org	GEF Int Waters support CEP w/s 1/02
AMERICA - CENTRAL (CA)			
Antigua/Barbuda, Bahamas, Barbados, Belize , Caribbean Territories of France, Colombia, Costa Rica , Cuba, Dominica, Dominican Republic, Grenada, Guatemala , Guyana, Haiti, Honduras , Jamaica, Mexico, Netherlands Antilles, Nicaragua , Panama , St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad/Tobago, U.S.A [Puerto Rico, U.S. Virgin Islands], Venezuela, and U.K. overseas territories.	Caribbean Environment Programme and Caribbean Sea Action Plan and Convention (Plan adopted in 1981 and convention adopted in 1993) (UNEP RSP)	Nelson Andrade Colmenares, Co-ordinator Regional Co-ordinating Unit for the Caribbean Environment Programme (CAR/RCU), UNEP 14-20 Port Royal Street, Kingston, Jamaica Ph: 1 876 922-9267, fax: 922-9292, nac.uneprcuja@toj.com / www.cep.unep.org	UNEP Regional Seas Program w/s 1/02
Belize, Guatemala, Honduras, and Mexico	Mesoamerican Reef Initiative and the Conservation and Sustainable Use of the Mesoamerican Barrier Reef System (see also Meso-America Wetlands and Coastal Zone Program)	Senior Coastal Management Specialist Environment Department, World Bank, 1818 H Street NW, Washington, D.C. 20433 Mhatziolos@worldbank.org Need name of local contact, addresses, and contacts	GEF-WB funded WB w/s 1/02

South-East Pacific (Chile, Colombia, Costa Rica , Ecuador, El Salvador, Honduras, Nicaragua, Panama , and Peru)	South-East Pacific Action Plan and Lima Convention (Plan adopted 1981) (UNEP RSP)	Permanent Commission of the South Pacific (CPPS). Coruña 2061 y Whimper, Quito, Ecuador Ph: 593 2 234--331. fax: 234-374, cpps@ecuanex.net.ec	UNEP Regional Seas Program w/s 1/02
North-East Pacific (Colombia, Costa Rica, El Salvador, Honduras , Mexico, Nicaragua, and Panama)	Convention for the Protection and Sustainable Development of the Marine and Coastal Environment on the Northeast Pacific and Related Action Plan (Text approved 8/01)(UNEP RSP)	UNEP- Water Branch P.O. Box 30552, Nairobi, Kenya Ph: (254) 2 62 2035, fax: 62 2788, water@unep.org www.unep.org/unep/program/natres/water/regseas/ssthatlan.htm	UNEP Regional Seas Program w/s 1/02
Central America (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama)	Coastal Zone Management Component of the Regional Environment of Central America Project (PROARCA /Costas)1995-2001)	Coordinator for the Costas Component Comision Centroamericana de Ambiente y Dessarrollo Boulevard Orden de Malta, No 470 Santa Elena, Antigua, Cuscatlan, Guatemala Fax: 503 289-6124, tnc@guate.net, www.sicanet.org.sv/ccad/Proyectos/Proyectos.htm#proarca	TNC, WWF, CRC USAID funded + CCAD support Source: Windevoxhel
<i>All 6 Central American States?</i>	Meso-American Wetlands and Coastal Zones Program (see also PROARCA-Costas)	Coordinator IUCN Mesoamerican Regional Office (ORMA) P.O. Box 0145-2150 Moravia, Costa Rica Ph: 506 240-9934, fax: 240-9934, nwindevo@uicn.icr.co.cr	Windevoxhel
Gulf of Fonseca (El Salvador, Honduras, Nicaragua)	Conservation of coastal marine systems	Representatives of the Central American Commission on Environment and Development (CCAD) Connected to the MesoAmerican Wetlands and Coastal Zones Programs	DANIDA funded Windevoxhel
Gulf of Fonseca (El Salvador, Honduras, Nicaragua)	Development of the Gulf of Fonseca Biological Corridor (Component of PROARCA Costas Program)	See Table C-1: National and sub-national efforts	PROARCA w/s 1/02
Gulf of Honduras (Belize, Guatemala, Honduras)	Development of Gulf of Honduras Biological Corridor (A component of the PROARCA Costas Program)	See Table C-1: National and sub-national efforts	PROARCA w/s 1/02
<i>Gulf of Honduras</i> (<i>Guatemala, Honduras</i>)	<i>Honduras Gulf Development Plan?</i>	<i>OAS Project</i>	Windevoxhel
Miskito Coast (Honduras, Nicaragua)	Development of the Miskito Coast Biological Corridor (A component of the PROARCA Costas Program)	See Table C-1: National and sub-national efforts	PROARCA w/s 1/02
Gandoca/Manzanillo (Costa Rica) to Bocas del Toro Region (Panama) (Costa Rica, Panama)	Development of the Gondoca-Bocas del Toro Biological Corridor (A component of the PROARCA Costas Program)	See Table C-1: National and sub-national efforts	PROARCA w/s 1/02

North Caribbean coast and estuary of the San Juan River (Costa Rica, Nicaragua)	Formulation of a Strategic Action Program for the Integrated Management of Water Resources and the Sustainable Development of the San Juan River Basin and its Coastal Zone	See Table C-1: National and sub-national efforts	GEF-UNDP-OAS funded GEF w/s 1/02
AMERICA - NORTH (NA)			
Antigua and Barbuda, Bahamas, Barbados, Belize, Caribbean Territories of France, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico , Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad/Tobago, U.S.A [Puerto Rico, U.S. Virgin Islands], Venezuela, and U.K. overseas territories.	Caribbean Environment Programme and Caribbean Sea Action Plan and Convention (Plan adopted in 1981 and convention adopted in 1993) (UNEP RSP)	Co-ordinator Regional Co-ordinating Unit for the Caribbean Environment Programme (CAR/RCU), UNEP, 14-20 Port Royal Street, Kingston, Jamaica Ph: 1 876 922-9267, fax: 922-9292, nac.uneprcuja@toj.com www.cep.unep.org	UNEP Regional Seas Program w/s 1/02
Great Lakes (Canada, USA)	The Great Lakes Water Quality Agreement	Great Lakes Regional Office, International Joint Commission 100 Ouellette Ave., 8th Floor, Windsor, ON N9A 6T3 Canada Ph: (519) 257-6715, fax: 257-6740, behlent@windsor.ijc.org or P.O. Box 32869, Detroit, MI 48232 Ph: (313) 226-2170 ext. 6733, www.ijc.org	
Gulf of Maine (Canada: New Brunswick and Nova Scotia)(USA: Maine, Massachusetts, and New Hampshire)	Gulf of Maine Program and Gulf of Maine Action Plan:1996-2001	Gulf of Maine Secretariat Coordinator New Hampshire Department of Environmental Services P.O. Box 95, Concord, N.H. Ph: 603 271-8866, fax: 271-2867, gom_sec@world.std.com, www.gulfofmaine.org	
Puget Sound and Georgia Basin (Canada, USA)	Puget Sound - Georgia Basin Environmental Initiative	Policy Director Puget Sound/Georgia Basin Task Force P.O Box 40900, Olympia Washington 98504 360 407-7305, jdohrmann@psat.wa.gov www.wa.gov/puget_sound/shared/shared.html	
St. Croix Estuary (Canada, USA)	St. Croix Estuary Project	St. Croix Estuary Project Inc. 178 Milltown Boulevard, St. Stephen, New Brunswick E3L 1G8 Ph: (506) 467-9905 - Main, (506) 529-4868 - St. Andrews satellite office, Fax: (506) 466-5174, scepnet@nbnet.nb.ca or P. O. Box 394, Calais, Maine 04619 http://www.scep.org	ACAP
North-East Pacific (Colombia, Costa Rica, El Salvador, Honduras, Mexico , Nicaragua, and Panama)	Convention for the Protection and Sustainable Development of the Marine and Coastal Environment on the Northeast Pacific and Related Action Plan (Text approved 8/01) (UNEP RSP)	UNEP- Water Branch P.O. Box 30552, Nairobi, Kenya Ph: (254) 2 62 2035, fax: 62 2788, water@unep.org www.unep.org/unep/program/natres/water/regseas/ssthatlan.htm	UNEP Regional Seas Program w/s 1/02

Tijuana River Watershed and Estuary (Mexico, USA)	Tijuana River Watershed Project	Tijuana River Watershed Project Center for Earth Systems Analysis Research Department of Geography, San Diego State University, San Diego, CA 92182 619 594-8042, miles@typhoon.sdsu.edu http://typhoon.sdsu.edu/TJWATER See also: Table C-1: National and Sub-national Efforts and C-3: ICM Efforts in the USA	
AMERICA - SOUTH (SA)			
South-East Pacific (Chile, Colombia, Costa Rica, Ecuador, El Salvador, Honduras, Nicaragua, Panama, and Peru)	South-East Pacific Action Plan and Lima Convention (Adopted 1981) (UNEP RSP)	Secretary General of the CPPS Permanent Commission of the South Pacific (CPPS). Coruña 2061 y Whimper, Quito, Ecuador Ph: 593 2 234-331, fax: 562 786, cps@ecuanex.net.ec www.ecuanexnet.ac	UNEP Regional Seas Program w/s 1/02
Antigua and Barbuda, Bahamas, Barbados, Belize, Caribbean Territories of France, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad/Tobago, U.S.A [Puerto Rico, U.S. Virgin Islands], Venezuela, and U.K. overseas territories.	Caribbean Environment Programme and Caribbean Sea Action Plan and Convention (Plan adopted in 1981 and convention adopted in 1993) (UNEP RSP)	Co-ordinator Regional Co-ordinating Unit for the Caribbean Environment Programme (CAR/RCU), UNEP 14-20 Port Royal Street, Kingston, Jamaica Ph: 1 876 922-9267, fax: 922-9292, nac.uneprcuja@toj.com www.cep.unep.org	UNEP Regional Seas Program w/s 1/02
Upper South -West Atlantic (Argentina, Brazil, Uruguay)	Southwest Atlantic Action Plan (not prepared or adopted?) (UNEP RSP)	UNEP- Regional Office for Latin America and the Caribbean Boulevard de los Virreyes No.135, Col. Lomas Virreyes AP 10793 11000 Mexico, D.F. Mexico Ph: 52 5 202-7529/7493, fax: 202-0950, rsanchez@rolac.unep.mx	UNEP Regional Seas Program w/s 1/02
Southeast South American Shelf (Argentina, Brazil, Uruguay)	Maritime Management Project South- east South American Shelf Large Marine Ecosystem Project (In the pipeline since 10/99)	<i>Has this been initiated, no specific info on the web?</i>	GEF-WB Project International Waters, WB/ICM w/s 12/01
Estuary of the Rio Plata (Argentina, Uruguay)	Strategic Action Plan for the Rio Plata and Its Maritime Front	Pablo Martínez, UNDP Program Officer. Barrios Amorín 870 3rd floor. (11.000) Montevideo, Uruguay. Ph.:5982 402-3356 to 59. pmartinez@undp.org.uy	GEF-UNDP, International Waters w/s 12/01
Lake Titicaca (Peru, Bolivia)	Conservation of Biodiversity in the Watershed of Lake Titicaca:Strategic Bi-national Plan	Proyecto Especial Binacional Lago Titicaca (PELT) Lake Titicaca Binational Authority aalt@wara.boltnet.bo	GEF/UNDP support GEF w/s 1/02

ASIA - EAST (AE)			
East Asian Seas (Australia, Cambodia, China , Indonesia, Malaysia, Philippines, Singapore, Korea , Thailand, and Vietnam)	East Asian Seas Program and East Asian Seas Action Plan (Approved 1981) (UNEP RSP)	Regional Coordinating Unit for the East Asian Seas (EAS/RCU) 10th Floor, United Nations Building Rajdamnern Avenue, Bangkok 10200, Thailand Ph: 66 2 288-1680, fax: 281-2428 kirkman.unescap@un.org www.unep.org/unep/regsoffs/roap/easru/index.htm	UNEP Regional Seas Program w/s 1/02
South East and East Asia) (Brunei-Darussalam, Cambodia, China , Indonesia, Japan , Malaysia, North Korea , Philippines, Singapore, South Korea , Thailand, and Vietnam)	Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)	PEMSEA Regional Programme Office P.O. Box 2502, Quezon City 1165, Philippines Ph: 63 2 920-2211, fax: 926-9712, info@pemsea.org www.pemsea.org	PEMSEA w/s 2/02
Yellow Sea (China , Korea)	Yellow Sea Strategic Action Plan (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 401 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Name of local contact, address and contact points?	GEF/UNDP support LME w/s 1/02
Yellow Sea (China , Korea , North Korea)	Reducing Environmental Stress in the Yellow Seas Large Marine Ecosystems	Connection to project above?	GEF International Waters GEF w/s 1/02
North West Pacific (China , Japan , Korea , North Korea , and Russia)	Action Plan for the North-West Pacific (NOWPAP) (Adopted in 1994) (UNEP RSP)	NOWPAP Focal point Northwest Pacific Region Environmental Cooperation Centre (NPEC) and the Special Monitoring and Coastal Environmental Assessment Center (NOWPAP) 7-18 Azumi-cho Toyama -city, Toyama 930-0094 Japan Ph: 81 76 445-1571, fax: 445-1581, www.npec.or.jp/english/index.html	UNEP Regional Seas Program w/s 1/02
ASIA - SOUTH (AS)			
Arabian Sea and Bay of Bengal (Bangladesh , India , Maldives , Pakistan , and Sri Lanka)	South Asian Cooperative Environmental Programme and South Asian Seas Action Plan (Action Plan adopted 1995) (UNEP RSP)	South Asia Cooperative Environment Programme (SACEP) 10 Anderson Road, Colombo 5, Sri Lanka Ph: 941 596-442, fax: 589-369, pd_sacep@eureka.lk	UNEP Regional Seas Program w/s 1/02
Bay of Bengal (Bangladesh , India , Indonesia, Malaysia, Maldives , Pakistan , Sri Lanka and Thailand)	Bay of Bengal Strategic Action Plan and the Bay of Bengal Programme (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Name of local contact, address and contact points?	GEF/WB/FAO support GEF Int.Waters w/s 1/02 and LME w/s 1/02

ASIA - SOUTHEAST (SEA)			
Australia and the ASEAN Region (Australia, Brunei Darussalam , Cambodia , Indonesia , Malaysia , Myanmar , Philippines , Singapore , Thailand , and Vietnam)	Coastal Zone Environmental and Resources Management Project (CZERM)	Project Manager Coastal Zone Environmental & Resources Management Project P.O. Box 341, Curtin, Canberra, Australia 2605 dgwalter@amsat.com.au http://www.amsat.com.au/czemp	Source?
East Asian Seas (Australia, Cambodia , China , Indonesia , Malaysia , Philippines , Singapore , South Korea, Thailand , and Vietnam)	East Asian Seas Program and East Asian Seas Action Plan (Action plan adopted 1981) (UNEP RSP)	Regional Coordinating Unit for the East Asian Seas (EAS/RCU) 10th Floor, United Nations Building, Rajdamnern Avenue, Bangkok 10200, Thailand Ph: 66 2 288-1680, fax: 281-2428 kirkman.unescap@un.org www.unep.org/unep/regsoffs/roap/easru/index.htm	UNEP Regional Seas Program w/s 1/02
South East and East Asia) (Brunei-Darussalam , Cambodia , China, Indonesia , Japan, Malaysia , North Korea, Philippines , Singapore , South Korea, Thailand , and Vietnam)	Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)	PEMSEA Regional Programme Office P.O. Box 2502, Quezon City 1165, Philippines Ph: 63 2 920-2211, fax: 926-9712, info@pemsea.org www.pemsea.org	PEMSEA w/s 2/02
Gulf of Thailand (Cambodia , Thailand , Vietnam)	Coastal Management System in the Gulf of Thailand?		CIDA w/s 1/02
South China Sea (Cambodia , China, Indonesia , Malaysia , Philippines , Thailand , and Vietnam)	South China Sea Strategic Action Plan (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Name of local contact, address and contact points?	UNDP and ADB support LME w/s
Sulu and Celebes Seas (Indonesia , Malaysia , and Philippines)	Preliminary Framework of Strategic Action Programme for the Sulu-Celebes Large Marine Ecosystem (LME Programme)	Large Marine Ecosystems Program Narragansett Laboratory, NOAA-NMFS 28 Tarzwell Drive, Narragansett, R.I. 02882, U.S.A. Ph: 401 782-3210, fax: 782-3201, kenneth.sherman@noaa.gov www.edc.uri.edu/lme Name of local contact, address and contact points?	GEF Int. Waters w/s 1/02
ASIA - WEST and the NEAR EAST (WANE)			
Arabian/Persian Gulf (Bahrain , Iran , Iraq , Kuwait , Oman , Qatar , Saudi Arabia and the United Arab Emirates)	Kuwait Convention and Action Plan (Adopted 1978) (UNEP RSP)	Executive Secretary Regional Organization for the Protection of the Marine Environment (ROPME) P.O. Box 26388, 13124 Safat, Kuwait, Kuwait Ph: 965 531-2140, fax: 531-2144, ropme@kuwait.net www.kuwait.net/~ropmek	UNEP Regional Seas Program w/s 1/02
Aral Sea (Kazakhstan , Uzbekistan)	Water and Environmental Manage- ment Project of the Aral Sea Basin (1998-2003)	Name of local contact, address and contact points?	GEF/WB project GEF Int. Waters w/s 1/02
Caspian Sea (Azerbaijan , Iran , Kazakhstan , Russia , Turkmenistan)	Caspian Environment Programme	Programme Coordinator Programme, Coordinating Unit, Room 108, 3rd Entrance, Government House, Baku 370016 Azerbaijan. Ph: (994 12) 971785, fax: 971786 caspien@caspien.in-baku.com/ www.caspianenvironment.org	GEF/UNDP

Mediterranean Sea (Albania, Algeria, Bosnia, Croatia, Cyprus, Egypt, France, Greece, Israel , Italy, Lebanon , Libya, Malta, Monaco, Morocco, Slovenia, Spain, Syria , Tunisia, Turkey)	Mediterranean Action Plan (MAP) and Barcelona Convention (Action Plan adopted in 1975 and Convention signed in 1976) (UNEP RSP)	Coordinator Secretariat to the Barcelona Convention Mediterranean Action Plan of UNEP (UNEP/MAP) 48, Vassileos Konstantinou Ave., 11635 Athens, Greece Ph: (30) 1 727-3100, fax: 725-3196, unepmedu@unepmap.gr, www.unepmap.org	UNEP Regional Seas Program w/s 1/02
Red Sea and Gulf of Aden (Djibouti, Egypt, Eritrea, Jordan , Saudi Arabia , Somalia, Sudan, and Yemen)	Action Plan for the Red Sea and the Gulf of Aden (Plan adopted in 1982 and Jeddah Convention signed in 1982) (UNEP RSP)	Programme for the Environment of the Red Sea and Gulf of Aden (PERSGA) P.O. Box 1358, Jeddah, 21431, Saudi Arabia Ph: (966) 2 651-4472, fax: 657-0945, persga@computec.com.bh www.unep.org/unep/program/natres/water/regseas/redsea.htm	UNEP Regional Seas Program w/s 1/02
Red Sea and Gulf of Aden (Djibouti, Egypt, Eritrea, Jordan , Saudi Arabia , Somalia, Sudan, and Yemen)	Strategic Action Programme for the Red Sea and the Gulf of Aden (RAB/95/G41)	Programme for the Environment of the Red Sea and Gulf of Aden (PERSGA) P.O. Box 1358, Jeddah, 21431, Saudi Arabia Ph: (966) 2 651-4472, fax: 657-0945, persga@computec.com.bh www.unep.org/unep/program/natres	GEF/UNDP/ UNEP/WB funding GEF Int.Waters w/s 1/02
Red Sea coast (Saudi Arabia and Yemen)	Protection of the Marine Ecosystems of the Red Sea Coast (YEM/92/G31) (Approval date 4/93)	Extension from Regional Sea program above? Has this project been completed or evolved into something else?	GEF/UNDP SDNP SIOCAM w/s 1/02
Gulf of Aden coast (Djibouti, Somalia, Yemen)	Coastal Zone Management along the Gulf of Aden (Started in 1999)	Focus on Yemen and Socotra Archipelago Extension from Regional Sea program above? Need name of local contact person, address, and contacts.	GEF/UNDP UNEP/CBD w/s 1/02
Gulf of Aqaba (upper part) (Egypt , Israel , Jordan)	Proposed Gulf of Aqaba Peace Park?		
EUROPE (EUR)			
European Commission and Baltic Nations (Belgium , Denmark , Finland , France , Germany , Greece , Ireland , Italy , Latvia , Lithuania , Netherlands , Norway , Portugal , Spain , and the UK)	European Commission, Demonstration Programme on Integrated Coastal Zone Management	Nature protection, coastal zones, and tourism (D2) environnementronment Directorate-General (11), EC Rue de la Loi 200, B-1049 Brussels, Belgium anne.burrill@cec.eu.int http://europa.eu.int/comm/environmentronment/czm/home.htm	
Eastern Europe (Estonia , Lithuania , Latvia , Poland , and Russia)	European Union for Coastal Conser- vation's ICM efforts in Eastern Europe	European Union for Coastal Conservation P.O. Box 1132 NL-2301 EE Leiden, The Netherlands Ph: 31 71 512-2900, fax: 512-4069, admin@eucc.nl www.eucc.nl	EUCC w/s 2/02
Denmark , Greece , Portugal , and the United Kingdom	Coastlink Project (Algarve and Portugal-Huelva, (Spain), Cornwall (U.K.), Devon (U.K.), Down (U.K.), Ipiros, (Greece), Kent (U.K.), and Storstrom (Denmark)	Coastlink Project Algarve-Huelva Demo Project is the Coastlink project coordinator (for address, see below) www.telecotrans.es/coastlink	EU TERRA Programme supported

France, Portugal, and the United Kingdom	European Network of Local Estuarine Authorities Programes in the Douro, Gironde, Loire, Severn, Tejo, and Wear estuaries (See Table C-1)	Esturiales Secretariat Area Metropolitana de Lisboa Rua Carlos Mayer No 2 r/c, 1700-102 Lisboa, Portugal info@esturiales.org / www.esturiales.org	Esturiales w/s 1/02
The Algarve and Huelva Coast (Portugal and Spain)	Integrated Management of the Algarve-Huelva coast	See Table C-1: National and Subnational ICM Efforts for the names, addresses and contacts for the respective coordinators in Portugal and Spain	EU ICZM Demonstration Project w/s 12/01
Mediterranean Sea (Albania, Algeria, Bosnia, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Morocco, Slovenia, Spain, Syria, and Tunisia)	Mediterranean Action Plan (MAP) and Barcelona Convention (Action Plan adopted in 1975 and Convention signed in 1976) (UNEP RSP)	Coordinator Secretariat to the Barcelona Convention Mediterranean Action Plan of UNEP (UNEP/MAP) 48, Vassileos Konstantinou Ave., 11635 Athens, Greece Ph: (30) 1 727-3100, fax: 725-3196, unepmedu@unepmap.gr www.unepmap.org	UNEP Regional Seas Program w/s 1/02
Baltic Sea (Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Russia, and Sweden)	Baltic Sea Joint Comprehensive Environmental Action Programme (Helsinki convention signed in 1974 and revised in 1992. Convention entered into force 1/00) (Twinning agreement with East-African Regional Seas - 2000)	Implementation Task Force for the Action Programme Helsinki Commission (HELCOM) Katajanokanlaituri 6 B, FIN-00160 Helsinki, Finland Ph: 358 9 6220-2223, fax: 6220-2239, ulrich@helcom.fi www.helcom.fi/secinfo.html	UNEP Regional Seas Program w/s 1/02
Estonia, Latvia, Lithuania, and Poland	Integrated Coastal Zone Management in the Baltic States and Poland	Need name of local contact person, address, and contact points in each country.	EUCC 1/02 w/s
Baltic Sea Region (including Vistula Lagoon, Poland and Vastmanland, Sweden)	The Indigo Lagoon Project: Comprehensive Actions toward the Sustainable Development of Coastal Estuaries in the Baltic Sea	Need name of local contact person, address, and contact points in each country.	EUCC w/s on ICM Progress: Sweden 12/01
Baltic Sea	The Nordic-Baltic Network on Sustainable Coastal Development	No coordinator listed, or address, or contact points	CSI w/s 1/02
Black Sea (Bulgaria, Georgia, Romania, Russia, Turkey, and Ukraine)	Black Sea Environmental Program and Bucharest, Convention (Convention signed in 1992) (UNEP RSP)	Secretariat of the Istanbul Commission Dolmabahce Sarayi II. Harekat Kosku Besiktas, Istanbul, Turkey Ph: 90 212 227-9927/8/9, fax: 227-9933, rmihnea@dominet.in.com.tr www.dominet.blacksea-environment.org	UNEP Regional Seas Program w/s 1/02
Irish Sea (Ireland, Isle of Man and the U.K.)	Irish Sea Forum	Irish Sea Forum Administrator Oceanographic Laboratories, U. of Liverpool, Liverpool L69 3BX U.K. Ph: 44 151 794-4089, Fax: 794-4099, h.davies@liverpool.ac.uk www.liv.ac.uk/3~/isfl/isfhome.html	
North-East Atlantic (Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the UK)	The Convention for the Protection of the Marine Environment of the Northeast Atlantic - OSPAR	OSPAR Secretariat, New Court 48 Carey Street, London WC2A 2JQ / UK Ph: 44 0 20 7430 5200, fax: 20 7430 5225, secretariat@ospar.org www.ospar.org/eng/html/welcome.html	

North Sea (Belgium, Denmark, Germany, Netherlands, Norway, and the UK)	North Sea Coastal Zone Management (NORCOAST)	Der Senator für Bau, Verkehr und Stadtentwicklung Referat Raumordnung, Landesplanung, Stadtumlandbeziehungen Ansgaritorstr. 2, D-28195 Bremen, Germany Ph: 49 421 361-6515, fax: 261-10875 sei@biba.uni-bremen.de, www.northsea.org/Projects/index.html	
Wadden Sea (Denmark, Germany, and Netherlands)	Trilateral Wadden Sea Plan	Secretary Common Wadden Sea Secretariat Virchowstr. 1, D-26382 Wilhelmshaven, Germany 49 (0) 4421 9108-0, fax: 9108-30, enemark@cwss.whv.net, http://cwss.www.de	
English Channel, Haute Normandie, Isle of Wight (England, France)	ArcManche: Environmental and Coastal Management Programme	ArcManche www.arcmanche.com/workncoast.html	
Gulf of Naples and Naples, Athens, Barcelona, Palermo, and Taranto (Greece, Italy, and Spain)	The Posidonia Project	Project manager Naples Provincial Authority 293 Via del Tribunali, 80138, Napoli, Italy 39 81 552-0552, fax: 551-2575	Terra Programme + EU ICZM Demo Program w/s
Lac Lemane (Lake Geneva) (France and Switzerland)	<i>A study of the feasibility of a bi national plan for the integrated planning and management of Lac Lemane?</i>	<i>Has this case study been implemented?</i>	OECD Case Study (date?)
Northern Irish Beaches and Dunes (Ireland and Northern Ireland, U.K.)	Implementing Alternative Strategies in Irish Beaches and Dune Management (County Donegal, Ireland and County Down, U.K.).	Irish Beaches Programme University of Ulster, Cromore Road, Coleraine, Londonderry, BT52 ISA Northern Ireland, UK Ph: 44 1265 324-429, Fax: 324-911, jag.cooper@ulst.ac.uk www.ulst.ac.uk/faculty/science/crg/czm.htm	EU ICZM Demo. Programme w/s 12/01
Skagerrak (Denmark, Norway, Sweden)	Skagerrak Forum	BOSAM, Box 305,S-451 18 Uddavalla, Sweden Ph: 46 522 15980, fax: 511-796, pege.schelander@bosam.se www.forumskagerrak.com./contact.htm	
OCEANIA (OC)			
South Pacific (Australia, Cook Islands, Micro- nesia States, Fiji, France, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, UK, USA, and Vanuatu)	South Pacific Regional Environment Programme (SPREP) (Action Plan adopted 1982, Nomea Convention adopted in 1986) (UNEP RSP)	South Pacific Regional Environmental Programme P.O. Box 240, Apia, Samoa Ph: 685 21-929, fax: 20-231, sprep@pactok www.sprep.org.ws	UNEP Regional Seas Program w/s 1/02

South Pacific (Cook Islands, Micronesia States, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Tonga, Tokelu, Tuvalu, and Vanuatu)	Climate Change and Integrated Coastal Management Program	South Pacific Regional Environmental Programme P.O.. Box 240, Apia, Samoa Ph: 685 21-929, fax: 20-231, sprep@pactok www.sprep.org.ws	Support from GEF/UNDP and PICCAP SBREP w/s 1/02
South Pacific (Cook Islands, Micronesia States, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Samoa, Tonga, Tokelu, Tuvalu, and Vanuatu)	Preparation of a Strategic Action Program for the Pacific Region	South Pacific Regional Environmental Programme P.O.. Box 240, Apia, Samoa Ph: 685 21-929, fax: 20-231, sprep@pactok.peg.apc.org	sdnp.undp w/s 1/02 GEF Int. Waters w/s 1/02
South Pacific (Cook Islands, Micronesia States, Fiji, Kiribati, Marshall Islands, Nauru, Niue, Palau, Papua-New Guinea, Tonga, Tuvalu, and Vanuatu)	Implementation of the Strategic Action Program of the Pacific Small Island Developing States (2000-2005)	<i>Is this project the implementation phase of the project above?</i> South Pacific Regional Environmental Programme	GEF/UNDP funding GEF Int. Waters w/s 1/02
Australia and the ASEAN Region (Australia, Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam)	The Coastal Zone Environmental and Resources Management Project (CZERM)	Project Manager Coastal Zone Environmental & Resources Management Project P.O. Box 341, Curtin, Canberra, Australia 2605 dgwalter@amsat.com.au http://www.amsat.com.au/czerm	Source?
East Asian Seas (Australia, Cambodia, China, Indonesia, Malaysia, Philippines, Singapore, Korea, Thailand, and Vietnam)	East Asian Seas Program and East Asian Seas Action Plan (Approved 1981) (UNEP RSP)	Coordinator Regional Coordinating Unit for the East Asian Seas (EAS/RCU) 10th Floor, U. N. Bldg., Rajdamnern Ave., Bangkok 10200, Thailand Ph: 66 2 288-1680, fax: 281-2428, kirkman.unescap@un.org www.unep.org/unep/regsoffs/roap/easru/index.htm	UNEP Regional Seas Program w/s 1/02

*** The key to the abbreviations is on the last page of Table C-1. Nations or semi-sovereign states in bold are part of the world region in which they are listed.**

ANNEX F: A Compendium of General Guidance Literature on ICM as an International Practice

Compiled June 2000. Introduction paragraph, June 2002.

These are the twenty-nine documents listed across the top of Annex F-1. These are in chronological order from left to right. Since this compendium was assembled two years ago, at least six more documents have been published to provide General Guidance on ICM as an International Practice. Hopefully, a content analysis will be done on these new additions – as any further work in the same vein – in future iterations of this document.

1990

Institutional Arrangements for Managing Coastal Resources and Environments; Recommendations (pp. 127-133). From: J. Sorensen and S. McCreary. **(A90)**

1992

Integrative Framework and Methods for Coastal Area Management; Categories of lessons learned from the ASEAN/US CRMP. (pp. 10-11). From: Chua Thia-Eng and L. F. Scura, ICLARM, ASEAN, USAID **(A92)**.

Integrated management of coastal zones: Principles and Premises. (pp. 48-66). From: J. Clark, **FAO Fisheries Technical Paper 327. (B92)**.

Agenda 21, Chapter 17; Protection of the Oceans, All Kinds of Seas, Including Enclosed and Semi-Enclosed Seas, and Coastal Areas and the Protection, Rational Use and Development of Their Living Resources. (42 pp.) **(C92)**.

1993

Noordwijk Guidelines for Integrated Coastal Zone Management. (14 pp.). Proceedings of the World Coast Conference **(A93)**.

Coastal Zone Management: Integrated Policies. (124 pp.). Organization for Economic Cooperation and Development, Paris **(B93)**.

Cross-sectoral, Integrated Coastal Area Planning: Guidelines and Principles for Coastal Area Development. (60 pp.). J. Pernetta and D. Elder, IUCN. **(C93)**.

1994

A Framework for Planning for Integrated Coastal Zone Management. (65 pp.). B. Bower, C. Ehler, and D. Basta. National Ocean Survey, NOAA. **(A94)**.

Guidelines for Integrated Management of Coastal and Marine Areas – with Special Reference to the Mediterranean Basin. From: Priority Action Programme, MAP, UNEP. **(B94)**.

1995

Coastal Zone Management Handbook: Management Strategies (62 pp.), **Management Methods** (157 pp.), **Management Information** (257 pp.). J. Clark. **(A95)**.

1996

Guidelines for Integrated Coastal Zone Management (14 pp.). J. Post and C. Lundin. World Bank. (A96)

The Journey from Arusha to Seychelles: An Assessment of Successes and Failures of ICZM in Eastern Africa and Island States. (pp. 15-27) O. Linden and C. Lundin (B96).

Enhancing the Success of Integrated Coastal Management: Good Practices in the Formulation, Design, and Implementation of Integrated Coastal Management Initiatives. From: The International Workshop on Integrated Coastal Management in Tropical Development Countries: Lessons from Successes and Failures. Xiamen, China. (C96).

Guidelines for Integrated Planning and Management of Coastal and Marine Areas in the Wider Caribbean Region. UNEP Caribbean Environment Programme. (D96)

1997

Assessment of Integrated Coastal Area Management Initiatives in the Mediterranean: Experiences from METAP and MAP (1988-1996): Lessons Learned (pp. 50-51). From: Priority Actions Programme, Mediterranean Action Plan, UNEP. (A97)

Sharing Coastal Management Experience in the Western Indian Ocean: *Summary of Working Group Activities and Conclusions* (pp. 115-123). S. Humphrey and J. Francis. Western Indian Ocean Marine Science Association. (B97).

National and International Efforts at Integrated Coastal Management: Definitions, Achievements, and Lessons (pp. 16-29). J. Sorensen. **Coastal Management Journal.** (C97)

1998

Good Practice Guidelines for Initiating and Sustaining Effective Coastal Management. S. Olsen, J. Tobey, and L. Hale. In: **Learning-based Approach to Coastal Management, Ambio.** (A98).

Coastal Seas: The Conservation Challenge. J. Clark. (B98).

Integrated Coastal and Ocean Management: Concepts and Practices: A Practical Guide to ICM Programs: Summary (10 pp.), **Examples of Good Practices in ICM Programs.** (6 pp.) **Prospects and Future Challenges** (3 pp.). B. Cicin-Sain and R. Knecht. (C98).

Lessons Learned During the GEF Pilot Phase. From: Resources Futures International, prepared for GEF. (D98)

1999

Strategic Principles for Pan-European Code of Conduct for Coastal Zones. European Union for Coastal Conservation. (A99).

Coastal Planning and Management, From: R. Kay and J. Alder. (B99).

An Introduction to the Application of Science to Coastal Resource Management (C99).

A Manual for Assessing Progress in Coastal Management: Issue Identification and Assessment, Preparation of the Plan, Formal Adoption and Funding, *Implementation, Adjustment and Evaluation.* (pp.14-50). S. Olsen, K. Lowry, and J. Tobey. (D99)

Lessons from the European Commission's Demonstration Programme on Integrated Coastal Zone Management (91 pp). European Union Demonstration Programme on Integrated Management in Coastal Zones 1997-1999. (E99).

2000

What Are We Learning from Tropical Coastal Management Experiences? (pp 7-17). From:
S. Olsen and P. Christie. **(A00)**.

Table F-1: Content Analysis of International Guidance Literature on ICM.

12 August 2002.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	DOCUMENTS (and types*):	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
		INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOS.	TROPICAL CM
	DIMENSIONS OF ICM:	90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
A Inherent Aspects (A)																														
1	Multi-sectoral (i.e. horizontal integration)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2	Multi-level (i.e. vertical integration)	X		X	X	X	X		X	X	X	X	X	X	X	X		X		X	X	X	X		X	X	X	X	X	
3	Multi-disciplinary integration	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	
4	Integration necessary between private public sectors				X				X		X					X	X	X	X	X			X	X	X		X	X	X	X
5	Dynamic, continuous/iterative process	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X
6	Adaptive and evolutionary	X				X		X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X		X
7	An expression of sustainable development	X	X	X	X	X		X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
8	Almost always balancing protection & development		X					X	X	X		X	X		X	X	X	X		X			X			X	X		X	X
9	Mgmt. of coastal systems (eco, public service, hazards)	X				X		X	X		X		X	X	X	X			X	X	X	X	X	X						
10	Reduce costs, incidence & vulnerability to natural hazards	X		X	X				X	X	X	X	X	X		X	X					X	X		X		X		X	
11	Consider global climate change and sea level rise		X		X			X	X	X	X	X		X		X				X			X	X	X		X	X		
12	Move from reactive to proactive decision-making	X				X		X	X				X	X					X	X	X			X		X				
13	Stakeholder involvement required	X	X			X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14	Consider & relate to existing institutional arrangements	X	X					X	X	X	X	X	X	X	X	X		X	X	X	X	X	X					X	X	X
15	Requires conflict resolution approaches		X							X			X	X	X		X		X	X	X	X	X		X			X		
16	Generally, same motivating issues around the world	X										X				X				X		X		X						X
17	Population growth rate on coast greater than inland							X		X			X	X	X					X		X	X		X		X	X		
18	In most developing countries, poverty exacerbated by dwindling resources, degraded habitats, & lack of alternative livelihoods				X									X						X		X			X					X
19	In developing countries, focus on capacity building of government units & NGOs	X	X		X									X	X				X	X		X	X	X	X			X		X

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	DOCUMENTS (and types*):	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
	DIMENSIONS OF ICM:	INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOs.	TROPICAL CM
		90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
A	Inherent Aspects (A) continued																													
20	Lack of understanding of socioeconomic contribution of coastal resources										X			X						X									X	
21	Managing common property resources a major focus			X	X		X	X		X	X	X		X	X	X			X	X		X	X							X
22	Operates within established geographic limits (zone)	X	X			X		X					X			X		X		X					X				X	X
P	Principles (P)																													
1	Apply collective learning approaches										X						X	X					X						X	X
2	Clear governance structure and lead institution	X	X		X	X						X	X		X	X		X		X	X	X						X		
3	Institutions given clear assignments of responsibility & held accountable								X				X			X				X		X			X		X	X		
4	Adequate human & financial resources are available for program preparation, adoption, implementation, monitoring and evaluation								X				X		X	X		X	X	X		X		X				X	X	
5	Saltwater & fresh water are the major integrating factor		X	X		X		X	X	X		X				X	X	X		X	X				X				X	
6	Land & sea uses must be planned and managed together		X	X	X			X		X		X				X	X	X	X	X	X		X		X	X	X		X	
7	The edge of the sea is the geographic focal point			X						X		X								X	X									
8	Nature-synchronous approach to development		X	X	X	X			X	X	X					X				X	X		X		X					
9	Cost recovery when possible		X		X		X		X		X									X			X		X				X	
10	Use proper resources accounting systems		X		X	X	X	X	X	X	X	X	X			X	X			X				X	X	X			X	
11	User pays, user fees, polluter pays	X			X		X			X	X		X	X	X			X		X			X			X				
12	Work with the market to the extent possible		X		X				X	X	X					X				X				X	X				X	
13	Transboundary responsibility				X	X		X			X	X	X		X	X		X		X									X	X
14	Precautionary principle or approach	X	X		X	X	X	X					X		X				X				X		X	X	X			
15	Intergenerational equity				X	X		X		X			X										X				X			
16	Those affected by a policy should partake in its formulation & implementation (Community Based Management)		X		X				X		X	X	X		X	X	X		X	X	X	X		X	X	X	X	X	X	X

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	DOCUMENTS (and types*):	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
	DIMENSIONS OF ICM:	INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOS.	TROPICAL CM
		90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
P	Principles (P) continued																													
17	All program phases (steps) should be transparent to all stakeholders				X				X		X		X			X		X	X			X	X		X	X		X	X	X
18	Encourage collaborative management (aka Co-management or the Two-track Approach)				X						X				X					X		X	X		X		X	X		X
19	Provisions should be made for coastal dependent uses							X		X														X						
20	In developing countries, objectives, policies, approaches & techniques must have clear connections to socioeconomic improvements	X	X		X					X	X		X		X	X				X	X	X		X				X		X
21	Capabilities of coastal related sectors must be strengthened (particularly in developing countries)				X					X				X	X	X	X	X	X			X		X	X	X	X	X		X
22	CZ boundaries should be based on the issues	X		X						X							X			X							X			
23	Motivating issues are the program's anchor points	X	X												X		X	X		X		X		X	X		X			
24	Recognize interconnections among coastal systems & uses										X					X		X	X	X	X		X		X		X		X	X
25	Assess cumulative and synergistic impacts									X								X		X					X					
26	Objectives are clearly articulated & expressed in terms that can be measured									X			X			X	X			X		X		X	X			X	X	
27	Policies to resolve issues are clear & unambiguous & effects of implementation understood by stakeholders						X				X		X		X	X	X			X		X		X			X	X	X	
28	Multiple-use management appropriate for most areas			X						X						X				X		X			X			X		
29	Traditional resource use should be respected			X	X					X	X				X	X			X	X	X	X					X			X
30	Set of mutually supportive implementation techniques									X			X		X	X	X			X		X					X	X		X
31	Must be able to adapt to new circumstances												X			X			X	X	X	X		X	X		X	X	X	X
32	Demonstrate some positive results in short time												X					X		X		X		X						
33	Sustainability requires ownership by key stakeholders										X		X			X		X		X		X		X	X					X

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
		DOCUMENTS (and types*):																													
			IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
			INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOS.	TROPICAL CM
			90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
P	Principles (P) continued																														
34	A supportive constituency is needed to give the government the political will										X							X		X	X		X		X	X					X
35	Plan formulation should be reasonably quick (first iteration)			X								X	X			X					X							X	X	X	X
36	Use best available science			X														X				X									
S	Steps in Program Preparation and Implementation (S)																														
1	Triggering actions, getting on the agenda		X	X			X				X	X		X							X		X					X	X	X	
2	Prepare concept paper with stakeholder participation			X							X			X									X					X	X		
3	Establish legal framework for ICM program			X		X					X	X			X		X			X	X						X	X	X		X
4	Establish interagency coordination arrangement			X	X	X					X	X		X	X	X	X	X	X	X	X	X	X		X	X		X	X	X	X
5	Establish lead unit and assign adequate and capable staff										X			X		X	X		X		X	X	X					X	X		
6	Endorsement and support by highest levels of government			X							X			X		X			X	X			X		X			X		X	
7	Constituency building and maintenance											X						X		X	X		X					X			X
8	Formulation of the plan/program		X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
9	Issue identification, analysis, prioritizing (profiling)		X	X			X				X			X	X	X	X	X	X		X	X	X		X	X			X	X	X
10	Analyze socioeconomic constraints & opportunities						X							X		X	X							X	X	X		X	X	X	
11	Assembly of necessary data and information			X											X	X	X	X	X	X		X	X			X		X	X		
12	Determine distribution + sustainable yield of resources						X							X			X			X							X			X	
13	Analysis of existing inst. arrangements, laws		X	X			X				X			X	X	X	X	X	X		X	X		X			X		X	X	X
14	Stakeholder involvement and consensus building			X		X						X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X
15	Education & public awareness campaign		X	X			X				X		X	X	X	X	X		X	X	X		X		X	X		X	X	X	X
16	Setting of coastal zone boundaries/tiers		X	X			X						X	X			X			X	X		X			X	X				
17	Visioning, goals, & specific measurable objectives		X	X		X	X				X	X		X		X	X	X	X		X	X	X	X		X		X	X	X	
18	Demonstration projects, learning areas			X		X										X			X	X	X		X		X				X	X	X
19	Financial and economic justification for the policies			X							X						X		X		X		X	X	X				X		

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	DOCUMENTS (and types*):	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
	DIMENSIONS OF ICM:	INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOS.	TROPICAL CM
		90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
S	Steps in Program Preparation and Implementation (S) continued																													
20	Proposed new legal instruments -- if needed											X	X	X		X		X		X				X				X	X	X
21	Proposed policies for resolving the issues											X	X		X		X	X		X		X	X		X		X	X	X	X
22	Proposed implementation techniques		X						X			X	X	X		X	X	X		X	X	X	X	X	X		X	X	X	X
23	Permit letting system		X													X	X				X	X	X			X	X			
24	Proposed budget & financing (build to sustainability)		X						X			X	X	X	X	X	X	X		X		X	X	X	X		X	X		X
25	Proposed monitoring and evaluation system		X								X	X	X			X	X	X		X		X	X			X	X	X	X	X
26	Program adoption and establishing legitimacy	X	X				X				X					X	X	X		X		X	X			X	X	X	X	X
27	Program implementation	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28	Monitoring compliance and changing conditions	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29	Enforcement	X				X	X				X	X	X	X			X	X	X	X			X				X		X	
30	Evaluation	X	X			X	X			X	X		X	X	X	X	X	X		X	X	X		X	X		X	X	X	X
C	General Components (C)																													
1	Demonstration/learning areas &/or pilot projects	X	X								X			X	X			X	X	X	X	X		X	X	X		X	X	X
2	Capacity building projects (e.g. training and education)				X					X	X		X	X	X	X	X		X	X		X	X	X	X		X	X	X	X
3	Reliable and adequate funding	X	X	X		X				X		X			X	X	X	X		X		X	X	X	X			X	X	X
4	Applied research	X	X	X	X	X				X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X		
5	Private sector and NGO involvement strategy	X			X	X				X	X			X					X			X		X	X				X	X
6	Integration with national development plans	X		X	X	X		X		X	X	X	X	X	X	X		X		X	X	X		X	X					X
T	Specific Techniques (means) (T)																													
1	Baseline studies and determination of baselines	X		X					X			X		X	X	X	X			X		X	X		X	X	X	X		
2	Impact assessment, socio-economic & environment	X	X	X					X	X	X	X	X	X	X	X		X			X		X		X		X		X	
3	Risk assessment and management	X							X	X	X	X					X				X		X			X				
4	Benefit-cost analysis & social distribution analysis	X	X	X					X	X		X			X		X	X		X			X			X		X		

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	DOCUMENTS (and types*):	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
	DIMENSIONS OF ICM:	INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOS.	TROPICAL CM
		90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
T	Specific Techniques (means) (T) continued																													
5	Rapid field assessments to determine issues & info. needs		X							X		X																		
6	Voluntary agreements																												X	
7	Emission trading schemes									X																	X		X	
8	GIS	X	X	X						X	X	X	X	X	X	X	X	X	X		X	X		X						
9	Permit letting process	X		X								X	X			X	X				X		X						X	
10	Master or comprehensive plans	X							X	X		X								X	X		X							
11	Land use plans, performance standards, and zoning	X	X				X			X		X	X	X		X	X			X	X		X		X		X		X	
12	Remediation and/or restoration projects									X		X	X										X		X					
13	Stimulation of new types of economic development				X				X		X		X										X	X	X					
14	Technology transfer				X		X				X						X				X		X				X			
15	Contingency plans for hazard events (e.g. oil spills)				X																		X			X	X			
16	A system of protected areas	X	X	X	X	X	X	X		X	X	X	X	X	X	X		X		X	X	X	X		X	X	X		X	X
I	Impediments (I)																													
1	Environmental issues are low priority among governing elites (private and public)											X					X		X	X		X	X		X		X			X
2	Empire building by sectors	X												X					X	X										X
3	Problems of coordination among levels of government											X	X	X			X	X	X		X		X	X	X			X	X	
4	Weak arrangements for cross sectoral integration	X										X	X	X			X	X	X		X		X	X				X	X	
5	Lack of high level support for ICM												X					X	X		X								X	
6	Public participation lacking, usually no tradition											X	X	X			X	X	X		X		X	X						X
7	Small and relatively weak NGOs for conservation											X	X	X				X		X				X						
8	Legal framework for ICM absent	X										X	X	X					X		X								X	
9	Reliance on command and control approach												X				X						X							X
10	Obscure land tenure	X											X						X		X									

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
	DOCUMENTS (and types*):	IP	IP	IP	IP	IP	IP	IP	IP	IP	IP	B	IP	IP	IP	IP	IP	IP	IP	A	IP	A	B	IP	IP	IP	B	IP	IP	A
	DIMENSIONS OF ICM:	INST. ARRANGMNT	ASEAN ICLARM	FAO	AGENDA 21, Ch. 17	NORDWIJK	OECD	IUCN	NOS NOAA	UNEP MED.	CZ CANADA 94	CLARK	WORLD BANK	EAST AFRICA	XIAMEN CONF.	UNEP CARIBBEAN	GESAMP	MED. PAP	WIOMSA	SORENSEN	IOC	OLSEN TOBEY HALE	CICIN-SAIN KNECHT	GEF	IADB	EUCC	KAY and ALDER	CM MANUAL	EU DEMOS.	TROPICAL CM
		90	92	92	92	93	93	93	94	94	96	96	96	96	96	96	96	97	97	97	97	98	98	98	98	99	99	99	99	00
I	Impediments (I) continued																													
11	Sea tenure non-existent																X													
12	Open access to resources - particularly fisheries	X										X		X			X	X		X			X		X				X	X
13	Lax enforcement of laws and regulations													X				X												X
14	Non-compliance: in order to attract development																			X										
15	Non-compliance: insufficient understanding of laws																			X										X
16	Non-compliance: kinship patterns & social familiarity																					X						X		X
17	Non-compliance: penalties are insignificant deterrence													X						X										
18	Non-compliance: inability to detect violations																			X										
19	Non-compliance: violations not taken seriously													X						X										
20	Non-compliance: elite's not prosecuted, bad example													X						X										
21	Non-compliance: basic survival needs predominate																									X				X
22	Donor funding concentrating on sectoral projects													X	X			X					X							X
23	Difficulty hiring competent in-country staff &/or manager													X	X				X	X				X					X	
25	Reliance on foreign consultants, not building capacity													X				X							X					X
26	Plans & policies do not influence decision making													X				X		X										X
27	Predominance of short term economic interests/profits																	X	X	X						X				
28	Planning fragmented into disconnected areas																									X				X
29	Lack of appropriate technology (e.g. GIS) and/or staff capable of using the technology																			X										
30	Difficult transportation and/or communication to coastal planning/management areas																		X											

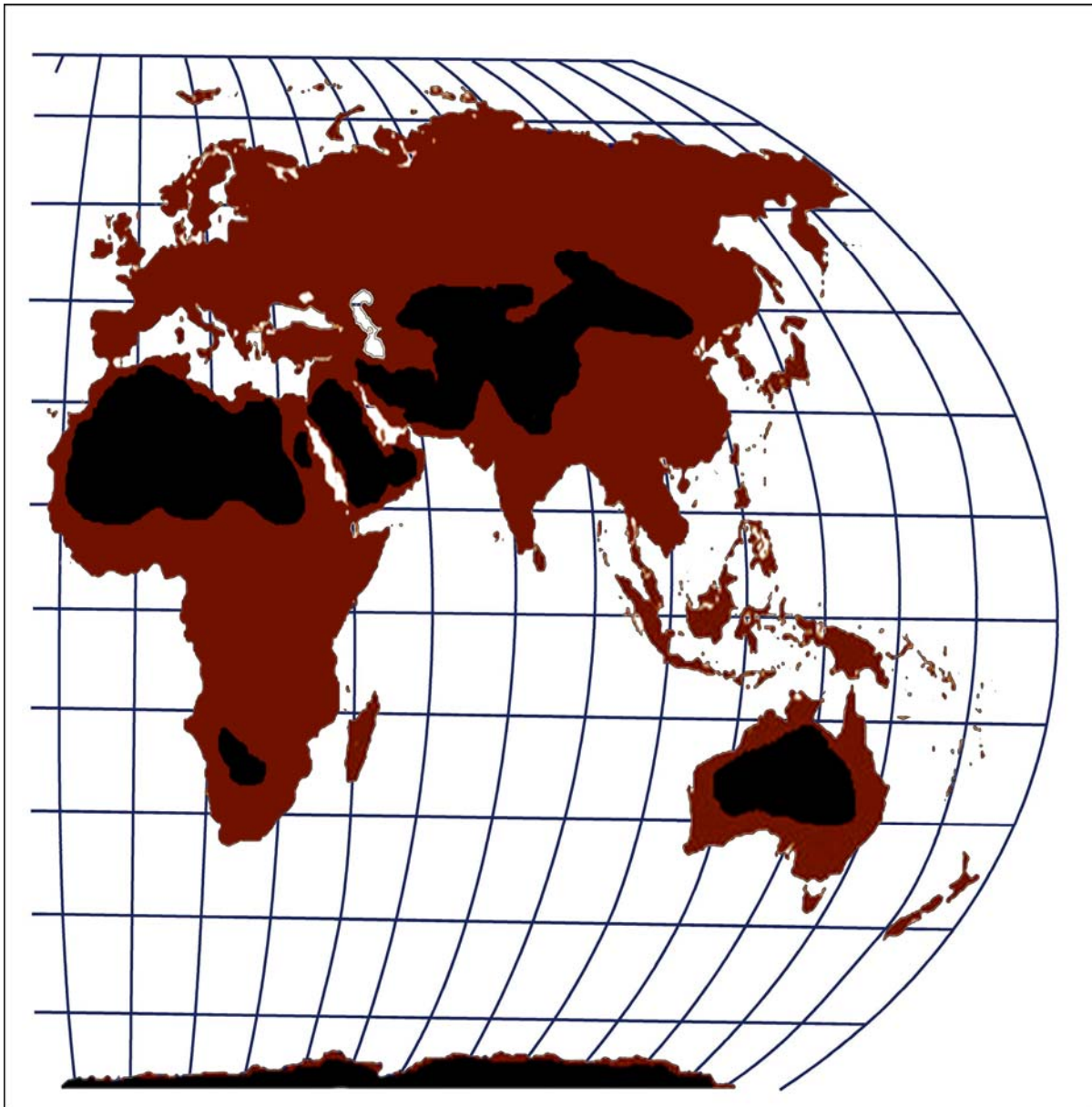
*** Key to Abbreviations**

A = Article B = Book IP = Institutional publication **dev.= developing nations

BASELINE 2000 BACKGROUND REPORT

THE STATUS OF INTEGRATED COASTAL MANAGEMENT AS AN INTERNATIONAL PRACTICE

SECOND ITERATION – 26 AUGUST 2002



**BROWN AREA INDICATES THE EXTREME LANDWARD
BOUNDARIES OF THE WORLD'S COASTAL ZONE**