

82

Vancouver

Creating working alliances

FRASER RIVER ESTUARY MANAGEMENT PROGRAM (FREMP), VANCOUVER, CANADA

PROFILE

POPULATION: 2 million in the Greater Vancouver Regional District (GVRD)

LAND AREA: FREMP applies to a 155 km² area of the lower Fraser River. This area is surrounded by the GVRD.

FREMP BUDGET: US\$560,000

STRATEGY

Strengthen inter-governmental and intra-governmental cooperation

CHALLENGE

To coordinate overlapping governmental jurisdictions in the Fraser River estuary to ensure economic development in harmony with increased recreational opportunities and environmental improvements.

GOAL

To improve environmental quality in the Fraser River estuary while providing economic development opportunities and sustaining the quality of life in and around the estuary.

ACTION

Establish a mechanism for cooperation among federal, provincial and local governments, First Nations, and port authorities to coordinate planning and decision making on human activities in the estuary.

ABSTRACT

Since 1985, the Fraser River Estuary Management Program (FREMP) has successfully coordinated decision making on environmental conservation and shoreline development among more than 30

agencies representing federal, provincial and local governments, port authorities, and First Nations in Greater Vancouver. FREMP is not another agency. Instead, it is a program jointly funded and operated through a memorandum of understanding that outlines the purposes, primary objectives and guiding principles of the partnership. Through a committee structure, the program implements a strategic plan, which contains a vision, goals and targeted actions to integrate decision making and coordinate activities in the estuary.

CASE

The Fraser River is one of the great rivers of the world, draining nearly a quarter of a million square kilometers into the Strait of Georgia (Pacific Ocean). An estuary is a coastal body of water which has a free connection with the tidal sea and where fresh water, derived from land drainage, is mixed with sea water. The Fraser River estuary, which has generated a vast delta from river silt over thousands of years, provides a globally significant natural area with some of the most productive and diverse biological systems in the world. The Fraser River estuary provides important habitat for fish and wildlife. Its marshes and wetlands provide habitat for four salmonid species, and is a key component of the Pacific Flyway, providing important resting areas for millions of migrating birds.

Nowhere in the Canadian province of British Columbia are the competing demands for space and resources greater than in the fertile and heavily populated metropolitan community situated in and around the estuary. Industrial activities such as wood processing, international shipping, fish processing, warehousing and manufacturing, together with new residential and commercial developments have occupied the Fraser River shoreline since the region was opened to

European settlement in the late nineteenth century. Currently, demand for the protection of open space, and public recreational access to the river and shoreline place added competition for the finite resource of estuary shoreline.

In the future, a growing population will be looking to the Fraser River estuary to satisfy its demands for housing, commercial development, port expansion, industrial development and recreation. At the same time, the region's residents want to protect fish and wildlife habitat and improve the environmental quality of the estuary.

Many agencies' jurisdictions overlap in the Fraser River estuary. Twelve local governments and three First Nations (Canada's indigenous peoples) have responsibility for community and land-use planning. The regional government is responsible for sewage and drainage facilities in the area and growth management across the metropolitan region. Two port authorities are in charge of resource planning and management, and water and land use, transportation, and port planning. Provincial and federal agencies have regulatory functions around environmental protection, and the protection of fish and fish habitat.

In recognition of the need to coordinate overlapping legislative, regulatory and policy regimes, and in response to local government and community concerns about environmental degradation and habitat loss in the lower Fraser River, the

cial, regional and municipal agencies, industry, and the public. Phase I of the program produced an inventory of existing conditions and trends in the estuary and outlined a series of management proposals and strategies. Phase II prepared and recommended a management program for the Fraser River estuary to the federal and provincial ministers of environment. The Fraser River Estuary Management Program (FREMP) was created as a result, in 1985.

The FREMP partnership was established under the premise that a new agency would not be the most effective way to provide the coordination required to manage sustainability in the estuary. Instead, partners retain their authority as agencies and coordinate policy through a linked-management structure. Organizations and agencies can pursue their individual interests and meet the needs of the broader region at the same time.

While the structure of FREMP has evolved over the years, it is still composed of three interrelated components. The first component is a series of goals and policies that direct agency planning and decision making, and guide program activities. Established after years of consultation and dialogue among government agencies, port authorities, local governments and interested citizens, the goals and policies recognize the importance of the estuary's economic, environmental and recreational resources, and provide guidance regarding the key issues relation to port-industrial development and transportation, water quality, habitat management, and recreation.

The second of FREMP's components is the establishment of a committee structure to manage and implement the program. While FREMP was originally managed by federal and provincial environment ministries and the two port authorities, the GRVD became FREMP's sixth management partner in 1991. As the regional federation of the 21 municipalities that make up the metropolitan area, the GVRD provides a local government voice in the management of the partnership.

The management partners jointly fund and operate the program through a memorandum of

The Fraser River Estuary.

(photo courtesy of The Fraser River Port Authority)



environment ministries from the federal and provincial governments initiated the Fraser River Estuary Study in the late 1970s. The study was a broadly-based activity involving federal, provin-

Marrakech, Casablanca and Tangier, Morocco

The three Moroccan cities of Marrakech, Casablanca and Tangier started an urban poverty alleviation pilot project in 1998. Supported by UN-Habitat, a partnership between the beneficiaries, associations and elected municipal and national officials was created. The goal of the partnership was to develop local capacity, create and implement action plans, and make decision-making institutions more participatory. Three main themes provided focus for the project; increasing income for low income families, improving access to housing and basic services, and protecting vulnerable groups. This project has been so successful that it encouraged the government to create a Social Development Agency designed to finance local initiatives.

(Source: UN Centre for Human Settlement (Habitat), Dept. for International Development and the Development Planning Unit University College London. 2001. "Implementing the Habitat Agenda: In Search of Urban Sustainability," Poverty Alleviation in Urban and Peri-Urban Areas.)

understanding (MOU) and function through a two-tier management structure. The Management Committee, comprising senior managers from each program partner, meets monthly to oversee FREMP work plans and budgets and provide functional direction to a program secretariat. A Steering Committee of principal representatives from the partners meets annually to review progress and resolve issues referred to it from the Management Committee. The Program functions on consensus when setting its policy priorities, annual work plans and budgets. Consensus is defined in the MOU as a lack of dissent among the parties to the MOU.

The main implementation committee, now known as the Water and Land Use Committee, provides advice to ensure the goals and policies for estuary management are achieved. Since 1985, the implementation committee has comprised all agencies, port authorities, municipalities, First Nations and the regional district with a prominent role in the estuary decision making.

The final component of the strategy is the implementation of coordinated activities to improve resource management. Some of FREMP's first activities were developing cooperative programs to facilitate the management and development of the estuary. Still in place today, these include a habitat colour-coding system, which classifies value of foreshore habitat to indicate an area's sensitivity to development, a coordinated project review process and area designation agreements, linking foreshore activities with the planning bylaws of local governments.

The coordinated project review process delivers a "one-window" approach for proponents seeking authorization for shoreline development projects and other works in the Fraser River estuary. An environmental review committee comprising representatives from the six FREMP management partners uses the habitat colour-coding system and other cooperative tools to ensure that development along the riparian area occurs in a manner that minimizes the damage to fish and wildlife habitat, and creates better projects that

are good neighbors to the environment. Since FREMP was established it has coordinated environmental review of, on average, 100 development proposals each year.

FREMP is also working with municipalities in the estuary on area designation agreements that rationalize shoreline uses that are compatible with municipal zoning for adjacent upland areas. The agreements can protect areas of the shoreline for specific uses. Since 1998, FREMP has been compiling all of the information it has about the estuary, including the habitat characteristics, habitat coding, compensation sites and project reviews, into a computerized Geographic Information System (GIS) available for public use at the FREMP office. FREMP also uses its internet website to provide public access to the review process and the policy work underway.

The key achievement of FREMP was the 1994 approval of a comprehensive Estuary Management Plan, also known as A Living, Working River. Formally endorsed by all of the municipalities in the FREMP area of interest, the Estuary Management Plan codified the existing programs and addresses the key concerns identified as gaps in individual agency efforts to manage the estuary. The plan established a vision for the "living, working river" supported by three goals and nine principles in an integrated management scheme.

The action component of the Estuary Management Plan comprises two broad themes: environmental protection and human activities. The supporting action framework for environmental protection addresses water quality management and fish and wildlife habitat. The four elements in the action framework under the human activities rubric are: navigation and dredging, log management, industrial and urban development, and recreation. Today it is the role of the Water and Land Use Committee to implement, evaluate and revise the Estuary Management Plan. The committee meets as a whole six to eight times a year and its four sub-committees meet monthly or as needed.

Air Quality District Management (Los Angeles, USA)

The City of Los Angeles and its four surrounding counties comprise the second most urbanized part of the United States. High population density, industrialization and natural geography have caused severe air quality problems. The South Coast Air Quality Management District, initiated in 1976, has developed a comprehensive planning approach that sets and enforces regulations, provides a wide range of programs, and promotes clean energy. This approach involves all sectors and has resulted in a reduction of ozone to half of 1950 levels and a decrease in the number of days on which air quality is considered unhealthy.

(Sources: AQMD. 2002. Website [www.aqmd.gov/aqmd/intraqmd.html], and World Resources Institute, UN Environment Programme, UN Development Programme, and The World Bank. 1996. "Los Angeles Copes with Air Pollution," *World Resources 1996—7*, pp.68—69. Oxford University Press.)

RESULTS

The FREMP partnership has proven to be an effective and efficient mechanism to manage a precious resource that lies within various jurisdictions in a growing urban area. Through greater coordination of activities within the estuary, partners have reduced time and resources required by individual jurisdictions to plan and manage the foreshore and adjacent upland areas. There has also been more certainty for private sector and public interests looking to develop, conserve, alter or change uses in particular areas of the estuary. Amid changes in partner institutions and their legislation, FREMP furnishes a stable and continuing focus for delivering a program of action for the Fraser River estuary that contributes to a sustainable world.

In 2001, FREMP delivered its first monitoring report defining 16 indicators that evaluate the effect of the Estuary Management Plan, as well as ongoing programs and policies that were in place since 1985. The monitoring program revealed that the estuary is no longer in danger from a persistent process of urban development and environmental degradation.

The indicators show progress in fulfilling the three goals of the plan. The first goal is to conserve and enhance the environmental quality of the estuary to sustain healthy fish, wildlife, plants and people. Progress can be seen in the decrease in contaminants in Great Blue Heron eggs, the reduction in fecal coliform counts in the main arm of the Fraser River and the net gain in productive fish and wildlife habitat.

There is also evidence of progress toward fulfilling the plan's second goal, to further the estuary's role as the social, cultural, recreational and economic heart of the region. For example, the ports' share of regional marine cargo increased, the number of visits to regional parks along the estuary doubled, the length of recreational corridors along the estuary increased and the number of protected cultural sites increased since FREMP was established.

Progress toward the third goal—to encourage human activities and economic development that

protect and enhance the environmental quality of the estuary—is indicated as well. Most log booms stored in the estuary adhere to FREMP techniques to minimize damage and protect sensitive fish habitat. Navigation dredging conforms to a 'sediment budget' ensuring removal of sand from the river bed is within the limits determined through annual variation in sediment deposit.

Finally, when laws, regulations and enforcement procedures are in conflict, the FREMP management partnership has been successful in seeking "made in the estuary" solutions. For example, the Liquid Waste Management Plan (LWMP) resulted from a requirement for local governments (GVRD in concert with municipal members) to comply with provincial government statutes regulating the discharge of urban wastewater to the receiving environment. The LWMP provides a comprehensive approach for future development of the infrastructure for wastewater treatment and storm water management, including measures for demand side management. An issue for the FREMP partnership was the federal government's concern about combined sewer outfalls into the estuary and other water bodies in the region, and 'end-of-pipe' toxicity measurements of the effluent from treatment plants. With the help of a mediator, FREMP achieved partner buy in to the GVRD's LWMP.

LESSONS LEARNED

The most important value the FREMP partnership offers is the opportunity to agree upon and act upon common goals and objectives regarding a shared resource. In addition to policy collaboration, partners have the opportunity to gain leverage on their financial resources. Each partner participates in a CDN \$500,000 program (US\$315,000) through contribution of only \$90,000 (US\$56,700). While the FREMP collaboration requires time and patience, it has yielded excellent results. Through their experience with the FREMP linked-management framework participants have also furthered their understanding of each others' positions and objectives.

Success of the program, however, depends on the quality of engagement of participants. The program has been most effective when the part-

Katowice, Poland

The Katowice region of Poland has long been a center of heavy industry and mining. Combined with insufficient waste management practices, this caused widespread environmental degradation and health concerns. In 1994, 13 neighboring municipalities formed a legal union to develop a cohesive approach to improving the urban environment. Working in partnership, the group found international support and initiated a variety of key pilot projects including the recultivation of old landfills sites, cleaning up a closed coal mine and coke plant, and developing appropriate waste management facilities.

Contact: Jan Blaz, Deputy Director, Health & Environment Protection Dept., City of Katowice, ul. Mlynska 4, PL 40 098

continued on next page

ner representatives on the management (executive) committee had the appropriate authority to be able to make decisions on behalf of their organizations.

Another challenge of this process has been balancing the varying levels of power of partnering agencies in dispute resolution. FREMP has learned the importance of setting and using dispute resolution to transcend the hierarchy between agencies. Typically, this has involved using mediation and focusing on shared interests until all parties come to a consensus.

While the individual municipalities are indirectly represented on the program's executive via the GVRD, they are encouraged to participate directly in the development and implementation of the Estuary Management Plan. For this type of partnership to work, local governments to commit to the process—from a regional perspective, success is compromised if municipalities choose not to participate, or participate on an infrequent basis.

The final challenge that has faced FREMP over the years is in the area of public participation and transparency. FREMP recently shifted its resources away from an earlier focus on educational initiatives, such as a schools program and volunteer clean-up events, so as not to duplicate work done by other organizations. While the FREMP partnership is committed to fostering dialogue with special interest groups and the general public, FREMP continues to be criticized for not including those stakeholders sufficiently in decision making and for its lack of an appropriate public education profile to the program.

KEY REPLICATION FACTORS

This case study reveals the value of an intergovernmental partnership for planning and managing an environmental ecosystem that is hampered by overlapping jurisdictions. The linked management model devised for FREMP could be replicated in other jurisdictions. The model is particularly appropriate for coastal areas or other significant waterways where jurisdictional authority is often shared. A program modeled

after FREMP was established for the other significant water body in Greater Vancouver, the Burrard Inlet. In 1991, the same four government partners in FREMP formed the Burrard Inlet Environmental Action Program with the third port authority in the region.

To replicate the FREMP model, interested parties should consider the following key factors. Within each organization, champions for partnerships are essential. The willingness to participate in a partnership should be reflected in tangible financial and time commitments. A written agreement, such as the FREMP MOU was important to reach agreement on common principles and operating protocols. Above all it is necessary to regularly reinforce the notion that the partnership makes it easier for each of the partners to do their own business, adding value to each partner as well as adding value to the collective benefits of linked management.

BUDGET AND FINANCING

The programs use a five-year business plan as a context for annual work plans and budgets. Each year, the contributions of the six funding partners total CDN\$540,000 (US \$340,000). By agreement (MOU) the contributions are provided from the partners annual operating budgets as a program item (partners are invoiced quarterly). These revenues provide for a Program Manager and three support staff. The staff and office overhead consume 60% of the partner contributions, leaving 40% for outside resources (usually consultants) on specific projects.

From a local government perspective, the GVRD pays its share of the partnership from its revenues (namely regional levy collected by municipalities) and participates on behalf of municipalities. As with all partners, staff time and expenses are covered by the GVRD, and municipalities cover off their own staff time in meetings as well.

STAFF

There is a small staff of three people that administer the EcoCity initiatives and a group of 20 consultants that are used as they are needed for particular projects.

Katowice, Poland; Fax: +48-32/589870; Email: ekologia@um.katowice.pl (Sources: UN Development Programme. 2002. Katowice Project, website [www.undp.org.pl/pages/pe_kat.htm], and UN Center for Human Settlement. 2002. City Summaries: Katowice, website [www.unchc.org/uef/cities/summary/katowice.htm], and International Centre for Sustainable Cities. 2002. PROJECT UPDATE—ICSC Newsletter No. 08 - Fall 1996 [www.icsc.ca/issues/issue08/issue08/katowice.html].)

KEY CONTACT

Joe Stott
Program Manager
Fraser River Estuary Management Program
501-5945 Kathleen Avenue
Burnaby, BC, V5H 4J7, Canada
Tel: +1-604/775-5756
Fax: +1-604/775-5198
Email: jstott@bieapfrem.org

Ken Cameron
Chair, FREMP Management Committee
Manager, Policy and Planning
Greater Vancouver Regional District
4330 Kingsway
Burnaby, BC, V5H 4N2, Canada
Tel: +1-604/432-6379
Fax: +1-604/436-6970
Email: Ken.Cameron@gvrd.bc.ca

Website: www.bieapfrem.org

REFERENCES

- Fraser River Estuary Management Plan. 2002. Website [www.bieapfrem.org].
- Fraser River Estuary Management Program. January 2001. *Monitoring the Estuary Management Plan: A report on the performance of FREMP and its Partners.*
- Fraser River Estuary Management Program. November 1997. *The Fraser River Estuary Management Plan Update 1997.*
- Fraser River Estuary Management Program. 1994. *The Fraser River Estuary Management Plan: A Living, Working River.*
- McPhee, Mike (Former Program Manager, FREMP). March 2002. Conversation with author.
- Peters, Sharon (Former Program Manager, FREMP). March 2002. Conversation with author.
- Stott, Joe (Current Program Manager, FREMP). March 2002. Conversation with author.

ACKNOWLEDGEMENTS

Reena Lazar, Author and Researcher;
Heather Kepran, Editor;
Jennifer Lee, Production Coordinator

The International Council for Local Environmental Initiatives is a membership organization of local governments and their associations. The Council's mission is to build and serve a worldwide movement of local governments to achieve tangible improvements in global environmental and sustainable development conditions through cumulative local actions.

16th Floor, West Tower
City Hall, Toronto, Ontario, Canada M5H 2N2
TELEPHONE: +1-416/392-1462
FAX: +1-416/392-1478
EMAIL: iclei@iclei.org
WEBSITE: www.iclei.org

© May 2002, ICLEI-Canada.
© May 2002, ICLEI USA, Inc. All Rights Reserved.

This case study is part of [Local Strategies for Accelerating Sustainability: Case Studies of Local Government Success](#).

This series of case studies highlights the diverse ways in which local governments and their partners have instituted strategies for action that are accelerating the transition to sustainable, equitable and secure communities. The series was prepared as part of the local government contribution to the UN World Summit on Sustainable Development (Johannesburg, South Africa, 2002).

The case studies were researched, written and produced with financial support from the Ministry of Housing, Spatial Planning and the Environment, The Netherlands.