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## Contaminated Sediment Highlighted at Mayors' Conference

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Contaminated sediment remediation can be a catalyst in the turnaround of waterfronts, which is important in shaping the future of many cities within the 42 Areas of Concern in the Great Lakes basin.

The IJC and its Water Quality Board have worked diligently to spread the word about this important issue. They reached an expanded audience in July of this year when approximately 70 attendees at the annual Great Lakes/St. Lawrence Mayors' Conference participated in a session entitled "Management of Contaminated Sediment in the Great Lakes Basin and the Benefits of Action."

Great Lakes mayors and other participants learned that all 42 Areas of Concern in the Great Lakes basin have contaminated sediment based on the application of chemical guidelines and that contaminated sediment is considered a universal obstacle to ecological recovery of Areas of Concern. The session was convened by the Citizens Environment Alliance and University of Windsor's Great Lakes Institute for Environmental Research. Members of the Water Quality Board's Sediment Priority Action Committee (SedPAC) helped organize the session and presented information from both SedPAC's white paper entitled "Overcoming Obstacles to Sediment Remediation in the Great Lakes Basin" and case studies of sediment remediation in Collingwood Harbour, Ontario and Waukegan Harbor, Illinois.

Municipal officials, mayors, and others learned that key obstacles to sediment remediation include:

- limited funding and resources;
- regulatory complexity;
- lack of a decision-making framework;
- limited corporate involvement;
- insufficient research and technology development; and
- limited public and local support.

Despite such obstacles, however, there are a number of success stories of sediment remediation in the Great Lakes basin. Two were presented as models.

Gail Krantzberg of Ontario Ministry of Environment shared the success story of sediment remediation in Collingwood Harbour, Ontario. In that project, approximately 10,000 cubic meters of contaminated sediment were removed using a new dredging technology. This was the first true application of a biologically-based, rather than chemically-based, decision-making framework for sediment remediation. As a result of the project, toxic levels of lead, zinc and copper were eliminated. Additional post-project monitoring of

effectiveness is underway.

Major benefits from this successful sediment remediation project include:

- restoring beneficial uses;
- removing the stigma of an Area of Concern for the community;
- renewing interest in beautifying harbourfront lands as a result of harbour restoration; and
- increasing the value of property.

Important lessons learned were that communicating the environmental consequences of sediment contamination in an understandable way to the Public Advisory Committee (PAC) and community was necessary. This helped reach multi-stakeholder consensus on the need for sediment remediation in order to achieve PAC goals. Having industry represented at the table from the outset avoided conflicts. In addition, cleaning up sediment contamination in a partnership helped industry from having to "go it alone" in the future. The broad-based partnership for sediment remediation benefitted all funding partners. Along the way, demonstrating small successes brought credibility to the PAC and Remedial Action Plan (RAP) team.

Greg Michaud from Illinois Environmental Protection Agency (EPA) shared the success story of sediment remediation in Waukegan Harbor, Illinois. As a result of a 1989 Consent Decree, approximately 453,600 kilograms (one million pounds) of PCBs, representing 24,500 cubic meters of PCB-contaminated sediment, were removed at the Outboard Marine Corporation site. More than \$20 million was spent on this sediment remediation project.

Throughout the process, good facilitating helped elicit private sector contributions. One good example of this is that consulting firms provided "gratis" services to help tackle the dredging problem that remains in the shipping channel.

The substantial benefits realized include:

- decline in PCB levels in fish by 80-90 percent as a result of sediment remediation;
- removal of the Waukegan Harbor fish advisory;
- increased revenues in the Waukegan Port District; and
- increased interest in harbor development leading to increased sales and property values for the city of Waukegan.

An early lesson learned by Illinois EPA was that team building with citizens could accomplish tasks that Illinois EPA could not have accomplished by itself. There is no doubt that the RAP process helped Illinois EPA look beyond traditional water programs to focus on restoring beneficial uses.

- Traditional governmental "land" programs (e.g., Superfund, Brownfields, Leaking Underground Storage Tanks) were successfully used to resolve source problems.
- Team building within the Waukegan Harbor Citizens Advisory Group (CAG) helped secure money from several different sources when Illinois EPA had none.
- The CAG was instrumental in obtaining confidential sample results from a parcel of property when Illinois EPA was unsuccessful.
- Communication tools such as kiosks, an Internet home page and a video tape were very effective in delivering the necessary message.

Both the Waukegan Harbor and Collingwood Harbour case studies show and reinforce that contaminated sediment remediation served as a catalyst in the turnaround of these waterfronts and that they can serve as a model for other cities. More information on these sediment remediation case studies can be found on the IJC's home page at [www.ijc.org/php/publications/html/cases/studies.html](http://www.ijc.org/php/publications/html/cases/studies.html).

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## **Les sédiments contaminés en vedette à une conférence des maires**

La décontamination des sédiments peut catalyser la remise en état des zones riveraines des villes, ce qui revêt beaucoup d'importance pour l'avenir de nombreuses villes des 42 secteurs préoccupants du bassin des Grands Lacs. S'étant appliqués à faire connaître cet important enjeu, la CMI et son Conseil de la qualité de l'eau ont rejoint un auditoire élargi, en juillet 1998, lorsqu'environ 70 participants à la Conférence annuelle des maires des municipalités du bassin des Grands Lacs et du Saint-Laurent se sont présentés à une séance sur le thème de la gestion des sédiments contaminés dans le bassin des Grands Lacs et les avantages de l'action.

Les maires et les autres participants ont appris que, d'après les lignes directrices sur les caractéristiques chimiques, il se trouve des sédiments contaminés dans les 42 secteurs préoccupants du bassin et que ces sédiments sont considérés comme un obstacle universel au rétablissement écologique de ces secteurs. Le Sediment Priority Action Committee du Conseil (SedPAC) a aidé à organiser la séance, et ses membres ont présenté de l'information tirée de son livre blanc *Overcoming obstacles to Sediment Remediation in the Great Lakes Basin* (surmonter les obstacles à la décontamination des sédiments dans le bassin des Grand Lacs) ainsi que d'études de cas sur la décontamination des sédiments des ports de Collingwood (Ontario) et de Waukegan (Illinois).

Les fonctionnaires municipaux, les maires et d'autres ont appris que les principaux obstacles à la décontamination des sédiments étaient :

- un financemnt et des ressources limités;
- la complexité des règlements;
- l'absence de cadre de prise de décisions;
- la participation limitée des entreprises privées;
- des recherches et des développements de technologie insuffisants;
- l'appui limité du public et de la population locale.

Malgré ces obstacles, on compte cependant un certain nombre de réussites dans la décontamination des sédiments du bassin des Grands Lacs.