

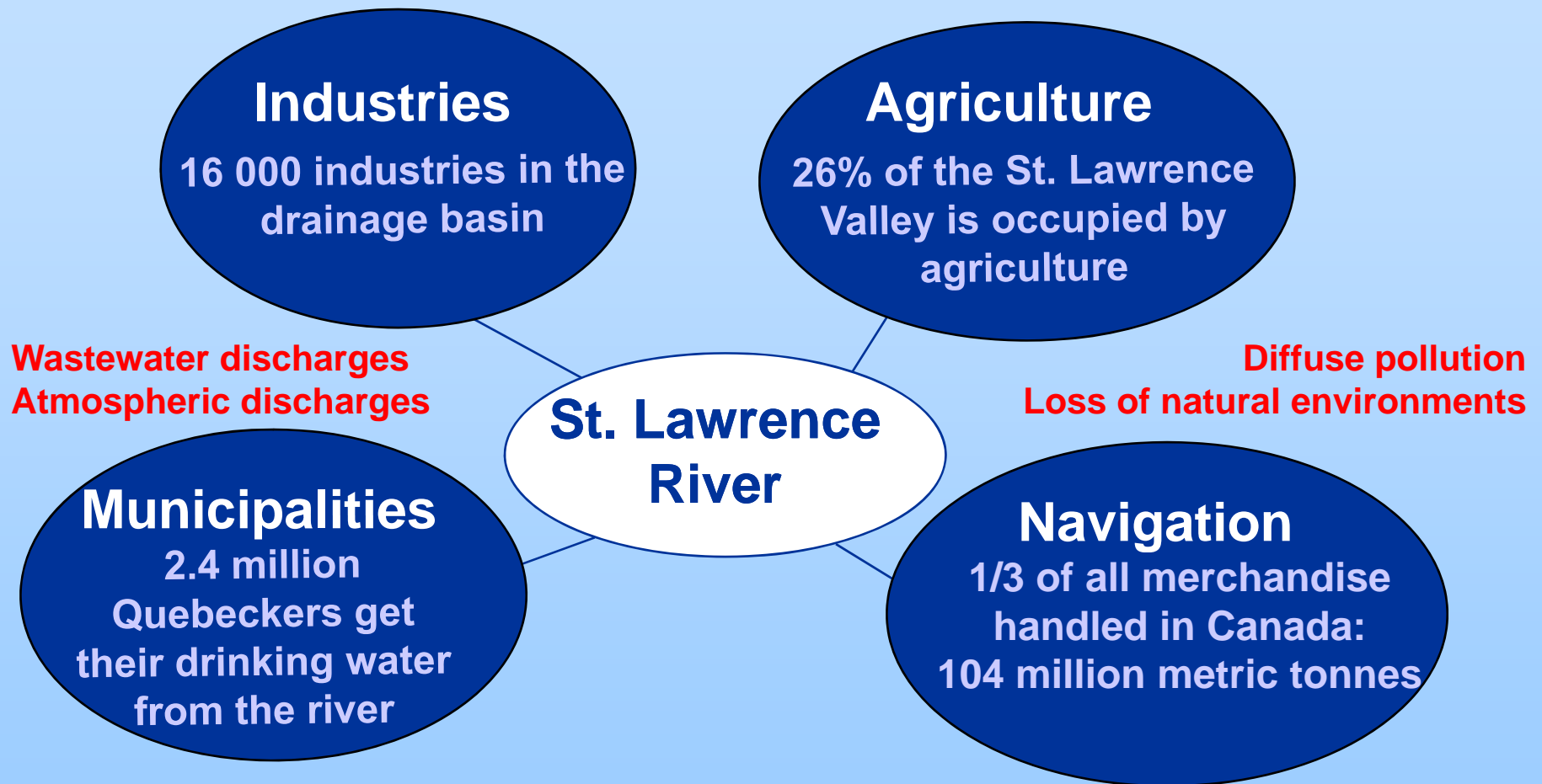
The St. Lawrence Plan: 20 Years of Action to Protect the River

**Great Lakes and St. Lawrence Cities Initiative –
Annual Conference
July 17, 2008**

**Philippe Morel
Environment Canada**

Co-Secretary of the Canada-Québec Agreement on the St. Lawrence 2005-2010

The St. Lawrence is subject to multiple pressures

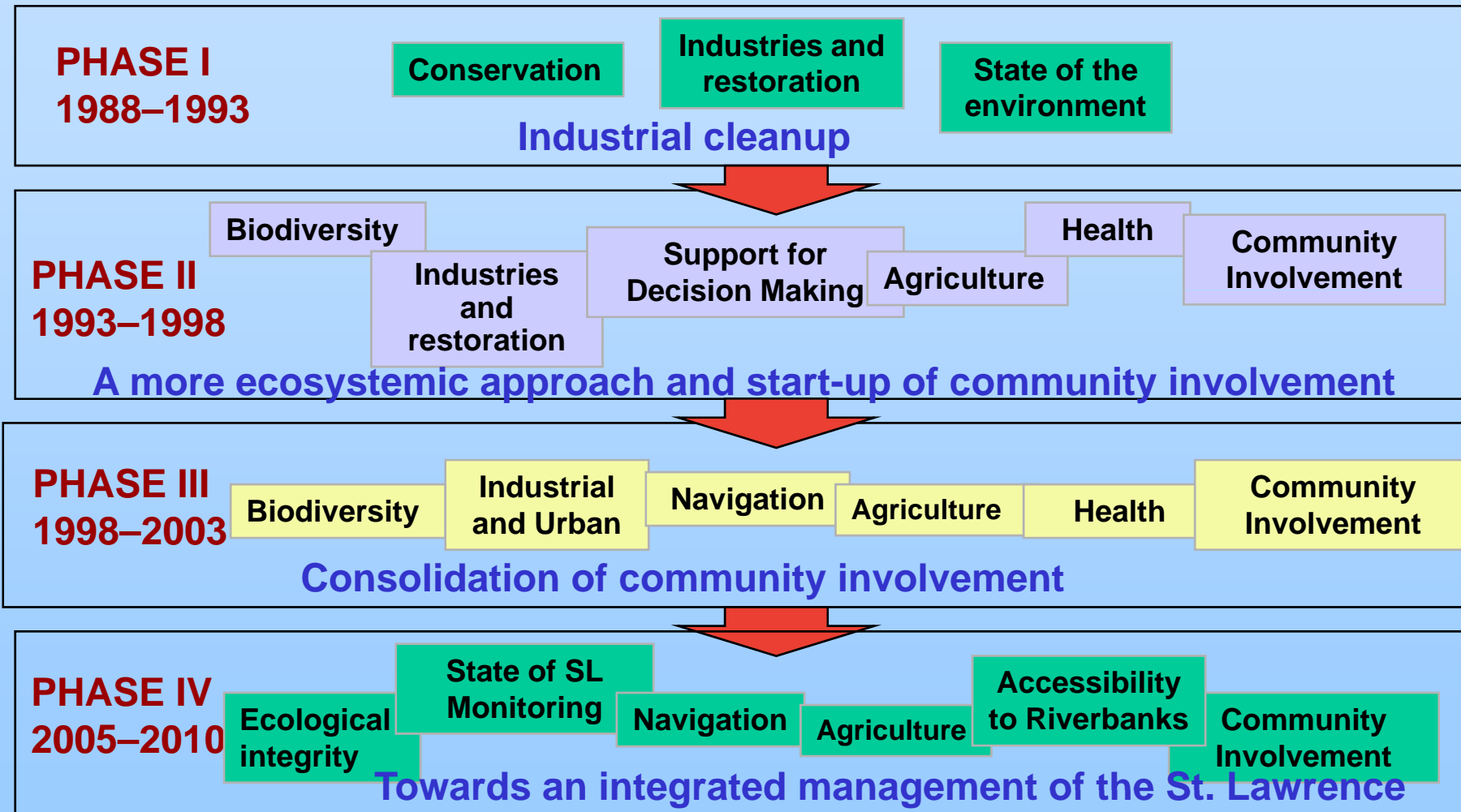


An ecosystemic approach is favoured

Horizontal and targeted action involving government and citizens is carried out that

- Is aimed at achieving specific and visible results through science
- Makes the joint efforts and mobilization of partners official
- Creates a significant leverage effect and allows for the optimization of resources
- Is guided increasingly by the objective of sustainable development

Four Canada-Québec Agreements and Four 5-Year Intervention Plans



Main Accomplishments – Ecological Integrity

- **Creation of the Saguenay—St. Lawrence Marine Park (phase II)**
- **Protection of 116 650 hectares of natural habitat (phases I, II and III)**
- **Development and implementation of recovery plans for some 50 species at risk (phases I, II and III)**
- **Installation of a multi-species fish-pass in the Richelieu River (phase III)**
- **Evaluation of the impact of water level variations in studies undertaken by the International Joint Commission (IJC) concerning the regulation of Lake Ontario and the St. Lawrence River (phase III);**
- **Identification of 500 priority conservation sites in the St. Lawrence Valley and Lake Champlain (phase IV)**

Main Accomplishments

- Restoration, Protection and Cleanup (1)

- 96% reduction of the toxicity of liquid discharges into the river from 50 of the most polluting industries (phases I, II and III)
- Measure of the toxicity of the effluents from treatment plants in 15 municipalities (phase III)
- Realization of over 120 technological development projects in the area of industrial and municipal cleanups (phases I to III) and 93 agricultural cleanup projects (phase III)
- Characterization of 12 contaminated aquatic sites (phase I)
- Restoration of wetlands and disturbed shorelines (phase II)
- Restoration of contaminated aquatic sites in sector 103 of Montréal's port zone and the mouth of the Saint-Louis River (phases III and IV)



Main Accomplishments

– Restoration, Protection and Cleanup (2)

Development and implementation of the Sustainable Navigation Strategy for the St. Lawrence (phases III and IV)

- Raising the awareness of the population and decision makers regarding the advantages and constraints of navigation ⇒ Information tour among St. Lawrence shoreline towns and cities by Amis de la vallée du Saint-Laurent
- Integrated management of dredging and sediments ⇒ Technical support for restoration projects at the contaminated aquatic sites of Pier 103 and the mouth of the St. Louis River
- Study on options to enable commercial navigation to adapt to potentially lower water levels
- Prevention of the impact of wash from passing boats ⇒ maintaining voluntary speed reduction measures for ships in the Sorel-Varenes segment
- Support for the development of the environmental policy of the Green Marine
- Raising the awareness of boaters through the eco-marinas program

Main Accomplishments – State of the Ecosystem (1)

- First synthesis report on the state of the St. Lawrence published in 1996 (phase I)
- Files on environmental issues relating to the agricultural and urban sectors, water level management and the disturbance of species in the St. Lawrence (phase II)
- *Environmental Atlas of the St. Lawrence*, which describes the natural and human environments, uses and conservation activities (phase II)
- Biodiversity Portrait of the St. Lawrence (phase II)
- Mass balance of chemical contaminants in the St. Lawrence (phase II)

Main Accomplishments – State of the Ecosystem (2)

State of the St. Lawrence Monitoring Program (phase III)

- Covers the five main ecosystem components: water, sediments, shorelines, biological resources and anthropogenic uses
- Includes 23 recurrent monitoring activities involving the collaboration of 7 partners under the Agreement (Environment Canada, DFO, Parks Canada Agency, MDDEP, MRNF, Stratégies Saint-Laurent and the Canadian Space Agency)
- Production of fact sheets on four issues common to the ecosystems of the Great Lakes and the St. Lawrence (phase IV):
 - * Water contamination
 - * Sediment contamination
 - * Wetlands size
 - * State of aquatic bird populations
- Production of a overview of the St. Lawrence every five years and the updating of 16 fact sheets interpreting the indicators

Main Accomplishments – State of the Ecosystem (3)

- Synthesis of the *Overview of the State of the St. Lawrence River*, published in 2003

COMPONENTS	SEVERE DEGRADATION ←	NO IMPROVEMENT →	SIGNIFICANT IMPROVEMENT →
WATER AND HEALTH			
• Classic toxics			→
• New toxics		?	
• Drinkable water and sports involving contact with micro-organisms and pathogens			→
• Fish (for eating)			→
• Low water levels	←		
SEDIMENT QUALITY			→
SHORELINE EROSION		*	
LOCAL ATMOSPHERIC POLLUTION		?	
NATURAL ENVIRONMENTS			
• Islands / river swamps			→
• Flood plain		←	
• Inland plain / drainage basin	←		
LIVING SPECIES			
• Plants		←	
• Fish		←	
• Birds		←	
• Species at risk			*
• Over-abundant species		←	
• Exotic / invasive species		←	
FAUNA AND FLORA CONTAMINATION			
• Aquatic flora			→
• Birds (except mercury (Hg))			→ ?

→ The next Overview will be launched in the fall of 2008

Main Accomplishments – Human Health

- Two major surveys undertaken in 1995 and 2001 enabled us to assess our knowledge of the behaviours and perceptions of shoreline residents regarding the uses of the St. Lawrence (phases II and III)
- More than 60 studies were conducted on the exposure of shoreline populations to various chemical and microbiological contaminants in the water and in aquatic resources (phases II and III)



Main Accomplishments – Community involvement (1)

- **Creation of 14 ZIP committees (phases II and III)**
(ZIP stands for *zones d'intervention prioritaire*, or areas of prime concern)

The ZIP committees intervene in territories that together cover the entire St. Lawrence and that were delimited using ecological and geopolitical criteria (these are not intervention hotspots such as the areas of concern in the Great Lakes)

- **Transfer of knowledge to the communities through the production of ecological assessment reports for the biological, physical and chemical, socio-economical and human health aspects in each of the ZIPs (phases II and III)**
- **Production for each ZIP of an ecological rehabilitation action plan (phases II and III)**

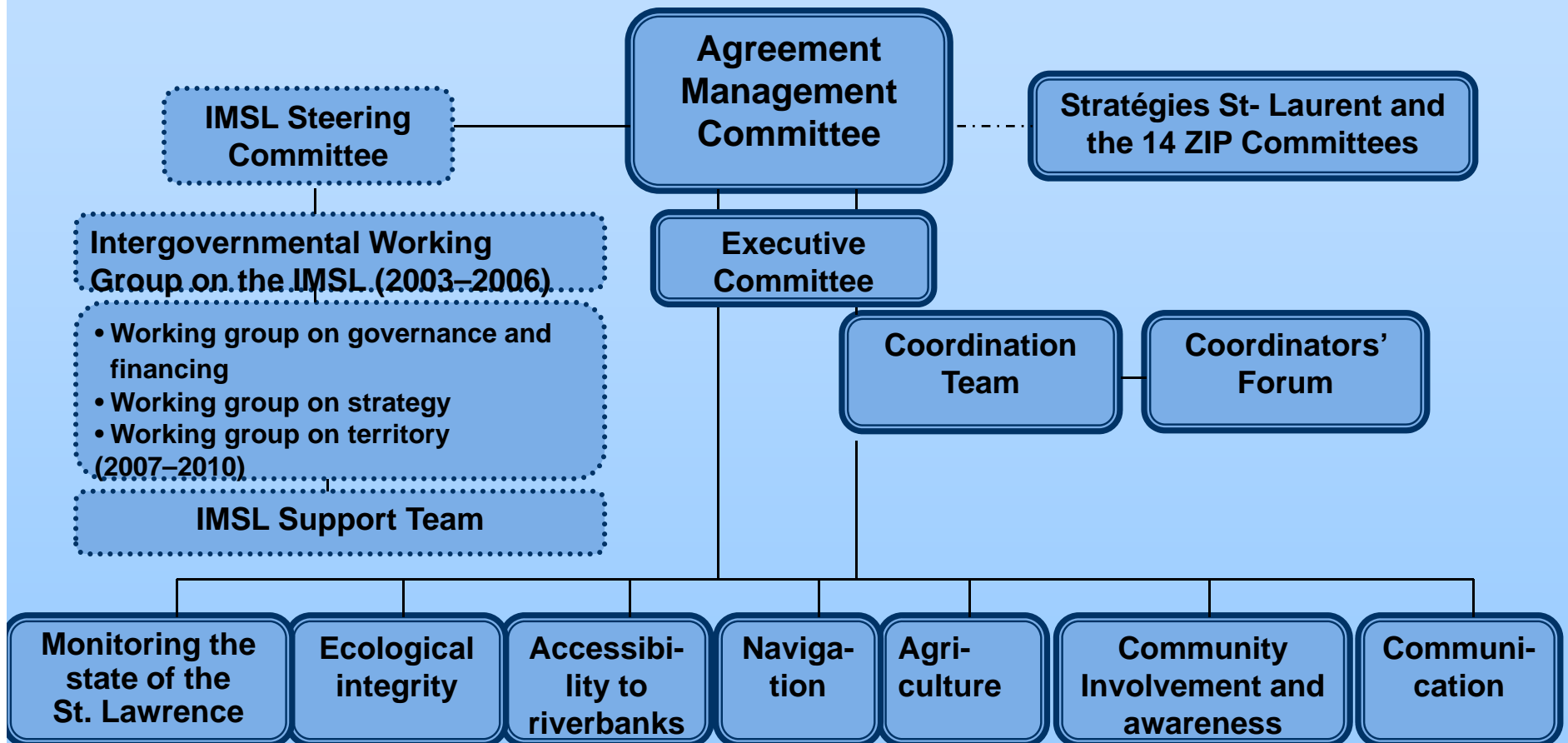
Main Accomplishments – Community Involvement (2)

- **Community Interaction Program (CIP) (phases II, III and IV)**

Realization by community organizations of 235 Community Interaction projects (bank cleanup and stabilization, development of wildlife habitats and improvement of sites providing access to the St. Lawrence)

- **Development of the St. Lawrence Global Observatory (phase IV)**

Governance Structure of the Canada-Québec Agreement on the St. Lawrence 2005–2010



Advantages of the current SLP governance approach

- The partners of the Agreement come from departments representing dimensions that are environmental (Environment Canada, MDDEP) and socio-economic (DFO, PWGSC, TC, MTQ, Parks Canada Agency, CSA, AAFC, MRNF)
- Partners participate in areas of intervention that call most for their attention and that are linked to their respective mandates
- After 20 years of joint efforts, the partners have developed a smooth and effective working relationship and a habit of collaboration
- The ZIP Program establishes a better linkage with community and municipal sectors

Weaknesses of the current SLP governance approach

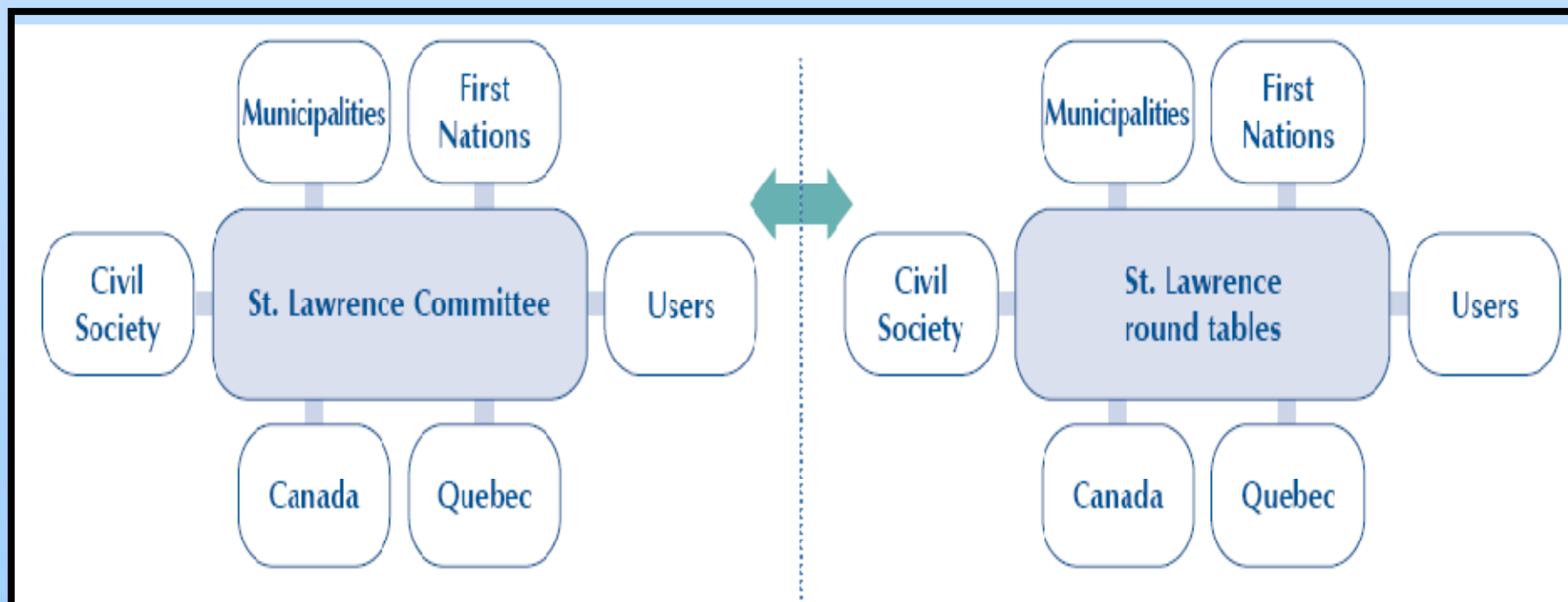
- Important stakeholders (some departments, users and members of the public) concerned by the issues of the St. Lawrence are not at the table
- Not all partners participate in the choice of every issue, objective and result
- After 20 years of joint efforts, maintaining the partners' commitment takes a lot of effort
- It can be hard to meet funding expectations of community organizations

Response to the need for more integrated governance

The concept of the integrated management of the St. Lawrence (IMSL) currently being developed calls for

- A permanent process based on joint efforts
- Equal representation for decision makers, users and civil society
- Planning of measures for resource protection and use through integrated management plans
- Two levels of governance to better take into account regional and local issues →

Structure of the proposed IMSL governance



Administrative, technical and scientific support provided by a permanent dedicated team

After 2010: A new agreement on the St. Lawrence

- Environment Canada has already started working on it
- This new approach is based on Canada's ecozones and Environment Canada Ecosystem Framework and will make it possible to handle common issues in the Great Lakes and St. Lawrence initiatives in a more integrated fashion
- A new agreement on the St. Lawrence should allow for a more integrated governance by bringing together a greater range of stakeholders

Importance of the municipal sector's involvement in the governance of the St. Lawrence

- Greater harmonization of decisions linked to regional and local issues
- Consideration of Quebec's political context in the integration of all stakeholders
- More efficient interventions regarding
 - Municipal wastewater
 - Access to shorelines
 - Control of industrial and diffuse pollution
 - Community involvement
 - Restoration of contaminated sites
 - Realization of local and regional projects