

# Water Resources & Wetlands Atlas

Integrated web-based information

on the world's freshwater resources



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# INTRODUCTION

## PRESENTATION

- Brief introduction to the basic ideas
- Food for discussion

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## WATER RESOURCES AND WETLANDS ATLAS

### WHAT IS IT?

Web-based, interactive data and information access and management tool for water resources and wetlands.

### WHAT DOES IT DO ?

Combines different existing data and information sources to produce standard and customized data products (maps, tables, figures) on water resources and wetlands.

### WHAT IS IT FOR?

For supporting policy development, training, public awareness raising, empowerment, assessments and management.

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# WATER RESOURCES & WETLANDS ATLAS

## ACTIVITIES

- *Links*  
relevant data, institutions and experts
- *Integrates*  
different sets of data from the global to basin level
- *Communicates*  
through easily accessible interactive and convincing maps and figures

## OBJECTIVES

- *Informs*  
user groups on water management issues
- *Supports*  
knowledge development, policy design and decision making
- *Empowers*  
people to participate in water resources management

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## REASONS FOR DEVELOPMENT

### CURRENT DATA AND INFORMATION ON WATER RESOURCES

- Sector based
- Non-integrated
- Access limited
- Fragmented
- Unreliable

*Moving towards integrated information*



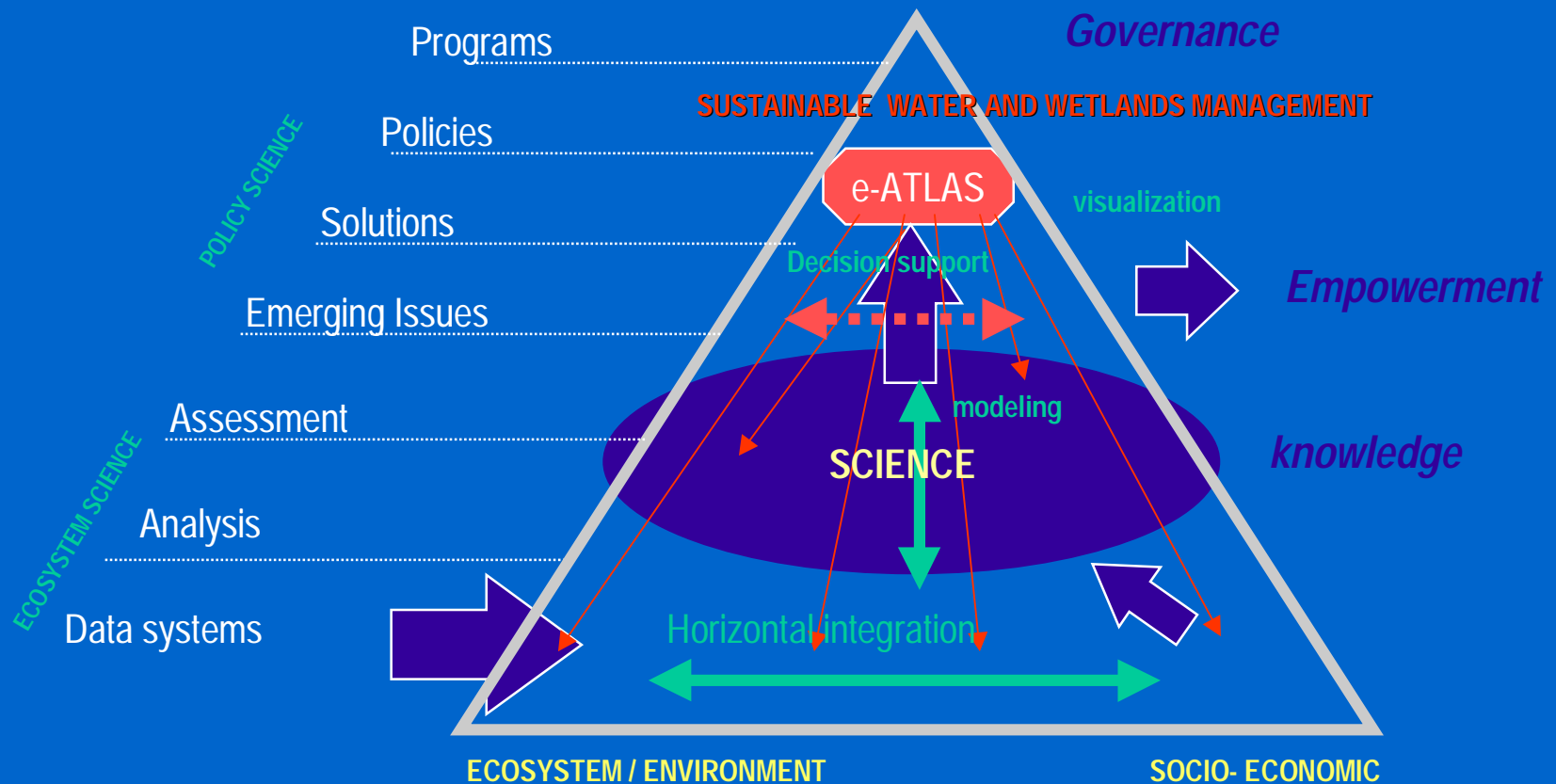
## THE CONCEPT

- Societal and multi-stakeholder decision support system/network
- Assist to bridge gaps between, science, policy, action
- Facilitate multi-stakeholder involvement from basin management to global policies
- Facilitate a unique network of global and regional centres of excellence
- Integrating Internet, multi-media approaches, GIS, modeling and decision support, visualization and communications approaches
- Linking Knowledge, Empowerment and Governance
- Part of building a global global knowledge Infrastructure

*Strategic and Applied knowledge Management*



# WORLD CONSERVATION ATLAS AND A GLOBAL CONSERVATION KNOWLEDGE INFRASTRUCTURE



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## WATER RESOURCES & WETLAND QUESTIONS

### Facts

- Where are dams being planned and built ?
- Where are freshwater biodiversity hotspots ?

### Analysis

- What has been the increase of in irrigated lands the last decade ?
- What is the relation between population growth and freshwater quality ?

### Scenarios

- How will encroachment to Lake Chad develop in the next 5 years ?
- What will be the effect of climate change on wetland ecosystems ?

*From facts to analyses to scenarios*

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## VALUE ADDED

### Open access

- Open access for all stakeholders
- Supports access to decision making and management

### Integration

- Integration of data (sectors, environmental, socioeconomic)
- Reliable and credible information

### Interactive

- Interactive and dynamic access to 'real time' data
- Customised visualisation for different / individual users

*A central portal to resources information*

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## AUDIENCE

### **Policy and decision-makers**

Supporting decision-making and management

### **Public and private donors**

Assisting in defining investment opportunities

### **Researchers, scientists and students**

Providing free access to data for assessments and analyses

### **NGOs and community groups**

Empowering stakeholders to participate in water dialogues

*Information for innovation*

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## POTENTIAL PARTNERS

- IUCN - The World Conservation Union  
(Secretariat, Commissions and Members)
- FAO-WAICENT
- UNH
- IWMI - International Water Management Institute
- WRI - World Resources Institute
- UNEP - GRID

*A partnership combining strengths*



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## CONTRIBUTING PARTNERS AND POTENTIAL DONORS

- Bilateral donors
- Multilateral donors (EU, WorldBank, GEF)
- Web-based information enterprises
- Publishers
- Data end-users
- Database custodians

*Developing open-access targeted products*



# The Business Model

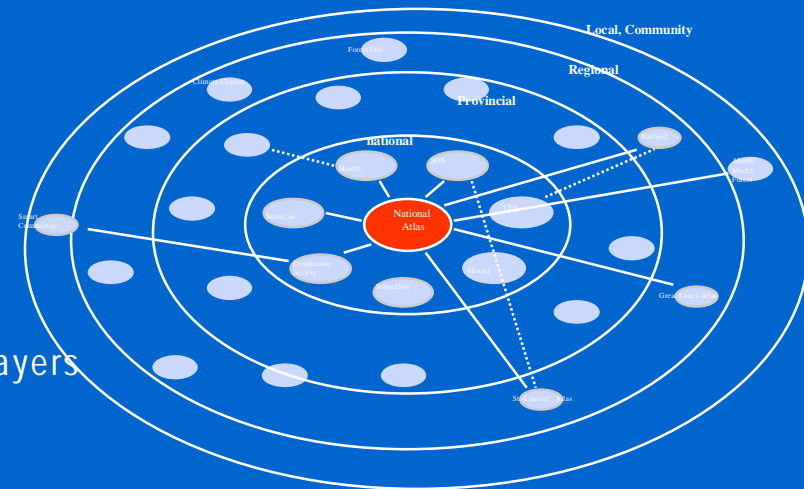
- Scientific Credibility
  - The Centres of Excellence Network:
  - The Editorial Board
- Sustainable Financing
  - Modular Approach for Umbrella Atlas, can be used for Thematic Atlas as well
  - Sponsorship/ Marketing by module, issue, region
  - Minimum start up financing 500,000 SFR
- Sustainable Operations
  - Centres of Excellence Network
  - Data Centres Networks
  - Issue relevance; sharing and integrating knowledge
- Client/ Market Impact
  - Scaling from global to regional
  - Multi stakeholder focus

*Building a sustainable operation*



# Business Model: The Global Atlas Network

- Strategic Partners
  - Centers of Excellence
  - mandate
  - data bases
  - resources
- Strategic Initiatives/ Issues
  - agents of change in “network” layers
  - comprehensive data available
  - issue response
- Building on Excellence
  - leading technology and substantive/ science/ data contributors
- Building on needed “Core Competencies”
  - integration tools
  - decision support tools
  - data and information bases: from ecosystem to socio-economic
  - “real time” response
- Linking with Clients, Markets



*Networking a global Cooperative*

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## THE NEXT STEPS - START UP PHASE

### Step 1 : July - December 2000

- Set-up editorial board to select issues and content (meeting Sep 2000)
- Define atlas scope, themes, end users, products and strategy
- Identify Centres of Excellence as partners
- Develop mock-up for 2 end-user groups (NGOs, Govt agency) (Dec 2000)

### Step 2 : December - Februari 2000/2001

- Finalise the business plan and the Atlas products
- Define the operational plan
- Develop the network and improve the integration framework
- Negotiate funding for entire endeavour

*Building a knowledge network*



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## IMPACTS

- Improved information access for all stakeholders
- Improved policy design and decision making
- Stronger links between policy and science
- Awareness raised on water resources and wetlands
- Increased participation of stakeholders in water management

*From the global to the basin level*

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## CONCLUSIONS

- Free access to integrated water resources information is highly needed
- Web-based information exists and the technology is available to develop an integrated data management tool
- The Water Resources and Wetlands Atlas can be a unique tool to assist in policy making and public participation
- The WRWA - partnership should be further extended and strengthened to develop the Atlas prototype

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## **ANNEX** : Additional Concept Slides

# e-ATLAS MAPPING TOOL

## SELECT ISSUE

CLIMATE CHANGE  
WETLAND LOSS  
THREATENED SPECIES  
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.....  
.....

## SELECT SCALE

GLOBAL

REGIONAL

NATIONAL

LOCAL

## SELECT MAP LAYERS

### BASE LAYERS

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### ENVIRONMENTAL DATA

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### SOCIO-ECONOMIC

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## BUILD A MAP/ Visualization

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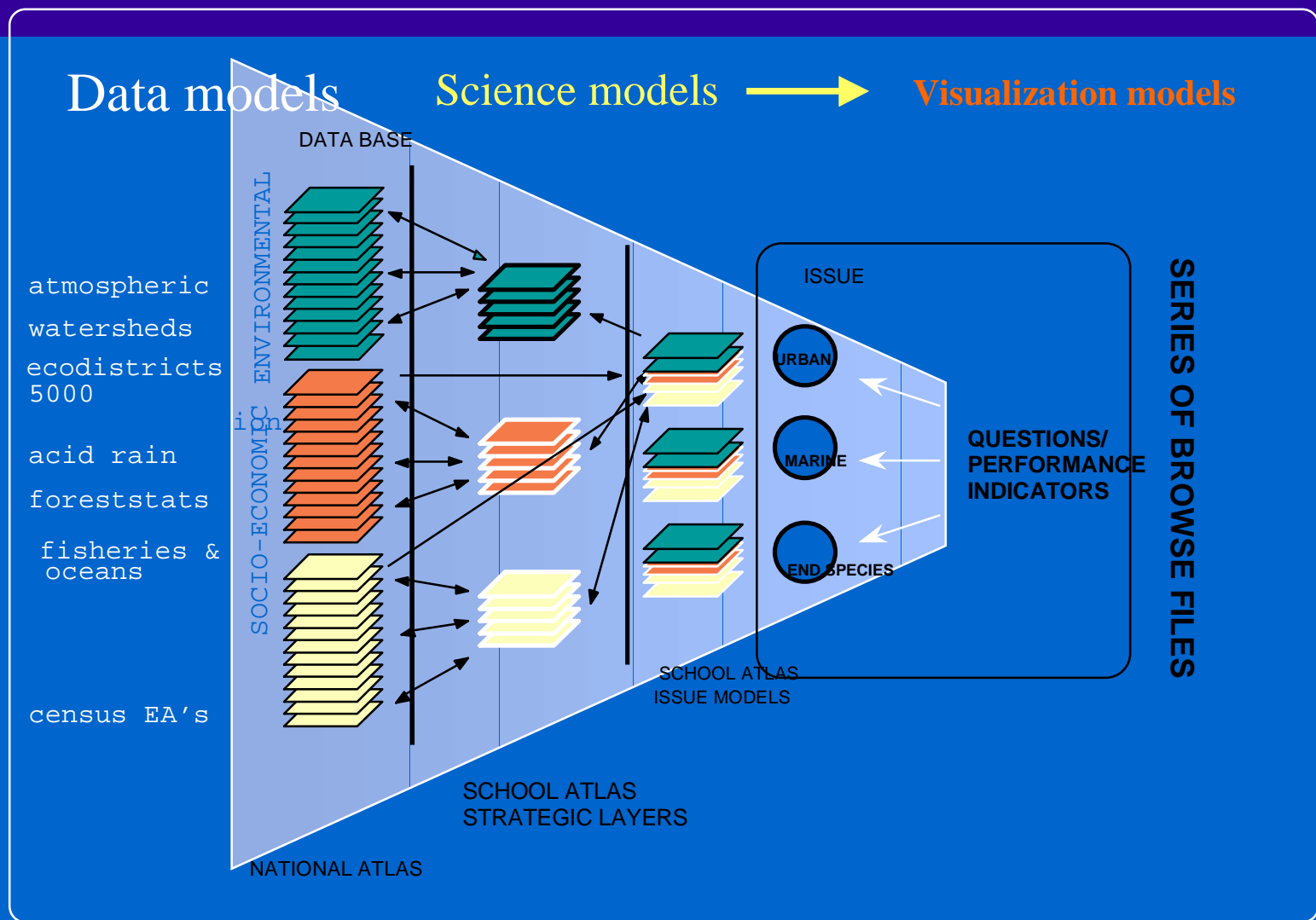
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SUBMIT MAP

# ELECTRONIC SCHOOL ATLAS CONCEPT: National Atlas of Canada



# INTEGRATING ENVIRONMENT- ECONOMY- SOCIETY- ACTION

