Watershed Indicators



PROBLEMATIQUE In watersheds around the world, a common barrier to effective planning is the complexity of multifaceted issues, incomplete and inaccessible data, jurisdictional fragmentation, transboundary issues and poor communication between stakeholders. In such a disjointed environment, the tracking and communication of data can help highlight where significant progress is being achieved, as well as where trends may be worsening.

IISD and WATERSHED INDICATORS As a solution, IISD promotes watershed indicator systems that highlight key data and serve as a common reference point for all stakeholders (e.g. agricultural groups, governments, conservation/watershed groups, non-governmental organizations). Indicators tracked can include environmental, social, and economic measures, resulting in a rich picture of status, potential linkages and progress towards sustainability.

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BENEFITS A number of economic and governance advantages can result from developing indicator systems at a watershed level. One of the greatest benefits is that the collaborative approach of shared measurement systems encourages common understanding of issues and priorities. Due to increased cooperation, stakeholders may also avoid duplication of efforts, thereby saving time and resources.

IISD's EXPERTISE

- Design and facilitate indicator selection from start to finish (e.g. engagement processes, indicator criteria, quality assurance protocols)
- Provide expert advice on potential watershed indicators (environmental, social and economic)
- Identify linkages between ecological, social and economic processes in a watershed, leading to a better understanding of sustainable development components
- Lead or advise on engagement and consultations to develop watershed indicators
- Develop data architecture and assist with data visualization
- Provide recommendations on the application and monitoring of watershed indicators
- Advise on the integration of indicators into decision-making processes linked to land, water and other related elements of watershed management

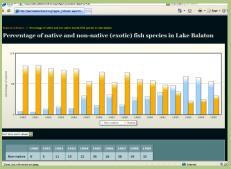
Developing a system of sustainability indicators for the Lake Balaton Region, Hungary

In 2005, IISD collaborated with the Lake Balaton Development Coordination Agency (LBDCA) and the United Nations Environment Programme (UNEP) to develop indicators to understand the environmental and socio-economic trends in the region, the main drivers of change, and how global and local forces contributed to regional vulnerability. The indicators were developed as a collaborative effort between technical and community stakeholders with differing knowledge of relevant issues. Ecological indicators included phosphorus loading to Lake Balaton, fish species, land use and greenhouse gas emissions. Social indicators included the percentage of people living in poverty, migration, education levels and life expectancy. Economic indicators included tourism measurements and unemployment.

The project also developed a website to visually depict the indicator data, allowing broad access to the information. This approach also improves overall accountability and results in opportunities for decision-makers in the region to collaborate.

To learn more, visit: http://www.iisd.org/measure/tools/assessment/balaton.asp





Peg: Winnipeg's sustainability tracker, Canada

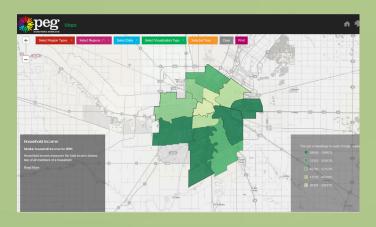
IISD has partnered with the United Way of Winnipeg to develop "Peg," a community indicator system designed to track indicators that reflect and measure well-being and sustainability in the city of Winnipeg, Canada. Peg helps the population to understand, develop, monitor and report on information and trends relevant to them. The indicators, developed by a wide variety of stakeholders, are grouped into eight theme areas: basic needs, health, education and learning,



social vitality, governance, built environment, economy, and natural environment. IISD's roles in the project included establishing linkages between key components of sustainability, developing indicator development processes with community and other stakeholders, developing the data architecture and managing the visualization process. The resulting data portal is well-used and appreciated by a wide range of organizations and people including journalists, government, educators and community groups.

To learn more, visit: www.mypeg.ca





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