

ABSTRACT

Use of Biodiversity Indicators in State of the Environment Reporting

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Biodiversity is a seemingly simple term but it embraces a huge range of conservation concerns related to ecosystems, habitats, species and genetics. Beyond being somewhat enormous in breadth, biodiversity is extremely encompassing in its geography, covering lands and waters, natural and human modified areas, and local through to continental ecological relationships.

The magnitude of biodiversity concerns means that conservationists and managers in resource sectors (i.e. forestry, agriculture, mining, fishing) will intersect in conflicting, as well as complementary, ways. How do decision-makers sort out the existing conditions, stressors and responses of biodiversity through informative sets of indicators? How do they equally design and improve pathways for sustaining the use and productivity of critical land and water resources in addition to biodiversity goods and services? How can various biodiversity and related indicators be used to answer common questions about what biodiversity is and why it is important? What are the current biodiversity conditions like and what are the factors that negatively impact and stress biodiversity assets? What is being done and about to be undertaken in response to biodiversity issues and to the conservation of remaining biodiversity assets?

The use of indicators in state of the environment or biodiversity reporting must be comprehensive and must examine many of the linkages among conditions, stressors and responses. This presentation uses some examples from the North American central grasslands as examples.

While current applications of biodiversity indicators face many challenges owing to uncertainties in monitored data, appropriate actions and scientific knowledge, improvements in defining relevant indicators and securing relevant data are being made by government agencies, non-government groups and industry.