Geography, geology, geomorphology, sedimentology;

Report Cards: An Effective Environmental Management Tool

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Environmental report cards have emerged as a technique to integrate monitoring data and provide feedback to a wide audience. There are several reasons for employing environmental report cards including a) raising environmental awareness, b) engaging citizen scientists and c) catalyzing management actions. Management objectives need to be clearly defined and a five step process of developing report cards can be used to assess progress in achieving these objectives: 1) conceptualization, 2) choosing indicators, 3) defining thresholds, 4) calculating scores and 5) communicating results. Effectiveness of management actions can be tracked with report cards. Report card credibility relies on independent rigorous assessments by environmental scientists. Citizen scientists can also contribute to report cards, particularly at small spatial scales, provided adequate training and quality control mechanisms are in place. Report cards can take advantage of emerging sensor, information and computational technologies. There are several environmental report card examples that serve as models for other regions, for example, Chesapeake Bay, Great Barrier Reef, Mississippi River, Gulf of Mexico, Southeast Queensland waterways, Maryland Coastal Bays. These examples of report cards used at different geographic and complexity scales will be used to develop some insights as to which report card approach may be applicable in other areas. In addition, the coupling of environmental report cards with a governance model, e.g., BayStat, will be discussed.