



Geographic Information Systems

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Abstract: Climate change is most commonly viewed as a global impact; however, the origins of emissions, the steps to reduce emissions, and the steps to adapt to the changes that result from climate change are much more local in nature. GIS enables modeling of the causes and effects of climate change at multiple geographies, and importantly it also facilitates the integration of data resources, model results, and measuring and monitoring programs to provide a continuum of understanding. This presentation provides a sampling of ways in which various international, national and sub-national organizations are using GIS to model, measure and respond to climate change. Also touched upon are various data resources that are in use at each of these governmental levels of response, and how integration of data resources enables the environmental, economic and social considerations of climate change and adaptation to be addressed.

Summary: Climate change, adaptation and sustainability are complex processes. Our responses are occurring at global, national and sub-national levels. This presentation provides a sampling of ways in which GIS is being used, in the response at each level of government, to integrate and apply diverse data sets while achieving actionable results.