

SkyTruth: Harnessing the Power of Imagery and Virtual Globes to Increase Public Involvement in Environmental Issues

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Abstract

To win the battle for hearts and minds, a picture is worth a thousand words. Imagery is an important tool for analyzing and illuminating environmental change, raising public understanding of environmental issues, and motivating people to actively participate in decisionmaking processes that have environmental consequences. We're living in a time where orbital and aerial imagery are increasingly available in a variety of formats and wide range of costs. The advent of virtual globe technology is making dynamic, 3-d representations of orbital imagery a ubiquitous feature of print and television news. Culturally, the general public is becoming accustomed to viewing and understanding such images; the emerging generation of virtual-reality and online gaming enthusiasts is propelling this to a level of expectation. Using these technologies, landscape-altering environmental changes can now be routinely and effectively presented to a diverse audience of policymakers, regulators and concerned citizens.

SkyTruth harnesses these tools to promote public understanding of environmental issues. We work closely with environmental NGOs to identify and prioritize issues and projects where imagery can play a valuable role. One such project, examining the growing impacts of natural-gas drilling in western Wyoming's upper Green River valley, illustrates the various ways that imagery and virtual globe tools can be used to explore and communicate environmental change, motivate public participation in resource-management decisionmaking, and drive scientific research on the effects of land-management practices.

Despite tremendous recent gains in the availability and ease-of-use of digital Earth imagery, in our experience many NGOs are impeded by the fundamental difficulty of measuring the value of this technology relative to their established program imperatives. This discourages NGOs from allocating staff to learn what's available, where to find it, and how it can be used to further their objectives. Paradoxically, as the universe of imagery and software options expands, this hurdle may grow even higher. The SkyTruth solution is to grow a flexible, distributed network of experts to bridge the gap between NGOs and earth-observation technology.