Land Use Methods and Metrics

OUTCOME

Continually improve the knowledge of land conversion and the associated impacts throughout the watershed. By 2016, develop a watershed-wide methodology and local-level metrics for characterizing the rate of farmland, forest, and wetland conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds, and communities. Launch a public awareness campaign to share this information with local governments, elected officials, and stakeholders.

Why is this outcome important?
Land use change is a local issue with regional consequences. Land use can affect restoration and protection efforts if not understood, mitigated, or otherwise planned for. This outcome was included in the Agreement to ensure that there are appropriate methods for understanding and tracking land use changes.

Current Conditions:
Currently, there is no convincing watershed-wide method for measuring the loss of agricultural lands, forests and wetlands when they are converted to parking lots, housing and other impervious surfaces. This poses a significant challenge to addressing land use change in the Bay watershed.

How was the outcome derived? Who came up with it?
This outcome responds to public comments received that an earlier version of the Agreement did not sufficiently address the extent and impacts of land use change in the watershed. The Land Use Workgroup of the Water Quality Goal Implementation Team was instrumental in developing this outcome, along with representatives of the Maryland Department of Planning and the Chesapeake Bay Commission.

What was the basis or baseline?
Over the next two years, academic experts and researchers at the U.S. Geological Survey, the University of Maryland and other organizations will be developing a convincing, watershed-wide method for measuring the conversion of natural lands to impervious surfaces. During this period, they will evaluate the data and methodology that currently exist, work with constituents, and determine what additional information is needed to meet the Outcome.