

## U.S. Environmental Protection Agency Office of Inspector General

# At a Glance

Catalyst for Improving the Environment

#### Why We Did This Review

We conducted this evaluation to determine whether one of the U.S. Environmental Protection Agency's (EPA's) research programs – the Land Research Program (LRP) – has appropriate performance measures for assessing the effectiveness of its research products.

#### **Background**

EPA relies on sound science to safeguard human health and the environment. LRP provides the science and technology to help its clients preserve the Nation's land. restore contaminated properties, and protect public health from exposure to environmental contaminants. LRP measures research performance by using (1) Office of Management and Budget (OMB) Program **Assessment Rating Tool** (PART) measures, (2) client feedback, and (3) peer review by the Board of Scientific Counselors (BOSC).

For further information, contact our Office of Congressional, Public Affairs and Management at (202) 566-2391.

To view the full report, click on the following link: www.epa.gov/oig/reports/2010/20100804-10-P-0176.pdf

### EPA's Office of Research and Development Performance Measures Need Improvement

#### What We Found

The difficulty of measuring research performance has been recognized by the National Research Council of the National Academies and other authoritative sources. No single measure can adequately capture all elements of research performance. Therefore, EPA's Land Research Program (LRP) has employed a variety of methods to assess its research performance. We found that improvements were needed to better enable EPA's Office of Research and Development (ORD) to assess the effectiveness of LRP research products. LRP did not have measures that assessed progress towards short-term outcomes identified in the LRP Multi-Year Plan (MYP). Additionally, LRP's citation analysis PART measures were not meaningful to ORD program managers and were not linked to LRP's goals and objectives. As implemented, ORD's survey of LRP clients did not provide a meaningful measure of customer feedback because ORD's client survey was not reliable. Further, LRP lacks some key measures that would aid BOSC in conducting its LRP program reviews, and ORD has not clearly defined elements of its long-term goal (LTG) rating guidance for BOSC reviews.

Several underlying issues impacted ORD's development of LRP performance measures. These include the inherently difficult nature of establishing outcome-oriented research measures and ORD's decision not to tailor its measures to each research program. As a result, ORD has invested resources in performance measures and tools that have not effectively measured key aspects of LRP performance. The measures have not provided LRP with the data to assess program progress towards its goals, identify areas for program improvement, and track the short-term outcomes of its research.

#### What We Recommend

We made a number of recommendations to ORD to improve LRP's research measures, including that ORD (1) develop measures linked to the short-term outcomes in LRP's MYP, (2) augment LRP's citation analysis with measures meaningful to ORD program managers and linked to LRP's goals and objectives, (3) develop an implementation plan for the LRP client survey to ensure that LRP has a reliable method for assessing relevance (or develop a reliable alternative customer feedback mechanism), (4) provide appropriate performance measurement data to BOSC prior to full program reviews, and (5) revise its LTG rating guidance to BOSC for program reviews. ORD generally agreed with our recommendations and is taking action to implement four recommendations. However, for three recommendations closely linked to the OMB PART, ORD is awaiting additional guidance from OMB before proposing specific corrective actions. We consider these three recommendations open and unresolved.