



ORD's Environmental Futures Program

ORD will evaluate opportunities for and, as appropriate, will conduct research to anticipate and assess future environmental stressors—whether human health or ecological—before their effects adversely impact people or the environment.

- Goal 5, EPA Office of Research and Development Strategic Plan

Futures analysis, or foresight, is a structured process that uses a variety of analytical tools to help organizations understand, anticipate, and influence the events and conditions of tomorrow. As stated in its 2001 strategic plan, EPA's Office of Research and Development (ORD) will continue to:

- (1) Develop an organizational capability for environmental foresight.
- (2) Stimulate dialogue both inside and outside EPA on future environmental developments and their significance; and
- (3) Conduct futures analyses for key environmental issues.

Program Goal

The goal of ORD's futures program is to protect human health and the environment by anticipating future opportunities and risks. To implement this goal, ORD seeks to understand, or reasonably predict, issues of national significance 10 to 20 years in advance, enabling EPA to promote positive opportunities and prevent negative impacts. Through futures analysis, and research in the field or laboratory that may follow, ORD informs national decisions affecting products, processes, and public infrastructure. Working with its partners, EPA can use ORD's anticipatory research to make environmental sustainability a practical reality.

Program Activities

To support EPA in this endeavor, some of ORD's Environmental Futures Activities include:

- Consulting experts within and outside EPA to identify early signals of future environmental risks and opportunities, and to explore best practices in the application of various futures analysis methods.
- Partnering with the University of Tennessee, through a cooperative research and development agreement (CRADA), to develop a peer-reviewed methodology for evaluating environmental scanning results of peer-reviewed and gray literature.
- Publishing an ORD document that summarizes the standard methods and describes the benefits of foresight. This document lays a foundation for futures analysis from an ORD perspective. It describes four principal analytical techniques: (1) Scanning, (2) Trends Analysis, (3) Delphi Interviews and Surveys, and (4) Scenario Building and provides examples of their application as used by EPA offices and programs.
- Collaborating with other EPA offices, as well as other federal agencies, to anticipate future risks and opportunities. For example, ORD has been participating in the Department of State's "Project Horizon" since September 2005 along with 14 other federal agencies. This interagency scenario planning effort is designed to improve and better coordinate strategic planning across government agencies.