United States Environmental Protection Agency
Office of Research and Development
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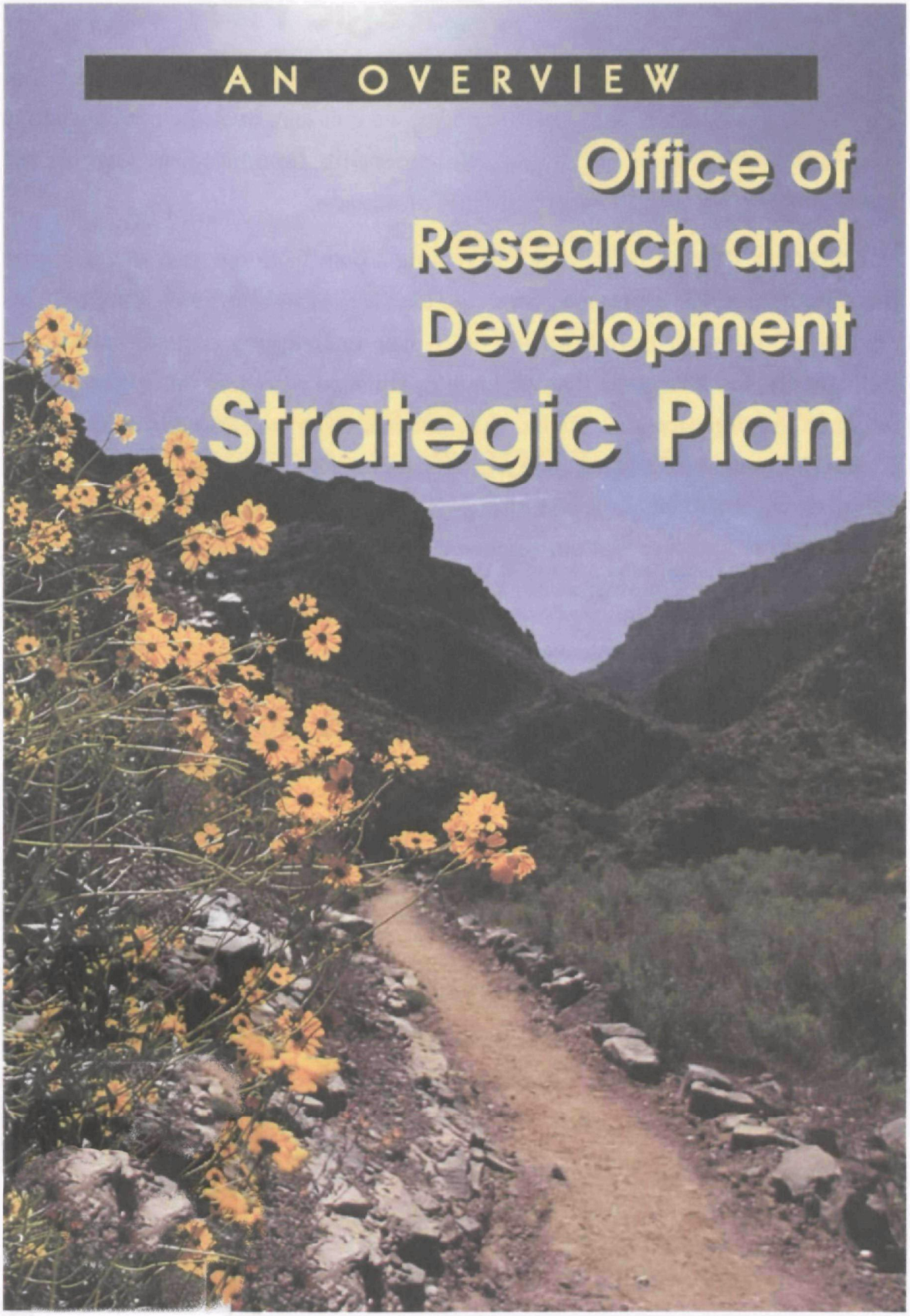
AN OVERVIEW

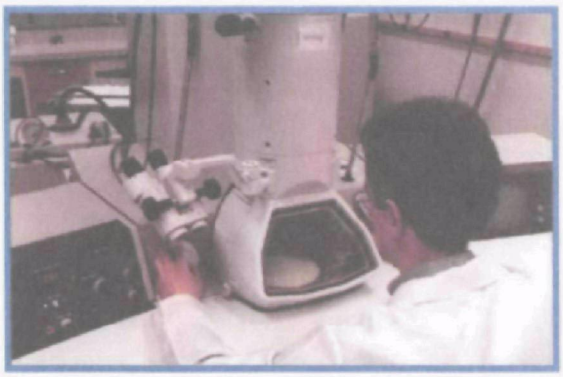
Office of Research and Development Strategic Plan



Purpose of the Strategic Plan

The Office of Research and Development's (ORD's) *Strategic Plan* describes the organizational goals and the actions that we will take over the next decade to achieve these goals as we provide the scientific foundation to support the Environmental Protection Agency's (EPA's) mission.

Our *Strategic Plan* is evolutionary—creating a path from our past to our future. Building upon ORD's previous Strategic Plans of 1996 and 1997, the *Plan* was developed through collaboration with our colleagues and stakeholders. Collectively, the five goals that we have established represent our vision for the future of the organization. Rather than concentrating on *what* research we will do, the *Plan* sets the direction for *how* we will conduct our research to accomplish our mission. It will be our foundation as well as our compass for future decision-making and will ensure that our science continues to be of high quality, relevant, responsive, and timely even as our research agenda evolves and changes.



Our Mission Directly Supports the Agency's Mission

ORD's Mission

To conduct leading-edge research and foster the sound use of science and technology to fulfill EPA's mission to protect human health and safeguard the natural environment.

EPA's mission is to protect human health and to safeguard the natural environment—air, water, land— upon which life depends. As EPA's scientific arm, ORD provides the scientific foundation that enables EPA to make informed decisions about risks to human health and the environment, and thus, eliminate or mitigate those risks.

Our mission is to conduct leading-edge research and foster the sound use of science and technology to fulfill EPA's mission. Central to our mission is the recognition that ORD is driven by the pursuit of *science for a purpose*—scientific knowledge that has a direct and tangible impact on EPA's environmental decisions. As a result, we are committed to a balanced program of problem-driven and core research, subject to the condition that this research is always necessary for, and relevant to, environmental protection and restoration.

Creating Our Strategic Plan

Input from ORD's customers and stakeholders was invaluable in helping us develop the *Strategic Plan*. They offered us a clear sense of the future, a strong basis for understanding the challenges facing us, and a candid assessment of ORD's current strengths and weaknesses.

The *Strategic Plan* was actually created by hundreds of ORD staff members who participated in meetings, workshops, and goal-writing teams to discuss the substance of the goals and to develop the actions and measures of success that are the core components of the *Plan*.

The *Plan* truly speaks with the voices of ORD. Its development and organization reflect not only good thinking, but also collaborative consensus building in mapping our future.

Our Goals

ORD has established five strategic organizational goals to meet the challenges of the future. Each goal contains several focused objectives, and under each objective there are specific actions. We will implement these actions in order to meet each objective and, taken together, achieve all of our goals. Individually, each goal represents an outcome we aspire to achieve. Collectively, our goals define the full range of ORD's role in shaping the future of environmental protection. Our goals are:

Goal 1	***Support the Agency's Mission***
Goal 2	***Be a High-Performing Organization***
Goal 3	***Be a Leader in the Environmental Research Community***
Goal 4	***Integrate Environmental Science and Technology to Solve Environmental Problems***
Goal 5	***Anticipate Future Environmental Issues***

GOAL 1 Support the Agency's Mission

ORD will support the Agency's Strategic Goals through collaborative relationships with its program and regional offices by providing high-quality, relevant, responsive, and timely scientific information and research results.

1	**Support the Agency's Mission**
2	Be a High-Performing Organization
3	Be a Leader in the Environmental Research Community
4	Integrate Environmental Science and Technology to Solve Environmental Problems
5	Anticipate Future Environmental Issues

Science is the foundation of all of EPA's work. ORD's role is to provide problem-driven and core research, scientific advice, and technical support that provides a solid, scientific basis for EPA's policy and program decisions. We are committed to pursuing "science for a purpose," namely, science to protect human health and the environment. Thus, our research and scientific support activities must clearly contribute to the Agency's Strategic Goals. In addition, the value of all of ORD's research should be measured by its importance in helping EPA to do its work—now and in the foreseeable future.

To accomplish this, we must maintain the standard of high quality science on which EPA's policies, programs, and credibility rest. ORD's research must be:

- Rigorous, objective, and thorough;
- Structured and conducted to provide complete, integrated information relevant to decision-making;
- Responsive to the needs of our customers; and
- Provided in a timely and useful manner.

Objectives

Under Goal 1, ORD's objectives are to:

- Maintain a balanced program of problem-driven and core research;
- Proactively lead EPA's effort to ensure that sound science is synthesized, integrated, and communicated in a form that supports effective environmental decision-making by EPA and its stakeholders;
- Provide technical assistance and regulatory support that meet the immediate needs of the program and regional offices; and
- Routinely obtain advice and feedback on our performance from our customers.

GOAL 2 Be a High-Performing Organization

ORD will be a high-performing organization in which employees communicate openly, serve customers, and work collaboratively to make ORD more effective and efficient.

1 Support the Agency's Mission

2 **Be a High-Performing Organization**

3 Be a Leader in the Environmental Research Community

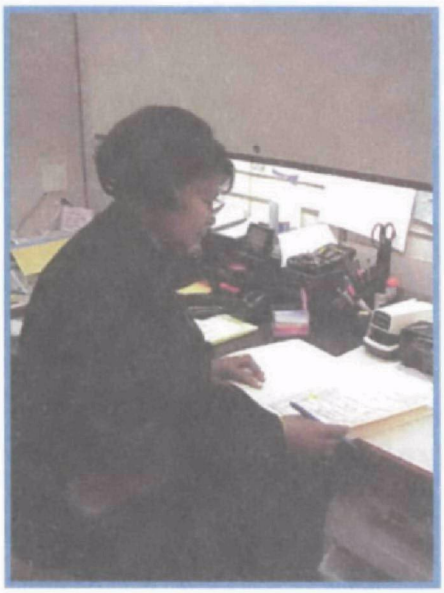
4 Integrate Environmental Science and Technology to Solve Environmental Problems

5 Anticipate Future Environmental Issues

Functioning as a high-performing organization allows us to achieve our other strategic goals. Excellence in scientific and engineering research requires a strong, supportive organizational foundation.

The single most important factor contributing to our success is the talent and effort of our staff. The discoveries and accomplishments that we seek will spring from the efforts of staff who are both motivated in their work, and provided with the support and recognition needed to help them to do their best. We are committed to the growth and development of our staff and to continuous improvement in the efficiency and effectiveness of our organization and infrastructure.

Under this Goal, ORD will continue to provide leadership and devote resources to develop and foster our workforce. We will model effective management behaviors and create a supportive work environment that promotes diversity, creativity, innovation, teamwork, and productivity. Further, ORD will create a stimulating research environment, communicate openly and clearly, efficiently manage our resources and operations, and promote flexibility and risk-taking.



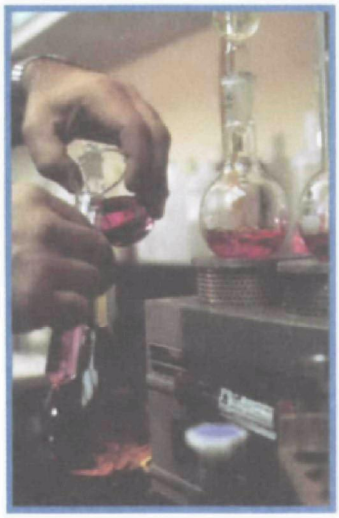
Objectives

Under Goal 2, ORD's objectives are to:

- Recruit, retain, and develop a highly qualified and diverse workforce;
- Create a culture that inspires respect, honesty, and trust;
- Create a stimulating work environment that encourages and rewards leadership, creativity, innovation, teamwork, and risk-taking; and
- Align our management and administrative processes and tools to help staff achieve our mission.

GOAL 3

Be a Leader in the Environmental Research Community



ORD will enhance its role as a national leader in the science and engineering research that underpins protection of human health and the environment, both by conducting and sponsoring mission-critical research and by playing a pivotal role in the development of a national environmental research agenda.

1 Support the Agency's Mission

2 Be a High-Performing Organization

3 **Be a Leader in the Environmental Research Community**

4 Integrate Environmental Science and Technology to Solve Environmental Problems

5 Anticipate Future Environmental Issues

Science leadership is critical to our success. It facilitates collaboration and the exchange of information with the broader scientific community, reinforces ORD's and EPA's reputation for sound science, and provides us with the opportunity to influence the research agendas of others thereby leveraging our own resources.

To cultivate and sustain science leadership, ORD must exhibit leadership at all organizational levels. Leadership is not the same as public recognition, and it is not limited to achievements by individuals. While recognition and individual achievement are important, we lead in other ways by shaping the research direction and priorities of other organizations and by being a resource for communicating complex issues of science and risk to the American public and the world. Accordingly, we want our scientists and engineers to be active participants in professional societies and conferences and acknowledged as leaders in their fields. We intend for our managers to be champions for science and science quality, especially in EPA's decision-making process. In addition, we will strive to play a critical role in all aspects of developing and conducting national research initiatives relevant to EPA's mission.

Objectives

Under Goal 3, ORD's objectives are to:

- Lead the development and definition of a national environmental research agenda for integrating and coordinating federally funded environmental research;
- Uphold the highest standard of independence, objectivity, and excellence;
- Be a widely used source of expertise and knowledge; and
- Communicate the results and value of ORD research.

GOAL 4 Integrate Environmental Science and Technology to Solve Environmental Problems

ORD will integrate its research across media, disciplines, and institutions to meet the challenges of complex environmental problems and to promote the discovery of holistic, efficient, and effective solutions.

Many of today's environmental problems are more complex, their causes less obvious, and their solutions more expensive and less certain than in the past. Today, sound risk-based decisions and environmental stewardship require an integrated approach in which the right people, with the right skills, collaborate in comprehensive programs to understand and solve specific, targeted environmental problems.

Integration across all media, disciplines, and institutions is neither easy nor straightforward. Success will require a broad mix of skills and organizational capabilities. ORD is uniquely qualified and positioned to integrate scientific research to address complex environmental problems. We have close working relationships with EPA program and regional offices, established ties to universities and other research institutions, and a large, multidisciplinary research staff.

To achieve this Goal, we will integrate research across the following:

- Human and ecological health;
- The risk assessment/risk management paradigm;
- Institutions;
- Disciplines; and
- Media.

Integration will reinforce a sense of common purpose among ORD staff and with EPA programs and regions. Equally important, integration will provide more useful and comprehensive information to guide policy and program decisions by EPA.

Objectives

Under Goal 4, ORD's objectives are to:

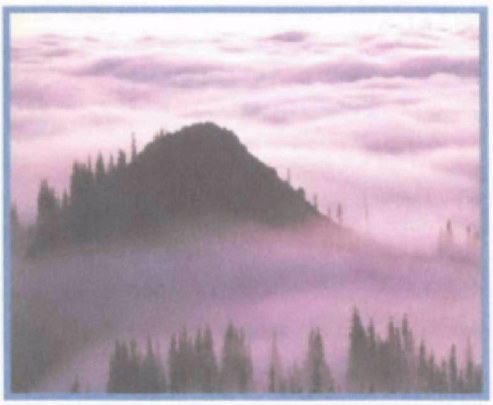
- Use ORD's multi-year planning process to identify priority environmental problems to be addressed by integrated research programs;
- Improve ORD's research management and communication processes to facilitate and support research that provides integrated solutions to environmental problems; and
- Dedicate efforts to increase utilization of ORD-developed science in the Agency's regulatory programs and by the environmental community at large.

GOAL 5 Anticipate Future Environmental Issues

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.

Anticipating future environmental trends and issues can help ORD maintain a leading-edge view of scientific needs to prevent or mitigate potential environmental problems. By using forward thinking, ORD will encourage more informed decision-making, help shape the national research agenda, and reinforce its leadership position in the scientific community.

Under this Goal, ORD will undertake a systematic "foresight" approach to identify potential issues that may surface 10 to 20 years into the future. We will focus on both detecting early warning signals and on identifying new issues for which early warning signals do not yet exist. In both cases, we intend to identify future environmental issues and predict their potential impacts with sufficient accuracy to inform our research planning process. This will allow EPA to take actions to prevent potential impacts rather than just respond to them.



Objectives

Under Goal 5, ORD's objectives are to:

- Develop an organizational capability for environmental foresight;
- Stimulate dialogue both inside and outside EPA on future environmental developments and their significance; and
- Pilot futures analysis for a few key environmental issues.

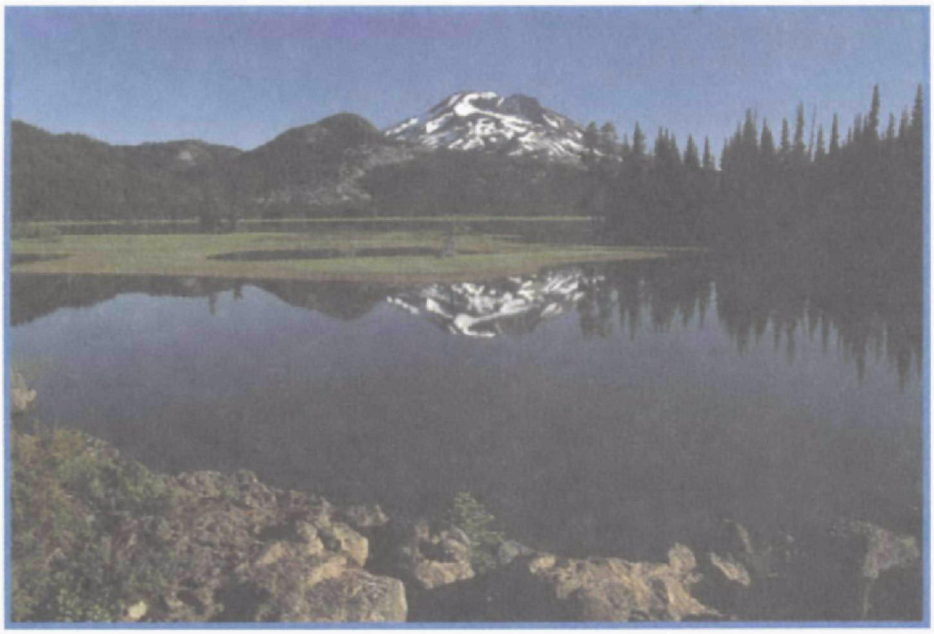
The Future We Seek

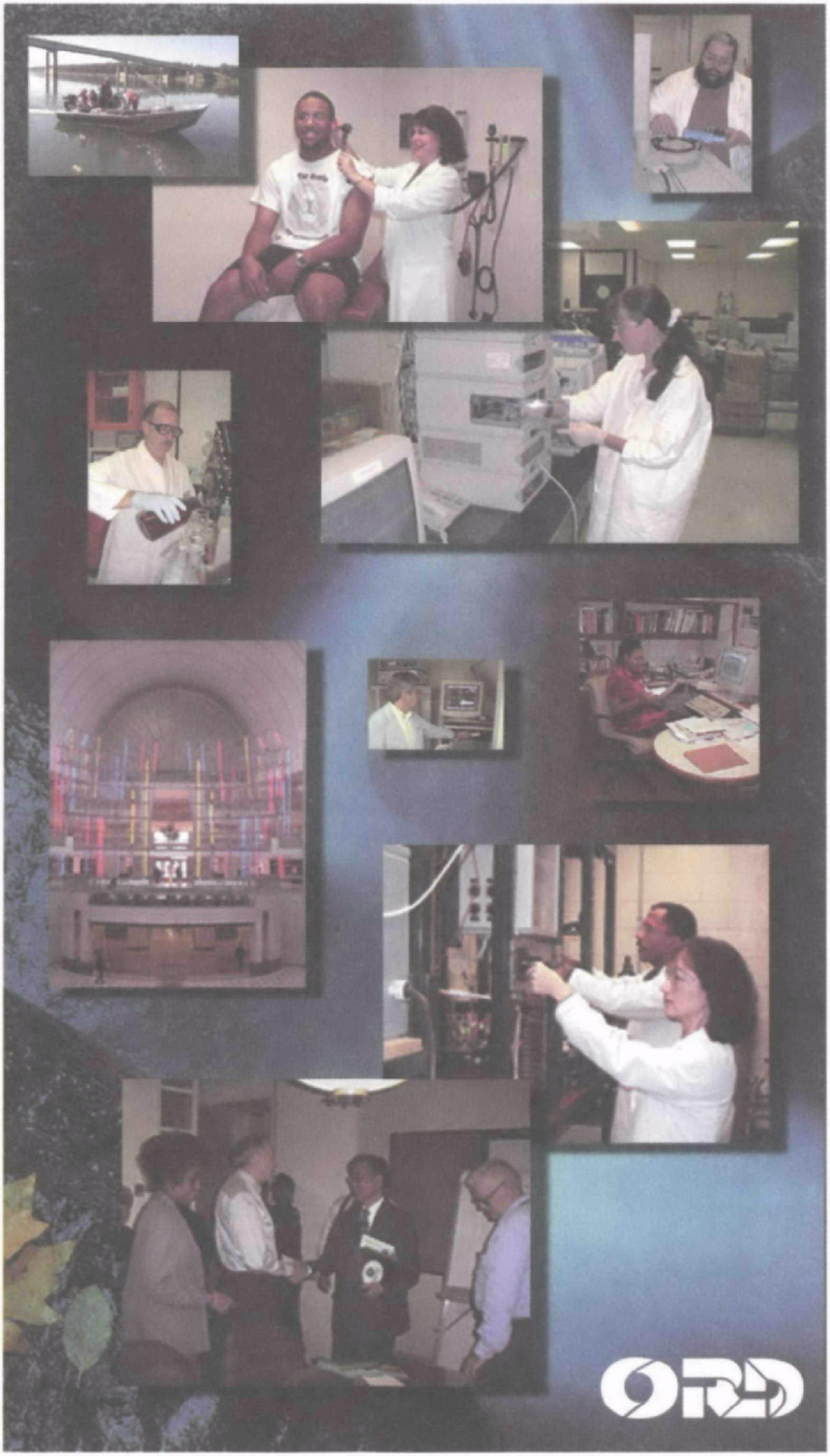
Our *Strategic Plan* evolved from our commitment to support EPA's mission and our vision for the future of our organization. We will use this *Plan* as a road map to guide ORD as an organization over the next 10 years. The *Plan* will require us to undertake new activities, enhance or improve upon our existing activities, and continue to perform at a high level on our current research priorities. To be successful, we must execute this *Plan* to its full extent. Implementation of the *Strategic Plan* will strengthen ORD's commitment and will unify our Labs, Centers, and Offices.

The objectives and actions described in this *Plan* represent those areas where we intend to concentrate our energy and resources in order to become a more efficient and effective scientific organization. We have already started to implement some of the actions in the *Plan*. We also are in the process of developing a formal implementation plan to guide our efforts with greater specificity and to clearly link our stated intentions to available resources and realistic timeframes. Successful implementation requires the personal commitment of each staff member in ORD, as well as collaboration across all our Labs, Centers, and Offices.

To assess our progress toward achieving our goals, we will identify clear and specific measures of success, which we will track regularly. We will use this information to evaluate what is working and what needs improvement, and make adjustments accordingly. Moreover, we will communicate our progress regularly to our customers and stakeholders. We will also learn from them and other organizations as to how we might better implement the *Plan*. By doing so, we will hold ourselves accountable to our customers, stakeholders, and each other for achieving our goals and future success.

We crafted our five goals to represent the organization that we intend to become. We recognize and embrace the challenges and opportunities we will face in working to achieve these goals. With the pride and dedication of each member of ORD, we will accomplish our goals while demonstrating the excellence of our work and the strength of our commitment to a safe and clean environment. This *Strategic Plan* will guide our efforts.





US EPA Office of Research and Development

For more information, please access the
Office of Research and Development Web site at:
www.epa.gov/ORD

The Strategic Plan is available on ORD's Web site at:
www.epa.gov/ORD/SP