April 2019



FUTURE DIRECTIONS

FOR EPA AND ENVIRONMENTAL PROTECTION

While the nation has made great strides in protecting its air, water, and land, the challenges ahead will require new technologies, strong partnerships, an engaged citizenry, and complementary efforts among thousands of organizations (both public and private) working toward common goals.

As we confront the challenges of the future, what will be the U.S. Environmental Protection Agency's (EPA) role, and how can the agency most effectively advance its essential mission of protecting human health and the environment? The American University School of Public Affairs' Center for Environmental Policy (CEP) partnered with the EPA Alumni Association to consider the challenges ahead and explore "future directions" for EPA. As EPA's 50th anniversary approaches, the project takes a long view — past today's contentious issues and legislative framework — to forge a broadly shared vision of a healthy environment. The goal is to transcend polarized debate and explore future directions that can help build a capable, effective EPA of the future.

THE PROJECT HAS FIVE COMPONENTS

- 1 | Focus Groups Reports, comprised of members of the EPA Alumni Association, identified key foundational issues for a survey of EPA alumni and for CEP's report on future directions. Their reports are posted at the EPA Alumni Association website (epaalumni.org/future).
- **2** | **Summary of Survey Results,** written by CEP in cooperation with the EPA Alumni Association, displays data and identifies "key take-aways" from the survey of EPA alumni con-ducted in November 2018 (american.edu/spa/cep).
- 3 | Preliminary Report: Future Directions for Environmental Protection and the EPA, written by CEP, provides an in-depth discussion of suggested future directions. A final report will be issued following the conference (see item #4) in April 2019.
- **4** | **Conference: EPA and the Future of Environmental Protection** will be held in April 2019 at American University in conjunction with the EPA Alumni Association and the Environmental Law Institute.
- **5** | **Modernizing Environmental Protection:** A brief history of lessons learned, produced by EPA staff and former employees in cooperation with CEP.



FUTURE DIRECTIONS FOR EPA AND ENVIRONMENTAL PROTECTION SUGGESTED BY CEP

Pressures on the environment will increase as worldwide population and economic growth drive energy use and greenhouse gas emissions, intensive agricultural production, competition for water, reliance on chemicals, land use and ecosystem destruction, urban concentration, and resource extraction. These stresses on the environment pose challenges of greater magnitude than past priorities and test the limits of traditional policy responses.

Ultimately, public support is needed to tackle future challenges. EPA can engage the public directly in new ways, especially with technologies that provide opportunities for real-time information feedback through social media. Winning broad public support will happen over time as EPA builds trust among stakeholders, EPA's new approaches take hold, and a new identity for the nation's environmental protection enterprise emerges.

FUTURE DIRECTIONS:

PURSUE STATE-OF-THE-ART SCIENTIFIC CAPABILITY

EPA's ability to lead in a future landscape involves many entities pursuing goals of sustainability and environmental protection in several ways. The agency's ability to lead in this future landscape starts with its own credibility and demands a solid basis on state-of-the-art science. To achieve this, EPA must would need to accomplish the following:

- Maintain scientific expertise in traditional and emerging fields to serve effectively as a convener of multiparty collaborative efforts.
- Seize the lead in managing an explosion of data from nontraditional sources. This can engage citizens and communities using advances in information technology.
- Anticipate threats and explore innovative solutions.
 Systematic scans "beyond the horizon" can shape responses for emerging concerns (e.g., bioengineered products) before they become entrenched problems.
 Engage other agencies and stakeholders in the process.
- Energize technical assistance to translate EPA's stateof-the-art science to results on the ground. A strategic approach should anticipate customer needs, include international exchange, and facilitate the flow of "best practices" up, down, and across the nation's environmental protection enterprise.

RENEW THE U.S. "ENVIRONMENTAL PROTECTION ENTERPRISE"

EPA's relationship with the states — the foundation for 50 years of environmental progress — must be renewed with fresh energy and broaden to include nongovernmental organizations, industry, local government, and others who can bring resources, expertise, and ideas.

- Invest in broadening the partnership with states/tribes to include others who can bring resources, ideas, and solutions to the table, including industry and NGOs when possible.
- Expand EPA-state agreements beyond the implementation of traditional EPA media programs and seek multilevel agreements when appropriate.

- Create an enhanced role for local governments. They have a wealth of experience to inform decision-making and priorities, especially related to climate change.
- Revitalize the EPA structure to focus on leading and supporting the Environmental Protection Enterprise.

STRENGTHEN INTERNATIONAL COOPERATION

EPA and its partners (old and new) need to think of international cooperation as part of the future environmental protection enterprise because climate change and other vexing challenges cannot be addressed without a worldwide response.

- Strive for new levels of international cooperation. Join forces with U.S. agencies doing international work. Actively engage in negotiations and science and technology exchange.
- Advance sustainability in trade agreements. EPA expertise can help design policies, set goals, and shape consensus for action.

ADVANCE A FORWARD-LOOKING REGULATORY SYSTEM

Regulations will still be part of the mix of future solutions, but should embrace the best new models for achieving outcomes and rewarding sustainability.

- Modernize regulations to form partnerships that work toward shared goals. Regulations will remain a critical part of EPA's work driving expectations, transparency and technology. They also provide a valuable focal point for collaborative efforts.
- Anticipate rapid technological change, and design regulations to adopt and encourage new tools, including those for transparency, and accountability to the public.
- Integrate regulations across media whenever possible, and remove regulatory obstacles to innovation. EPA has made progress on this, but it should be a sustained, ambitious process of continuous improvement over time.

HARNESS MARKETS AND CONSUMER CHOICE IN CONCERT WITH REGULATION

- Accelerate the use of market approaches that are already proven, such as regional cap-and-trade systems. Some market approaches can achieve more than regulations alone.
- Use public information as a tool to promote sustainable practices the Toxic Release Inventory is one example. Use new information technologies, such as social media, to energize public awareness and engagement.
- Broaden consumer information on products/practices. Energy Star and Safer Choice, for example, help send market signals favoring sustainability. EPA needs permanent capacity to foster consensus standards for sustainability across economic sectors and corporate sustainability reporting.





KEY TAKE-AWAYS

SURVEY OF THE EPA ALUMNI ASSOCIATION MEMBERS

A survey was sent by email to 1,550 members of the EPA Alumni Association in November 2018. Of these, 871 emails were opened, and 381 surveys were filled out for a response rate of 24.5 percent.



381
ANSWERED THE SURVEY

871
READ
THE EMAIL

1,550
CONTACTED
BY EMAIL

1

Climate change is far and away viewed as the most important environmental challenge of the future.

When asked to select four top challenges from a list of eight future environmental challenges, climate change was ranked the most serious challenge. Other important challenges are water resource management, energy sustainability, and protection of biodiversity and ecosystems.

MOST SERIOUS ENVIRONMENTAL CHALLENGES



82.1
PERCENT

311 VOTES
CLIMATE
CHANGE



63.9
PERCENT
242 VOTES
WATER

RESOURCES

MANAGEMENT



59.6
PERCENT

226 VOTES
ENERGYRELATED
IMPACTS



49.3 PERCENT187 VOTES

187 VOTES
BIODIVERSITY
AND ECOSYSTEMS
PROTECTION

2

An "all of the above" approach for climate change is strongly supported, including incentives, partnerships, and mandates.

In written comments, EPA alumni expressed concern about climate change and supported a broad range of potential responses. They called for a sense of urgency. One respondent wrote that "An 'Apollo Moonshot' to decarbonize our economy is needed." Another wrote that: "Fifty years from now, EPA will be judged by how well it pivoted to recognize implications of [greenhouse gases] ... for human health and the environment ... we should be asking the question, 'What do we need to do to move in that direction ASAP?"

CLIMATE CHANGE POLICIES



81.4 PERCENT

301 VOTES
SOME FORM OF
CARBON TAX



55.9

207 VOTES TECHNOLOGY-BASED STANDARDS



65.9

251 VOTES
GOVERNMENT
INVESTMENT
IN ENERGY
TECHNOLOGIES



64.9

PERCENT

244 VOTES
GLOBAL
LEADERSHIP
ON TECHNICAL
ASSISTANCE,
TRAINING, AND
AGREEMENTS

3

EPA alumni see science as a critical foundation for EPA's actions and future role, especially science directed toward developing tools and solving problems.

"Nothing is more important than a solid foundation of peer-reviewed science on which to set all regulatory actions and even proactive innovative approaches."— Survey respondent



Public awareness and consumer information are powerful sources for moving industry toward sustainability, yet regulations will still be needed to deal with poor performers.

"Increased transparency, expanding right-to-know, and encouraging voluntary actions are critical. These support actions 'beyond compliance." — Survey respondent

PROMOTING SUSTAINABILITY



67 2 PERCENT

252 VOTES
PARTNERSHIPS TO PROMOTE
SUSTAINABLE PRACTICES



54.1 PERCENT

203 VOTES INVESTING IN PROGRAMS LIKE SAFER CHOICE OR ENERGY STAR



50.1 PERCENT

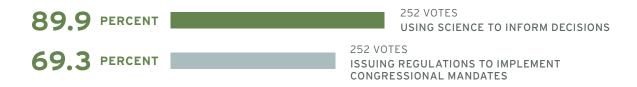
188 VOTES
RECOGNITION FOR
PERFORMING SUSTAINABLY

5

Strengthening the essential EPA-state relationship is critical, but how remains a challenge. There are no simple solutions.

Most respondents favored moving in the direction of cooperative strategic planning and joint prioritization. The suggestion of "certifying state/tribal-wide programs, with periodic audits or reviews" and "expansion of EPA's current Performance Partnership system" were supported by 69.4 percent and 70.4 percent of respondents. Many alumni said EPA must continue an active oversight role, with more emphasis on technical assistance.

EPA HISTORICAL STRENGTH



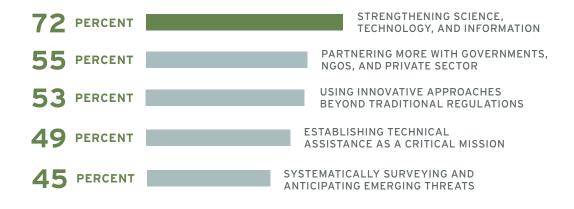
6

Public understanding and engagement on environmental issues is critically important for tackling future challenges. EPA must use new tools to reach broader audiences with credible information on science, solutions/policies, and progress.

"Far too many people think that we have already solved the environmental problems and that little else needs to be done..." — Survey respondent

PROMISING DIRECTIONS FOR EPA

Rated "strongly agree" by EPA Alumni



7

EPA's historical strengths in regulation, science, and technology provide a sturdy foundation for the future, but EPA should improve its ability to adopt new approaches and form partnerships.

8

Clarity of mission, motivated staff, scientific excellence, and openness to new approaches are essential ingredients of a successful future EPA.

Other topics frequently mentioned include promoting education/public relations, stake-holder communication, and working at the local level with communities.

INTEREST IN WORKING FOR EPA

Rated "very important" by EPA Alumni

