

## **Roundtable Sessions: June 9, 2010**

### **Strategies, recommendations and best practices for creating effective environmental leadership in Arizona**

*In 17 concurrent roundtable sessions, a diverse group of people—politicians, scientists, educators, business owners, writers, artists, students, and others—developed the following list of strategies to address critical needs in Arizona’s environmental leadership. Many thanks to roundtable discussion leaders Tom Buschatzke, Jeff Tannler, Channah Rock, Ralph Marra, John Rasmussen, Val Little, Matt Bailey, Jim Leenhouts, Paul Wilson, James MacAdam, Nicole Urban-Lopez, Guy Carpenter, Mark Shaffer, Katharine Kent, Ellen McMahon, Micaela McGibbon and Alison Waterkotte.*

#### **There is a need to articulate how and why we value the environment in Arizona.**

- Understand why a community values the natural environment.
- Educate policymakers about the environmental values of individual communities, and make protecting these values a priority.
- Create leadership that is connected to the needs of the people and the land, and understands the relationship between the two.
- Revitalize perceptions of neighbors and neighborhoods to encourage communication and the development of shared values.
- Utilize economic analyses as a way to facilitate the understanding of the true costs of water.
- Create ways to experience a sense of place—our rootedness in the desert landscape.
- Integrate the arts and humanities into the sciences to pose important questions: What do we treasure? Where is our common ground?

#### **There is a need for long-term statewide water planning in Arizona.**

- Articulate a long-term vision of water resource management for Arizona, preferably a vision that is mandated and consistent.
- Define what sustainability means, and determine how it fits with regulations already in place.
- Require environmentally-sustainable practices to accelerate change and promote an environmental ethic.
- Address the policy disconnect between groundwater and surface water.
- Match quality of water to use.
- Encourage the use of greywater and rainwater.
- Develop or redevelop infrastructure for better stormwater management, such as porous pavement.
- Make use of city/county regulations and regional planning to conserve water, for example, by requiring effluent on golf courses.

- Create processes to close gaps between the haves and have-nots, and include the environment as a have-not.
- Conserve water for nature.
- Promote discussion on climate change.
- Develop a clear direction on the future of agriculture in Arizona, and create a safe space for agricultural and urban stakeholders to engage in conversation.
- Increase extension programs to educate urbanites about agricultural issues.
- Establish models for water conservation in agriculture, such as drip irrigation.
- Develop economic analyses that reflect the full cost of water, and involve economics from the very beginning of a project.
- Create a legal recognition of the cumulative effect of harm on system limits, and substitute the understanding of “cumulative harm” for the more commonly used cost/benefit analysis.
- Encourage businesses to set an example in the community by supporting landscaping codes and water conservation policies.
- Create Solar/Water Improvement Districts, funded by municipalities and partnered by community associations.
- Enhance the Green Business Certification Program.
- Create a water ambassador program for businesses, including incentives for employees to make water and energy savings.
- Eliminate the win/lose mentality surrounding water quantity issues.
- Replace prescriptive approaches to legislation with performance-based standards to encourage innovation.
- Encourage more transparency between policies and reviews of those policies to allow the public to see if goals are being met.
- Ensure that political agendas do not influence data, and eliminate subjective use of science.
- Step out of the litigation cycle and create a new institutional culture.
- Make decisions based on the best available data, acknowledging where gaps exist but recognizing the need to move forward. Create an atmosphere where this informed risk-taking is rewarded and not punished.
- Do not wait until disaster strikes to regulate a resource. Ensure that water is a priority not only in crisis but also in the long-term perspective.
- Involve multiple stakeholders and cut across political, geographically and academic boundaries to coordinate efforts.
- Hold policymakers accountable for implementing policy.
- Include young people in the dialogue.
- Frame communication to the public with the understanding that the future won’t look like the past and our competing uses of resources must be balanced.
- Generate local data for statewide planning, and encourage collaboration between state and local leadership. Agree upon a common functional vocabulary and measurement standards.
- Recognize and address the fact that a statewide plan may not be best for local situations.

**There is a need for a water agency that can take leadership and articulate a vision for Arizona's future.**

- Recognize that the disappearance of funding for the Arizona Department of Water Resources has left no agency available or capable of taking on a leadership role, and create an autonomous, credible, separately funded agency to fill this gap.
- Build a diverse portfolio of sustainable funding for the agency.
- Allow the agency to provide independent oversight and enforce the rules already in place
- Create an agency that is credible, with results that are trusted, and a technical function that is separate from policy and regulation.
- Frame a vision for Arizona with continuous and credible water quality and quantity data.

**There is a need to encourage the development of environmental leaders in Arizona, perhaps by forming an institute.**

- Recognize the need for a pipeline of future leaders, and create a centralized organization to manage a student mentoring network.
- Create mentoring opportunities for emerging leaders within agencies, grassroots organizations, businesses, and universities, and find funding sources for this purpose.
- Set up mentoring partnerships between successful, environmentally-conscious businesses and new businesses.
- Open career pathways for emerging leaders with outside-the-box training.
- Engage the community in leadership training with field trips and other activities.
- Develop public-private partnerships to enhance collaboration skills and stakeholder understanding.
- Create a diverse leadership forum to look at how to change or modernize environmental law.
- Cultivate local leadership to proactively identify harm and create solutions; for example, teach landowners how to mitigate the environmental impact of building in compliance with the Endangered Species Act.
- Develop economic incentives and other mechanisms to keep emerging leaders and mentors in the environmental field in Arizona.

**There is a need to communicate complex environmental issues both to the public and to elected officials.**

- Educate the public in an engaging, personal and emotive way.
- Communicate data, and uncertainty of the data, to policy leadership.
- Have a multifaceted communications approach in multiple languages.
- Create communications teams trained in a variety of venues—print, social media, face-to-face and oral communication.
- Create “citizen’s guides” to water and environmental resources.

- Identify trusted advocates who can act as conduits for information, especially with the intent of closing the urban-rural digital divide.
- Make use of well-regarded community voices and grassroots organizations that rise above the political fray, to spread the message in an increasingly diffuse media landscape.
- Recognize that Arizona has a large retiree population and an influx of older residents, and develop communication strategies to reach this population.
- Encourage bilateral communication from scientist to policymaker and policymaker to scientist.
- Create focused education programs that teach legislators about environmental law.
- Create a resource for the general public that describes the foundations of environmental law.
- Develop advisory councils, workshops and training sessions to involve and educate the community about how water works.
- Design “water footprint” programs that help individuals recognize their water use.
- Get water issues out in front of the public in an attention-grabbing way, such as Denver’s “running toilet” program.
- Use public spaces as education tools; for example, don’t hide water infrastructure, so that people in cities “experience water.”
- “Brand” water resources; use marketing strategies to communicate to the public why water is important and emphasize their ownership over public resources.
- Capitalize on the fact that the built environment is common ground.
- Put a human face on communications projects. Tell a story instead of delivering data.
- Avoid covering environmental issues only when there is a crisis.
- Recognize that art can help the public visualize the sciences in an emotionally moving way, and use art to build on data and research to influence how the public makes decisions.
- Create art that illuminates, not simply illustrates, scientific issues.
- Centralize the possibilities to apply for grants in arts and sciences together.
- Utilize opportunities to communicate to the public about water through the arts; for example, poetry in the water bill, or water-focused poetry seminars.

**There is a need to create networking and data-sharing opportunities among the diverse groups involved with environmental issues.**

- Understand that water does not recognize political or institutional boundaries, and thus communication across various disciplines is vital.
- Create a stable, centralized clearinghouse with trustworthy data and a consistent funding mechanism.
- Create networks that link leadership across local, state and federal levels.
- Create a venue for grassroots organizations to connect to each other and collaborate, so they can develop a broader, unified voice.
- Provide mechanisms for grassroots organizations to access resources and decision-makers, and, conversely, provide mechanisms for decision-makers to access local, grassroots knowledge, and to identify gaps in research that need to be filled.

- Avoid territorialism in scientific research and foster the sharing of data among scientists.
- Create pathways or mechanisms for the public to offer innovation solutions to local environmental problems.
- Publicize successful innovations and create a method for sharing innovative ideas between communities.
- Create on-ramps for meaningful public participation.
- Organize and standardize water quality and quantity data to facilitate consensus-building.
- Foster transparency in information, particularly regarding the uncertainty of numbers and predictions.

**There is a need to create better environmental education in the K-12 system.**

- Promote authentic, hands-on, minds-on experiences for students with the environment.
- Develop a consistent curriculum that identifies the environment as important.
- Get kids in nature to create a sense of “ownership to area.”
- Encourage role playing, problem solving and critical thinking activities.
- Encourage adaption to a changing world.
- Encourage collaboration, professional connections and “two way” communication between students and the community (including scientists and policy makers).
- Ask for student input and request the community and family to be involved.
- Generate supportive families; educate children and parents together so they can set an example for one another.
- Provide opportunities for students to present what they’ve learned, in classrooms, political settings, science fair competitions, etc.
- Generate an understanding of individual impact on the environment.
- Explore the national and global ties to student actions.
- Educate inner-city students about where their food comes from and what is required to grow it.
- Encourage students to seek out credible sources of information and explore different viewpoints.
- Teach students that failure is OK.
- Develop “life-long learners,” track students after graduation and create career pathways.
- Encourage environmentally-friendly classroom practices, like recycling and outdoor green spaces.
- Build a database of information for teachers, students and community to use and connect.
- Create a way for scientists, teachers and artists can collaborate.
- Create a better classroom environment with smaller class sizes and access to resources, for example, through an equipment library.
- Establish funding for environmental education from sponsors, grants, and partnerships.
- Generate “human capital” to support environmental education programs and tap the community’s volunteer potential.