

# 1975-2005

2005 ANNUAL REPORT





# FROM THE PRESIDENT

lbert Einstein once said that solving the This problems we now face cannot be done with the same kind of thinking that got us into those problems. By following our timeline, which explores The Keystone Center's 30-year history, you will see just how right Einstein was. For three decades, The Keystone Center has brought diverse thought leaders to the table to solve stubborn policy issues and, through our sophisticated science education programs for teachers and students, has been steadily preparing the next generation for the same critical thinking that Einstein alluded to.

Robert W. Craig, The Keystone Center's founder, put it this way, "In general, I believe it can be said that successes in one sector of policy conflict and deliberation led to our being invited into other problem areas. What has and still does distinguish The Keystone Center has been its ability to select and have at the table the best representatives of all parties at interest in a particular issue and to assure that the dialogues that emerge are kept honest by the discipline of the best science and technological knowledge underlying that issue."

In June 2005, in celebration of our 30th Anniversary, The Keystone Center hosted a symposium in Washington, DC on "Political Courage and Bridge-Building." Senators Larry Craig (R-Idaho) and Ron Wyden (D-Oregon); Representatives Nancy Johnson (R-Connecticut) and Ed Case (D-Hawaii) joined National Public Radio's Washington Editor Ron Elving and the Heritage Foundation's John Hulsman to debate the very themes that TKC has

personified for so many years. "Information is what drives people to work together," said Nancy Johnson. "It is political glue." To which Senator Wyden added, "Bipartisanship is more alive than we know but less visible than it has ever been. That visibility is crucial if faith in our democracy is to be maintained."

If imitation is the highest form of flattery, The Keystone Center has much to be proud of. Today, The Keystone Center has a growing network of colleagues and friends around the world, people who believe as we do that collective wisdom can and must be uncorked to solve problems at the local, national, and global level. As we look ahead, we see a growing list of science-intensive political problems that will command future attention. These include emerging technologies (nanotechnologies, genetically modified organisms, pharmacogenomics), social risk, energy challenges (production, transmission, financing), and food and nutrition (obesity in the developed world, hunger and malnutrition in the developing world), as well as preparing our future leaders for careers in science and technology.

Keep your eye on these and many other issues. As people gather to take them on, The Keystone Center will be there to help convene and broker solutions and prepare the next generation of leaders to think and act in ways that would have made Einstein proud.

**CONTENTS** 

2

4

13-14

15

16

17-18 20

21 22 Letter from the President

12th Annual Leadership

Center for Professional

Education and Leadership

Consolidated Statement of

**Consolidated Statement** 

Sources of Support 2005

The Keystone Center

Awards Dinner

5-6. 8 Center for Science and

**Public Policy** 

9-10, 12 Keystone Science School

**Financial Position** 

**Board of Trustees** 

A Reflection from a Trustee of TKC

of Activities

Staff

Peter S. Adler, Ph.D President

ounded in 1975, The Keystone Center (TKC) is a non-profit 501(c)(3) organization whose mission is to develop solutions to societal issues through the innovative use of deliberative frameworks, inclusive processes, and analytical scientific information. Through its education and public policy programs, The Keystone Center improves decisions about long-term issues by helping thought-leaders, teachers, students, and decision-makers effectively address technically complex and politically uncertain situations.

TKC has garnered an international reputation of excellence for developing smart public policy that has lasting impact while building a foundation for future leadership by positively influencing students and educators through creative approaches to education.

The Center for Science and Public Policy (CSPP) uses scientific reasoning, analytical frameworks, and alternative dispute resolution techniques to lead decision-makers in crafting solutions and developing sound policies. CSPP programs identify policy-making opportunities; convene key stakeholder representatives; facilitate



# THE KEYSTONE CENTER

dialogue, joint fact finding or agreement building; and produce reports documenting the consensus-based outcomes.

Keystone Science School (KSS) inspires respect for science, the environment, self and others using scientific frameworks, inquiry and interdisciplinary academic instruction in the natural world. Through its programs, KSS strives to stimulate and strengthen students' critical thinking skills; recognize and apply relationships between classroom lessons and the natural world; enhance leadership and team-building skills, and demonstrate how collaboration can act as a tool for addressing complex environmental issues.

Professional Education and Leadership (PEL) programs impact education communities around the globe by developing and disseminating non-biased, hands-on, interdisciplinary curricula to educators through public, private and corporate partnerships with a view to improving education for all. PEL offers teacher training, curriculum development and distribution.

# A LOOK BACK: 1975-1983

**1975** – The Keystone Center founded by Keystone, Colorado entrepreneur Robert W. Craig as a 501(c)(3) non-profit organization.

1976 – Keystone Science School (KSS) is established as a division of The Keystone Center. 274 students attend KSS programs. Today, more than 4,000 participants attend KSS programs each year. TKC hosts its first policy dialogue: The Next Million Years: An Examination of the Capability of the Planet Earth as a Repository for High Level Radioactive Waste.



1978 – U.S. Energy Futures program established, leading to the development of the Keystone Energy Board in later years.

> **1980** – TKC hosts policy dialogue on *Siting Non-Radioactive* Hazardous Waste Management Facilities—an Overview.

> > **1981** – TKC convenes *A Consensus* Building Effort on Strengthening U.S. Energy Security.

**1982** – Revisions of the Clean Air Act are addressed through the *Clean Air Consensus* Policy Dialogue. KSS hosts Elderhostel, an adult science education program that ran for more than a decade.

**1983** – Keystone Biotechnology Forum established to address regulatory issues of the rapidly emerging biotechnology industry.

## 12th ANNUAL LEADERSHIP AWARDS DINNER

Cince 1994, The Keystone Center has presented Wawards to more than 45 individuals for outstanding leadership in government, the environment, industry, and education. All have modeled the philosophy of The Keystone Center, exhibiting a strong sense of vision and the ability to motivate others in a united effort to achieve important change, dedication to teamwork and consensus-building, and respect for all parties and all information available. All proceeds from the dinner, The Center's largest fundraising event, support The Center and its projects.

2005 marked the event's 12th year. The Keystone Center welcomed more than 400 guests to honor five distinguished awardees on June 8th at the East Hall of Union Station in Washington, DC. The event was emceed by award-winning journalist Cokie Roberts, with remarks by The Keystone Center President Peter Adler and Steering Committee Chair Shelby Coffey III.

### HISTORY OF KEYSTONE LEADERSHIP AWARD RECIPIENTS

ship in the Environment Award	Leade
Gustave Speth, U.N. Development	1994
Programme Administrator	1995
Professor Florence Taylor Robinson	1996
John Sawhill, The Nature Conservancy	1997
Dr. Mildred McClain, Citizens for	1998
Environmental Justice	1999
Kathryn S. Fuller, World Wildlife Fund	2000
Fred Krupp, Environmental Defense Fund	2001
Dr. George Archibald, International	2002
Crane Foundation	2003
Patrick F. Noonan, The Conservation Fund	2004
Russell E. Train, World Wildlife Fund	
Teresa Heinz Kerry, Heinz	Leade
Family Philanthropies	1998
Jonathan Lash, World Resources Institute	2000
ship in Industry Award	2001
Frank Popoff, The Dow Chemical Company	2004
H. Laurance Fuller, Amoco Corporation	
Edgar S. Woolard, DuPont	The S
Bob Burt, FMC Corporation	1996
John F. Smith, Jr., General Motors Corporation	1998
Sidney Taurel, Eli Lilly & Company	
Responsible Care Initiative of the Chemical	1999
Manufacturers Association	2001
Archie Dunham, Conoco	
Marilyn Ware, American Water Works	2002
Thomas C. Jorling, International Paper	2003
Ralph Peterson, CH2M HILL Companies	
	ship in the Environment Award Gustave Speth, U.N. Development Professor Florence Taylor Robinson John Sawhill, The Nature Conservancy Dr. Mildred McClain, Citizens for Environmental Justice Kathryn S. Fuller, World Wildlife Fund Fred Krupp, Environmental Defense Fund Dr. George Archibald, International Crane Foundation Patrick F. Noonan, The Conservation Fund Russell E. Train, World Wildlife Fund Teresa Heinz Kerry, Heinz Family Philanthropies Jonathan Lash, World Resources Institute ship in Industry Award Frank Popoff, The Dow Chemical Company H. Laurance Fuller, Amoco Corporation Edg ar S. Woolard, DuPont Bob Burt, FMC Corporation John F. Smith, Jr., General Motors Corporation Sidney Taurel, Eli Lilly & Company Responsible Care Initiative of the Chemical Manufacturers Association Archie Dunham, Conoco Marilyn Ware, American Water Works Thomas C. Jorling, International Paper Ralph Peterson, CH2M HILL Companies

### 2005 AWARDEES

Leadership in the Environment: Anne H. Ehrlich, Associate Director, Center for Conservation Biology, Stanford University - presented by Thomas E. Lovejoy, Heinz Center for Science

Leadership in Industry: James E. Rogers, Chairman, President and CEO, Cinergy - presented by Paul V. Tebo, former Vice President, DuPont

Leadership in Government: Congresswoman Nancy Johnson, Connecticut - presented by Clinton Vince, Sullivan & Worcester

Leadership in Education: Jane Nelson, Director, Corporate Social Responsibility Initiative, Harvard University - presented by Elizabeth Lowery, General Motors Corporation

Spirit of Keystone: Nicholas L. Reding, former Chair of The Keystone Center Board of Trustees and former Vice Chair of Monsanto - presented by David T. Buzzelli, former Vice President, The Dow Chemical Company

#### rship in Government Award

Energy Secretary Hazel O'Leary Senator Pete V. Domenici Mayor Norman Rice (Seattle, WA) Senator John Chafee Senator John Glenn Congressman Sherwood Boehlert Congressman John D. Dingell Congressman Henry Waxman Senator Richard Lugar

Congressman James L. Oberstar

Senator Daniel K. Inouye

### rship in Education Award

Dr. Donald Kennedy, Stanford University Dr. Bruce Alberts, President, National Academy of Sciences Helge Wehmeier, Bayer USA Daniel Ritchie, University of Denver

### pirit of Keystone Award

Congressman W.J. Tauzin Dr. Stephan Schmidheiny, ANOVA Holding Ag Sir John Browne, BP Amoco Corporation Edward M. Gabriel, former Ambassador to Morocco Paul V. Tebo, DuPont William K. Reilly, Aqua International Partners



## CENTER FOR SCIENCE AND PUBLIC POLICY

The Center for Science and Public Policy (CSPP) directs The Keystone Center's consensus-building and 📕 collaborative problem solving work. Bringing together leaders from all sectors of society—government, industry, non-governmental organizations and academic entities-CSPP focuses on examining the most pressing and scientifically complex policy problems and finding solutions that can satisfy all stakeholders. CSPP staff identify policy-making opportunities; convene key stakeholder representatives; facilitate dialogue, joint fact finding or agreement building; and produce reports documenting the outcomes.

In 2005, CSPP added several senior mediators, associates and project support staff, nearly doubling its staff. The division's work focused on three core subject areas-energy; health and social policy; and the environment.

### ENERGY

The Keystone Energy Board continued to serve as a venue for dialogue between lawmakers and agency staff; energy advocacy and non-governmental organizations; and a full range of energy companies. The board discussed a wide array of important topics ranging from lessons learned from the effort it took to restore power after hurricanes Rita and Katrina to the early implementation of the Energy Policy Act of 2005.

In addition to hosting the Keystone Dialogue on Regional Transmission Projects: Finding Solutions, the Energy Practice Group facilitated the U.S. Environmental Protection Agency's State Clean Energy-Environment Technical Forum, a venue for exploring analytical questions and resolving key issues surrounding state clean energy efforts.

Energy Practice Group staff continued to work with TKC's Professional Education and Leadership staff on the development and enhancement of curriculum related to global climate change and carbon sequestration.

### KEY PROJECT: Keystone Dialogue on Regional Transmission Projects: Finding Solutions

#### ISSUE

Expansion of the physical electricity transmission infrastructure is critical to ensuring a reliable and economical electricity system, as are increasing demand-side resources, adding generation capacity, improving operating procedure, and developing new transmission technologies. The Keystone Center convened the Regional Transmission Dialogue in order to develop recommendations to address difficult and contentious issues concerning expansion of the regional electric transmission system needed for reliable and economic transmission of power within and across regions.

### PROCESS

Funded by industry participants, and a grant from the U.S. Department of Energy (DOE), this year-long effort brought together a cross-section of affected stakeholders and thought leaders to address the issue. Participants included representatives from transmission owners, consumer advocacy groups, environmental organizations, regional transmission organizations, generation developers, public power suppliers, and state and federal regulators. Together, they discussed how to begin to unravel some of the more intractable issues surrounding identification of need, allocation of costs and reaching consensus on siting, which can frustrate the development of regional transmission infrastructure.

After debating a wide range of possible solutions to these dilemmas, the Dialogue participants adopted a set of recommendations that as a package they felt could make the decision-making process on planning, allocating cost and siting of new transmission more rational, effective and aligned with the realities of our country's current electricity system.

#### OUTCOME

In June 2005, The Keystone Center issued its final report on Regional Transmission Projects: Finding Solutions. The report was circulated among the Organization of Midwest States during the formative stages of the Midwest ISO policies, and a number of the Dialogue recommendations were later reflected in the U.S. Energy Policy Act of 2005. Additional findings were cited in the annual report of the U.S. Bureau of Land Management to the U.S. Congress, and the Dialogue process and conclusions were highlighted at the 2006 National Association of Regulatory Utility Commissioners annual meeting and at DOE's Symposium on Electricity Delivery.

To view the final report on this Dialogue, please visit www.keystone.org.

### HEALTH AND SOCIAL POLICY

The newest of TKC's three practice groups, CSPP's Health and Social Policy Practice Group realized great progress in two areas: nutrition and pandemic disease. With funding from the U.S. Food and Drug Administration, CSPP launched a dialogue including participants from food companies, advocacy groups, and regulatory agencies about how to provide consumers with more detailed information about food consumed outside of the home. The Keystone Center Youth Policy Summit on Adolescent and Childhood Nutrition in America successfully partnered CSPP with Keystone Science School and challenged a group of exceptional students to research childhood obesity and develop student-driven policy recommendations in a mock Keystone dialogue. CSPP staff also completed The Public Engagement Pilot Project on Pandemic Influenza.

### KEY PROJECT: The Public Engagement Pilot Project on Pandemic Influenza

### ISSUE

The scope of recent outbreaks of avian influenza has sparked large-scale concern about potential new and severe strains of human-transmitted influenzas that could pose a global pandemic threat. Believing that an inclusive public process with opportunities for frank, open dialogue and careful deliberation ultimately result in sounder decisions and great public trust, The Keystone Center launched the Public Engagement Pilot Project on Pandemic Influenza (PEPPPI) to discuss and rank goals for a pandemic influenza vaccination program and to test a new model for engaging citizens on vaccine related policy decisions.

#### PROCESS

A \$75,000 grant from the Richard Lounsbery Foundation provided the opportunity to leverage additional resources and recruit partners to initialize the dialogue. Through public consultation, the sponsors engaged stakeholders from various organizations with an interest in pandemic influenza (the National Stakeholder Group), and individual citizens-at-large from four principal regions of the United States. The anticipated major benefits from this public consultation were the development of an improved plan to combat pandemic influenza that would be more likely to gain public support, as well as a demonstration that citizens can be productively engaged in informing vaccine related policy decisions.

PEPPPI was carried out in five phases: two day-and-a-half dialogue and deliberation meetings with approximately 50 national stakeholders and consultants;

similar type.

a day-long consultation with more than 100 citizens-atlarge in Atlanta, which took place between the two stakeholder meetings; and three half-day sessions conducted with approximately 150 citizens-at-large in Massachusetts, Nebraska, and Oregon, at which citizens were shown the results of the earlier deliberations and were solicited for their feedback.

### OUTCOME

A final report, Citizen Voices on Pandemic Flu Choices was released in December 2005. Both citizens-at-large and the National Stakeholder Group decided-with a very high level of agreement-that assuring the functioning of society should be the first immunization goal followed in importance by reducing the individual deaths and hospitalizations due to influenza (i.e. protecting those who are most vulnerable and at risk). This Pilot Project provided "proof of principle" to the vaccine community that a diverse group of stakeholders and citizens-at-large can be recruited to learn about a technical subject, interact respectfully, and reach a productive outcome on an important policy question. Recognition of the importance and utility of these findings was made evident in the U.S. Department of Health & Human Services

(HHS) Pandemic Influenza Plan of 2005, which described the agency's consideration of the priorities that emerged from the PEPPPI project. The HHS plan ultimately called for additional public discussion of a

To view the final report on this Dialogue, please visit www.keystone.org.

to tell you that this is the best I really think that what you've for all of us who are involved -Patty Dineen, Member of the Board of Directors of the Institute and Contributing Editor for the National Issues

# A LOOK BACK: 1984-1990

1984 – TKC convenes dialogue on *Energy* Emergency Preparedness: Possible Approaches to the Free Market Distribution of Oil Products during Times of Shortfall.





**1986** – TKC dialogue, *Roles of the Ocean in Hazardous Waste* is presented to Congress. First Cancer Siblings Camp held at Keystone Science School.

> **1987** – TKC releases dialogue report, *How Clean is Clean?* The report's recommendations specific to inactive or abandoned hazardous waste sites are incorporated into Superfund reauthorization legislation.

> > **1988** – TKC's *AIDS Vaccine Liability Project* focuses on barriers to developing an AIDS vaccine. TKC initiates The Keystone International Dialogue on Plant Genetic Resources. Two dormitories, Henry and BigHorn, are dedicated on KSS campus.

> > > **1989** – TKC hosts a conference on the global food crisis as related to population, which is attended by former Secretary of State Henry Kissinger; CBS correspondent Eric Sevareid; and U.S. Secretary of Agriculture, Clayton Yuetter. *Dialogue on* Biological Diversity addresses action needed on the management of biological diversity on federally owned lands.



**1990** – The Keystone Center expands to open an office in Washington, DC. Keystone Dialogue on Global Climate Change and U.S. National Energy *Policy* focuses on policy options in the areas of fuel switching, energy efficiency, and conservation as well as the development of renewable resources and new technology.

### **ENVIRONMENT**

The Keystone Center's longest-standing and most diverse practice area continued to focus on chemical weapons disposal, hazardous waste cleanup, and other remediation efforts in 2005, and began new work focused on remedial efforts for contamination from mining operations. Additionally, the group focused on natural resource issues, including helping land management agencies and stakeholders address complex and controversial land use decisions. The Keystone dialogue on the critical habitat provisions of the Endangered Species Act was also commissioned by six U.S. senators in 2005.

The Bureau of Land Management (BLM) Northwest Colorado Stewardship project and the Western Governors Association Clean and Diversified Energy Advisory Committee were two TKC projects that stand at the intersection of natural resource issues and energy concerns. CSPP was also contracted to assist BLM in the effort to develop a Memorandum of Understanding, required by the Energy Policy Act of 2005, regarding coordination of leasing and permitting for geothermal development of public lands.

Another cross-cutting project for CSPP involved work in Pueblo, Colorado, in which CSPP staff worked with the Pueblo community to envision its economic and environmental future.

### **KEY PROJECT:** Sustainable Pueblo

#### ISSUE

The Keystone Center has worked for many years in the Pueblo community on issues associated with the destruction of chemical weapons at the Pueblo Chemical Depot. With the completion of a process to decide on the technology and type of facility used to destroy the weapons, both the Assembled Chemical Weapons Alternatives program of the Army and the community began to turn their attention to the longer-term impact of the facility on the community's workforce and economy. Studies demonstrated that the facility would provide economic growth while in construction and operation, but once closed would leave Pueblo economically worse off, creating a "boom bust" cycle that both Pueblo and the Army sought to avoid.

#### PROCESS

To help address these potential impacts early in the process, The Keystone Center convened a steering committee to develop a plan for Pueblo that is more sustainable than the boom busts created by major projects such as the weapons destruction facility. The steering committee developed a set of principles to guide their work, named themselves Sustainable Pueblo, and

formed five working groups (environment, economic development, education, community, and communications) made up entirely of interested citizens. The Keystone Center provided facilitation and substantive expertise to develop sustainability resources, projects, and strategies for these groups.

### OUTCOME

Each of the working groups proceeded to take on projects to assist the broader community in developing more sustainable strategies for Pueblo. They have engaged the school districts, the local chambers, and other community organizations to initiate discussions and provide information about sustainability plans and practices. Sustainable Pueblo also partnered with Xcel Energy as the corporation undertakes a major expansion of their power plant in Pueblo, to provide community forums and information on sustainability. At year-end, Sustainable Pueblo was in the process of forming an independent 501(c)(3) non-profit organization to provide the Pueblo community with ongoing long-term support for sustainability efforts.

Endangered Species Act and

"I have been a camper, a counselor assistant, and a counselor at Keystone Science School. Being at KSS taught me a great deal about the natural world, science, leadership, and confidence. This spring, I will graduate from Tufts University with a degree in environmental engineering and particular interests in water resources. site remediation, and sustainable design. This year, I will attend Princeton University to begin working towards a Masters degree in environmental engineering. KSS definitely had an influence on me and on my decision to study a science-related field. They made science fun, interesting, and most importantly, attainable. I learned that science was something I could understand, as well as how complex and wonderful the natural world is. That interest and respect for nature had an important impact on me and on my career decisions." -Kim Bowman enters Princeton University in fall



## **KEYSTONE SCIENCE SCHOOL**

Everystone Science School (KSS) inspires respect for science, the environment, self and others using scientific frameworks, inquiry and interdisciplinary academic instruction in the natural world. Through its programs, KSS strives to stimulate and strengthen students' critical thinking skills; recognize and apply relationships between classroom lessons and the natural world; enhance leadership and team-building skills, and demonstrate how collaboration can act as a tool for addressing complex environmental issues.

In 2005, on its 23-acre campus in Keystone, Colorado, KSS provided field science experiences for more than 3,500 participants through its school groups program, *Classroom Access to Science Education (CASE)*, and summer science education programs, *Discovery Camp; Counselor Assistant Program;* and *Keystone Mountain Adventures*, for students ages 7 to 17. In conjunction with Keystone Resort, KSS also offered community programs that incorporate natural history lessons to residents, guests, and groups. Scholarship funding from individuals, foundations, and corporations allowed more than 300 students from socio-economically disadvantaged backgrounds to attend KSS programs. Other 2005 highlights included *The Keystone Center Youth Policy Summit* and an enhanced local partnership with Summit Middle School.

# THE KEYSTONE CENTER YOUTH POLICY SUMMIT

In collaboration with the National Consortium for Specialized Secondary Schools of Mathematics, Science, and Technology (NCSSSMST), KSS hosted the second annual Keystone Center Youth Policy Summit. Building on the momentum gained from the 2004 Summit, which explored energy sources related to sustainable transportation, the second Youth Policy Summit focused on issues around child and adolescent nutrition in America, in particular obesity. The project involved 40 high school students and 10 teachers from 10 schools; six TKC staff members, and food, nutrition, and medical experts from prominent non-profit organizations, corporations, and government agencies, including The California Center for Civic Participation and Youth Development, Consortium to Lower Obesity in Chicago Children, Abbott Laboratories, Cargill, The Coca-Cola Company, Kraft Foods, and National Institute of Diabetes and Digestive and Kidney Diseases. As they addressed these complex policy problems involving diverse stakeholder interests, students learned about mediation and consensus-building and developed policy recommendations to encourage youth to lead healthier lives.

The 2005 Summit was highlighted in several news media outlets, including segments on *CBS4 News* on KCNC-TV in Denver, Colorado. A copy of the student-driven policy recommendations can be found on The Keystone Center's website, www.keystone.org.



### PARTNERSHIP WITH SUMMIT SCHOOL DISTRICT

A grant from The Summit Foundation enabled KSS to partner with Summit School District in a program aimed at breaking down cultural, racial and economic differences between students while also teaching science concepts and critical thinking skills in the natural world. Designed to ease the cultural and socio-economic barriers among sixth grade students as they transition from one of six regional elementary schools to a central middle school, the program was also designed to enhance leadership and team building skills and inspire cooperation.

In conjunction with their middle school orientation sessions, 225 sixth grade students were provided team-building experiences designed to teach them about the principles that make up the touchstone statement of Summit Middle School (SMS)—respect, integrity and cooperation. Each student developed a personal goal for him/herself for the school year, which was then integrated into an assignment conducted in the classroom. To complement the team-building activities, KSS staff assisted students in conducting various physical, chemical and biological tests to assess the water quality of several rivers in Summit County. This data was then used by students during a classroom assignment to investig ate the environmental issue of mining and water quality.

Throughout the project, KSS administrative staff worked closely with SMS sixth grade science teachers to plan the exercises and activities. Together, they determined how the KSS programs would be integrated with the sixth grade river studies unit as well as a portfolio assignment encompassing the students' first months of sixth grade.

# AN EXPERIENCE TO REMEMBER: ONE SCHOOL GROUP'S JOURNEY INTO THE ROCKY MOUNTAINS

As the bus pulls into the gravel parking lot that is surrounded by quaint, old cabins and an open meadow, the wide-eyed students eagerly await their next instructions. These sixth grade students from inner-city Denver will be spending the next few days living in Keystone Science School's comfortable dormitories and experiencing the outdoors like they never have before. For most, this is their first time in the mountains. Their classroom teacher has selected Earth science as the curriculum to be studied this week, and the goal for the next three days is to provide the students with a well-rounded educational outdoor experience, one that will give them an appreciation of the beautiful and fragile mountain environment. Their journey has begun.

DAY 1: Preparing the students for a fun and safe experience in the mountains is crucial. Virtually every one of these students is new to the unpredictable and ever-changing weather found at higher elevations, and teaching them about hydration, safety, and staying warm sets them up well for a positive experience. As students are broken into smaller groups of eight to ten students and one field instructor, the first day begins with an assessment of the educational levels of the students as well as the dynamics within each new peer group. Each instructor's goal is to balance introductory Earth science-based lessons with team-building challenges.

As they transition to life in the mountains and the outdoor classroom, this opening day can be overwhelming for the students. The instructor starts with the basics, "Why study Earth science? How does Earth science affect people?" Simple activities and demonstrations help the students ease into the topic. After the field day, a nutritious dinner and an educational evening program provides students a chance to interact with each other and journal in a large group setting while focusing on another Earth science lesson, the rock cycle.

DAY 2: The second day is a full day in the Rocky Mountains in which field instructors share lessons that get to the core of Earth science. The focus for the day is landforms and the weathering forces that shape them—from micro to macro, from huge tectonic plates to tiny minerals, the variety of activities allows students to better understand the forces that shape the earth. Before launching into their field lessons, the students start the day with a team-building challenge: They must line up shoulder-to-shoulder, balance on a log, and, without speaking, figure out how to get into order according to their birthdays.

Next, the instructor introduces the day's lessons with a fun, energetic game that explains the three rock types found on Earth and the processes that created them. Activities focus on plate tectonics, and the students get a chance to work as a team by placing replications of the earth's various plates together in a puzzle. While visualizing the powerful interactions of these plates at their boundaries on the earth's crust, the students gain a better understanding of current geological events like earthquakes, tsunamis, volcances and mountain formation. "I did a rough analysis of our science CSAP scores. I found Earth science to be one of the highest (if not THE highest) area of achievement. Since my students last had Earth science in 6th grade, I am fairly certain that a connection can be drawn between their scores and the instruction by your staff." –Kristy Lathrop, 8th grade teacher, Lake County Middle School

"Great job hitting our geology standards! This program has reduced the amount of time I need in class to cover this topic SIGNIFICANTLY!" –Kate VIchek, teacher, Cresthill Middle School

"This is a wonderful program with caring, professional instruction and well planned curriculum. Well balanced between academic and fun activities. It was great! Thank you all!" —Teddy Evans, parent chaperone, Crested Butte Community School



# A LOOK BACK: 1991-1997



**1991** – *National Policy Dialogue on Food Safety* focuses on the impact of food safety policies on the agricultural industry and public participation. *Scientist to Scientist Colloquium* brings top scientists to Keystone to discuss cutting-edge scientific developments. **1992** – KSS hosts first session of *Key Issues Institute*, with 28 teachers sponsored by corporations from across the country. Today, *Key Issues Institute* brings more than 180 teachers to Colorado to learn how to bring inquiry-based curriculum into their classrooms. Keystone Energy Board's inaugural meeting is chaired by Congressman W.J. Tauzin and Senator Pete Domenici.



1993 – TKC facilitates *President Clinton's Council on Sustainable Development*, which includes five members of the President's Cabinet; CEOs of industry and environmental organizations; public interest groups; and state government officials. TKC also convenes the *National Commission on Superfund* to develop proposals aimed at improving Superfund legislation, and U.S. EPA Administrator Carol Browner announces the release of the *Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee*, a process facilitated by TKC.

**1994** – The Keystone Center hosts its *First Annual Leadership Awards Dinner*. Keystone Science School establishes *Discovery Camp*, a summer residential science education program for youth.



**1995** – TKC initiates its *Dialogue on Electricity Policy* to address questions raised by efforts to deregulate and increase competition. Keystone Dialogue Report on *Incentives to Protect Endangered Species* is presented to the Senate Environment and Public Works Committee as part of the effort to reauthorize the Endangered Species Act.

**1996** – TKC *Dialogue on Food, Nutrition and Health* commences. In order to improve patient understanding of prescription drugs, an Action Plan for the *Provision of Useful Prescription Medicine Information* is developed and submitted to the U.S. Secretary of Health and Human Services.

**1997** – TKC receives \$1 million from Emily Hall Tremaine Foundation to evaluate and assess potential issue areas where the Keystone Process might be applied. TKC convenes a *Dialogue on Assembled Chemical Weapons Assessment.*  As the morning matures and the temperatures rise, it's time to depart campus for a trail near Boreas Pass in the mountains of the White River National Forest. While hiking, the students participate in various activities including a "professor hike" in which each student gets a chance to become an expert on a specific topic of geology relating to the observable landforms, and then share this newly acquired expertise with his or her fellow classmates. Youth discover exposed intrusions of igneous rock which display the powerful uplifting force of magma from inside the earth, and further down the trail, they observe examples of sedimentary rocks that indicate the land might have once been part of an ancient sea bed. The views from this mountain pass are tremendous. Sitting quietly, the students engage in a creative journal assignment by drawing their favorite views of the surrounding landscape. They label their landscape drawings and learn how these different landforms were created and shaped. They learn about the powerful glaciers that moved throughout these valleys long ago to carve the shapes they see today. After locating an appropriate area, the students search for a favorite rock, which the field instructor breaks apart with a rock hammer. Using magnifying lenses and the lessons they've learned thus far, the students identify each of the minerals that make up their rocks. Finally, a team-building experience further uplifts the students and caps off an amazing day in the field.

DAY 3: The third day concludes the group's experience at Keystone Science School. At breakfast, the students are already well-versed in their dining routine, as each field group has now taken its turn being "hoppers," setting and clearing the dining tables, helping to serve the meal to their classmates, and cleaning the dining hall at the meal's completion. The dormitories have also been vacuumed and swept, with each student taking responsibility for its cleanliness. A final, advanced team-building challenge highlights their learning of Earth science concepts and illustrates their positive growth as a group over the last two days.

"Which methods worked and which didn't?" asks the instructor. "How can each of you incorporate these group dynamics into your everyday lives?" As they complete their final day at KSS, the group forms a closing circle, reviewing what they've learned and sharing their most memorable experiences. Their time here has passed quickly, yet the inquiry-based lessons, the bonds that have formed with their classmates, and the memories they've created will leave an impression for some time to come.





13

"At KSS, children see snowshoe hare tracks in fresh snow, squirrel middens where food is stored, Englemann Spruce in the sub-alpine, and the odd noisy crow. They identify avalanche trails and cornices on the ridges of the Continental Divide. They continually shout to each other, 'Look at that! Look at that!"" -Lois Sandusky, teacher, Friends School

"We got out our journals and wrote or drew a picture of what we saw. I thought it was really cool that it was so quiet that I could hear nature all around me. I really enjoyed breaking open rocks. Did you know that I want to be a geologist?" —Ryan Hoeck, student



"I wanted to connect my math lab to the recent tragedies of Hurricanes Katrina and Rita so I incorporated a lab I learned at Key Issues. My students and I reviewed the concept of ratio and percent, culminating in the parts per million lab. We pretended that the 10 percent red dye solution was actually contaminated flood water. We had many profound discussions and the students rather enjoyed the activity. In all. about 130 students were involved." -Steve Schmitt, Wildwood, Missouri. Sponsor: Emerson

"The Tri-State project has been a blast. I think I had more fun than the kids! For the stakeholder analysis, I videotaped various friends and family members and later had students write interview auestions for community members. As the teacher, it has been fun to guide student learning and see the reactions of the kids. I will be using this program five more times this year as I get additional classes. Thanks for your help, this unit is awesome. I can't get over how fun, educational, and realistic it is. It is amazing that it can be all three things at once." -Christianne Ottinger, West Chester, Pennsylvania.

Sponsor: DuPont

## PROFESSIONAL EDUCATION AND LEADERSHIP

the Professional Education and Leadership (PEL) programs of The Keystone Center impact education communities 上 around the globe by developing and disseminating non-biased, hands-on, interdisciplinary curricula to educators through public, private and corporate partnerships with a view to improving education for all. PEL's programs and services include teacher training as well as curriculum development and distribution.

PEL's teacher training programs, entitled Key Issues Institutes, provide teachers a framework in which to lead their students through a non-biased and science-based investigation of environmental issues. By applying this Key Issues Framework to its project and program development, PEL has created unique interdisciplinary curriculum units and teacher training workshops on issues including green science, aluminum can recycling, space exploration, and global climate change.

In 2005, 263 teachers were sponsored by 45 corporations, government agencies, and foundations to attend PEL's teacher training institutes. In addition to workshops held at regional National Science Teachers Association conferences, TKC staff hosted seven teacher training sessions, including three sessions of Key Issues: Bringing Environmental Issues to the Classroom; as well as sessions of Tri-State Key Issues, NASA's Rovers, Reward, Risk & The Red Planet; Green Chemistry and CSI: Climate Status Investigations. Participating teachers brought the TKC-developed curriculum back to their classrooms for immediate implementation with their students.

The three sessions of Key Issues: Bringing Environmental Issues to the Classroom held in Summit County, Colorado, gathered teachers from across the United States, Canada, Mexico, and the United Kingdom for a week of curriculum planning, environmental investigation, and networking. In 2005, PEL introduced a new component to Key Issues which allowed educators teaching similar grades but different disciplines to come together and discuss various aspects of education at each grade level. Feedback from participants indicated that these grade level discussions helped participants rediscover their passion for teaching.

### CURRICULUM HIGHLIGHT: Rovers, Reward, Risk & The Red Planet

In 2001, National Aeronautics and Space Administration (NASA) and Jet Propulsion Labs (JPL) asked The Keystone Center for Science and Public Policy to help think through a new era of stakeholder involvement. NASA recognized that the use of nuclear technologies was historically controversial and hoped that a new approach might enable productive early dialogue between citizens and NASA about the issues of highest concern.

Upon learning about PEL's teacher training programs, JPL/NASA staff were intrigued by the philosophy of the program that encouraged students to think critically about data, evaluate options, recognize the role that values play, and to ultimately come to a balanced decision. JPL/NASA embraced the idea that students with these critical thinking skills were just the type of youth that might be the future of NASA's talented workforce.

In June 2005, 22 Florida educators attended Rovers, Reward, Risk & The Red Planet, a curriculum unit and teacher training developed by PEL and sponsored by NASA and JPL. During this training, teachers analyzed Mars exploration by focusing on the various power options-including nuclear, solar and hydrogen-that could fuel rovers. They identified stakeholder interests, perceived benefits and risks, and used technologies to investigate exploration through history. Once in their classrooms, teachers implemented the lessons and activities and provided invaluable feedback that was used to enhance the unit. In these classrooms, students work in mission teams to evaluate the pros and cons of each of the energy sources and design a model rover that is programmed to explore the simulated surface of Mars and gather scientific data. In a culminating activity, mission teams recommend their ideal rover energy option. Through these exercises, students are introduced to STEM (Science, Technology, Engineering and Math) careers that relate to the field of aerospace.

Also during the institute, representatives from JPL and NASA who work closely with the Mars rovers were available to answer questions on their direct work with the technology. With Cape Canaveral, Florida serving as the venue for the training, participants had the opportunity to tour Kennedy Space Center's Education Resource Center with 'backstage' passes. Teachers reported that the inclusion of this activity not only enhanced the Institute, but provided them with additional teaching resources.

### CURRICULUM HIGHLIGHT: CSI: Climate Status Investigations

In 2004, PEL was contracted by U.S. Department of Energy (DOE) and National Energy Technology Laboratory to develop an interdisciplinary middle-level curriculum designed to explore the issue of global climate change. The curriculum, CSI: Climate Status Investigations, leads students through an exploration of the social factors contributing to greenhouse gas levels and the resulting economic and social impact associated with climate change. Students evaluate possible options for addressing climate change mitigation and prevention, and explore technology's role.

The second annual teacher training on the Climate Status Investigations curriculum was held in Keystone, Colorado in fall 2005. Sponsored by 14 companies and foundations, the 30 participating middle-level teachers from around the country committed to implementing the module, activities and methods with their students for at least three years. In the classrooms of these participating teachers, students who have completed the unit have been involved in writing letters to their Congressmen, presenting reports to their schools, and conducting car count analysis in their communities.

In addition to presenting the four-day teacher training in Keystone, PEL staff presented the CSI curriculum through workshops held at National Science Teachers Association (NSTA) conferences. More than 750 copies of the CSI curriculum were distributed to teachers attending the national NSTA convention in Dallas and regional NSTA conventions held in Chicago and Baltimore.

To complement the teacher training on CSI, DOE also contracted with TKC to develop a comprehensive website, www.keystonecurriculum.org, where teachers can easily download lesson plans, access resources to complement their lessons and receive implementation support from PEL staff. The curriculum includes biology, earth science, chemistry, physics, and ecology as well as language arts, math, and social studies components that are immersed in each lesson. The lessons and labs also include the use of technology when appropriate and are tied to national standards.

Due to the positive feedback received from the middlelevel CSI curriculum unit and its dissemination. DOE contracted with PEL to design a high school version of the unit. High school educators were selected for their science backgrounds and curriculum development experience to serve as teacher facilitators for this unit. In spring 2005, a weekend planning session was held with these facilitators to identify the needs of high school science teachers and the best way to bring CSI to high school classrooms. These ideas were subsequently beta tested in the high school classroom and further refined into a curriculum module which has interdisciplinary components as well as a stand alone delivery method for all levels of high school science educators.

Tn addition to these two successful curriculum units, PEL continued its work with grant funding from The Pfizer  $m \bot$ Foundation to develop curriculum based upon the 12 principles of Green Chemistry for middle and high schools, as well as a curriculum developed for teachers in the United Kingdom called Ideas, Issues and Evidence UK. PEL continued to work with Can Manufacturers Institute on disseminating the "Talkin' Trash with ABCs (Aluminum Beverage Cans)" module, in which students explore the social, environmental, & economic issues related to the waste stream.

During 2005, PEL also supported education and stewardship on federal lands in partnership with U.S. Fish and Wildlife Service, National Fish and Wildlife Foundation, and a consortium of federal land management agencies that comprise Partners in Resource Education. These programs, Nature of Learning and Hands on the Land, provide a national network of field classrooms that enhance kinderg arten through high school student learning.

In Colorado, PEL staff was closely involved in implementing the curriculum with the sixth grade at Summit Middle School. Within the player grid lesson, staff role-played varying points of view as to what may be the cause of climate change and also helped in the classroom as students examined mitigation techniques.

"So often, teachers get so consumed with the textbook, but Key Issues has shown us how to push the textbook aside and bring science to life." –Dana Harrison-Jeter, Saginaw, Michigan Sponsor: The Dow Chemical Company Foundation

"It's been several years since I have learned so much in a science related professional development opportunity!" -Bree Arzy-Mitchell, Gillette, Wyoming. Sponsor: Kennecott Energy & Coal Company

"This has truly been the most valuable, stimulating, and enjoyable teacher training experience I have ever had. The Keystone staff has provided me with stimulating and relevant workshops combining a high degree of professionalism, creativity, and good humor." -Sharon Dennis, Hinsdale, New Hampshire. Sponsor: W.R. Grace & Company



# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

# THE KEYSTONE CENTER DECEMBER 31, 2005 (WITH COMPARATIVE TOTALS FOR 2004)

16

		2005	2004
ASSETS			
Cash	\$	123,663	\$ 137,133
Investments		56,740	54,058
Receivables		667,104	495,043
Science School store inventory		14,583	11,580
Prepaid expenses		62,931	2,967
Deposits and other		21,122	13,874
Investments, restricted		51,600	94,830
Property and equipment, net		<u>3,550,349</u>	<u>3,600,679</u>
т	otal assets \$	4,548,092	\$ 4,410,164
LIABILITIES			
Accounts payable	\$	220,556	\$ 91,313
Accrued liabilities		91,844	105,470
Deferred revenue		43,249	43,562
Line of credit		150,000	293,000
Deferred compensation payable		51,600	96,429
Related party note payable		-	1,117,820
Long-term debt		<u>1,908,307</u>	<u>801,660</u>
Tota	al liabilities \$	2,465,556	\$ 2,549,254
NET ASSETS			
Unrestricted	\$	1,336,459	\$ 1,107,673
Temporarily restricted		694,077	701,237
Permanently restricted		<u>52,000</u>	<u>52,000</u>
Total	net assets \$	2,082,536	\$ 1,860,910
Total liabilities and	net assets \$	4,548,092	\$ 4,410,164

# CONSOLIDATED STATEMENT OF ACTIVITIES

# THE KEYSTONE CENTER DECEMBER 31, 2005 (WITH COMPARATIVE TOTALS FOR 2004)

	2005						2004						
	UNF	RESTRICTED	TEN R	IPORARILY ESTRICTED	PERI RI	MANENTLY ESTRICTED	TOTAL		TOTAL				
REVENUE													
Program revenue	\$	2,708,184	\$	-	\$	-	\$ 2,708,184	\$	2,012,946				
Contributions		664,814	1,589,886		1,589,886		,814 1,589,886			-	2,254,700		2,483,515
Investment income		6,590		-		-	6,590		9,054				
Miscellaneous income		157		-		=	157		3,490				
Income from settlement of deb	t	-		-		-	-		34,716				
Released from restrictions		<u>1,597,046</u>	(1	<u>,597,046)</u>				-					
Total revenue	\$	4,976,791	\$	(7,160)	\$	-	\$ 4,969,631	\$	4,543,721				
EXPENSES													
Program services	\$	3,712,938	\$	-	\$	-	\$ 3,712,938	\$	2,959,374				
Management and general		633,806		-		-	633,806		782,487				
Fundraising		<u>401,261</u>		-		-	<u>401,261</u>		<u>379,410</u>				
Total expenses	\$	4,748,005	\$	-	\$	-	\$ 4,748,005	\$	4,121,271				
Change in net assets		228,786		(7,160)		-	221,626		422,450				
Net assets - beginning of year		1,107,673		701,237		52,000	1,860,910		1,438,460				
Net assets - end of year	\$	1,336,459	\$	694,077	\$	52,000	\$ 2,082,536	\$	1,860,910				



## SOURCES OF SUPPORT 2005

### CORPORATE, FOUNDATION AND GOVERNMENT DONORS

#### 3M

Abbott Laboratories Agilent Technologies Alcan Inc. Alcoa Foundation Alliance for Habitat Conservation Altria Group, Inc. American Electric Power American Farm Bureau Federation American Forest Resource Council American Gas Association American Transmission Company Antelope Valley Air Quality Management District Battelle Bechtel Corporation Beldon Fund The Bobolink Foundation Bristol-Myers Squibb Foundation California Natural Resources Group Cargill CH2M HILL Charles River Associates Chevron Corporation Cinergy Corporation City Market City of Phoenix CMS Energy The Coca-Cola Company Colgate-Palmolive Company ConocoPhillips Conservation International Cummins Inc. Daniels-Houlton Family Foundation Davenport Family Foundation Deere & Company Defenders of Wildlife The Denver Foundation Denver Zoological Foundation, Inc. Department of Energy Dewey Ballentine The Dow Chemical Company Dow Corning Foundation The Robert N. and Nancy A. Downey Foundation DTE Energy Foundation Duke Energy Corporation DuPont

Eastman Kodak Company Ebbin Moser and Skaggs ECA Foundation Edison Electric Institute EHS Partners LLC Emerson Emerson & Cuming Specialty Polymers Enbridge Energy Company Entergy Services Inc. The Gabriel Company, LLC Gas Technology Institute **GE** Foundation General Motors Corporation Georgia-Pacific Foundation Goldman, Sachs & Company Greater Denver Area Gem and Mineral Council. Inc. Green Strategies Inc. The Herman and Goldie Halpin Foundation Heller Ehrman LLP Hoeft Family Foundation Hogan & Hartson LLP Illinois State Geological Survey International Paper Johnson & Johnson The David J. Joseph Company Justice & Sustainability Associates, LLC Kennecott Energy & Coal Company Keystone Citizens League The Keystone Neighbourhood Company Keystone Resort Kinder Morgan Foundation Kraft Foods Latham & Watkins Lockheed Martin Corporation McGraphix Creative, Ltd. MeadWestvaco Corporation Monsanto Company Monsanto Fund Morg an Meguire, LLC Myron B. Thompson Academy National Association of Home Builders National Association of Manufacturers National Fish and Wildlife Foundation

National Grid National University System Natural Resources Defense Council Northeast Utilities Service Company Partners Mentoring Association Peabody Energy PepsiCo Foundation Perkins Coie The Pfizer Foundation PG&E Corporation Plum Creek Foundation R.W. Beck Raptor Construction, Inc. The River House Collection Rockwell Automation Rohm and Haas Company The Rossetter Foundation Sanitation Districts of Los Angeles County Sargent & Lundy LLC SC Johnson Fund, Inc. Shell Oil Products Company Sidley, Austin, Brown, & Wood LLP Skadden, Arps, Slate, Meagher & Flom. LLP Snake River Foundation Southern Company Services, Inc. Sullivan and Worcester, LLP Summit County Government Summit County Rotary The Summit Foundation Syngenta Crop Protection, Inc. Ruth and Vernon Taylor Foundation Team Unlimited Tennessee Valley Authority The Dutko Group Troutman Sanders LLC Turner Foundation Untraditional Marketing, LLC Vail Resorts, Inc. Van Ness Feldman, PC Van Scoyoc Associates, Inc. W.R. Grace & Co. Wal-Mart Foundation Warriors Cycling Western Urban Water Coalition Weyerhaeuser Company Wyeth Xcel Energy Foundation Yampa Valley Community Foundation

### **INDIVIDUAL DONORS**

Peter S. Adler, Ph.D. Sarah Stokes Alexander Julia M. Arbaugh Edwin W. Baker, Jr. Charles and Meredith Bleskan John and Ann Boyd Scott and Melody Braaten Robyn Brewer Susan M. Brown Mark and Ruchi Brunvand Richard Burton David and Kathy Bussman David and Barbara Buzzelli Rodger and Patricia Bybee Arthur L. Caplan, Ph.D. Tim and Patti Casey Don and Sandy Chisholm Chris Chopyak and John Herge Mike and Joyce Clary Mike and Linda Clem Nicholas B. Clinch Alan and Susan Cohen Dr. and Mrs. Noel L. Cohen. M.D. Thomas M. Connelly, Jr. Steve and Kathy Corneillier Douglas M. Costle Robert W. Craig Dr. William H. Danforth Hap and June Dobbs Dan and Diane Duke John and Kathy Echohawk Lee and Deb Edwards Eggert Family Mohammed T. El-Ashry James J. Ferris John and Jean Fitzgerald Robert and Nancy Follett Dirk Forrister Gerry and Annette Fricke Kasey Geoghegan Ronald and Mary Elizabeth Gillig an Lynn Goldman Linda Gooden Alison Gooding and Daniel Bridg eman William and Marianna Goslau Gertrude Grant Eliot P. Green David I. Greenberg

Robin Hadley Robert Hanfling Lex and Mitzie Hawkins David R. Heil Lee and Peg Henry Chuck and Katy Hirt Jana Hlavaty and Eugene Os Joan D. Manley Peter and Maryann Ill Gerald and Constance Irelan Daniel Johnson Susan S. Juergensmeier Robert and Marjorie Julian Meg Kelly Carol Stock Kranowitz Jeremy Kranowitz Binka Le Breton Dr. Felice J. Levine Leon Levy and Denise Barlo Jerry Lieberman Helen Littrell Elizabeth Lowery Larry and Kathy Lunceford Cathy and Todd McCague Roger McCarthy Jere and Carolyn McIntyre Jeff Melendrez Kikken Miller Boyd and Debra Mitchell Ed Moreno and Janet Wise Catherine Morris Greg and Tamara Moses Aaron Murray Hazel O'Learv Diane Osgood, Ph.D. Dennis Parker Kristi and Frank Parker Celico Dr. Bruce Paton Mr. and Mrs. Henry M. Paulson, Jr. Robert Joe Pierpont Rachel Pokrandt Harold A. Pratt Glenn T. Prickett Stephen D. Ramsey Nan and Robert Ratner Nicholas L. Reding Bud Ris William J. Roberts Elise M. Rowe Lois J. Schiffer Rodger Schlickeisen, Ph.D. Barbara J. Schneeman

	Dan and Amy Schroder
	William B. Schultz
	Jeff Seabright
	Philip R. Sharp
	Diane B. Sheridan
	Gail A. Smith
sman	Stanton Kinnie Smith, Jr.
	John and Linda St. John
	Jerry Steiner
ıd	John and Sharon Stevenson
	Wilson and Sherry Strong
	Pam and Paul Tebo
	Ellen Temby and Chuck Ginsberg
	Fred and Eileen Terens
	Joey Terriquez
	Doug Thompson
	Susan Tomasky
	Guff VanVooren and Vicki Raport
ck-Levy	Clinton A. Vince
	Hagen and Eldine Von Burchard
	Tom and Christine Vujovich
	Amy Waldes
	John and Jennie Walker
	Lawrence J. Washington, Jr.
	Greg Wetstone
	Keith and Karen Wheeler
	Ken and Gloria Wiggins
	David and Susan Wilcox
	Suzanne and Cap Witzler
	Durwood Zaelke



# A LOOK BACK: 1998-2005

**1999** – Educators learn sustainability concepts at the first session of KSS' teacher development program, *Key Issues II. The Regional Transmission Organization (RTO) Dialogue* report focuses on the establishment of an efficient and effective RTO market.

**2000** – The Keystone Center celebrates its 25th Anniversary. *Keystone Leadership Forum* is established to assist business leaders in crafting a case for sustainable development within their companies.



**2001** – Keystone Energy Program completes its *Natural Gas Infrastructure Dialogue.* The Asian Development Bank commissions TKC to facilitate the *Regional Initiative to Eliminate Micronutrient Malnutrition in Asia* to combat malnutrition in six Asian countries.

> **2002** – The Keystone Center *Dialogue on Global Climate Change* explores emission reduction strategies. TKC's Professional Education and Leadership (PEL) division is formed to encompass professional education programs including *Key Issues Institutes, Earth Stewards, and Keystone Leadership Forum.* A \$50,000 grant from Youth in Wilderness, a joint project of the Sierra Club and The Sierra Club Foundation, allows KSS to host 300 economically disadvantaged students in its *Classroom Access to Science Education* program.

> > **2003** – TKC assists NASA in preparing for its Mars missions, both in the design and implementation of public participation processes, and in its projects involving the return of Mars samples to Earth. PEL partners with TKC's Center for Science and Public Policy to develop curriculum related to global climate change.

**2004** – PEL develops a middle-level curriculum, *Rovers, Reward, Risk and The Red Planet* exploring energy sources to fuel the Mars rover. TKC hosts the first *Keystone Center Youth Policy Summit*, in which students from the National Consortium for Specialized Secondary Schools of Mathematics, Science and Technology explore policy options on sustainable energy as it relates to transportation.

**2005** – The Keystone Center celebrates its 30th Anniversary and expands to open an office in Denver, Colorado.

# THE KEYSTONE CENTER BOARD OF TRUSTEES

### MEMBERS OF THE EXECUTIVE COMMITTEE

David I. Greenberg Co-Chairman of the Board Altria Group, Inc.

Howard "Bud" Ris Co-Chairman of the Board New England Aquarium

David T. Buzzelli

Thomas Connelly DuPont Experimental Station

Robert W. Craig Founder and President emeritus The Keystone Center

Eliot Green Loeb & Loeb

Robert Hanfling KFx

Dennis Parker

Joe Pierpont Pierpont Associates

Harold A. Pratt Educational Consultants, Inc.

Glenn T. Prickett Center for Environmental Leadership in Business

William J. Roberts Beldon Fund

Lois J. Schiffer National Capital Planning Commission

**1998** – Robert W. Craig–Education and Consensus–Building is dedicated in–Keystone, CO. TKC's Endocrine–Disruptor Screening and–Testing Advisory Committee–provides guidance on the–establishment of a screening–and testing program for–endocrine disruptors.–

### TRUSTEES

Barry Brandon Seneca Gaming Corporation

Richard N. Burton MeadWestvaco

Rodger W. Bybee Biological Sciences Curriculum Study

Arthur L. Caplan University of Pennsylvania Center for Bioethics

Shelby Coffey Freedom Forum

John E. Echohawk Native American Rights Fund

James Ferris CH2M HILL Companies

Robert Follett Alpine Guild, Inc.

David E. Greenberg Denver School of Science & Technology

John J. Hall Hall Consulting, Inc.

Paul Hansen Izaak Walton League of America

Lee Henry Riverwood Partners

Binka Le Breton Iracambi Rainforest Research Center

Felice J. Levine American Educational Research Association Gerald Lieberman State Education and Environment Roundtable

Elizabeth Lowery General Motors

Roger McCarthy Breckenridge and Keystone Resorts

Erik D. Olson Natural Resources Defense Council

Diane Osgood International Environmental Consultant

Stephen Ramsey General Electric

Nicholas L. Reding

Rodger Schlickeisen Defenders of Wildlife

Jeff Seabright The Coca-Cola Company

Jerry Steiner Monsanto

Susan Tomasky American Electric Power

Clinton A. Vince Sullivan & Worcester LLP

Lawrence Washington The Dow Chemical Company

Keith Wheeler Center for a Sustainable Future

Durwood Zaelke International Network for Environmental Compliance and Enforcement

## THE KEYSTONE CENTER STAFF

Peter S. Adler, Ph.D. President

Christine Scanlan Senior Vice President and Chief Operating Officer

### **ADMINISTRATION**

Robyn Brewer Communications Manager Kasey Geoghegan Director of Development and Community Relations Jeff Melendrez Systems Administrator Tamara Moses Director of Human Resources and Operations Julie Rybak Accounting and Administrative Assistant Amy Waldes Controller

#### CENTER FOR EDUCATION

### KEYSTONE SCIENCE SCHOOL

Andy McIntyre Co-Director Aaron Murray Co-Director Kendall Martin Brown Campus Caretaker Phaedra Demers Senior Field Instructor Casey Fagre Field Instructor Annemarie Goetz Program Coordinator Susan Juergensmeier Campus Registrar Matt Kohn Senior Field Instructor Bob Moon Food Service Manager Brock Munson Field Instructor April Slagle Field Instructor Lori Van Broekhoven Field Instructor Guff Van Vooren Program Coordinator

PROFESSIONAL EDUCATION AND LEADERSHIP

Kim Misyiak-Chumney Project Manager, The Nature of Learning Wendi Liles PEL Associate Rachel Pokrandt PEL Senior Associate Alison Randel Lead Project Support Coordinator Ellen Reid PEL Senior Associate Dan Schroder Key Issues Program Director Cali Turner PEL Associate for Research

### CENTER FOR SCIENCE AND PUBLIC POLICY

#### Michael Hughes

Vice President, Center for Science and Public Policy Susan Wilcox Assistant Director, Center for Science and Public Policy Sarah Stokes Alexander Director, Sustainability and Leadership Programs Heather Bergman Associate

Senior Associate Stephanie Cheval Senior Program Coordinator Marketing & Web Development Coordinator Jody Erikson Associate Gina Gardiner Program Coordinator Mary Davis Hamlin Senior Associate Meg Kelly Associate Jeremy Kranowitz Associate Helen Littrell Program Coordinator Caelan McGee Associate Ed Moreno Associate **Catherine Morris** Director, Energy Practice Group Judith O'Brien Senior Facilitator & Director, Keystone Energy Board and Keystone Food & Nutrition Roundtable Johanna Raquet Program Coordinator Will Singleton Senior Associate Brad Sperber Senior Associate and Director, Health and Social Policy Practice Group

Janesse Brewer

Doug Thompson Senior Mediator and Director, Environmental Practice Group Sierra Trujillo Program Coordinator

### The Keystone Center is a sh 30 years, The Keystone C advance, for the next 30 years. Life, wrote one Spanish philos make these collisions law forme

are rooted in the civili

With the strong leadership now at the helm, Bob Craig's vision of learned exchange at the frontiers of knowledge will continue to come true—to the benefit of the United States and the world.

Shelby Coffey III was executive vice president at ABC News in New York before he became news chief of CNN in 1999. Prior his work with ABC News and CNN, Coffey served as editor of the Los Angeles Times. Currently, Mr. Coffey is a Senior Fellow at The Freedom Forum.



# A REFLECTION FROM A TRUSTEE OF THE KEYSTONE CENTER

The Keystone Center is a shining beacon to the power of ideas and dialogue. As it has for the last 30 years, The Keystone Center will stand at the crossroads of practical innovation, aiding social advance, for the next 30 years.

Life, wrote one Spanish philosopher, is a series of collisions with the future. The Center's role is to make those collisions less fierce and more beneficial for all elements of society. The Center's successes are rooted in the civilizing influence of structured dialogue, powered by pragmatic analysis.



Le.

### **KEYSTONE OFFICE**

1628 Sts. John Road Keystone, CO 80435 Phone (970) 513-5800 Fax (970) 262-0152

### **DENVER OFFICE**

1580 Lincoln Street Suite 1080 Denver, CO 80203 Phone (303) 468-8860 Fax (303) 468-8866

## WASHINGTON DC OFFICE

1730 Rhode Island Avenue, NW Suite 509 Washington, DC 20036 Phone (202) 452-1590 Fax (202) 452-1138

### www.keystone.org

Selected photos courtesy Bob Winsett Printed on recycled paper

©The Keystone Center 2006