INSTITUTE FOR ENVIRONMENTAL SOLUTIONS

2008 ANNUAL REPORT

SCIENTIFIC SOLUTIONS FOR A BETTER ENVIRONMENT

THE INSTITUTE FOR ENVIRONMENTAL SOLUTIONS IS AN INDEPENDENT NON-PROFIT ORGANIZATION THAT ENGAGES STAKEHOLDERS TO DELIVER PROACTIVE, TECHNICALLY SOUND SOLUTIONS TO COMPLEX ENVIRONMENTAL AND NATURAL RESOURCE PROBLEMS THAT AVOID UNWANTED SIDE EFFECTS.

FROM THE EXECUTIVE DIRECTOR

Greetings:

As 2008 drew to a close, I reflected on our accomplishments, which I am proud to say were many.

During 2008, IES began work with the City of Golden, Colorado, on a second major initiative, *Emerging Contaminants – Linking Science to Effective Action*. This project addresses one of the most challenging environmental problems affecting Colorado waterways. Through this project, IES seeks to determine the sources of trace concentrations of pharmaceutical and personal care product contaminants in drinking water, increase the community's awareness of its impact on water quality, and implement scientific strategies to prevent these contaminants from entering waterways.

Project successes include the release of TreeScapes – an online, interactive, and user-friendly tool that allows homeowners to optimize, quantify, and visually display the environmental benefits of trees on their property. This tool originated from our work on The Tree Project, which continued in 2008 toward its goal of identifying how trees can be used to optimize energy and water conservation, mitigate climate change, improve air quality, and manage stormwater. Now in Phase 3, look for more Tree Project progress in 2009 through stormwater management, ozone air pollution mitigation, and the Colorado Urban Forestry Climate Coalition.

IES Executive Director enjoys a hike in Yellowstone National Park.

To help spread the word about our important work, IES launched a new Web site that makes it easier to find information about the organization and all our projects. We also introduced a new e-newsletter called *Stakeholder Connection*. This quarterly news brief allows us to inform all our stakeholders and friends of project updates, progress, and news. You can find back issues of the newsletter on our Web site. Please just let me know and I'd be happy to see that you receive future issues via e-mail.

The IES Board of Directors grew in size and energy in 2008, completing a comprehensive strategic and fundraising plan. The new plan will anchor IES's work through 2009, as we continue to put our mission into action. The joint efforts of IES's energetic board members, staff members, graduate interns, volunteers, and associates made 2008 a great success in delivering proactive, technically sound solutions to complex environmental and natural resource problems that avoid unwanted side effects.

Please visit our Web site, www.i4es.org, and consider getting involved in one of our projects to improve our environment.

Sincerely,
Carol E. Lyons, *Executive Director*

WHO WE ARE AND WHAT WE DO

The Institute for Environmental Solutions (IES) recognizes an urgent need to find, test, and implement sound, scientific, cost-effective solutions to complex environmental problems. Too often when dealing with environmental challenges a gap exists between science and action. Even when sound information is available, the barriers that exist among government agencies, businesses, and the community may prevent essential communication to enable effective solutions.

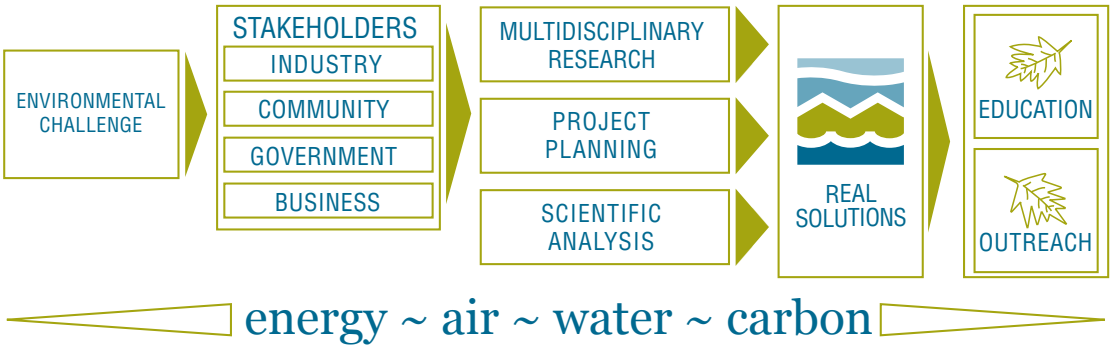
IES changes the way environmental issues get resolved by building broad coalitions of stakeholders – from government, industry, and the community – and using only sound, independent, objective scientific information.

By addressing environmental issues with a multidisciplinary technical approach and broad stakeholder involvement, we can prevent waste and unwanted side effects, provide opportunities to optimize environmental improvements, and reduce energy consumption and greenhouse gas emissions.

IES works with partners and stakeholders to solve environmental problems. We work toward positive outcomes by:

- Asking difficult questions
- Tackling complex, seemingly intractable problems
- Challenging the status quo to collaborate effectively by involving the full range of community, business, and government participants
- Testing and demonstrating technically sound potential solutions in the real world
- Measuring effectiveness objectively
- Disseminating results
- Providing educational outreach and information

IES's approach emphasizes an element critical to a successful remedy – communication and integration across technical, organizational, and social barriers.



TOP SIX ACCOMPLISHMENTS FOR IES IN 2008

LAUNCHED THE EMERGING CONTAMINANTS PROJECT

The *Emerging Contaminants (EC) – Linking Science to Effective Action* project advanced in 2008 through the launch of a pilot project with two major goals: to reduce the amount of ECs that people contribute to local waterways and to increase their awareness about ECs. We began the pilot program in Golden, Colorado, our partner city, and established a project steering committee with members representing a broad spectrum of stakeholders. We will test the effectiveness of prevention strategies aimed at reducing the contributions of ECs made by individuals through local education and outreach, focus groups, surveys, and public communication.

In 2008, the dedicated EC project team designed a detailed project plan and schedule with the following components:

- Water analysis to see which ECs exist and in what amounts
- Surveys of Golden's citizens to determine which products (e.g., shampoo, detergent, medication) they consume and in what quantities
- Prevention strategies that target the ECs that our analysis indicates are the most pressing and preventable
- An education and outreach campaign, to inform the citizens of Golden about ECs, where they come from, their environmental consequences, and how to change behavior when making individual choices in product selection

Our environment provides beauty and a space to breathe.

PUBLISHED THE TREE PROJECT PHASE 2 FINAL REPORT

IES published the 200-page Final Report on Phase 2 of The Tree Project, documenting the findings of the field research program and measurements to identify how trees can be used to optimize energy and water conservation, carbon sequestration, and air quality. In conjunction with this research and analysis, IES developed and published the Strategic Plan for Environmental Improvement – Tree Planting, Management, and Sustainability Planning for the City of Golden. The results of The Tree Project were also used to prepare Model Municipal Environmental Tree Guidelines. All IES publications are available on our Web site.

INITIATED THE COLORADO URBAN FORESTRY CLIMATE COALITION

IES began a community-based climate change mitigation program that applies urban forestry as a marketable greenhouse gas offset, the first of its kind in the nation. In this program, Colorado communities will work together through the Colorado Urban Forestry Climate Coalition (CUFCC) to develop, aggregate, and market the carbon sequestration function of their urban forests. The project will enable communities to collectively harness the greenhouse gas offset potential of their urban forests while optimizing trees' environmental and human health benefits. As part of the project, IES:

- Developed a preliminary program plan
- Identified and reached out to stakeholders
- Prepared a program prospectus
- Delivered presentations to professional meetings and conferences

RELEASED TREESCAPES

IES designed, developed, tested, and released TreeScapes, an online, interactive, and user-friendly tool that allows a homeowner to optimize, quantify, and visually display the environmental benefits of trees on their property. The tool, available free on the IES Web site, www.i4es.org/treescapes.htm, first asks users to choose a direction for the front of their home, the size of house, and dimensions of their property and then, using drag-and-drop technology, to place individual existing trees and "plant" potential trees on their virtual property. The tool provides a scored list for the existing trees and new trees based on their environmental benefits, including:

- Carbon sequestration (global warming mitigation potential)
- Air quality improvement
- Energy savings
- Prevention of stormwater runoff
- Water conservation potential

INTRODUCED *STAKEHOLDER CONNECTION* – A QUARTERLY E-NEWSLETTER

IES developed this new tool to link and inform you about project updates and research. Quarterly e-mailings began in late September. The IES Board adopted a strong privacy policy, with the commitment that the names and contact information of IES stakeholders, friends, and donors will not be shared, sold, or otherwise released to anyone.

LAUNCHED A NEW WEB SITE

New projects, and a need to better inform current and future partners, inspired IES to create a new Web site, www.i4es.org, that makes it easier to find general IES information and updates on projects and research.

The EC team creates the project plan and schedule.

The IES Board works hard to lead IES to success.

2008 IES BOARD OF DIRECTORS

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Our board members guide our strategy. Pictured (left to right) back: Robert E. Brady, Jr., W. Gale Biggs, John Thornton. Front: Amy K. McGuire, Cindy Hanna, Tucker Hart Adams, Elizabeth V. Gardener.

Trees provide many environmental benefits.

2008 STAFF AND ASSOCIATES

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Welby Gardens Co.
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The development staff and interns bring funds into IES by writing grants. Pictured (left to right) back: Ryan Moore, Sara Klingenstein, Jack Hoopes, Ruth Gaulke, Lys Smith. Front: Graham Hill, Sarah B. Lade, Carol E. Lyons.

2008 STAFF AND ASSOCIATES CONTINUED

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James M. Williams
Socioeconomic & Public
Policy Consultant
Denver, Colorado

All who support IES throughout the year celebrate at the annual summer potluck. Pictured (left to right) back: Howard Kiyota, Susan Bardwell, Mandy Gruchow, Alana Burrow, Cindy Hanna, Carol E. Lyons, Sara Klingenstein, Ryan Moore, Robert E. Brady, Jr., Elizabeth V. Gardener, Ann J. Lockhart, Claudia Browne, Ruth Gaulke. Front: Lys Smith. Amy K. McGuire, Desirée Thorp, Jack Hoopes, Karma, Kristen Bertuglia.

THANKS TO ALL WHO HELPED MAKE 2008 SUCCESSFUL!

GRANTS

IN SUPPORT OF THE EMERGING CONTAMINANTS PROJECT:

Laura Jane Musser Fund, Minneapolis, MN

IN SUPPORT OF THE TREE PROJECT:

Xcel Energy Foundation, Denver, CO

City of Golden Parks & Recreation Department, Golden, CO

Plant-It 2020, Highlands Ranch, CO

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$0-$99

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Claudia Browne
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$1,000-$2,499

Elizabeth V. Gardener
Cynthia Hanna
Marilyn Kelman
Robert Medlock
John P. Thornton

$5,000-$7,499

GivingFirst – The Community First Foundation
Carol Lyons

IN-KIND DONATIONS

Cairn Consulting – Jack Hoopes
Gaulke Photography – Jim Gaulke
Hanna Design – Cindy Hanna and the staff
Image Brew Designs, LLC – Benjamin C. Jones
VideoGraphicArts – Anne Farrell

THE TREE PROJECT STEERING COMMITTEE

Chris Condit, The Climate Registry
Elizabeth Gardener, Denver Water
Sheila Hayter, National Renewable Energy Laboratory
Howard Kiyota, Xcel Energy
Joe Schalk, City of Westminster
Judith Ward, Critical Habitats, Inc.
Keith Wood, Colorado State Forest Service

THE EMERGING CONTAMINANTS PROJECT STEERING COMMITTEE

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Brandon Weaver, New Belgium Brewing Company
Jim Wilson, P.E, J.D., Roche Colorado Corp.
Theresa Worsham, City of Golden
Robert Young, J.D., Colorado State University

Many ingredients in personal care products include trace amounts of organic chemicals.

2008
FINANCIAL REPORT

	IES Operating	Projects	TOTAL
Income			
Balance forwarded*			$ 19,666
Grants	8,785	56,355	65,140
Interest	87	-	87
Board Contributions	7,330	-	7,330
Other Contributions	14,680	-	14,680
Total Income	**$ 30,882**	**$ 56,355**	**$ 87,237**
Expense			
DIRECT EXPENSE			
Dues, Training, Registration Fees	470	135	605
Internet and Website	1,093	925	2,018
Insurance	946	-	946
Meeting/Conference Supplies	351	498	849
Mileage	724	2,846	3,570
Office Rent/Equipment	-	-	-
Office Supplies	1,306	1,106	2,413
Parking Transportation	17	94	110
Postage/Shipping	231	248	479
Printing and Reproduction	1,278	3,739	5,017
Software	248	-	248
Taxes	1	-	1
Telephone Services	431	302	734
Total DIRECT EXPENSE	**$ 7,095**	**$ 9,894**	**$ 16,989**
LABOR			
Executive Director	-	-	-
Administrative Expense	7,230	1,545	8,775
Grad Student Interns	600	980	1,580
Professional/Technical Staff	-	2,225	2,225
Research Associates	6,320	66,942	73,262
Total LABOR	**14,150**	**71,692**	**85,842**
Total Expense	**$ 21,246**	**$ 81,586**	**$ 102,831**
Balance			**$ 4,072**
2009 Grants Receivable	$ 3,976	$ 14,929	$ 18,905
2009 Corporate Gifts Receivable	$ 1,250	$ 3,750	$ 5,000

** Balance forwarded on January 1, 2008 and funds transferred to accounts were corrected from December 31, 2007. Revisions were due to transactions that were completed but not recorded in the bank accounts.*

IES WELCOMES YOUR SUPPORT

Help support scientific solutions for a better environment! We welcome contributions and grants that support our mission. Through the generous contributions of IES supporters, IES implements its mission and broadens the environmental cause through the Tree Project and EC project.

Your tax-deductible gift can be made by credit card (through Community First Foundation, which pays all credit card fees) at **www.GivingFirst.org.**

Interested in helping with a project? IES welcomes participation by all individuals and organizations that support our mission and goals:

- **Professionals** interested in environmental solutions may join IES as Institute Associates. Visit our Web site or contact us directly for more information.
- **Students** at a graduate school or advanced level can apply for intern positions listed on the Web site.

Please call or e-mail with your questions, comments, and requests for more information.

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Water sustains life.

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Thanks to Jim Gaulke of Gaulke Photography for many of the 2008 Annual Report photos.

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