INSTITUTE FOR ENVIRONMENTAL SOLUTIONS
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Volume One, Number Two, December 2008

IES presents urban forestry carbon credit opportunities at state conference

IES Senior Research Associate Ryan Moore delivered a presentation on opportunities to develop marketable carbon credits from urban forestry programs at the Colorado Terrestrial Sequestration Conference in Brighton on December 4. Ryan discussed how businesses, local governments, foresters and other community members can support urban forestry, improve their local environment, and mitigate climate change by participating in the Colorado Urban Forestry Climate Coalition (CUFCC). IES is collaborating on this project with key organizations including the Colorado State Forest Service, the Colorado Tree Coalition and the National Carbon Offset Coalition. The presentation covered new developments in the carbon credit market that make it possible to support urban forestry programs in Colorado. IES is now forming the CUFCC Steering Committee. Interested representatives of businesses, local governments, state agencies, and other organizations can find out more by visiting www.i4es.org/climatecoalition.html or by contacting Ryan at ryan@i4es.org.

Stakeholders guide next steps for *Tree Project*

Twenty-one stakeholders participated in the fifth *Tree Project* Stakeholder Workshop held November 6, 2008, in Denver. Participants heard the project's Phase 2 findings, including the value of air pollutants removed by urban forests, the results of water and energy conservation modeling, and barriers to optimal tree planting revealed by the project's survey of public attitudes and knowledge. The stakeholders then set priorities for future work, including building a comprehensive list of tree attributes and maintenance strategies and developing better guidance for cities on tree selection and planting. These tasks are now being incorporated into the project's Phase 3 design. Such consultation in project planning is part of IES's trademark approach, which promotes communication and collaboration among all parties affected by an environmental problem to contribute to the solution. Too often, environmental actions yield unwanted side effects because the project was conceived too narrowly. IES seeks diverse stakeholder input early and often to strengthen project design and reduce the potential for unexpected or unwanted outcomes.

Don't miss *The Secret Environmental Lives of Trees* at the ProGreen Expo, January 15

IES will present a seminar called *The Secret Environmental Lives of Trees* on Thursday, January 15, 2009 at 3:15 p.m. at the ProGreen Expo. The seminar will cover the environmental tradeoffs of urban forestry and strategies for optimizing benefits such as air quality improvement, energy and water conservation, and carbon sequestration. The ProGreen Expo, at the Colorado Convention Center in Denver, January 12-16, 2009 will feature more than 800 exhibitors and 171 seminars on topics related to landscaping and urban greening.

Colorado Healthy Rivers Fund Grant awarded to IES's *Emerging Contaminants Project*

IES's *Emerging Contaminants (EC) Project* is off the ground and running, thanks in part to a generous grant from the prestigious Healthy Rivers Fund. The Healthy Rivers Fund is supported by donations through the

Colorado state income tax form. The Fund helps support local watershed organizations across the state in their efforts to protect water resources. The EC project has a unique preventive approach to the problem of emerging contaminants. ECs are organic chemicals whose appearance in the environment has been recently detected in trace amounts. The rate of occurrence, fate, and impact of ECs are poorly understood, but their effect on human and ecological health is suspected to be adverse. The Pilot Phase of the EC project will collaborate with the City of Golden, Colorado, to educate its citizens about ECs and measure resulting reductions in EC levels downstream of the city.

Trees can help manage stormwater

Stormwater runoff can lead to the ecological and physical degradation of river ecosystems. High runoff volume often results in costly damage, requiring repairs such as bank stabilization. Small quantities of the many pollutants carried by stormwater runoff can harm rivers and streams, necessitating expensive water treatment processes. Using strategic tree planting, stormwater managers may be able to decrease runoff volume and the amount of pollution in the water, reducing downstream infrastructure costs and protecting the environment. Trees can reduce and clean up runoff through their ability to increase both infiltration (the rate at which water enters the ground) and filtration (the process of reducing pollution). Trees trap a significant amount of rainfall on leaf and trunk surfaces. As tree roots grow and then decompose, they change the soil structure, increasing the rate at which water enters the soil as well as the ability for soil to store water. Trees slow erosion by reducing the velocity of drops hitting the ground. Depending on climate and local stormwater management policies, investing in the urban forest may return large savings from avoided infrastructure development (including, in some cases, avoided retention ponds) and water treatment.