

US EPA ARCHIVE DOCUMENT



HIRI NEWS

Sacramento prepares a proposal with the NRDC, Los Angeles conducts urban airshed modeling

Call participants

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Urban Heat Island Pilot Project and Cool Community updates

Los Angeles

Urban airshed modeling

Gary Gero (City of Los Angeles) spoke about the urban airshed modeling Los Angeles is conducting using UAM-IV and MM3. Using the modeling, the city hopes to quantify the air quality benefits of urban heat island reduction initiatives. Los Angeles is conducting this modeling with the help of the Lawrence Berkeley National Laboratory (LBNL) and the

consulting firm ENVIRON. The modeling has indicated an average ozone reduction of 9 ppb and a 1 ppb peak reduction. Los Angeles will use the modeling results to create maps with isopleths showing the effects of heat island reduction strategies, in terms of NO_x and VOC reductions. Los Angeles plans to present the modeling process and results to the South Coast Air Quality Management District, the California Air Quality Resources Board, and EPA Region 9.

The urban airshed modeling reconciles two previous modeling attempts by Environ and LBNL, which showed different results. Los Angeles is using a moderate implementation of heat island reduction initiatives in its modeling effort. The city hopes to present these results at the air quality modeling workshop in DC in March. When available, Gary will send the group a briefing package of modeling information (e.g., charts, information on the modeling approach).

Sacramento

Proposal with NRDC

Lisa Gartland (PositivEnergy) is working with the Natural Resources Defense Council (NRDC) on a proposal to be submitted to the governor for \$50 million to implement more heat island reduction strategies in California. The proposal would cover 20 different communities, phasing in five communities each year over 8 years. Proposed projects include regional workshops, staffing full-time staff and interns in each city, cool roofing on residential and commercial buildings, cool pavement demonstrations, cool landscaping projects, cool schools projects, air quality modeling, and design assistance for a new University of California campus. Lisa is collecting letters of support to give to the governor. The proposal will be submitted within the next week.

Demonstration project

Sacramento's Cool Community Program will implement cool pavings coatings and vine shading on a parking lot in downtown Sacramento.

Outreach

Sacramento will hold a cool roofing seminar in July, and will have a booth at the Great Valley Workshop in Sacramento in May. Lisa also recently gave a presentation to EPA Region 9 on the Cool Community Program.

Salt Lake City*EMPACT proposal*

Camille Russell (Utah Office of Energy Services) said that the Utah Office of Energy Services is applying for a grant under EPA's Environmental Monitoring for Public Access and Community Tracking (EMPACT) Program. The proposal is for delineating thermal data for the Salt Lake Valley. The proposal includes delineating the data into geographical/political boundaries and conducting a land use analysis within each boundary. The proposal also includes creating an interactive web-based system in which communities can access the land cover analysis for their communities and locate hot spots for planting trees. Work also includes comparing the land cover analysis with historical data sets to determine what environmental changes have occurred within the last 30 years (e.g., land cover changes, wetland and farmland loss).

The Office of Energy Services is partnering with Beth Murphy (Geoscience and Energy Institute, University of Utah) and a private Geographic Information Systems firm for the proposal which is due in April 2000.

Youth education

Several elementary schools have completed their "Kool Kids" projects. TreeUtah has provided funding for planting trees around the schools, using the landscape plans designed by the children. Camille is working with other environmental groups to create a curriculum for teachers on environmental issues such as wetlands and water.

ICLEI workshop

Vancouver, Canada, will host a national workshop on climate change in March. ICLEI is collecting information on heat islands for this workshop. Camille, who has been in touch with ICLEI, passed along Virginia Gorsevski's (EPA) contact information.

PBS segment

The local PBS station will air an hour-long tree documentary including information on heat islands. TreeUtah and other groups have contributed to this documentary. Camille will send Virginia a copy of the documentary when it is available.

Camille will also give a series of presentations to the League of Women Voters. In addition, Salt Lake City will test a white coating as part of a demonstration project in a parking lot.

NASA*Outreach*

Maury Estes (NASA) and Fran Stewart (Louisiana Department of Environmental Quality) gave presentations on heat island

reduction initiatives to the Louisiana Forestry Conference and to a U.S. Department of Agriculture air quality task force.

Workshops

Maury attended a NASA meeting in Arizona on state and local government initiatives. He passed along contact information for several of the city coordinators as sources for additional information on urban heat islands.

NASA plans to host four regional workshops this year to solicit information on the uses of remote sensing and satellite data. NASA hopes to learn from state and local governments how it can facilitate the use of the data collected. The workshops will be held during the following months: May 2000 (Midwest), August 2000 (Western), November 2000 (Northeastern) and December 2000 (Southeastern). When they are available, Maury will send Virginia the details and dates of the workshops for distribution to the group.

Maury said that the American Planning Association (APA) will publish an article in its April newsletter on heat islands. Maury will send the article to Virginia for distribution to the group.

Atlanta

Lucie Griggs (American Forests) was not able to participate in the conference call, but she e-mailed the coordinators an update on Atlanta's activities.

Demonstration projects

Atlanta continues to discuss demonstration projects with the Metropolitan Atlanta Rapid Transit Authority. The Atlanta Steel

Authority. The Atlanta Steel brownfield redevelopment has agreed to a demonstration project. Construction will begin in late 2000.

Atlanta may also submit an EMPACT proposal with Fulton county.

Conferences

Lucie recently participated in the Greenprints 2000 conference attended by over 950 architects, developers, and engineers. The agenda focused on smart growth and sustainable design. Lucie moderated a panel on environmentally-friendly parking lot construction.

In April, Lucie will give a presentation to the National Ready-Mix Concrete Association's Southeastern Promotion Forum in Orlando.

ABC segment

Lucie spoke with an ABC reporter who said that ABC news will do a follow-up story on Atlanta's heat island and sprawl issues within the next couple of weeks. The reporter plans to interview Lucie and Dale Kemmerick (Georgia Environmental Protection Branch) for this story. Lucie will send more details to the group when available.

Maury said that Atlanta received Haider Taha's (LBNL) modeling results as part of Project Atlanta. The results indicate a peak ozone reduction of 7 ppb, assuming cities increase albedo for residential and commercial roofs, roads, and parking lots. The results were also based on the assumption that each residential unit would get four trees and each industrial unit would get six trees as a result of the heat island reduction initiatives.

March air quality workshop

The air quality workshop will be held March 6-7, 2000, in Washington, DC, to discuss air quality modeling studies. Haider will present results of the pilot city studies, and Sharon Douglas (ICF Consulting) will present information on a recent study completed for the northeastern United States. The rest of the workshop will focus on a plan to streamline the modeling process.

Virginia is working with Haider to finalize his modeling report and hopes to have the report available at the workshop. All cities experienced reductions in ozone concentrations, and Sacramento experienced a reduction in peak ozone concentrations.

Jim Schwab (Senior Research Associate/Editor for Zoning News) e-mailed Virginia. He is interested in mainstreaming heat island reduction information into the planning profession. Virginia will forward the e-mail to Maury and will discuss ideas on following-up with APA.

Virginia is meeting in March with pavement contacts Harry Tormey (W.R. Grace company in Houston) and Robert Garbini (President of the National Ready-mix Concrete Association).

Virginia's abstract on air quality modeling was accepted at the American Council for an Energy-Efficient Economy conference which will take place this summer. Virginia will co-author this paper with Haider and Dave Sailor (Tulane University).

Next steps

- C When it is available, Gary will send the group a briefing package on Los Angeles' urban airshed modeling efforts.
- C When they are available, Lucie will send the group more details on the ABC segment.
- C When it is available, Camille will send Virginia a copy of the tree documentary.
- C When they are available, Maury will send Virginia the details and dates of NASA's regional workshops on remote sensing and satellite data.
- C Maury will send Virginia the APA article for distribution to the group.
- C Virginia will forward Jim Schwab's e-mail to Maury.

The next conference call is scheduled for Thursday, March 23, 2000, from 4:30 to 5:30 p.m. EST. The call-in number is 202-260-7280, and the access code is 7617#.
