

The Center for Integrated Solutions to Climate Challenges

Climate Service
for Urban Centers

Sustainable Cities Network –
Regional Meeting

Sept 25, 2012



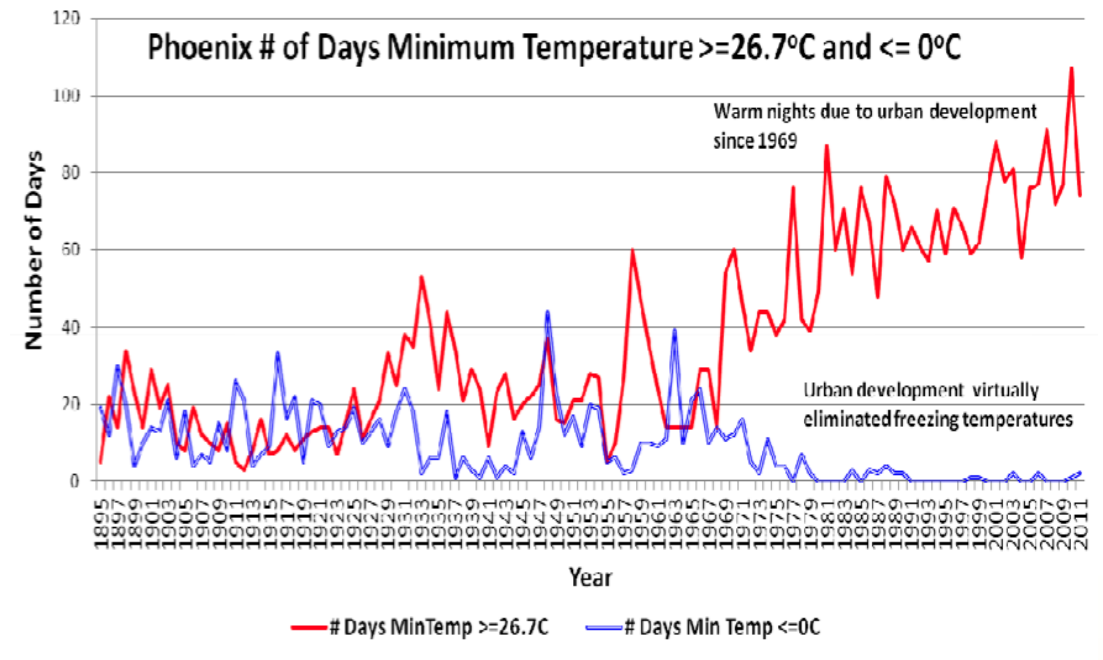
ARIZONA STATE UNIVERSITY

Climate challenges at the cities' doorsteps

- Cities and municipalities are at the frontline
- In Arizona climate challenges are happening now

Climate challenges in Phoenix metro

- Drought
- Increasing night time temperature
- Urban heat island effects
- Air quality & asthma
- Ozone exceedance days



Source: Arizona State Climate Office

Climate challenges at the cities' doorsteps

- Cities plan for mitigation and adaptation measures
- Cities desire current climate science that is *relevant & usable to them* at local level

(Not) Communicating science...

- This **climate science** information is generally geared for academic journals;
- Climate science information is rarely transformed into usable narratives that **speak to or is relevant** to decision makers;
- It is generated through **researcher interest** rather than through the perspective of planners and decision makers.

Climate service

- National conversation
- Global Institute of Sustainability
 - Advancing knowledge for applied solutions,
 - Creating means for improved decision making.

The Center for Integrated Solutions to Climate Challenges

A unit of the Global Institute of Sustainability at ASU

The Center

*The Center's mission is to **coproduce** integrated research-based decision tools and services with **urban decision makers** to enable more comprehensive management and planning decisions in the face of climate variability and uncertainty.*

Strategy

- Through **engagement** with decision makers for timely and relevant information that can be applied for real-world adaptation and solution efforts;
- By **communicating climate science** and research more effectively and by making it more relevant for all users including researchers.

Center Services

Dynamic interactive web portal

- One stop site for managers and the public
- Interactive, dynamic and multi-layered (transparency)
- Each layer contains prioritized information
(scenarios, services and products, model runs, data)

Direct engagement

- Regular outlook forums and workgroups with city planners & resource managers
- Leverage existing networks and forums, eg: SCN, DCDC

Education program

Print, verbal and visual products

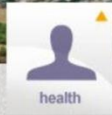
Policy briefs, bulletins, 3D visualizations, webinars, TED-like talks

living in our future climate

integrated research-based decision support tools and services for urban decision-makers in the face of climate change and uncertainty



air quality



health



water



energy



food systems



infrastructure

about CISCC

The Center for Integrated Solutions to Climate Challenges, Global Institute of Sustainability, Arizona State University works with practitioners and stakeholders to understand how climate variability and uncertainty impact the decisions they make, including how they plan for the associated risks to their communities and to themselves. Our goal is two-fold. First is to engage urban decision makers and understand their needs in order to produce timely and relevant information as well as real-world adaptation scenarios. Second is to make the climate science and research easy to understand and accessible for all users.

recent reports & publications



Assessing xeriscaping as a sustainable heat island mitigation approach for a desert city

[Read More ▶](#)

expert profile



Dr. Georgescu's research focuses on identifying hydro-climatic and air quality impacts resulting from large-scale urbanization, as well as

in the news

upcoming events

quicklinks

- [Plain English Guide to the Clean Air Act](#)
- [AIRNow](#)
- [Explore Earth's Water Cycle](#)
- [Special Report: Changing Climate](#)
- [Scorching Phoenix Plans For An Even Hotter Future](#)

Current actions

- Assembling 80+ experts at ASU
- Assembling stakeholders from cities, tribal nations and counties
- Inventory of climate science on Phoenix metro and arid regions
- Focus on dissemination of published science
- Translating science into plainer language
- Establishing **working groups** to address urban challenges in climate:
 - Air Quality, Water, Energy, Health, Transportation/Infrastructure, Food Systems & Climate

Working Groups

Climate & modelers: Alex Mahalov, Mohamed Moustouai, Matei Georgescu, Robert Balling, Kevin Gurney, Randy Cerveny, Marty Anderies, Soe Myint, Nancy Selover, Bohumil M. Svoma + stakeholders

Air Quality: Jim Anderson, Huei-Ping Huang, Pat Mariella+ stakeholders.

Health: Rolf Halden, Gerardo Chowell-Puente, Sharon Harlan, + stakeholders.

Energy: Gary Dirks, Pat Phelan, Harvey Bryan, Mike Pasqualetti, Tony Brazel, Clark Miller + stakeholders.

Water: Enrique Vivoni, Pat Gober, Dave White, Ben Ruddell, Paul Westerhoff + stakeholders.

Food systems: Hallie Eakin, Netra Chhetri, Rimjhim Aggarwal + stakeholders.

Transportation: Ram Pendyala, Michael Kuby, Aaron Golub + stakeholders.

Decision-making/ ecosystems/sustainability: Dan Sarewitz, Ann Kinzig, Osvaldo Sala, Dan Bodansky, Arnim Wiek+ stakeholders .

Practitioner experts: Ray Quay, Kris Mayes, Peter Hyde, Al Brown, Michael Dalrymple.

Health-Climate Working Group

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Welcome to the Project Tracking Workspace

These pages are designed to help the group identify issues and collaborate on projects. Your guidance, input and time are greatly appreciated. Do not hesitate to contact Nalini Chhetri at nalini.chhetri@asu.edu or climate@asu.edu if you have any questions or issues that need to be addressed by the Center for Integrated Solutions to Climate Challenges staff.

Overview

The Health-Climate Working group consists of researchers, urban decision makers and practitioners who are interested in sharing information and working together to integrate current modeling techniques and develop new models and tools to prepare our cities for an uncertain climate.

Recent List Items

Title	Assigned To	Status	Priority	Due Date	% Complete
Prior to First Meeting	All members	1.) Active	2.) Medium	September 17, 2012	0%

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Overview


The Energy-Climate Working group consists of researchers, urban decision makers and practitioners who are interested in sharing information and working together to integrate current modeling techniques and develop new models and tools to prepare our cities for an uncertain climate.

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 [Maricopa2002.jpg](#) 566k - Sep 18, 2012 2:37 PM by Nancy Selover (v1)

Objectives

1. Engage decision and policy makers, practitioners, the public and researchers to understand each other's needs and to co-produce integrated, timely and relevant modeling tools and scenarios for use in daily decision making and planning.

Water-Climate Working Group

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Questions?

climate@asu.edu