On Friday, October 2, 2009, approximately 70 decision-makers, water managers, environmentalists, and emergency preparedness planners joined with a binational group of multi-disciplinary researchers in the coastal city of Puerto Peñasco, Sonora to discuss problems related to water, climate variability and climate change in the border region. The stakeholder workshop was sponsored by the National Oceanic and Atmospheric Administration (NOAA) and the Inter-American Institute for Global Change Research (IAI). Other sponsors included the University of Arizona Udall Center for Studies in Public Policy, the Colegio de Sonora, Mexico’s National Water Commission, the State Water Commission of Sonora, the Instituto Tecnológico Superior de Puerto Peñasco, and the Center for the Study of Deserts and Oceans.

Dr. Margaret Wilder, one of the principal organizers of the workshop (with Dr. Nicolás Pineda of the Colegio de Sonora, Hermosillo) and deputy principal investigator on the NOAA-SARP “Moving Forward” Project, said the workshop planners were exceptionally pleased with the participation and interaction at the workshop, including from both high-level government officials within relevant agencies and water managers at municipal and state levels. “This is only the third stakeholder workshop in our SARP/IAI series, and over just 12 months, there appears to have developed a very positive feeling about the emergence of this network of managers, decision makers, and researchers from both sides of the border,” she noted. “The language of water managers appears to be shifting a bit to include some of the things we researchers want them to be thinking about—how to plan adaptively and reduce vulnerability even in the face of uncertainty.”

The workshop had two primary objectives: first, to promote stakeholder interaction, participation, and exchange of ideas and information; and second, to focus the scope of the binational science-stakeholder engagement onto a more specific set of problematics and adaptation priorities. Following an official welcome by the workshop sponsors and the inauguration by the Municipal President Alejandro Zepeda Munro (Puerto Peñasco), the event got underway with an energetic “icebreaker” exercise. Participants paired into small groups of 3-5 people, and exchanged their “major climate-related concern” with one another. The most salient of these were then shared with all workshop participants.

A morning breakout working session asked participants to focus on specific questions for 30 minutes, and then each group’s response was discussed in detail by all participants. The session asked the groups variously to: a) Identify major vulnerabilities in the urban water sector; b) identify major problems relating to climate variability and climate change; and c) evaluate where the binational stakeholder-researcher collaboration should prioritize its attention, looking ahead towards the future. A plenary discussion to synthesize each group’s comments was led by Dr. Nicolas Pineda of the Colegio de Sonora and Dr. Patricia Romero-Lankao, of the National Center for Atmospheric Research.
A session on the role of desalination in addressing regional water supply and sustainability issues created a good deal of debate. Ing. Jorge Ayala, coordinator of a desalination plant proposal for the municipality of Puerto Peñasco gave a presentation of the planning, design and schedule for the plant, and addressed environmental concerns and how they would be managed under his proposal. His presentation noted the possibility of an Arizona-Sonora agreement involving the Puerto Peñasco plant as a supplier for water for Arizona cities. The presentation set off a vigorous debate about the effectiveness and adaptability of desalination in view of the extensive water losses within the current water delivery systems, both urban and irrigation, that hover around forty percent. Other participants expressed concerns about the equity impacts and costs of desalted water, and potential environmental impacts on the estuaries of the Upper Gulf of California and on fragile desert areas near the border.

The results of an online pre-workshop survey of participants discussed by Dr. Gregg Garfin, associate director of the UA’s Institute of the Environment, however, indicated acceptance of desalination as a probable component of future strategies to have sufficient water supply on hand to meet increasing demand.

Highlights of the workshop also included three major presentations by prominent government officials or academic researchers from outside the region. Dr. Valentina Davydova, Deputy Director of Mexico’s National Weather Service, Mexico D.F., presented her agency’s findings regarding the high degree of intra-regional variability and climate patterns within the northwest region. Davydova urged that this variability must be factored into urban water adaptation planning. Dr. Efraín Nieblas, of the state government of Baja California, presented an update on the first year’s experience of the State Climate Action Plan in Baja California. The climate action plans—or PEAC’s, in their Spanish acronym—are now a federal government requirement for all states in Mexico. Sonora has yet to get a PEAC process underway, and Nieblas’ report on the process undertaken by counterparts in the climatically-related Baja California created great interest among workshop participants.

Dr. Patricia Romero-Lankao, a social scientist and researcher at the National Center for Atmospheric Research (NCAR), drew the attention of the workshop to the need for context-specific vulnerability assessment in order to create appropriate and effective plans for addressing climate variability and change in the water sector. Dr. Romero-Lankao’s talk was based on her extensive research in Mexico City and other major cities in the ‘developing’ world. Dr. Graciela Schneier-Madanes offered an insightful commentary on the keynote.

Other workshop sessions included a roundtable panel discussion of coastal and urban vulnerabilities, with researchers and environmentalists from both Sonora and Baja California, and a roundtable panel discussion of the role of planning in making urban water management more adaptive. Panel participants included deputy director of hydrology for Mexican Water Technology Institute (IMTA), Dr. René Lobato; the
director of the National Water Commission’s northwest region office, Florencio Díaz Armenta; and the director of the state’s water commission, Enrique Martínez Preciado.

Workshop organizers will issue a full report by the end of the month, and photos and presentations will be available on the Udall Center workshop at: http://udallcenter.arizona.edu. A fourth workshop is anticipated for May 2010 in Hermosillo, Sonora.