

sophisticated tools to bear on the problems at hand.” Doing so, says Kohl, will take some of the mystery out of science. “Policymakers’ lack of science literacy greatly impedes their abilities to make informed decisions. It’s critical that more scientists become involved at all levels of the political process from local to state to national.”

Based on the DOE’s successful experience with AAAS Fellowships to date, Bill says it’s likely that other science programs within the Office of Science will host AAAS Fellows in the future. “It’s a great opportunity for the Office of Science to look at extremely talented people who have good technical skills who might be interested in working longer term in program management or policy development within the federal government,” he explains. “It’s a win-win situation. AAAS Fellows get to see firsthand what we do within the Office of Science and decide if this is the area where they want to apply their scientific expertise.”

**Alexey Voinov**  
2006-07 AAAS Fellow at the U.S. Army Corps of Engineers  
Institute for Water Resources

2006-07 AAAS Science & Technology Policy Fellow Alexey Voinov was the first AAAS Fellow to be placed at the U.S. Army Corps of Engineers (Corps) Institute for Water Resources (IWR). The IWR helps the Corps anticipate changes in water resources conditions by analyzing emerging national water resources issues.



Originally from Russia, Alexey received his PhD in biophysics and ecosystem modeling from Moscow State University. He relocated to the United States in 1992 in order to pursue broader science career opportunities. Before coming to Washington, DC, Alexey was associate research professor at the University of Vermont’s Gund Institute for Ecological Economics and the Computer Science Department. He brought to his fellowship nearly 25 years of experience in environmental and sustainability science with most of his research focusing on ecosystem modeling, including spatial, dynamic modeling of watersheds, lakes, and ponds.

During his fellowship year, Alexey used his research background in applied participatory modeling to help the Corps develop and strengthen its efforts in Shared Vision Planning, an innovative approach to water management and conflict resolution developed by the Corps. “Shared Vision Planning involves stakeholders in the modeling process

from the beginning, so by the time the model is finished, they feel an ownership in the product, and challenges have been addressed along the way. It's a powerful approach," Alexey says.

In addition, Alexey participated in the Upper Lakes Study and then prepared an Energy Water Nexus Outlook paper about the Corps' position on related water and energy issues. "The Outlook paper will help IWR as it considers different approaches to managing demand for water as we run out of cheap, accessible energy," Alexey says. "This should be an important policy change, since so far

federal agencies are much more focused on the supply side."

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He also led the modeling team working on the Shared Vision Planning Approach for the James River Basin in Virginia, and helped organize a group of AAAS Fellows interested in sustainability and alternative resources issues. After completing his fellowship, Alexey joined the Chesapeake Research Consortium, a nonprofit corporation chartered by the State of Maryland to research and solve problems affecting the Chesapeake Bay and its watershed, where he serves as program manager for the Chesapeake Community Modeling Program.

Although Alexey was IWR's first AAAS Fellow, many department workers were already familiar with AAAS Fellowships. Henry "Hal" Cardwell was a 1996-98 AAAS Diplomacy Fellow at the U.S. Agency for International Development and now works as a hydrological environmental engineer at IWR. He also served as one of Alexey's mentors and supervisors.

"IWR is a great place for AAAS Fellows with backgrounds in systems engineering, economics, or water resources, and who consider themselves to be facilitators or negotiators," says Hal. "We're excited to be able to bring in more scientists via AAAS Fellowships. We hope this will help us better educate others in broader policy circles about the work IWR does." In the future, AAAS Fellows placed at IWR may work on water resource policy issues, such as analyzing the linkages between water resources development and water resources problems like drought and floods.

