

**Summary of
Roundtable Discussion on the USGS Cooperative
Water Program**

March 9, 2005, Washington, DC

On March 9, 2005 twenty-six representatives of USGS water cooperators joined fourteen managers from the U.S. Geological Survey for the first national meeting of stakeholders in the Cooperative Water Program (see attached roster). The cooperators represented a cross section of the nearly 1,400 government entities at the State, local, and tribal government level who participate with the USGS in jointly funded water data collection and studies. The meeting was jointly sponsored by the USGS and the Interstate Council on Water Policy (ICWP). Marci DuPraw of Resolve served as the Facilitator.

The objectives of the meeting were to provide an opportunity for the cooperators to hear about the status and recent achievements of the Program, to learn about the nearly-completed external review of the Program, to give feedback to the USGS about the Coop Program, and to share common ideas with each other (see attached agenda).

The meeting began with a tribute by Joe Hoffman of the Interstate Commission on the Potomac River Basin and Bob Hirsch of USGS to Tom Stiles of the Kansas Department of Health and Environment for his outstanding service to the ICWP, the USGS, and the Advisory Committee on Water Information.

Bob Hirsch gave a presentation that highlighted some background information on the Program, trends in funding, outlook for Fiscal Year 2006, examples of recent projects and data-collection activities, and actions taken in response to the recommendations of the 1999 External Review Task Force. For 110 years the USGS has been collecting data and conducting interpretive studies in jointly-funded efforts under this program. The distinguishing feature of the program is joint funding for shared benefits of water data and science. The data help to populate the National Water Information System, the USGS comprehensive and publicly available water database. Indeed, 65 percent of the USGS streamgaging network is funded through the Coop Program. In addition to streamgaging, the Coop Program also includes collection of data on ground water and water quality. Much of the data collected through the Program, including an increasing amount of the ground-water and water-quality data, is made available in near-real time via telemetry and the internet.

The Coop Program represents 44 percent of the entire USGS Water Resources program, and covers its share of USGS scientist and technician salaries; rent, vehicles, administrative staff, databases, quality assurance, and field-office management. The Program was operated for many years on a 50-50 cost-share basis, but in recent years the Cooperator share has risen to about 67 percent while the Federal share has fallen to about 37 percent. In Fiscal Year 2004 cooperators contributed \$138 million to the Program, while the USGS, through the Cooperative Water Program line item in its Congressional appropriation, contributed \$64 million.

Bob illustrated the data collection and interpretive studies in the Coop Program with the following examples:

- Real-time streamgaging nationwide
- Real-time monitoring of shallow ground water in Pennsylvania
- Effects of acid deposition and logging practices on forests and water quality in the New York City watersheds in the Catskills
- Effect of solids retention time on removal of pharmaceuticals and other organic wastewater contaminants, New York City
- Saltwater intrusion into aquifers under Long Island
- Methodology for determination of ecological water needs in New Jersey streams
- Phosphorus in the Illinois River, Oklahoma
- Pesticides and PCB's in fish in Lake Texoma, Oklahoma
- Land subsidence due to ground-water withdrawals in California and elsewhere

In 1999 the USGS requested that an external review of the Program be conducted by a Task Force of cooperator and other-Federal-agency representatives under the auspices of the Advisory Committee on Water Information. The Task Force made 59 recommendations, nearly all of which are in various stages of being implemented, or have been implemented. This has resulted in a stronger program through improvements in:

- Communications with cooperators on priorities
- Interaction with other USGS disciplines
- Avoiding competition with the private sector
- Establishment of NSIP program
- Ground-water Climate Response Network
- Timeliness of reports

Bob noted that continuing efforts are still underway to complete improvements in:

- Federal matching funds
- Further improvement in timeliness of reports
- Growth of NSIP
- Cooperator involvement in data collection
- Defining appropriate balance of data and projects

Bob finished with two scenarios regarding financial impacts if funding were available to return to a 50-50 match ratio. In one scenario the total funding in the Program would remain at the 2004 level of \$202 million, but the contributions would be equalized. This would save the cooperators \$37 million. In the second scenario, the total contributions from cooperators would remain the same (\$138 million), and USGS contributions would rise to match that level. This would provide an additional \$74 million for new data collection and studies.

Barney Austin gave an overview of the work of the 2004 External Task Force to Review the Cooperative Water Program:

USGS has made some good strides implementing recommendations of the 1999 Task Force, including:

USGS data collection and dissemination are unique, free, and comprehensive.

Coop Program web site has been established.

USGS is making significant progress putting reports on the internet.

Of the 59 recommendations in the 1999 Task Force report,

--6 are complete,

--50 have been accepted and are in various stages of implementation,

--2 have been partially accepted (in-kind services, 11.3, and proposals on the web, 17.1), and

--2 have been rejected (billing for gaging based on actual cost for each station (8.2), use of outside contractors for gaging (11.2a)

Of the recommendations that are still in need of additional effort, those with highest priority included:

--Restoration of 50:50 match in the Coop Program

--Establishment and funding of the National Streamflow Information Program to provide Federal funding for streamgaging (it has been established but is not fully funded.)

--Emphasis on long-term data collection versus interpretive studies

--Greater use of in-kind services as cooperator match

--Concentrate on core competency (long-term data collection)

--Improve timeliness of reports, explain review process, make unpublished data available, maintain point of contact for long-term projects, and improve knowledge transfer within USGS.

Like Bob, Barney closed by emphasizing the growing gap between Federal and non-Federal contributions to the Cooperative Water Program. This funding gap has grown by 50 percent from \$40 million in 1999 to about \$60 million in 2004.

A Panel of Three Cooperators next gave their views on strengths of the Cooperative Water Program, challenges the USGS could work on, and things that cooperators can do to improve the Program.

Tom Stiles, Kansas Department of Health and Environment, noted that there are sometimes issues related to the cost and timeliness of USGS products, but emphasized three strengths in a philosophical way:

--When you tap into the Coop Program, you buy into an innovative ability to solve problems.

--The Coop Program pulls in nationwide expertise.

--The USGS streamgaging network is at "the top of the list", and is helpful to States in many ways, including determination of total maximum daily loads.

As for challenges, Tom mentioned several:

- Need to close out some projects when they are finished and not draw them out longer than they are needed.
- Need to refrain from including policy- or value-laden conclusions in scientific products. For example, refrain from too strong an implication as to what constitutes “good” or “bad” water quality.
- District Chiefs are pulled in two directions, meeting the needs of cooperators and meeting the objectives of the USGS and the national interest. In an ideal Cooperative Program, these needs and objectives overlap nicely, but in reality they sometimes conflict.
- Pressure from the Department of the Interior to turn the USGS inward, away from the needs of States, and toward the needs of DOI Bureaus.

Tom suggested that Cooperators can help the USGS with:

- The Program Assessment Rating Tool (PART) exercise, by documenting benefits derived from the USGS programs and products.
- Being more transparent in sharing State strategic plans.
- Press for greater funding for basic hydrologic work, which is needed as the foundation for much additional water-resources work such as water-quality management.
- Taking greater ownership of Coop Program studies, including greater use of in-kind services and more co-authored reports.

Duane Smith, Oklahoma Water Resources Board, mentioned some pressing water management issues facing Oklahoma, such as the growth of animal feeding operations and interstate rivalries over water. While Duane is a proponent of outsourcing, he said his agency tried doing some streamgaging on their own, and he found that collecting flood data is expensive. He concluded that the USGS is really not that expensive, and that the USGS credibility is worth the expense. He still feels that with sufficient training and quality assurance, willing cooperators can effectively participate in some data collection.

With respect to Federal funding for the Coop Program, Duane said the Oklahoma Delegation feels the problem is too large for one delegation to handle.

Jeff Myers, New York Department of Environmental Conservation, mentioned the value of the cooperative effort with USGS on real-time surface-water data collection. He also said a cooperative effort on ground-water monitoring has grown from 5 to 60 sites in recent years. He mentioned some examples of valuable interpretive studies in the Coop Program, and that the results of some, such as wastewater treatment modification to achieve greater removal of pharmaceuticals, are highly transferable to other states.

Among the strengths of the program, Jeff listed USGS expertise and the benefits of leveraged funding. There is a related challenge, however: his agency puts a large amount of unmatched funding into the agreements, but they are reaching the limit of their ability to absorb more than their share of additional increases.

Jeff suggested cooperators could help with strategic planning for the program.

A few highlights from the discussion that followed:

--We are continuing to manage through a crisis, trying to do more with less. We are getting to a point where additional Federal matching funds are needed.

--USGS has been taking some steps toward greater involvement of cooperators in strategic planning at the local level, and will do more at both the local and national levels.

To summarize the panel discussion:

Strengths of the Program:

- Innovative; ability to synthesize disparate approaches to data collection
- Full agency support and resources
- Gaging Network itself and its longevity
- Quality, reliability and availability of data
- “cost-effective” way to provide high quality data; consistent data over time
- Dedicated staff, bring a lot of expertise
- Way of leveraging cooperative resources
- Separation between ‘information’ and ‘regulation’ (science-based objectivity)

Challenges that USGS could Improve On:

- Need clarity about scale of new initiatives – has resource implications
- How baseline/background water quality is taken into consideration re WQ standards...USGS should stay in objective science mode; technical/regional-peer benchmarks OK, being careful not to adopt ‘stds’ that might not be supported....
- Help reconcile directional pulls on District Chiefs – e.g., agency mission/national public good vs. district/state/local needs
- Pressure from USDOJ on USGS to turn inward vs. toward cooperator needs
- Training cooperators to help with streamgaging activities
- Improve coordination with state, Federal and tribal entities seeking funds for streamgaging
- Increase Federal match
- Get out of ‘crisis’ mentality (toward long term planning) – note: thought this applied esp. to state strategic planning (not USGS – they do do national long-term strategic planning)

Possible Cooperator Actions:

- Document benefits of data collection (and also Interpretive studies) to states

States being transparent w/USGS re Strategic Planning (and doing such planning at state level) to coordinate deployment of people, resources, etc.

Ongoing support for streamgaging network and USGS role in it

Take more ownership of Coop Studies (offer in-kind services, esp. in terms of state staff involvement; co-author reports...)

Improve coordination with state, fed, tribal entities seeking funds for streamgaging

Get out of crisis mentality – take more long-term view, do strategic planning

Coordinated effort across cooperators (nationwide) to seek additional Federal funds for Coop Water Program (esp. for NSIP stream gages of National interest) – e.g., expand role of statewide group(s) like ICWP, WSWC, ASIWPCA...

After lunch, **Chip Groat**, USGS Director, made some comments including:

Chip was surprised that this was the first national meeting of Coop Program stakeholders, and surprised that the Coop Program represents 35 percent of the total USGS reimbursable funding. “When partners come together and share money, it’s real.” He acknowledged the growing funding gap between the USGS and the non-Federal partners, and cited the example of a cooperative program in the USGS Biological Resources Discipline, where the cooperators got together to communicate regarding the funding situation.

Chip described the upcoming changes in regional structure in terms of building on the success of water district chief’s model as a point of contact.

Although we are being more proactive about supporting needs of other DOI bureaus as their science agency; we are making it very clear to Congress and Executive Branch that we are in no way demeaning or reducing our national role.

2006 Budget is a ‘victory’ – closer to actual Congressional appropriation in ‘05. However, a ‘challenging’ victory – with fewer glaring proposed cuts, there may be less attention from constituents and Congress. Some new funds to fix Landsat problem, and additional funding in response to Tsunami by updating global seismic network, both in US and globally.

The bad news is the proposed \$29 M cut in minerals program; still early in the game...

USGS Natural Hazards Initiative – everyone can see the implications and importance. Also USGS seen as a pre-eminent force. Impacts on lives, safety, quality of life, health...esp. effective after this past year with so many hazard episodes. Provide science underpinning, moves in direction of predictability, and differently – translate science, monitoring into some products and services that go right to flood plain managers, disaster response agencies (in consultation with them), to reduce risk to people, places, and structures. Design robust science and monitoring plan in consultation; major outreach effort with response agencies to see what products and services they would like to see. Need strong partners – use cooperative and granting approaches to

implement. Long-term effort. Streamgaging program, floods a clear focus, so the Cooperative Program is expected to be a part of the Initiative.

Next Facilitator **Marci DuPraw** led a discussion to amplify the list of strengths, challenges, and actions that could be taken for the Cooperative Water Program. The results:

Strengths:

- Sound, unbiased science (science independent from policy)
- Credibility
- Ability to draw on entire agency resources
- Direction of the work is both locally-led to a large extent, but because of soundness and consistency, easily rolled up for National picture. Tricky balance to maintain and explain, but a real strength of program.
- USGS is now delivering better data products and delivery, real time, less lost data
- Quality, longevity, access to data key strengths

Areas where the USGS could improve:

- Timeliness of Products
- Highlighting existing “cooperative” effort
- Document program benefits
- Lack of state and Federal budget increases to cover cost of inflation
- USGS produce targeted Fact Sheets and communications to also assist in the funding process
- USGS needs to listen to cooperators and Strike appropriate balance between data and projects
- Expanding Coop program to include other disciplines, importance of streamgaging program, bring in extra dollars and more participation to project work
- Use of USGS equipment (by states) for relaying traffic information (example), bring in more support for program.
- Increase public and political awareness of the availability of equipment for various uses.

Actions Cooperators could take:

- Proactive outreach, get the message out
- Grass roots up at local level – local/county/state--talk about streamgaging, flood protection, QW, WQ issues, talk about value of programs and real life impacts. Nice to get ahead and articulate values, as opposed to crisis reaction and management to be more strategic.
- Helping USGS brand itself that it is a science agency – USGS State of the Union.
- Water is a big issue, all people should be able to relate to it.
- Cooperators can help set vision for multi-year program planning.
- Cooperators can collaborate with USGS on data collection and interpretive studies.

Need for cooperators to get together and form a commonality, consistent story, that cooperators can take to congress to request additional support for program, ICWP, WSWC, TWDB for state-specific funds; more effective National letter jointly from Cooperators to take to each of local state reps for overall support at Federal level for NSIP program.

Incorporate working with USGS and Admin and Congress to bring National perspectives into planning/budget process

Coordinated efforts, more effective and more powerful – and not compete for individual piecemeal resources.

Involvement of Cooperator throughout all stages of products, planning, implementation, and delivery.

In Bob Hirsch's feedback on the items suggested above, he referred to the balance of data and interpretive studies. Bob is reluctant to cut back too much on projects—after all, the USGS is responding to local needs as expressed by cooperators. Data and projects support each other and need each other. The USGS mourns the loss of a gage, but we also mourn the loss of scientists who do the interpretive work.

As for the boundary between science and policy, Bob agreed that the USGS needs to be policy-relevant but policy-neutral.

Bob pledged to strive for even better communications with cooperators and their associations.

The **final discussion** was a session just among the cooperators. Among the comments emanating from this session:

Cooperators cannot continue indefinitely to absorb more than their fair share of cost increases. USGS needs to pick up some of the increased costs.

Both the Cooperative Water Program and the National Streamflow Information Program (NSIP) are in need of additional Congressional funding.

Cooperators would like to be partners, not just payers.

Cooperators, working at times with each other and at times with the USGS, can help with public relations, political strategy, and strategic planning. They should discuss these issues with their association members and encourage them to make their feelings known to influential groups.

Four associations emerged as potential leaders in consolidating cooperator actions: Interstate Council on Water Policy, Western States Water Council, Association of State Floodplain Managers, and National Association of Flood and Stormwater Management Agencies. ICWP will put the notes from this meeting on their website.

Cooperators can be a part of the work, including data collection and projects.

USGS should protect data first before interpretive studies.

A follow-up meeting similar to this one might be helpful.

Bob Hirsch closed the meeting by expressing sincere gratitude for the time, effort, and thoughts contributed by the participants.