

Dear Reader,

The 2004 Task Force is pleased to submit this report of our review of the progress made to date by the U.S. Geological Survey in addressing the recommendations made by the 1999 Cooperative Water Program Review Task Force. We appreciate the opportunity to conduct this review. The collection of sound, scientific water data nationwide is important to a large constituency across the country. We commend the U.S. Geological Survey for this review process and their efforts to make the program as strong as possible. In addition to an Executive Summary, our report consists of four main sections and two appendices, as follows:

- I. Background** provides a brief overview of the activities of the 1999 Task Force and lists the members of the 2004 Task Force and their affiliations.
- II. USGS progress since 1999** describes the number of recommendations from the 1999 report that have been completed or where substantial progress has been made in the past 5 years.
- III. Areas of disagreement or insufficient progress** describes issues identified as needing additional focus or areas in which the USGS did not agree with the 1999 Task Force recommendation.
 - Long-term data and core competency
 - Relationship with the private sector
 - Use of in-kind services
 - Availability of information on proposals on the internet
 - Billing cooperators based on actual, rather than average costs
 - Scheduling/timing of reports
 - Funding issues

IV. Summary of 2004 Task Force findings

Appendix A provides the terms of reference of the 2004 Task Force.

Appendix B lists, for each of the 59 recommendations made by the 1999 Task Force, the status, the priority rating and assessment by our Task Force and provides an implementation schedule for those recommendations needing additional attention.

On behalf of the 2004 Task Force members,

Barney Austin,
Chairman

Executive Summary

In 1998 the Advisory Committee on Water Information (ACWI) established a Task Force to review the Cooperative Water Program (CWP). The 1999 review was the first external review of the CWP in its 105-year history. The purpose of the 1999 review was to gather information, assess the effectiveness of the program, and recommend improvements. In 2004, five years after the CWP Task Force report was released, the USGS and ACWI expressed interest in an external evaluation of the progress made to date by the USGS in responding to the recommendations of the 1999 Task Force. A new Task Force was assembled under ACWI to provide such an evaluation. This report contains details of that evaluation.

Significant progress has been made by the USGS since the release of the 1999 Cooperative Water Program Task Force report. Although the total number of water monitoring stations is slightly lower now than in past years, the number of stations across the country for which real-time water resources monitoring data are available is significantly higher, which has been of great benefit to water users, water managers and the general public. Furthermore, in the few years since the Task Force report was released, data quality has improved, due in part to the ability of the new telemetry equipment to help identify faults in a timely manner and the advent and use of acoustic technology.

Of the 59 recommendations made in the 1999 Task Force report, most have either been adopted by USGS or are in various stages of planning or implementation. Recommendations where the USGS is not in total agreement, or the present Task Force felt that insufficient progress had been made are discussed in this report. Recommendations that need special attention or may involve a change in USGS philosophy are also given special attention and are summarized here:

1. To make the best use of limited funds when funding shortfalls occur, the members of the present Task Force believe that the USGS should place emphasis on data collection, rather than interpretive studies. If anything the balance of Federal funds used as match by the USGS has gone the other way, thereby exacerbating an already difficult situation for data collection. It is important that the USGS continue to perform interpretive studies to validate their work, but they need to be careful not to reduce their data collection efforts.
2. When funding shortfalls occur, it makes sense to examine existing resources available from both the USGS and their Cooperators and make sure they are being used most effectively. Sometimes Cooperators could do more of the actual work with their staff, but have no money to pay the USGS to do the same work. Cooperators have a vested interest in ensuring the highest quality of data and often have a lot of expertise and non-fiscal resources to bring to the table. The USGS should re-examine the use of in-kind service credit and continue to look for ways to foster better working relationships with cooperators.
3. The USGS should continue to be extra vigilant in avoiding competition with the private sector. Some basic data collection and dissemination functions are inherently governmental and these duties belong to the USGS. Government oversight and criteria are needed to ensure consistent information is collected in a consistent format. However some studies could realistically be done by the private sector and the USGS needs to make sure that they are not competing unfairly with the private sector in bidding for and conducting this work.

Many of the recommendations that have not been fully implemented are due to lack of funding, rather than lack of will on the part of the USGS. There is a serious need for adequate and consistent Federal funding of the CWP. Recent shortfalls in Federal funding have resulted in the loss of important water monitoring stations and a greater financial burden being placed on cooperators, who now provide approximately 68% of the total costs. Also, vital interpretive studies were either significantly cut, or not funded at all. The TF regards Federal funding shortfalls as the most critical issue currently facing the program and a major impediment to implementing the remaining Task Force recommendations. In realizing the need and calling for additional Federal appropriations for the CWP, it should be noted that any new funds secured for the CWP should not come at the expense of water-related environmental protection, public health protection, or other related programs.

I. Background

The U.S. Geological Survey (USGS) Cooperative Water Program (CWP), known until 2000 as the Federal-State Cooperative Program, combines resources of the Federal government with other governmental units to collect and analyze water-resources data. Established in 1895, the CWP provides a mechanism for States, Counties, Municipalities, Tribes, and other governmental entities to work cooperatively with the Federal government on a cost-share basis to monitor ground and surface water resources and provide answers to questions about water supply, water quality, and hydrologic hazards. About 65 percent of the cost of the USGS streamgaging program is funded through the CWP.

In 1998 the Advisory Committee on Water Information (ACWI) established a Task Force to review the CWP. The 1999 review was the first external review of the CWP in its 105-year history. The purpose of the 1999 review was to gather information, assess the effectiveness of the program, and recommend improvements. The ACWI focused the review on the mission of the program, prioritization and funding of work, conduct of work, and products. The Task Force held meetings in USGS offices, met with USGS staff, and held panel discussions with representatives of agencies participating in the CWP.

The 1999 review resulted in 59 recommendations, embodied in a report published as USGS Circular 1192, "External Task Force Review of the United States Geological Survey Federal-State Cooperative Program, August 1999", including, in a separate volume, associated appendices A-F. In general, the 1999 Task Force found that the CWP is critical to improving the management of the nation's water resources, and it acknowledged the keen shared interest of Federal, Tribal, State and other government agencies in appraising the Nation's water resources and seeking solutions to water-related problems. They found that the CWP offers the highest level of scientific knowledge, objectivity, and technical expertise, and is vital for provision of long-term data collection and analysis of water quantity, quality, and use on a national basis.

The 1999 Task Force report reflects opportunities for improving the CWP in several areas, including:

- Contribution of Federal funding to the program;
- Separate Federal funding for a core national streamgaging network;
- Emphasis on data collection, which should not be sacrificed for interpretive studies;
- Enhance project selection criteria and better communicate with the private sector;
- Refine the allocation of Federal funds among the USGS Center Offices by setting priorities for individual projects, reviewing the allocation of funds, and developing a system to distribute a small percentage of funds to high-priority needs;
- Enhance communication with cooperators and stakeholders, and
- Improve the accessibility of CWP products.

In October 2001, the Secretary of the Interior, Gale A. Norton, provided a comprehensive response to each of the 59 recommendations in the 1999 Task Force report.

In 2004, five years after the initial external review, the USGS and ACWI expressed interest in an external evaluation of the progress made to date by the USGS in responding to the recommendations of the 1999 Task Force, and a new Task Force was assembled to provide such an evaluation. The 2004 Task Force (hereafter referred to as TF) terms of reference are provided in Appendix A. The membership list is presented below:

Representing

| | |
|------------------------|---|
| Fred Bloetscher | American Water Works Assoc. |
| Bill Cauthren | Assoc. of State & Interstate Water Pollution Control Administrators |
| Tom Dietrich | NOAA, National Weather Service |
| John Jansen | National Ground Water Association |
| Rick Johnson | Water Environment Federation |
| Sue Lowry | Interstate Council on Water Policy |
| Karl Muessig | Association of American State Geologists |
| Barney Austin | Western States Water Council |

Throughout the course of the review, significant input and information was provided by Glenn Patterson, Cooperative Water Program Coordinator, who served as Executive Secretary (non-voting member).

The 2004 TF report will serve as a basis for the ACWI to recommend mid-course corrections to enhance the CWP. While the scope of work laid out in the terms of reference indicates that no new analyses or review of the CWP are required, the Task Force thought it would be useful and appropriate to comment on some areas of particular concern which will likely impact the future viability of the CWP, and to prioritize recommendations that have not been completed or fully adopted by the USGS.

The 2004 TF met in Reston, VA in June 2004, held 3 meetings by conference call during the summer and fall of 2004, and conducted a final 2-day meeting in Denver, CO in November 2004.

II. USGS Progress Since 1999

The TF recognizes that significant strides have been made by the USGS in many areas over the past five years. The number of streamgages across the country for which real-time data are available is significantly higher now than it has been in the recent past; the same is true for groundwater monitoring stations. As gages have Data Collection Platform (DCP) equipment added, the USGS is alerted earlier when there are malfunctions. This has led to a decrease in both the amount of lost data and the amount of interpolated data in station records. The data that are now available on a near real time basis to the public through the National Water Information System (NWIS) over the internet is a great benefit to water users, water managers and the general public.

Of the 59 recommendations made in the 1999 Task Force report, 48 have been adopted by the USGS and all but two of the remaining recommendations are in various stages of planning or implementation. Six of the recommendations from the 1999 report have been completed. A few of these recommendations were relatively easy to implement such as the name change and the mission statement, however some required a significant amount of effort and/or involve a long-term process.

Some of the major accomplishments are listed below. For reference, the recommendation number from the 1999 Task Force report is provided in parentheses at the end of each listed accomplishment.

- Identification, establishment, and partial funding of a Federally-funded core set of streamgaging stations, known as the National Streamflow Information Program (NSIP). (9.1)

- Improved information collection and reporting on the status of implementation of several recommendations. Most of the information is collected from USGS Water Science Centers (WSC, Center) during annual program reviews. At the USGS Water Resources Discipline Senior Staff meeting in October 2004, approval was given to a nationally consistent set of 40 indicators of Center status. Several of these indicators will provide nationally consistent, time-trend information pertaining to specific recommendations of the 1999 Task Force. These include:

- CWP funding (4.1);
 - Overhead rate (8.1, 11.2);
 - Balance of data versus interpretive activities in the CWP (10.1, 15.2);
 - Report production (25.1, 27.1, 27.2, 28.1); and
 - Overdue reports (25.1).

- Development of a CWP web site, including memos on program priorities and on avoiding competition with the private sector. (1.1, 1.2, 16.1, 17.2)

- Improved communications with cooperators and stakeholders regarding priority needs for projects and data collection for the CWP. (13.1, 13.3, 22.1, 31.5)

- Incorporation into project proposals of items to describe the public interest in the project. (14.1)
- Contribution to the cost of streamgages by several new cooperators, who stepped forward despite threats of discontinuation of gaging stations in response to level or declining USGS and/or cooperator funding. Some gages have been funded through the USGS NSIP program. (9.3)
- Reduction of the number of overdue reports. (25.1)
- Findings reported by the ACWI Streamgaging Task Force, on the network of streamgages required to meet national data-collection objectives. (9.2)
- Growth in the number of USGS reports available on the internet. (27.1, 27.2)
- Creation of a national Ground Water Climate Response Network, established to monitor water levels in shallow aquifers influenced by climatic variations. (22.2)
- Increase in partnerships and collaborations among the USGS Disciplines, along with improvements. (31.3)
- Progress in improving the compatibility of databases maintained by the USGS and by other Federal agencies such as EPA and USDA. (12.2)
- A memorandum on avoiding competition with the private sector was updated in 2004, with distribution to all USGS Center offices. The memorandum can be found at: <http://water.usgs.gov/admin/memo/WRD/wrdpolicy04.01.html> . (16.1)

Early on in the TF discussions, it was decided that prioritizing the 59 recommendations would be a useful aid to the USGS. Each member of the TF was asked to seek input from his or her organization and then categorize the recommendations as high, medium, low, or indifferent. Blanks (indifferent) were interpreted as intermediate between low and medium. The following numeric scores were assigned to the results:

| <u>Ranking</u> | <u>Score</u> |
|----------------|--------------|
| High | 3 |
| Medium | 2 |
| Blank | 1 |
| Low | 0 |

The cumulative scores for all the recommendations were computed to determine a rank order for the list. The scores ranged from 22 to 6. Break points were assigned as follows to determine overall priorities to the recommendations:

| <u>Cumulative Score</u> | <u>Overall Priority</u> |
|-------------------------|-------------------------|
| 12 and above | High |
| 7 – 11 | Medium |
| 6 and below | Low |

The breakpoints were selected so that if two or more Task Force members rated a recommendation high, the overall priority was high. If no member rated a recommendation above low, the overall priority was low. All the rest were assigned medium priority. The number of recommendations in each overall category was:

| <u>Category</u> | <u>Number of Recommendations</u> |
|-----------------|----------------------------------|
| High | 14 |
| Medium | 44 |
| Low: | 2 |
| Total: | 60* |

* Total is 60, rather than 59, because recommendation 11.2 was split in two and each part addressed separately.

Appendix B contains the full list of 1999 Task Force recommendations with associated USGS response, TF priority rating, and progress assessment. Selected recommendations where the TF determined there to have been insufficient progress and instances where the USGS does not agree with the TF recommendation are discussed in more detail in the following section.

III. Areas of Disagreement or Insufficient Progress

The USGS does not fully agree with all of the 1999 Task Force recommendations. This section elaborates on these differences. For some of the other recommendations, the TF determined that insufficient progress has been made to date and this section discusses why this has occurred and what ought to be done to rectify the problem.

Emphasis on long-term data collection (10.1) and core competency (15.2)

Recommendation 10.1 in the 1999 Task Force report states that the USGS should place emphasis on long-term data collection which should not be sacrificed for interpretive studies. The TF believes that insufficient progress has been made in addressing this recommendation. Recommendation 15.2 states that the Coop Program should concentrate on its core competency and continue to advance its capabilities in long-term data collection and analysis, technology and model development, and the transfer of technology to end-users. The TF believes that insufficient progress has been made in addressing this recommendation, primarily due to funding shortfalls.

The USGS places a high value on long-term data-collection activities but also greatly values interpretive studies because they are an integral part of understanding the need for, uses of, and ways to improve our networks, as well as stimulating the development of new data-collection techniques. The proportion of data-collection activities versus investigative activities in any State is a function of many variables which causes the role of the USGS in data collection to vary accordingly. The USGS greatly values long-term data, but does not think it is appropriate to place an increasingly greater emphasis on data to the exclusion of a reasonable and complementary number of interpretive studies.

The growth in USGS funding for hydrologic monitoring has not been adequate during the past two decades. The strategic directions document for Water Resources Discipline states "WRD will work with DOI, Office of Management and Budget, and Congress to begin to shift the overall program to increase the funds available for long-term data collection." From FY01 through FY04 the Cooperative Water Program has grown almost entirely through increased contributions from cooperators. In the past two fiscal years, Federal funding has remained flat, however there has been a slight trend toward a greater percentage of funding for investigative projects (see Table 1, below). This trend obviously exacerbates the funding situation for streamgaging, and should be reversed, as recommended by the 1999 Task Force.

| Cooperative Water Program Funding (Dollars in Millions) | | | | | |
|---|-----------------|---------|----------------|---------|---------|
| FY | Data Collection | Percent | Investigations | Percent | Total |
| 2004 | \$32.37 | 51.93 | \$29.96 | 48.07 | \$62.34 |
| 2005 | \$31.84 | 50.17 | \$31.63 | 49.83 | \$63.47 |

Table 1. Distribution of USGS matching funds between data and investigations in the CWP.

A one-time remedy for the shortfall in Federal funding for basic data collection occurred in fiscal years 2000 and 2001. The USGS received an increase of \$12 million in Federal funding for activities to initiate a core national network of streamgages, through its newly instituted National Streamflow Information Program. Since that time funding has been maintained or increased slightly, but has not kept up with inflation.

As our population increases and places additional demands on our limited resources, it is disheartening that streamgages continue to be cut. Federal, state, tribal and local governments, as well as private entities and members of the public, need these data to help plan to meet our future water supply for agricultural, municipal, industrial and environmental needs. Long-term continuous and real-time water resource data are needed to calibrate hydrological models, predict floods, monitor droughts, verify complaints with water treaties and water rights and ensure the long-term viability of our streams and rivers and the quality of life which they bring our communities.

The TF believes that when funding shortfalls occur, the USGS should place emphasis on long-term data collection, rather than interpretive studies, to avoid loss of data. It is important that the USGS continue to perform interpretive studies to validate their work, but they need to be careful not to reduce their data collection efforts.

Relationships with cooperators and the private sector (11.2 (a) and 15.3)

Recommendation 11.2(a) states that the USGS should consider employing outside contractors for data collection under strict USGS supervision when doing so can reduce costs. The USGS disagrees with this recommendation. Recommendation 15.3 states that the USGS should refrain from unfairly competing with or giving the impression of unfairly competing with the private sector. The USGS agrees with this recommendation and the TF agrees that satisfactory progress has been made. However, in order to maintain a positive relationship with the private sector it is vital that efforts continue and that unfair competition is further curtailed.

The USGS has acknowledged the need to work more closely with outside cooperators from state and local agencies and universities. These types of arrangements are becoming necessary in terms of finding efficiencies to maximize the return from available funding. While they agree in principle with this approach, the USGS has shown some reluctance to share responsibility over data collection. Certainly their concerns over adhering to consistent data quality standards and collection procedures are well founded. However, these issues should not be allowed to become a barrier that prevents greater cooperation. These issues have been resolved in several states where cooperative arrangements have been established and should be expanded to cover more areas. Technology should help alleviate some of these issues as data acquisition continues to become more automated. However, the USGS should make efforts to reduce institutional barriers that inhibit their ability to search out and create opportunities to stretch resources by establishing cooperative relationships.

The 1999 Task Force recommended that the USGS must refrain from unfairly competing with private sector entities. The USGS has agreed to this recommendation. As an agency that is

largely supported by taxes, both by direct Federal taxes as well as by state and local tax funds from cooperators, the USGS needs to expand this recommendation to include a prohibition from any competition with private sector entities. This position is supported by the “Policies and Guidelines for Avoiding Competition with the Private Sector in USGS Water Programs”, USGS Water Resources Discipline Memorandum 04.01, dated January 1, 2003 (<http://water.usgs.gov/coop/competition.html>).

While significant progress has been made over the last five years, there are still occasional cases where USGS Center offices have taken on projects that have a scale and project scope that could have been accomplished by local agencies or private consultants. There have also been cases where the USGS used CWP funds to provide a competitive advantage in bidding for services that could have reasonably been outsourced to private contractors. These few cases have occasionally created disproportionate levels of animosity with state agencies and private sector entities. This has diverted time and energy away from the USGS’ core function and limited the amount of support that trade organizations and professional societies can provide in highlighting critical water research needs. Cases almost always are related to investigations, not the streamgaging program. Outsourcing of streamgaging to private firms raises concerns of data quality, longevity and impartiality.

There are certainly many areas where the USGS is the only logical entity to undertake projects. However, the USGS needs to establish clear and consistent guidelines for all Centers to determine what scope and scale of projects are best accommodated by state or local agencies, or private sector entities. These standards may vary by location depending on the level of expertise available, but basic principles and guidelines should be established to guide Centers. The USGS needs to carefully monitor Center activities to avoid inappropriate competition issues and modify Center practices as local conditions change. In cases where the USGS is the logical agency to conduct a project, significant efforts should be made to involve local agencies and private sector entities to the extent that is practical. These efforts will have the advantages of providing flexibility and efficiency in accomplishing the project goals as well as fostering technology transfer between agencies and the private sector.

The USGS has made satisfactory progress since 1999 in avoiding competition with the private sector and should continue to look for ways to foster better working relationships with cooperators and the private sector. Instances where USGS resources or funds are used to provide an unfair competitive advantage should continue to be avoided.

Use of in-kind services (11.3)

In the 1999 Task Force report, recommendation 11.3 states that the USGS should increase the use of in-kind services to maintain data collection stations and provide the data to the USGS for quality assurance and quality control (QA/QC) and publication. The USGS only partially agrees with this recommendation and only when certain conditions are met. Agreements for cooperator participation in data collection are in place in several states including VA, CO, WY, CA, and ID (for surface water), AZ and MD (for ground water), and NJ and MD (for water quality).

Several years ago, direct in-kind service credit was given to state water resource agencies participating in the CWP for the streamgaging and data collection they performed. The data were worked up by the state agency personnel at the end of the water year, and then submitted to the USGS for QA/QC and publication. As the Federal share of funds in the CWP became tighter, the USGS changed their policy to one where in-kind service credits were no longer acceptable and the participating agencies had to come up with cash rather than in-kind contributions. As state budgets tighten and as the USGS continues to raise their cost per gage, the effective buying power of an individual state agency's cooperative program cost share budget drops precipitously. In some states, the water resources agency continues to collect streamflow or diversion data that the state wishes to have included in the USGS Water Resources Data publication. The states now have to pay for the publication of these data, rather than getting any credit or recognition for their contribution to expanding the breadth of data available to the agencies and to the public.

A CWP workshop was held in Washington DC on March 9, 2005 and the cooperators represented made it clear that the continued escalating costs per water monitoring station are unacceptable and the burden of the increase to their own budgets cannot be sustained. In order for the water data needs of this country to be met, a new way of doing business is needed. More efficient use of cooperator expertise has to be part of the solution.

The TF recommends that the USGS reconsider the use of in-kind credit for cooperators providing data collection services. It is important that cooperators be treated like cooperators, rather than funding mechanisms. Use of in-kind credit fosters a better working relationship with cooperators and may have the effect of reducing loss of water monitoring stations when funding shortfalls occur.

Information on proposals to be posted on the internet (17.1)

In the 1999 Task Force report, recommendation 17.1 stated that information on proposals should be posted on the internet at the time the proposal is forwarded to the Regional Hydrologist for approval. The Regional Hydrologist should consider comments, but not lengthen the time frame in which projects are approved. The recommendation stated that the decision should be communicated to the Center and to all those who submitted written comments. The information should include a statement of how the project is in compliance with WRD Memorandum 95.44 on avoiding competition with the private sector (now superseded by WRD Memorandum 04.01).

The USGS partially agrees with this recommendation. Most cooperators and project chiefs consider proposals confidential until agreements are signed. Unapproved proposals are considered pre-decisional documents under the Freedom of Information Act, and are therefore exempt from requirements for public release. USGS will, however, post project information once projects are approved.

This is a low priority recommendation and the TF is satisfied with the response and action taken by the USGS.

Feasibility of billing cooperators based on actual, rather than average costs (8.2)

The 1999 Task Force recommended that the ACWI Streamgaging Task Force (now sunsetted) determine the feasibility of billing cooperators for data-collection activities that are based on actual costs.

The USGS disagrees with this recommendation. This approach has been used in the past, however, based on a recent analysis most USGS offices now charge on an “equalized” average cost per station, rather than actual costs. In some cases a “difficulty factor” is applied to the cost for stations that are difficult to access or monitor. Typically, administrative costs are reduced using this approach, because financial transactions are simplified and definitive cost information is available to all parties at the beginning of the fiscal year.

The TF concurs with the USGS position and feels that the benefits of using an equalized average cost per station outweigh the benefits of billing on an actual cost per station basis.

Scheduling/Timing Reports (25.1, 30.1)

The CWP produces over 250 reports each year, and contributes basic data to the annual data reports produced by each USGS Water Science Center. Overdue interpretive reports have been a recurring problem in the program as in the Water Resources Discipline as a whole. Management has recognized this problem and has directed significant efforts toward reducing the backlog of overdue reports and improving on-time report delivery. Current tracking statistics show a slight improvement in report timeliness from 2002 to 2004, with additional effort still needed (see Figure 1).

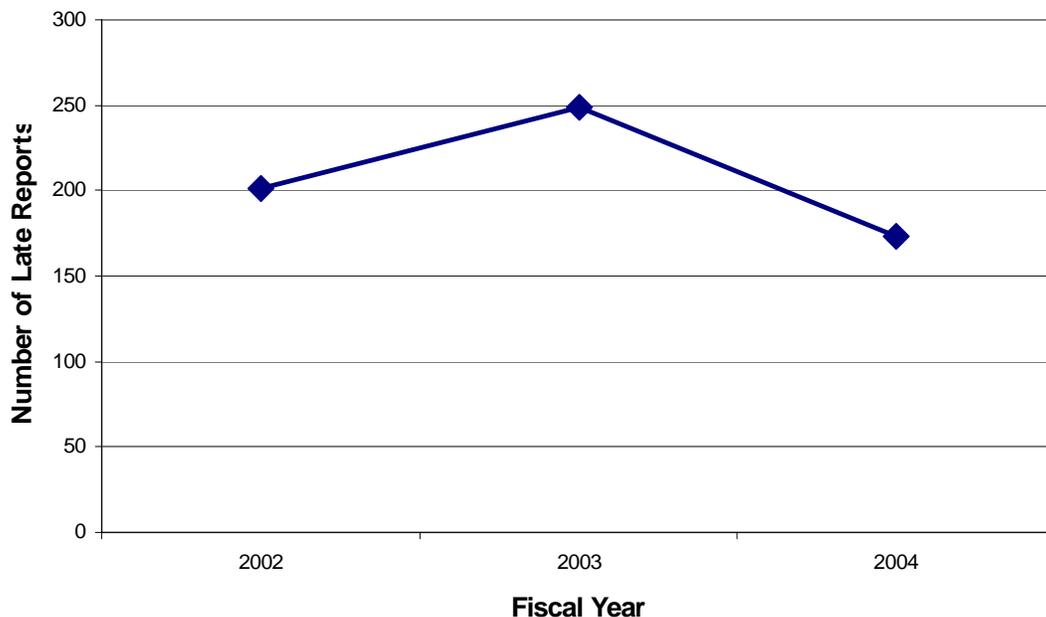


Figure 1 – History of late reports for all USGS Water Science Centers: FY02-04.

The problem of overdue reports is related to several factors, including heavy commitments on scientists' time, unforeseen project delays due to external circumstances, and a review and approval process that emphasizes scientific accuracy. Recent management actions related to allocation of scientists' time, management of projects, and streamlining the report review and approval process have had some success, and continued improvement is expected in the future.

This is a high priority recommendation for which the TF members feel insufficient progress has been made despite some recent improvements. The TF expects the Indicators of District Center tracking, to be implemented in 2006, will help identify and reduce report backlogs.

Funding issues (4.1)

Recommendation 4.1 states that funds for the CWP should be increased to a level sufficient to achieve a full match for the current and future cooperator offerings, and should be indexed for inflation. There is a serious need for adequate and consistent Federal funding to maintain, restore, modernize, and provide for the targeted expansion of the USGS CWP. **The TF regards full funding of the CWP as the highest priority of all recommendations.**

The President's FY2006 request of \$63,770,000 for the CWP is up over the FY05 appropriation of \$63,262,000 but is insufficient to meet the increased cost of water monitoring levied by the USGS. This trend has continued for several years, resulting in the discontinuation, disrepair and obsolescence of a significant number of streamgages, in turn reducing long-term planning and emergency warning capabilities.

Figure 2 shows the trend in Federal and local funding of water monitoring stations in the CWP. Federal funding has not kept up with inflation in recent years, resulting in the local cooperators having to pick up the shortfall. Originally intended to be a 50-50 match, local cooperators are now responsible for 68 percent of the cost of stations in the CWP and there is no indication that the trend will change course. If the CWP funding trend is not reversed then it is clear that additional water monitoring stations will be lost.

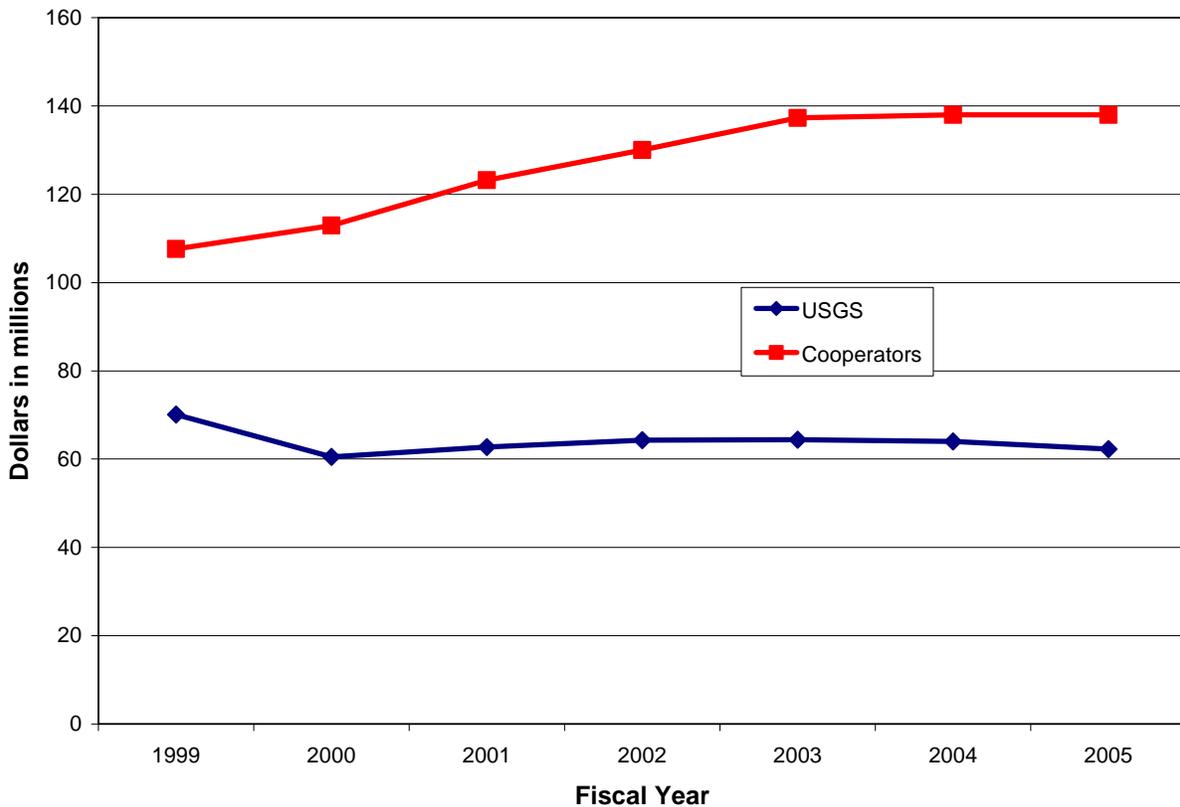


Figure 2. Recent funding history for the USGS Cooperative Water Program.

The National Streamflow Information Program (NSIP) was created partially in response to recommendations 9.1 and 9.2 of the 1999 Task Force report. NSIP has been designed to benefit users of streamflow information in three broad ways – providing increased stability to the streamgaging network by fully funding a Federal backbone network of critical streamgages, providing increased technical understanding of the streamflow information from the network, and enhanced streamflow information delivery to the users. In Fiscal Year 2003, NSIP became a line item in the USGS budget for the first time.

Of the 4,425 streamgages identified to make up the backbone NSIP streamgaging network, as of 2003 approximately 2,800 of these streamgages were active. Of these, however, only about 520 (19 percent) were being funded by NSIP, with the remainder funded through the CWP.

The NSIP plan was reviewed by the ACWI Streamgaging Task Force and by the National Research Council. Both reviews were very favorable of the NSIP design and plans for implementation. However, to fully implement NSIP would require a one time up-front cost of about \$103M to add or reactivate streamgages and upgrade the system, and then about \$95M per year for complete program operation. In FY 2004, NSIP received about \$14.2M, and in FY2005 about \$13.8M, less than 15 percent of the full annual costs for NSIP. At these funding levels, additional streamgages can be expected to be discontinued because of inadequate funding.

In the March 9, 2005 CWP workshop previously mentioned, a group of cooperators formed a committee to look into the possibility of developing and signing a joint letter to Congress describing the CWP crisis and making a specific request for funding. At the culmination of several meetings, it was decided that the letter should be addressed to Gale Norton, Secretary of the Interior and to Marcus Peacock, Office of Management and Budget. To address the funding issues described, the letter requests \$74 million in FY 2007 for the CWP, in order to restore program purchasing power to its FY 2003 level. This amount is still well below the \$138 million contributed by cooperators annually since FY 2004, but would go a long way to improving the viability of the program. The letter further requests \$16.2 million in FY 2007 for the NSIP program to restore program purchasing power to its FY 2003 level and states that another \$100 million would be needed to realize the full vision of the NSIP.

In theory, NSIP relieves the financial burden on cooperators for maintenance of critical stations and frees up funds to support gages that are important for other reasons, or even allows for the expansion of the water monitoring network. In practice NSIP funding has been so inadequate that its impact has not been felt. Flat funding of the NSIP as per gage costs continue to increase has resulted in fewer gages being supported by NSIP.

Streamgage information is used for a multitude of purposes and the timeliness, integrity and long-term reliability of the data is crucial for the effective operation of the programs which the data supports. The under-funding of the nation's streamgages is significantly undermining the long-term viability of the USGS' streamgaging program. Budget shortfalls are the main concern of the CWP and therefore it is vital that appropriations are restored to previous levels and that future spending be increased until the Federal match returns to 50 percent. It is equally important that future Federal funding keep up with program cost increases.

IV. Summary of findings and Task Force recommendations

The TF recognizes that great progress has been made by the USGS in many areas since issuance of the 1999 Cooperative Water Program Task Force report. Although the total number of water monitoring stations is slightly lower now than in past years, the number of stations across the country for which real-time data are available is significantly higher, which has been of enormous benefit to water users, water managers and the general public. Of the 59 recommendations made in the 1999 Task Force report, most have either been adopted or are in various stages of implementation or planning. Areas of disagreement or insufficient progress are briefly outlined in this summary.

The USGS places a high value on long-term data-collection activities but also greatly values interpretive studies because they are an integral part of understanding the need for, uses of, and ways to improve data networks, as well as stimulating the development of new data-collection techniques. However, the TF members feel that when funding shortfalls occur, the USGS should place emphasis on long-term data collection to avoid loss of data.

The USGS has made satisfactory progress since 1999 in avoiding competition and should continue to look for ways to foster better working relationships with the private sector. Instances where USGS funds or resources are used to provide an unfair competitive advantage to the USGS should continue to be avoided.

The TF recommends that the USGS reconsider the use of in-kind credit for cooperators providing streamgaging and data collection services. It is important that cooperators feel and be treated like cooperators, rather than funding mechanisms. Use of in-kind credit fosters a better working relationship with cooperators and may have the effect of reducing loss of water monitoring stations when funding shortfalls occur.

The 1999 Task Force recommended that information on proposals be posted on the internet at the time the proposal is forwarded to the Regional Hydrologist for approval. The USGS has agreed to post project information once projects are approved. This is a low priority recommendation and the TF is satisfied with the response and action taken by the USGS.

The 1999 Task Force recommended that the Streamgaging Task Force determine the feasibility of billing cooperators for data-collection activities that are based on actual costs. The USGS disagrees with this recommendation. It is expected that administrative costs would be higher if cost estimates had to be produced for each individual gage. The TF concurs with the USGS position that the benefits of using an equalized average cost per station outweigh the benefits of billing on an actual cost per station basis.

The CWP produces over 250 reports each year, and contributes basic data to the annual data reports produced by each Center. Overdue interpretive reports have been a recurring problem in the program as in the Water Resources Discipline as a whole. USGS managers have recognized this problem and have directed significant efforts toward reducing the backlog of overdue reports and improving on-time report delivery. Though the current TF members feel that insufficient progress has been made by the USGS in dealing with this recommendation, members also have

high expectation that recently improved project tracking capabilities by the USGS will soon alleviate the problem.

Funding shortfalls have hindered the progress on some of the higher priority recommendations of the 1999 Task Force report. There is a serious need for adequate and consistent Federal funding of the CWP. Recent shortfalls in Federal funding have resulted in the loss of important streamgages and a greater financial burden being placed on cooperators, who now provide approximately 68% of the total costs. The TF regards full funding of the CWP as the highest priority of all recommendations.

Appendix A – Terms of Reference for the 2004 Cooperative Water Program Task Force

I. Official Designation

Task Force 2004 to Review the Cooperative Water Program (Coop Task Force 04) of the Advisory Committee on Water Information (ACWI).

II. Purpose, Scope and Applicability

Purpose - The purpose of the Coop Task Force 04 is to assess the effectiveness of the U.S. Geological Survey's (USGS) Cooperative Water Program (Coop Program) in addressing the recommendations of the first Coop Task Force. These recommendations were published in a 1999 report, USGS Circular 1192, titled *External Task Force Review of the United States Geological Survey Cooperative Water Program*, which will be provided to all Task Force representatives. The written report of the Coop Task Force 04 should discuss continued actions to be taken by the USGS to more fully implement the recommendations of the 1999 report. These two reports taken together will serve as the basis for the ACWI to recommend mid-course corrections to enhance the USGS Coop Program, and will form the basis for a 5-year action plan for the Coop Program, to be developed internally within USGS.

Scope - The Coop Task Force 04 is requested to provide an interim review of the responses of the USGS to the 57 recommendations in Circular 1192 and evaluate its effectiveness in following through on those responses. The scope does not include revisiting the 1999 recommendations, or conducting a new analysis or review of the Cooperative Water Program. The Task Force will have from March through August 2004 to complete its work.

Applicability - As resources are available and consistent with applicable authorities, the USGS will make every effort to improve the operation of the USGS Cooperative Water Program, following the recommendations of the 1999 Coop Task Force, and consistent with the actions outlined by the Coop Task Force 04. The USGS will report at least annually to the ACWI on the status of implementation of these improvements.

III. Membership

The chair of the ACWI will designate up to nine organizations for membership on the Coop Task Force 04 -- seven non-Federal organizations and two other Federal agencies. Of the non-Federal organizations, at least four will also be member organizations of the ACWI. All organizations should use USGS water information, have partnerships with USGS, and/or have interests in the objectives of the Coop Program. Each organization selected as a member will then designate one of their individual members to represent them on the Task Force. For non-Federal organizations, these representatives should be appointed from the organization's membership, and not be association staff.

The Chair of the Coop Task Force 04 will be elected from among the non-Federal member representatives to the Task Force. The USGS National Coordinator for the Coop Program will serve as the non-voting Executive Secretary for the Task Force.

IV. Meetings and Procedures

The Coop Task Force 04 will begin activities during March 2004. The Chair will announce date, time, and location of each meeting or conference call in advance. After an initial meeting and/or conference call, the Task Force will plan further sessions as necessary. Support services shall be provided by USGS. The Task Force report is due to the Executive Secretary of the ACWI by August 31, 2004.

Member organizations are expected to support their representative or their alternate to participate in all meetings or calls. The Task Force will conduct business in an open fashion by discussing and attempting to resolve all issues through consensus and by recognizing the legitimate interests and diverse views of the member organizations as appropriate. Representatives will receive no pay, allowances, or benefits by reason of their service on the Task Force. However, while away from their homes or regular place of business and in performance of service for the Task Force, non-Federal representatives will be reimbursed for appropriate travel expenses, if needed. Travel expenses will include transportation and per diem to cover meals and lodging.

The Executive Secretary will prepare and distribute to all Coop Task Force 04 members a summary of each meeting. Recommendations adopted, actions recommended to USGS, and copies of all studies and reports issued by the Task Force will be submitted to the full ACWI membership for review and approval. Once approved, all Task Force documents will be available to the public on the ACWI World Wide Web site, as well as for review and copying at the following location:

Water Information Coordination Program
U.S. Geological Survey
417 National Center
12201 Sunrise Valley Drive
Reston, Virginia 20192

703-648-5645 or cilewis@usgs.gov

V. Products

A compilation of Coop Task Force 04 meeting summaries and special studies or analyses, if any.

A draft written report describing the findings of the Coop Task Force 04 and its recommendations and actions for continued improvements to the USGS Cooperative Water Program.

A written summary of the ACWI review comments on the draft report, and the Coop Task Force 04 response to those comments.

An oral presentation to the ACWI of the summary findings and recommendations of the Coop Task Force 04.

A final written report describing the findings of the Coop Task Force 04 and its recommendations to the ACWI.

Transmittal of the final report from ACWI to the USGS.

VI. Authority

The Coop Task Force 04 is part of the implementation of the Water Information Coordination Program mandated by OMB Memorandum No. 92-01, dated December 10, 1991. The Task Force reports to the ACWI that operates under the Federal Advisory Committee Act. The Task Force has no independent authority to act without concurrence by the ACWI.

Dates of Approval:

Subcommittee:

ACWI:

Signed: National Coordinator
USGS Cooperative Water Program

Executive Secretary, ACWI
Designated Federal Official

Appendix B – Recommendations of the 1999 Task Force, USGS response, current status and implantation plan, and 2004 Task Force assessment and priority ranking.

1.1 The Task Force recommends that this Mission Statement (included in the 1999 report) be adopted as the Mission Statement of the Coop Program, or that this be used as an initial attempt in the formulation of such a Mission statement.

USGS Response: Agree

Status: Complete. The mission statement is posted on the CWP web site (water.usgs.gov/coop).

2004 Task Force priority: Medium

Task Force Assessment: Complete

1.2 The Task Force recommends that the words “Federal-State” be removed from the USGS Coop Program title in recognition of the broader range of cooperative partners involved in the program.

USGS Response: Agree

Status: Complete. The Program has been renamed and the name is posted on the web site and used in all official USGS documents pertaining to the Program.

2004 Task Force priority: Medium

Task Force Assessment: Complete

4.1 The (Federal) funds (in the CWP) should be increased to a level sufficient to achieve a full match for the current and future Cooperator offerings and should be indexed for inflation.

USGS Response: Agree

Status: Adopted. USGS and other groups are continuing discussions with internal and external entities. Supporting information about funding trends is available.

2004 Task Force Priority: High

Task Force Assessment: Insufficient progress

USGS Implementation Plan: Working with associations of cooperators, USGS will help to convene a roundtable meeting of cooperators and their organizations in March 2005 to discuss funding and other issues. Internally, USGS will continue to work with the Department of the Interior and the Administration to address funding issues.

4.2 Projects that are appropriately funded 100% by a cooperating agency should be reported separately (from projects with cost-sharing). These projects should nonetheless meet the criteria of WRD Memorandum No. 95.44 to prevent the appearance or reality of competition with the private sector.

USGS Response: Agree

Status: Adopted. Several types of reports on activities in the CWP provide sorted information on projects with and without Federal matching funds from the USGS. Examples include funding information in the Basis-Plus project information system and on retrievals from that system. USGS typically produces statistics on unmatched funding from cooperators in various categories, but there is room for improvement and greater specificity in this type of report.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress but continued improvement is encouraged.

USGS Implementation Plan: In 2005 USGS will attempt to report matched and unmatched funding in all reports and tables in which CWP funding is reported.

5.1 Center chiefs should include the following considerations in setting priorities for individual projects and in determining the percentage of match that the USGS puts into a given project: (a) availability of funds; (b) ability of the project to clearly meet the USGS's Congressional mandate to work within the national domain or on issues determined by Congress or the Secretary of the Interior to be in the national interest; (c) ability of the project to meet cooperator needs consistent with national priorities that are established in the USGS Strategic Plan, the WRD Strategic Plan, and the memorandum issued annually by the Chief Hydrologist concerning Coop Program priorities; and (d) ability of the project to meet multiple goals among the eight outlined in WRD Memorandum No. 95.44 (superseded by No. 04.01) (with the understanding that generally a project that meets more of these goals will have a higher priority than one that meets fewer).

USGS Response: Agree

Status: Adopted. Each project proposal addresses these items. A question about this item will be included in a customer survey during 2005.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress

USGS Implementation Plan: USGS will continue to address these items in project proposals. During 2005 a question on this topic will be included in a customer survey.

5.2 Establish a special panel to meet at least every five years to review lessons learned and to provide improvements to the process for allocating funds to Centers.

USGS Response: Agree

Status: Adopted. Some ad-hoc review by Headquarters and Regional personnel was done in 2004, resulting in a minor reallocation of Federal Matching Funds. During 2005 an ad hoc panel will be convened.

2004 Task Force Priority: Medium

Task Force Assessment: Insufficient progress—need to convene special panel and make appropriate adjustments.

USGS Implementation Plan: During 2005 and every 5 years thereafter the ad-hoc panel will be convened and the allocation formula will be reviewed.

6.1 The USGS should consider establishing a program on a regional basis to address high-priority national needs using a small percentage of Coop Program funds. The objective of this program is to fund pressing needs without permanently reallocating funds between Centers.

USGS Response: Agree, if new funding is provided.

Status: Adopted. Will implement when new funding becomes available. In the mean time, the same purpose is served in some measure by the Director's Venture Capital Fund, and by Center and Regional discretionary funds.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress

7.1 Improve collaboration between Region and Center offices on water issues that cross jurisdictional boundaries.

USGS Response: Agree.

Status: Adopted. During annual Center Program Reviews, conducted by each Regional Executive for Hydrology and their staff, information is solicited from each Center identifying emerging issues that cross institutional and political boundaries; including a brief statement of the nature of these interactions. These data are forwarded to the CWP Coordinator to be used in evaluating the nature and extent of emerging issues that cross institutional and political boundaries on an annual basis (Appendix B).

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress

USGS Implementation Plan: Continue to collect information from Centers on issues that cross jurisdictional and political boundaries, and sharing that information with Regions and Headquarters. Also continue to seek input from external and internal sources to help identify such issues.

7.2 Annually review and report all cooperative projects for the purpose of identifying emerging issues that cross institutional and political boundaries and include these issues in the Chief Hydrologist's annual memo on Coop Program priorities.

USGS Response: Agree

Status: Adopted. The data collected during the annual Center Program Reviews are forwarded to the CWP Coordinator to be used in formulating the annual CWP priorities memorandum each year. The priorities memos are posted each year on the CWP web site (water.usgs.gov/coop/priorities). One of the major strengths of Cooperative Water Program is its ability to provide data and assessments on varied topics from across the country, which, when synthesized, can be useful in addressing broad, national USGS mission goals. As recommended by the 1999 External Review Committee the USGS plans to expand these efforts by "pre-planning" selected synthesis products. The FY03 CWP priorities memorandum describes four topics for possible future national synthesis; recharge to ground water systems, fluvial sediments, changes in flood frequency, and synthesis of water quality information. The FY04 CWP priorities memorandum reaffirms these four topical synthesis areas and provides some information as to progress made toward this goal during the preceding year.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress

USGS Implementation Plan: See 7.1 above.

8.1 Produce a report of how the USGS derives current billable costs of the streamgage network.

USGS Response: Agree.

Status: Adopted. Although there will not be a printed report, several documents have been collected that describe how the USGS derives streamgaging costs. For example, see "About Those Streamgaging Costs", 2001, by Brian Mrazik, NH-VT Center Chief, (<http://nh.water.usgs.gov/WhatsNew/newsletters/2001Newsletter/message.htm>). In general, gaging costs, including labor, equipment (including safety equipment), supplies, travel, contracts, permits, and overhead related to gaging, for a typically equipped station, are averaged for each Center. These costs include the cost of training, quality assurance, safety, data handling, and data publication. Prices usually vary for gages with equipment that departs from that of a typical

continuous, real-time streamflow station. Gages with extra costs associated with remote locations or other difficult conditions are usually assigned a surcharge.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: Continue to compute gaging costs based on the average actual cost of maintaining a typically-equipped continuous streamflow gage, with adjustments as needed for different equipment or extremely remote locations. Document gaging-cost computations.

8.2 Utilize the Streamgaging Task Force to determine feasibility of billing cooperators for data collection activities based on actual costs (instead of average cost per station).

USGS Response: Disagree.

Status: Not implemented. USGS feels advantages of equalized gaging costs, particularly the savings from not having to compute and track costs for each gage, outweigh disadvantages.

2004 Task Force Priority: Low

Task Force Assessment: Concur with USGS position.

USGS Implementation Plan: Continue the current procedure for determining gaging costs, as described in 8.1 above.

9.1 Establish an adequate and permanent streamflow monitoring network in the National interest. Funding for long-term data collection should be stressed as a national priority. The Task Force supports the concept that the Federal government should provide 100% funding for a national stream-gaging network, and that the funding for this network should not come at the expense of the Coop Program.

USGS Response: Agree

Status: Adopted. The National Streamflow Information Program was established in 2000 and has been funded at about \$14 million/year since 2001. Of this amount, about \$5.8 million/year goes to recurring costs for operation and maintenance of the national data management infrastructure, and about \$8.2 million/year goes to the Centers for gaging and local data management infrastructure. About 525 of the planned 4,424 NSIP gages are now (2004) supported by NSIP funds. Full funding would require about \$121 million (in 2000 dollars) for one year, and about \$65 million each additional year.

2004 Task Force Priority: High

Task Force Assessment: Insufficient progress

USGS Implementation Plan: Continue implementing the National Streamflow Information Program according to the NSIP plan, as funding permits.

9.2 ACWI (or its Stream Gaging Task Force) should make a specific finding regarding the number, distribution, and character of long-term data sites necessary to meet national data-collection objectives. Similar findings should be developed for groundwater and water quality data sites.

USGS Response: Agree

Status: Adopted. On August 29, 2003 the ACWI Streamgaging Task Force submitted its report stating that an ideal network to meet 14 streamgaging goals would require 18,330 gages. Recognizing the small chance for such a network, the Task Force then endorsed the ICWP proposal for a network of 6,448 Federally funded gages, including 1,370 new gages. The NSIP plan included a smaller number of Federally funded gages: 4,424. The ACWI Streamgaging Task Force also recommended full funding for the National Streamflow Information Program, increasing Federal funds in the Cooperative Water Program to provide for 50-50 match, and continued cooperation with other Federal agencies for reimbursable streamgaging. Recommendations for water-quality sampling can be found in the report of the Intergovernmental Task Force on Monitoring Water Quality. A growing national ground-water level monitoring network, currently comprising about 730 wells, has been initiated by the Office of Ground Water (<http://groundwaterwatch.usgs.gov/>).

2004 Task Force Priority: High

Task Force Assessment: Satisfactory progress

USGS Implementation Plan: The NSIP plan sets forth a reasonable goal for streamgaging stations that meet national objectives. The plans for the National Water Quality Assessment and the National Stream Quantity Accounting Network set forth adequate plans for inland water-quality monitoring to meet national objectives. Planning for water-quality monitoring at the interface between inland and coastal waters is underway by a task group of the Advisory Committee on Water Information in response to a charge from CEQ and the Ocean Policy Commission.

9.3 The USGS should work to limit the loss of long-term stream-gaging stations funded by the Coop Program until the ACWI Stream Gaging Task Force has presented its findings.

USGS Response: Agree.

Status: Adopted. USGS works diligently, but not always successfully, to find alternate funding sources for long-term gages threatened with discontinuation. The ACWI Streamgaging Task Force presented its report in April 2002, recommending that the USGS seek additional funding for NSIP, but also seek additional funding for continued support of streamgaging through the Cooperative Water Program and through reimbursable agreements with other Federal agencies

(OFA). In 2005 there are significant threats of losses in long-term gages in MS, IN, NH, FL, TN, KY, and other states due to cuts in State and OFA budgets.

2004 Task Force Priority: High

Task Force Assessment: Complete, but still concerned about loss of long-term gages. See discussion below.

USGS Implementation Plan: When gages are threatened with discontinuation due to termination of funding, USGS will place a notice on the data retrieval page for each threatened gage, explaining the situation and inviting interested parties to contribute funding to maintain the gage. USGS will also seek additional funding for NSIP to provide Federal funding for long-term gages. And USGS will continue communications with existing cooperators to help ensure continuation of a mutually beneficial partnership.

9.4 Supplement the national data networks with additional stations funded through the Coop Program to address State, Tribal, and other governmental water management needs.

USGS Response: Agree.

Status: Adopted. Already in place. USGS will strive to maintain healthy data networks, including joint funding within the Coop Program.

2004 Task Force Priority: Medium.

Task Force Assessment: Complete, but need adequate funding for the NSIP and Cooperative Programs

USGS Implementation Plan: As mentioned in 9.3 above, USGS will continue to seek mutually beneficial partnerships with existing and new cooperators in the Cooperative Water Program, including establishment and maintenance of data-collection stations.

10.1 The emphasis of the Coop Program should be on long-term data collection activities. Data collection should not be sacrificed for interpretive studies.

USGS Response: Agree.

Status: Adopted. The USGS strongly agrees with the need to emphasize long-term, consistent, nationwide data collection related to surface water, ground water, and water quality. That is the impetus behind the National Streamflow Information Program, a USGS initiative that Congress has partially funded each year since 2001, several national water quality monitoring programs such as NAWQA, NASQAN, Benchmark, and NADP, and the National Ground-water Climate Response Network. The position of the USGS is that these networks need a substantial long-term Federal investment. A recent NRC report on NSIP agrees: "Federal support of a base streamgaging network is recommended to assure long-term viability of the network for national needs." Within the Cooperative Water Program, we support a balance between data collection

and interpretive projects. In FY 2004 51.6 percent of the total funds in the CWP went to data collection. In terms of Federal contributions to the CWP, the percentage of those Federal dollars that went to data as opposed to projects rose from 48.4% in 2002 to 50.8% in 2004.

2004 Task Force Priority: High.

Task Force Assessment: Insufficient progress. Situation exacerbated by funding shortfalls.

USGS Implementation Plan: Continue to be responsive to state and local needs for both basic data and interpretive results, as well as to national needs for both. Strive to maintain healthy balance of data and interpretive work.

11.1 The USGS should take advantage of all available expertise and technology, regardless of where it resides, provided that the USGS certifies final quality.

USGS Response: Agree.

Status: Adopted. Each year the USGS accepts hundreds of data records from cooperators:

| <u>Fiscal Year</u> | <u>Active Gages</u> | <u>Additional Gages with Record Furnished by Others</u> |
|--------------------|---------------------|---|
| 2000 | 6,716 | 628 |
| 2001 | 6,891 | 873 |
| 2002 | 7,086 | 736 |
| 2003 | 7,134 | 806 |

Additional examples: The Water Use program involves a collaboration whereby States furnish data on some categories of water use. The National Atmospheric Deposition Program is a collaboration of the USGS and 15 other Federal agencies, 57 universities, 35 State and local agencies, 5 tribes, 14 companies, 16 NGO's, and 2 international agencies to collect data on the chemical content of wet and dry atmospheric deposition. Window to My Environment is a collaboration with EPA to provide one-stop access to environmental data from EPA and USGS databases...Also see response to 11.2(b).

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress, encourage continued efforts on real-time access to furnished record.

USGS Implementation Plan: Continue collaborations such as those listed above. Develop additional real-time access to furnished record.

11.2(a) USGS should consider employing outside contractors for data collection under strict USGS supervision when doing so can reduce costs.

USGS Response: Disagree

Status: Not implemented. Data collection is usually not among the activities USGS considers for contracting out because of 5 factors that make USGS streamgaging inherently governmental. A 1990 report (Feasibility of Privatization of the Hydrologic Data Collection and Analysis Functions of the USGS, Open-File Report 90-184), which was reviewed by a 6-member outside Review Committee, concluded that "the potential for additional privatization of either the onsite data collection of the office analysis functions is limited."

2004 Task Force Priority: High

Task Force Assessment: Insufficient progress. The response should recognize that other types of data collection besides streamgaging can be open to outside contractors. USGS should look for additional opportunities to include private entities in data collection activities, such as drilling, logging, analytical services, etc, where this would meet project objectives.

Look for stats on contracting.

11.2(b) The USGS should consider employing cooperators for data collection under strict USGS supervision when doing so can reduce costs.

USGS Response: Agree.

Status: Adopted. Agreements for cooperator participation in data collection are in place in several states including VA, CO, WY, CA, and ID (for surface water), TX and AZ (for ground water), and NJ (for water quality). CA has a significant program of data provided by external agencies, with appropriate quality control.

2004 Task Force Priority: High.

Task Force Assessment: Satisfactory progress, additional efforts should be made.

USGS Implementation Plan: Although USGS generally prefers in-house data collection, when faced with the alternative of losing the gage and the data, USGS will continue to consider accepting furnished records that meet appropriate standards.

11.3 Increase the use of in-kind services to maintain data collection stations and provide the data to USGS for quality assurance and publication.

USGS Response: Partially agree.

Status: Partially adopted. USGS does some already and will do more when additional funding becomes available. See response above to 11.2(b).

2004 Task Force Priority: High

Task Force Assessment: Insufficient progress. States would like to receive credit for in-kind services. See discussion.

USGS Implementation Plan: In cases where additional Federal matching funds become available, or where Centers have little or no unmatched Cooperator funding, additional in-kind services matching will be considered.

12.1 Establish guidelines for accepting and disseminating data from non-USGS sources, and include appropriate data from other sources in USGS databases.

USGS Response: Agree.

Status: Complete. The policy is stated in WRD Memo 92.59. Outside data that meet USGS standards will be accepted into the National Water Information System, as is already being done in several states such as California. Perhaps seek additional information in customer survey.

Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—continue to add to record from outside sources without quality ramifications.

USGS Implementation Plan: Continue to operate “furnished record” programs according to the established policy. Perhaps seek additional information in customer survey.

12.2 Be aware of data collection efforts of other Federal agencies such as EPA and USDA and strive for compatibility with their databases.

USGS Response: Agree

Status: Adopted. Many interagency data collaborations are underway through bilateral and multilateral arrangements including the Advisory Committee on Water Information (ACWI), the Subcommittee on Water Availability and Quality, an agreement with EPA on STORET and NWIS, and others. Database compatibility is being advanced through the efforts of the ACWI Methods and Data Comparability Board, which USGS Co-chairs with EPA.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—Keep up the good work with ACWI website being a conduit for cross-agency information exchange.

USGS Implementation Plan: Continue and enhance inter-agency water-data coordination through such efforts as ACWI, the CENR Subcommittee on Water Availability and Quality, the CEQ-driven planning for integrated water-quality monitoring, and periodic meetings with other Federal agencies such as the National Weather Service and EPA.

13.1 USGS should continually strive to increase their awareness of cooperators’ needs.

USGS Response: Agree

Status: Adopted. Current communications include frequent contact at the Center level; Cooperator sessions at Center Strategic Reviews; state, regional, and national conferences; ACWI; USGS stakeholder listening sessions; and meetings of HQ reps with national associations that represent Cooperators. Perhaps seek additional info in customer survey.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress. Look for indications of increase in awareness since 1999.

USGS Implementation Plan: Continue existing efforts as described above in “Status”, and conduct a customer survey during 2005.

13.2 Promote increased collaboration with cooperators in data collection work, interpretive work, report preparation and presentation activities consistent with maintaining the objective nature of the work.

USGS Response: Agree

Status: Adopted. Collaboration is already strong but could still be improved.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—Continue to look for avenues for collaboration.

USGS Implementation Plan: Continue to take advantage of opportunities for scientific and data-collection collaboration with cooperators.

13.3 At the Center level, annually convene a general meeting of all cooperators and interested parties to review overall progress, critique quality of work, assist in development of priorities, and offer feedback on water resource issues present or developing within the Center.

USGS Response: Agree

Status: Adopted. Traditionally Centers have met with cooperators one-on-one owing to divergent interests among cooperators. Increasingly, Centers are convening groups of cooperators for program and planning discussions. Some of this function can be met through State Water Monitoring Councils.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—Perhaps annually is too often for all cooperators to get together, but an occasional meeting in each Center is good for all cooperators to get to know each other and make the most efficient use of the funding available.

USGS Implementation Plan: Encourage Centers to meet with all Cooperators at least once every five years, and to participate in State Water Monitoring Councils, State sections of the American Water Resources Association, and other State groups where water issues are discussed among Cooperators. Convene a national meeting of cooperators and cooperator associations during 2005.

13.4 Each cooperative agreement should contain an explicit and detailed scope of work including tasks, timelines, costs, staffing levels, and identification of Project Chief.

USGS Response: Agree

Status: Adopted. Project chiefs already prepare work plans; USGS agrees to make sure Cooperators receive them. Will be addressed in a memo.

2004 Task Force Priority: Medium

Task Force Assessment: Complete

USGS Implementation Plan: Continue preparing proposals and work plans, and make sure Cooperators receive copies of the work plans.

13.5 Improve technology transfer to cooperators through joint effort in the field, laboratory and office work, topical seminars, and training Center offerings.

USGS Response: Agree

Status: Adopted. Many examples available; should be expanded.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress, but as technology changes, the USGS should provide leadership in getting technology transfer to cooperators.

USGS Implementation Plan: Encourage Centers to enhance their technology transfer efforts including collaborations, seminars, training, workshops, web sites, and other means.

14.1 In project proposals and in project information that is available to the public, Centers should document how each project is in the national interest, and specifically meets the applicable criteria outlined in WRD Memorandum No. 95.44.

USGS Response: Agree

Status: Complete. All proposals now include this information.

2004 Task Force Priority: Medium

Task Force Assessment: Complete

15.1 Partnering with private-sector and university practitioners should be encouraged. This would enhance technology transfer to those who apply these investigative tools. It would also help to engage the best and brightest experts on particular projects.

USGS Response: Agree

Status: Adopted. Many examples available (see appendix B); should be expanded.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: USGS will encourage Centers to take advantage of opportunities for collaboration with the private sector and universities, expanding on the many existing examples of such collaborations.

15.2 The Coop Program should concentrate on its core competency. The Program should continue to advance its capabilities in long-term data collection and analysis, technology and model development, and the transfer of technology to end-users.

USGS Response: Agree

Status: Adopted. See response to 10.1

2004 Task Force Priority: High

Task Force Assessment: Insufficient progress due to funding shortfalls. See additional information below.

USGS Implementation Plan: The USGS will continuously seek to advance capabilities in long-term data collection through expansion of the National Streamflow Information Program as funds become available, and through technological innovations such as increased use of hydroacoustics and radar. Model development, including documentation and support for end-users, will also continue to be a high priority.

15.3 The USGS must refrain from unfairly competing with or giving the impression of unfairly competing with the private sector.

USGS Response: Agree

Status: Adopted. Policy is in place (Memos 95.44 and 04.01), and activities that appear to compete unfairly have been curtailed.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress; greater consistency is needed among Centers. See more information below, on clarification and enforcement of guidelines.

USGS Implementation Plan: Continue to stress to Centers the need to comply with the guidelines in Memo 04.01, and to review all proposals for such compliance.

16.1 WRD Memorandum No. 95.44 should be amplified to include specific examples of activities that have been deemed inappropriate for USGS involvement (e.g. routine site specific investigations of: bridge scouring, wellhead protection area delineation, and groundwater).

USGS Response: Agree

2004 Task Force Priority: Medium

Status: Adopted. Over the years, the USGS has promulgated a number of documents addressing the issue of competition with the private sector. A number of these memoranda released over the past 4 years make an effort to better explain the characteristics of acceptable CWP investigative studies that do not compete with the private sector. These documents, in reverse chronological order, are:

- Memorandum 04.01—“Avoiding Competition with the Private Sector”, Water Resources Discipline Technical Memorandum Number 04.01, released on January 7, 2004 with a sunset date of January 2009 (<http://water.usgs.gov/admin/memo/WRD/wrdpolicy04.01.html>).
- July 23, 2003 Memorandum— “Guidance for Bridge Scour Studies”, Office of Surface Water Technical Memorandum 2003.06, released July 23, 2003 (<http://water.usgs.gov/admin/memo/SW/sw03.06.html>)
- April 19, 2003 Memorandum—“Potential opportunities in FEMA flood-insurance mapping program”, Office of Surface Water Guidance Memorandum, April 19, 2003, Guidance (<http://water.usgs.gov/osw/pubs/FEMAfile1.html>)
- August 22, 2002 Memorandum— “Potential opportunities in FEMA flood-insurance mapping program”, Office of Surface Water Guidance Memorandum, August 22, 2002 (<http://water.usgs.gov/osw/pubs/FEMAfile2.html>)
- Memorandum 00.04—“New requirements for project proposals and AIS project descriptions”, Water Resources Discipline Policy Memorandum No. 2000.04, released November 1999 with a sunset date of November 2004 (<http://water.usgs.gov/admin/memo/WRD/wrdpolicy00.04.html>)
- Memorandum 95.44—“Avoiding Competition with the Private Sector”, Water Resources Discipline Technical Memorandum Number 95.44, released on July 7, 1995 (superseded by WRD Memo 04.01) (<http://water.usgs.gov/admin/memo/WRD/wrdpolicy95.044.html>)
- Memorandum 84.21—“Hydrologic Activities to be Excluded from the Federal-State Cooperative Program”, Water Resources Discipline Memorandum No. 84.21, released on December 3, 1984 (<http://water.usgs.gov/admin/memo/WRD/wrdpolicy84.021.html>)

Task Force Assessment: Complete, but need more consistent application among Center offices. See additional information below.

USGS Implementation Plan: Continue with efforts as listed above to define the appropriate role for USGS in various fields of study. Strive for consistent application among Centers.

16.2 Convene ad hoc committees by project type, composed of private sector, other agencies, and cooperators to resolve emerging competition issues, and to help determine what types of projects are appropriate for the USGS to undertake.

USGS Response: Agree

Status: Adopted. USGS will work through ACWI to pilot test this concept.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: USGS will work through ACWI to pilot test this concept during 2005 or 2006.

16.3 Create and convene biennially a review panel to revise WRD Memorandum 95.44 as necessary.

USGS Response: Agree

Status: Adopted. Memo 95.44, on avoiding competition with the private sector, was updated and re-released in 2004 as Memo 04.01, based on input from the Associate Director for Water, the Coop Program Coordinator, the Acting Chief Scientist, the Regional Program Officers, the WRD Senior Staff, the Center Chief Representatives, and the American Consulting Engineering Council. USGS will work through ACWI and suggests using a 5-year interval for future updates.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—Task Force concurs with the USGS suggestion for a 5 year review rather than biennially as suggested in the earlier review.

USGS Implementation Plan: Memo 04.01 will be revised again in 2009, based on input from the above-listed groups and others.

16.4 Produce a biennial report for ACWI on successful collaborative work efforts with the private sector, as well as a listing of projects the USGS deemed inappropriate based on WRD Memorandum 95.44. Include a description of projects that are impacted by competition issues.

USGS Response: Agree.

2004 Task Force Priority: Medium.

Status: Adopted. USGS will produce a biennial report on successful collaborations with the private sector, actions taken in response to 16.1-16.3, and, to the extent information is available, on projects impacted by competition issues. See Appendix C.

Task Force Assessment: Insufficient progress. Produce report.

USGS Implementation Plan: USGS will produce the requested report during 2005.

17.1 This information (a summary of the proposal) should be posted on the Web at the time the proposal is forwarded to the Regional Hydrologist for approval. The Regional Hydrologist should consider comments, but not lengthen the time frame in which projects are approved. The decision shall be communicated to the Center and to all those who submitted written comments. The information should include a statement of how the project is in compliance with WRD Memorandum 95.44.

USGS Response: Partially agree.

Status: Partially adopted. Most cooperators and project chiefs consider proposals confidential until agreements are signed. Unapproved proposals are exempted as pre-decisional documents under FOIA. USGS will, however, post project information once projects are approved. Project chiefs are updating their project information during the fall of 2004 in anticipation of public release of project information via the web during 2005.

2004 Task Force Priority: Low

Task Force Assessment: Satisfactory Progress—USGS should post information as soon as possible without violating confidentiality.

USGS Implementation Plan: USGS will post summary project information on a public, searchable web site during 2005 or as soon as the current effort led by the Director's Office is complete.

17.2 Copies of WRD Memoranda Nos. 95.44 and 84.21, and any future updates to them should be posted on the Web for easy reference.

USGS Response: Agree

Status: Complete. Memos 95.44 and 04.01 (on competition issues) and Memo 84.21 are posted on the Coop Program web site (<http://water.usgs.gov/coop/>).

2004 Task Force Priority: Medium

Task Force Assessment: Complete

18.1 Continue to be active in, conduct regular project reviews at, and have a greater visible presence at state, Tribal, and other governmental water workshops, forums, and seminars to share knowledge, technology advancements, and data access.

USGS Response: Agree

Status: Adopted. Many examples available; should be expanded as appropriate, without overly restricting programmatic work and the need to conserve funding.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress, need continued emphasis in the future.

USGS Implementation Plan: USGS will continue to be a presence at such meetings, and will convene workshops, forums, and seminars as appropriate.

18.2 Increase involvement in professional and local scientific society forums.

USGS Response: Agree

Status: Adopted. Staff are encouraged to do so.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress—Keep up the culture within the USGS of encouraging participation by USGS employees in these forums.

USGS Implementation Plan: This will be included in a memo to Centers during 2005.

18.3 Annually assess emerging water resource issues, and include these issues in the report referred to in Recommendation 6.2.

USGS Response: Agree

Status: Adopted. Much done already through the Advisory Committee on Water Information, the CENR Subcommittee on Water Availability and Quality, USGS science plans, cooperator meetings, etc., and publicized through the annual priorities memo. Perhaps seek additional information in customer surveys.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress— When funding shortfalls occur, USGS should concentrate on basic water data collection and not spend too much energy on emerging issues.

USGS Implementation Plan: Continue efforts as outlined above. During 2005 USGS will help lead the development and publication of a Strategic Plan for Federal Research and Development on Water Availability and Quality through the CENR Subcommittee on Water Availability and Quality. USGS will also, in conjunction with other agencies, develop and update regional science plans, bureau-wide future science directions, bureau-wide science thrusts, and a 5-year science plan for the Cooperative Water Program.

18.4 Prepare and publish on the Worldwide Web a national summary of projects to increase public awareness of the USGS role in water resources.

USGS Response: Agree

Status: Adopted. The USGS is in the process of implementing this recommendation. The Bureau has established a team to develop an effective keyword search capability for the project information when it is posted. Project staff are updating project descriptions. The web-posting and search tool should be available during 2005.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress

USGS Implementation Plan: Continue with efforts underway by the Bureau-wide team, and post the project information on a searchable web site during 2005.

21.1 The USGS must continue to act professionally and objectively to preserve its respected reputation.

USGS Response: Agree

Status: Adopted. Much being done; will strive for more.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress. When there are legal challenges, data collected by USGS are typically viewed as unbiased and credible. USGS should avoid active solicitation of projects, and should continue to avoid actions that might appear as advocacy.

USGS Implementation Plan: Include a reminder about ethical behavior in the follow-up memo to Centers.

22.1 The coop program should be driven by the needs of the users (State, Tribal, and local users and other Federal agencies), where those aggregate interests form a basis for meeting the national interest.

USGS Response: Agree

Status: Adopted. See 10.1, 13.1, 15.2, 18.3.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress but funding shortfalls may influence the balance between Federal and Cooperator needs. The national interest should be considered in planning national data networks.

USGS Implementation Plan: USGS will continue to operate the Cooperative Water Program as a collaboration with Cooperators to meet jointly-defined needs of governments at the Federal, State, local, and Tribal levels.

22.2 Establish core data collection networks (streamgaging , water quality, sediment transport, and ground water) to serve the national interest. See also Recommendation 9.1.

USGS Response: Agree

Status: Adopted. USGS is working toward this goal and will continue to do so within constraints of funding. See response above to 9.2.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress—An adequate network design is in place. Need now to concentrate on getting funding for implementation.

USGS Implementation Plan: Continue efforts to secure enhanced funding for the National Streamflow Information Program, the National Water Quality Assessment, the National Stream Quality Accounting Network, the National Ground-Water Climate Response Network, the National Atmospheric Deposition Program, and a new integrated national water-quality monitoring network that is under discussion with other agencies in response to the 2004 Ocean Policy Commission report.

23.1 Continue to develop products that are effective in communicating to the diverse audiences now concerned with water management issues. Products now being produced by the program, such as fact sheets and fast read summaries are excellent examples. To continue to improve in this area, develop a program to subject such products to a critical review by non-scientists to assure understandability.

USGS Response: Agree

Status: Adopted. This is being done to some extent already. USGS will explore using more internal and external non-scientists as reviewers.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—USGS has done a good job of creating fact sheets and basic information interpretation for the public and water users and managers.

USGS Implementation Plan: Continue and expand efforts in this area, including individual projects and national synthesis topics.

24.1 Maintain high standards of unbiased, credible products of superior quality through assignment of experienced professionals, quality control/quality assurance techniques, and peer review.

USGS Response: Agree

Status: USGS is working diligently toward this important goal. The standards have been codified in a Bureau wide statement of Fundamental Science Practices.

2004 Task Force Priority: High

Task Force Assessment: Satisfactory progress. The level of technical expertise among technicians and field staff is generally increasing. The increasing average grade level of field staff attests to the assignment of experienced staff to data collection. USGS should maintain efforts, especially on peer review, approval of products by a level above the originating office, and avoidance of advocacy.

USGS Implementation Plan: Continue the ongoing efforts aimed toward this goal. Contribute to the production of a Bureau-wide Common Science Practices document for USGS.

25.1 To facilitate continued improvement in achieving deadlines for the release of products, especially interpretive reports: (a) secure agreement between cooperator and USGS staff up front as to the date for the receipt of deliverables; (b) improve efforts to explain to cooperators the process for report preparation, review and release; (c) continue to cultivate approaches to provide information to cooperators when they need it (e.g., “Open-file” reports, real time data, cooperator staff serving as peer reviewers); (d) develop the capability to be prepared for and respond to situations when USGS staff, who are serving as report authors, are disengaged from the responsibility (ex. due to retirement, resignation, transfer etc.); (e) take appropriate action to transfer knowledge and experience to others in the organization to reduce the degree of corporate knowledge loss.

USGS Response: Agree.

2004 Task Force Priority: High

Status: Adopted. Achieving deadlines for release of products continues to be a high priority for USGS managers and scientists. The Reports Tracking System provides improved statistics on status of reports, and each Center must submit information about any overdue reports at annual Program Reviews. For example, Appendix D shows changes in the number of overdue reports in the Western Region during 2002-2004. (a) Each project work plan specifies planned reports and

due dates. (b) We will post a description of the review process on the Coop Program web site. (c) We will examine additional approaches to providing information to Cooperators when they need it. (d and e) Through workforce planning and project management, we will strive to maintain sufficient expertise focused on the task of report preparation. This includes actively seeking young professionals to work with, and gradually replace, our older employees as they retire.

Task Force Assessment: Insufficient progress, despite some improvements.

USGS Implementation Plan: Regions, through their Program Officers and Reports Specialists, will continue to track overdue reports and will work with Centers to ensure adequate resources are made available to reduce backlogs of such reports. Statistics will be compiled annually on a nationally consistent basis as part of the Indicators of Center Status starting in 2005, and will be discussed periodically with management at all levels.

26.1 The longstanding policy that provides for program products to be made available free or for minimal charge should remain unchanged.

USGS Response: Agree

Status: Complete. USGS is mandated by law to recover at most the costs of printing and distributing products.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress—Getting past publications on the web should continue.

USGS Implementation Plan: The current practice of recovering costs of printing and distribution will be continued, and the number of reports included in the online digital reports warehouse (<http://infotrek.er.usgs.gov/pubs/>) will continue to grow.

27.1 USGS should continue to aggressively explore ways to incorporate use of the Internet and other available and emerging electronic communication technologies in the development, review and release of all its products.

USGS Response: Agree

Status: Adopted. Much already being done--many reports are prepared and reviewed digitally; most significant new reports and fact sheets are on the web, and many significant archived reports are being digitized. For example, as of October 2004 the USGS Online Publications Warehouse (http://infotrek.er.usgs.gov/docs/usgs_pubs/publication_warehouse_contents.html) contains 4,708 of 6,820 Water-Resources Investigations Reports published between 1972 and 2004, and 1,615 of 3,156 Water-Supply Papers published between 1896 and 2002.

2004 Task Force Priority: High

Task Force Assessment: Great Progress in this area!! NWIS is a wonderful tool.

USGS Implementation Plan: Efforts to put USGS data and products on user-friendly web pages will continue. NWIS will incorporate new software for better serving of unit-values data. Additional reports, fact sheets, and data will be posted on the web. New web sites such as the Ground-Water Climate Response Network (<http://groundwaterwatch.usgs.gov/>) will be expanded.

27.2 Make reports available in an appropriate electronic format, beginning with current reports and ultimately working back in time to include historic reports.

USGS Response: Agree

Status: Adopted. See 27.1.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: The number of reports included in the online digital reports warehouse (<http://infotrek.er.usgs.gov/pubs/>), currently several thousand, will continue to grow.

28.1 Products should address the critical issues of the cooperator as specified in the cooperative agreement. When appropriate, the USGS should expand the use of lay summaries and fact sheets for the general public.

USGS Response: Agree

Status: Adopted. This will continue to be a high priority. Fact sheet production has expanded and will continue to expand.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory progress; continue to emphasize public outreach and broad-audience circulars.

USGS Implementation Plan: Continue addressing Cooperator-relevant critical issues in reports and fact sheets.

29.1 Update, maintain, and make more accessible existing databases, such as GWSI .

USGS Response: Agree

Status: Adopted. This is a high priority of the Office of Information, its NWIS team, and the associated user groups. About 1/3 of the annual NSIP funding is spent on this task.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress—Continue to make a (“high” omitted) priority.

USGS Implementation Plan: Continue with implementation of the NWIS strategic plan, which is based on input from user groups and external users.

29.2 Make historical data and metadata available in electronic formats at the shortest available temporal resolution.

USGS Response: Agree

Status: Adopted. USGS is working to provide 15-minute and hourly data as well as daily values.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: During 2005 USGS will use part of \$300,000 in new water-data funding from NOAA to develop software for serving 15-minute and hourly data in NWIS.

30.1 Develop a consistent nationwide policy that results in the earliest possible release of data to cooperators.

USGS Response: Agree

Status: Adopted. Policy is in place, though some discrepancies among Centers have occurred in its implementation. Policy will be reviewed, revised as needed, and re-released.

2004 Task Force Priority: High

Task Force Assessment: Satisfactory progress. NWIS-Web has helped with rapid dissemination of provisional and final data. Centers are involving cooperators in various aspects of project and report planning, execution, and review.

USGS Implementation Plan: USGS will continue to enhance and streamline both automatic and manual review of near-real time data to reduce errors and speed the posting of data.

31.1 Increase resources for the development of national synthesis products to enhance information and technology transfer.

USGS Response: Agree

Status: Adopted. USGS agrees this is a high priority. Specific funding has been curtailed, but efforts will continue as funds are available. The annual Coop Priorities memo (on the Coop Program web site) lists national synthesis topics toward which efforts are being directed.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: Produce at least one national synthesis report or fact sheet per year.

31.2 Increase resources to update previously developed modeling technologies.

USGS Response: Agree

Status: Adopted. USGS has placed an emphasis on updating models and will do so as funds are available.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: Continue updating models and documentation as funding permits.

31.3 Strengthen partnerships between USGS Disciplines. Such partnerships are necessary to synthesize diverse information and provide comprehensive answers to resource questions.

USGS Response: Agree

Status: Adopted. Many examples are available through bureau-wide meetings, communications tools, and management actions. This will continue.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress

USGS Implementation Plan: The Director is in the process of reorganizing the Regional offices to create smaller geographic units in which all USGS Disciplines are represented by one Regional Executive. In addition, the Bureau Planning Council (Associate Directors) is developing program planning models that will enhance interdisciplinary collaboration on many projects.

31.4 Strengthen coordination between the Coop Program and other Federal, State, Tribal and local programs to achieve better focused and more economical products.

USGS Response: Agree

Status: Adopted. Examples available involving meetings and other communications tools; efforts will continue.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress. Continue to encourage Centers to look for areas for coordination.

USGS Implementation Plan: At the Center, Regional, and Headquarters levels, efforts to convene meetings and other communications will be continued and enhanced to coordinate the Coop Program with other Federal, State, Tribal, and local programs. Examples include State Water Monitoring Councils, Regional Science Planning Workshops, ACWI meetings, and the CENR Subcommittee on Water Availability and Quality.

31.5 As appropriate, continue to co-locate USGS staff with cooperators (and vice-versa) to facilitate day-to-day information transfer and to promote better understanding of local issues and perspectives.

USGS Response: Agree

Status: Adopted. USGS generally agrees and will do so as appropriate. Data will be sought pertaining to benefits of existing co-locations. As one example, the Long Island SubCenter of the New York Center has since 1994 been co-located with a Cooperator, the Suffolk County Water Authority. This Cooperator has been working with USGS for 40 years. Several USGS offices have moved to University campuses since 1999.

2004 Task Force Priority: Medium

Task Force Assessment: Satisfactory Progress ??? Glenn, can you provide any statistics or further info? Has any real progress on this been made since the 1999 report (see above)?

USGS Implementation Plan: Continue to take advantage of opportunities for mutually beneficial co-locations with universities and cooperators.

32.1 Promote the National Training Center in Denver as an available resource for professional development.

USGS Response: Agree

Status: Adopted. USGS is working on a business plan for the NTC and will seek to expand both USGS and Cooperator use of the facility.

2004 Task Force Priority: High

Task Force Assessment: Satisfactory Progress—Make opportunities with NTC more visible to Cooperators.

USGS Implementation Plan: USGS will publicize NTC opportunities through national Cooperator organizations, and will encourage Centers to share information with Cooperators at the State and local level.

Appendix C - Collaboration with the Private Sector

The USGS interacts frequently with the private sector to obtain instrumentation, equipment, supplies, and services. Services include drilling, geophysical services, transportation, and specialized technical services. The USGS also frequently works side-by-side with private companies in collaborations where both organizations contribute toward an overall goal for a cooperator.

The following examples are given to indicate the type of interactions that have occurred recently involving the USGS Cooperative Water Program and the private sector.

Nationwide—The USGS has entered into a contract with Aqua Terra Consultants, Inc, to provide general hydrologic support including:

Training, mentoring, and assistance in the use of the Hydrological Simulation Program - Fortran (HSPF) and related tools as well as some other applications.

Development, maintenance, and technical documentation of software for analysis and modeling in the water resources discipline, including peak flow computation, flood frequency analysis, water-use data, transmission and handling of real-time hydrologic data, and estimation of flow at ungaged sites.

Aqua Terra is currently or has previously provided assistance in:

Ohio, Missouri, Wisconsin, Illinois, Florida, Massachusetts, New York, California, Texas, Virginia, Maryland, and Pennsylvania.

New York—Modifications to wastewater treatment process to enhance removal of pharmaceuticals and endocrine disruptors. The USGS New York Water Science Center and a major engineering company are collaborating on a project for the City of New York to determine which modifications are most likely to result in enhanced removal of these emerging contaminants. For this effort, in 2005 the USGS received a Platinum Award for Engineering Excellence from the American Council of Engineering Companies of New York.

New Jersey—Hydrologic support for design of the Cape May desalination facility. The USGS New Jersey Water Science Center collaborated with a major engineering company to provide hydrologic support for the design of a plant to desalinate brackish ground water at Cape May. The company designed the plant, and the USGS provided information on the rate of movement of brackish water in response to various withdrawal scenarios. The analysis helped to determine the length of time during which the plant would be handling water with chloride concentrations less than 10,000 mg/l.

Michigan— The St. Clair River and Lake St. Clair are the source of drinking water to 4.5 million people and continues to experience degraded water quality. The USGS Michigan Water Science Center is working in cooperation with the Lake St. Clair Regional Monitoring Project to address

a comprehensive assessment of the hydrological, chemical, and physical state of the surface waters draining to the St. Clair River and Lake St. Clair, Michigan. The regional monitoring team, consisting of Federal, State, local, and private sector partners, has developed a three-year water-quality assessment to be completed in September 2006. The plan includes wet and dry weather water-quality sampling and analysis by private consultants; and real-time streamflow, water-quality monitoring, and interpretation of historical and current project water- and sediment-quality data by the USGS.