# Appendix C – 1994 Survey of Cooperator Satisfaction with U.S. Geological Survey Federal-State Cooperative Water Program

# USGS Customer Service Team Preliminary Report of the Pilot Project: Water Resources Division Federal - State Cooperative Water Program

**July 1994** 

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### INTRODUCTION

The U.S. Geological Survey, Water Resources Division, has a unique program activity--the Federal/State Cooperative Matching Program--that provides Federal funding for matching at least an equal amount of funding from State, County, city, or other local tax-based entities. USGS Cooperators, which number more than 1,000 nationwide, are considered primary customers—partners in hydrologic studies and data activities. These customers represent a broad user community which collectively has a "first line" concern of national water issues, water problems, and water needs.

### DESCRIPTION OF PILOT EFFORT

The purposes of this Water Resources Division pilot effort were to assess existing perceptions of customer service and to provide input to preliminary customer service standards for the cooperative program for the Division. To get a broad sampling of the cooperator community, each District (State) office of the Division was asked to survey two cooperators with 11 questions. The responses to the survey, which are compiled and included in the Appendix, are summarized in "Summary of Responses with Interview Guide" section. In addition, other possible customer services are identified ("Identification of Customer Needs"). Finally, existing Division standards for three product areas in the cooperative program--hydrologic data, hydrologic consultation, and hydrologic interpretative reports--are described, and preliminary draft customer service standards are suggested and compared to existing standards where they apply.

For the 48 Districts (Maryland-Delaware, New Hampshire-Vermont, and Massachusetts-Rhode Island are each two-State Districts; Puerto Rico is a District), a potential survey return of 96 responses was projected. Eighty- two survey responses (85 percent of the potential 96 responses) were completed as identified below:

STATE/DISTRICT	NUMBI RESPO	ER OF ONSES	STATE/DISTRICT	NUMBER OF RESPONSES
1. Alabama 2. Alaska 3. Arizona 4. Arkansas 5. California 6. Colorado 7. Connecticut 8. Florida 9. Georgia 10. Hawaii 11. Idaho 12. Illinois 13. Indiana 14. Iowa 15. Kansas 16. Kentucky 17. Louisiana 18. Maine 19. Maryland-Delaware 20. Massachusetts-Rhode 21. Michigan 22. Minnesota		1 2 2 2 2 2 2 2 2 3 1 0 2 1 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2	25. Montana 26. Nebraska 27. Nevada 28. New Hampshire-Vermo 29. New Jersey 30. New Mexico 31. New York 32. North Carolina 33. North Dakota 34. Ohio 35. Oklahoma 36. Oregon 37. Pennsylvania 38. Puerto Rico 39. South Carolina 40. South Dakota 41. Tennessee 42. Texas 43. Utah 44. Virginia 45. Washington 46. West Virginia 47. Wisconsin	2 0 3
23. Mississippi 24. Missouri		3	47. Wisconsin 48. Wyoming 49. Unknown	2 1

<sup>\*</sup>Kentucky had very recently completed an external customer survey.

These 82 responses do not strictly represent two cooperators per District. However, they are geographically well distributed, and are, therefore, considered representative of the cooperator community. One survey was received without a District/State designation and it is shown as "unknown".

### SUMMARY OF RESPONSES WITH INTERVIEW GUIDE

The basis for the Interview Guide was a more general guide that the USGS Customer Services Standards Committee is using in other pilot efforts. The guide was customized to provide more specific information relating to services for the Water Resources Division Federal/State Cooperative Program. A copy of the guide is included here and a summary of the interview responses is included following each question.

### USGS FEDERAL/STATE COOPERATIVE PROGRAM CUSTOMER SERVICE INTERVIEW GUIDE

1. IS YOUR BUSINESS PRIMARIL	LY: A) REGULATORY <sub>.</sub>	, B)
C) WATER MANAGEMENT	, D) OTHER	

When asked to identify the primary role of their organization, 51 of 82 cooperators indicated a "Water Management" responsibility, 31 identified a "Regulatory" role, 21 identified a "Scientific" mission, and 17 identified "Other" responsibilities which included design of highway structures, transportation engineering, geologic and water resources information, planning, State fish and wildlife agency, sanitation quality, power, fish and wildlife research and management, data base management and technical assistance, environmental restoration, and geographic information systems. Many cooperators identified more than one primary responsibility.

# 2. WHAT IS THE MOST SIGNIFICANT EFFECT OF THE USGS ON YOUR OPERATIONS?

In answer to this query, 73 identified data (28 general data, 29 streamflow data, 11 water-quality data, and 5 ground-water data), including 3 for real-time data. Thirty responses identified information from hydrologic investigations or research has a most significant effect. Fifteen responded that hydrologic expertise provided by the USGS has a significant effect on their operations. A few included the importance of other USGS contributions such as the availability of mapping products (National Mapping Division), availability of Cooperative Program funding, and the quality assurance process for peer review of reports.

### 3. HOW DO YOU ACCESS USGS PRODUCTS/SERVICES?

A)	MAIL	75	EASY? _72	DIFFICULT?	3
B)	TELEPHONE	76	EASY? _73	DIFFICULT?	4
C)	FAX	64	EASY? _64	DIFFICULT?	
D)	COMPUTER ACCESS	49	EASY? _33	DIFFICULT?	_19
$\mathbf{E}$ )	CD-ROM	11(2*)	EASY?7	DIFFICULT?	4
	*Third Party Vend	dor			

The above counts indicate the method of access of USGS products and services. Three other methods of access were identified by a few customers; reports, regular meetings, and personal contact. The difficult rating (and a few individuals thought that some methods were both easy and difficult) is, percentage wise, more significant for computer access and CD-ROM. Sixty percent of the cooperators say they access information by computers, and 39 percent of those individuals say that the process is difficult. Thirteen percent of the cooperators say they access information by CD-ROM, and 36 percent say it is difficult.

4. ON A BROAD SCALE, WE SEE OUR MAJOR PROJECTS [PRODUCTS] FOR OUR CUSTOMERS TO BE A) BASIC HYDROLOGIC DATA, B) HYDROLOGIC CONSULTATION, AND C) INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS. WHICH OF THE ABOVE DO YOU USE?

A)	BASIC HYDROLOGIC DATA	80
B)	HYDROLOGIC CONSULTATION	70
C)	INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS	72

# 5. WHAT OTHER PRODUCTS/SERVICES WOULD YOU LIKE TO RECEIVE FROM USGS?

The responses were broadly categorized into 12 types of services or assistance. These categories and the number of responses for each are listed below:

a.	Technical consultation or assistance	19
b.	GIS support (some Mapping support included)	10
c.	On-line data access	8
d.	Training support	8
e.	Happy customersneeds being met	8
f.	Summary information (statistical analysis of data, Statewide conditions periodically, 10-year data summaries, annual summary of ongoing studies and completed reports.)	6
g.	More funding for cooperative program and State research	6
h.	Public education/outreach/more lay reader reports	3
i.	Need for enhanced communications (quarterly meetings; describing who we are/what we do; involvement in local issues, meetings, committees; etc.)	3
	Data on floppy disks Data on CD-ROM Equipment support	2 2 2

### (INQUIRIES FOR SETTING CUSTOMER SERVICE STANDARDS):

# 6. FOR 4 A, B, C (ABOVE), WHAT TIME AND QUALITY STANDARDS WOULD YOU LIKE TO SEE FOR DISSEMINATION OF THOSE PRODUCTS?

### A) BASIC HYDROLOGIC DATA

Overall 55 of the 82 responses (67 percent) indicated that timeliness of hydrologic data was important; 26 of 82 (32 percent) indicated quality was important; and one cooperator identified the need for some operational information to assist with their planning and activities. Seventeen respondents (21 percent) indicated satisfaction with the current standards for providing data, a likely indication that their timeliness and quality requirements are being met. Seventeen (21 percent) requested on-line data access by computer, 11 requested real-time data (assumed to imply need for on-line data access and included in the 17), 5 requested "as soon as possible" or on-demand data, 3 requested in less than 1 week, 9 in less than 1 month, and 11 wanted to receive data more timely. Twelve asked for annual publication of the data (including several that wanted provisional real-time or on-line access), one requested publication in 6 months, and one requested publication in 3 months. Eleven were of the opinion that the data should be of high quality.

### B) HYDROLOGIC CONSULTATION

Thirty-four cooperators (41 percent) think that timeliness of consultation is important and 14 (17 percent) think that quality is important as a standard. Thirteen (16 percent) indicate that the current standards are acceptable. Cooperators thought the following types of response was appropriate: on demand--14; more timely--2; less than 1 week--3; less that 1 month--2; quarterly-3; and annual--1. Seven thought that consultation standards should be of high quality and two identified a need for better communications skills.

### C) INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS

Overall 55 respondents (67 percent) indicated that timeliness was an important standard and 17 (21 percent) indicated that quality was important. Six (7 percent) thought that current standards are acceptable. Twenty-seven cooperators are of the opinion that reports should be more timely; three think they should be provided by the project completion date; four think they should be completed in 1 month or less; seven, in 3 to 6 months; seven, in 1 year or less, and two, on demand or as soon as possible. Two cooperators indicated a need for better communications and more understandable products and eight indicated that the products should be high quality.

7. IN ALMOST ALL STATES, USGS AND ITS CUSTOMERS HAVE A COOPERATIVE PROGRAM WHICH CONTAINS AN INVESTIGATIVE PROGRAM WITH WRITTEN INTERPRETATIVE REPORTS AS PRODUCTS. WHAT CUSTOMER SERVICE STANDARDS DO YOU THINK SHOULD APPLY TO THESE INTERPRETATIVE REPORTS?

In addition to timeliness standards (identified by 40 people) and quality standards--including accuracy, reliability, professionalism--(identified by 31 people), 13 cooperators indicated the need for management standards that include project management interaction with cooperators (discussion of technical or scope changes, concern about layers of peer/editorial/policy review, flexibility for regulatory changes, realistic project scope and completion dates, cost-effectiveness issues, etc).

Thirty-one cooperators (38 percent) thought that reports should be more timely; four thought that the report should be completed within 1 year of project completion; two thought that the report should be completed within 6 months of project completion; and seven thought the current standards are acceptable. Fifteen cooperators felt that high quality is important and 20 (24 percent) thought that the report products should be more understandable, be better coordinated with the customer, or better meet their needs.

# 8. IF YOU HAD TO SET CUSTOMER SERVICE STANDARDS FOR THE USGS FOR THE ABOVE PRODUCTS (4 AND 6 A, B, C), WHAT WOULD BE THE MOST IMPORTANT COMPONENTS?

The responses have been categorized into eight components as identified below:

	COMPONENT	RESPONSES
a.	Timeliness	54
b.	Accuracy	22
c.	Quality	22
d.	Format/Usability	12
e.	Communications	10
f.	Cost-effectiveness	4
g.	Relevance	4
h.	Objectivity	2

### 9. WHAT COULD WE DO TO IMPROVE OUR CUSTOMER SERVICE?

The following categories of improvements were suggested by the cooperators:

Timely products	38
Communication issues	23
Funding concerns	12
Management or project concerns	8
On-line Computer Data Access	4
Training	2

# 10. WHAT HAVE YOU DONE TO IMPROVE YOUR CUSTOMER SERVICE THAT WE SHOULD DO?

The responding cooperators provided excellent suggestions for improving customer service. Please see list in the Appendix.

# 11. IN YOUR EXPERIENCE, WHAT BUSINESS OR ORGANIZATION MIGHT THE USGS USE AS A BENCHMARK FOR COMPARING CUSTOMER SERVICE STANDARDS?

The responses include suggested benchmarks of 13 major industries or businesses, 11 government entities, 10 consultant firms, and 5 that indicated that the USGS sets the standard in its field. Please see list in Appendix.

### IDENTIFICATION OF CUSTOMER NEEDS

The most common concern expressed by the cooperators was timeliness of product completion. In addition to the three specific areas of hydrologic data, hydrologic consultation, and interpretative reports, following are other areas of concern identified by customers as needed services.

### **Access and Timely Review of Data**

The Division is studying the question of whether to continue to publish the Annual Data report in paper copy. Other options discussed have been publishing the data on CD-ROM (this practice has been in place for the last several years), or doing away with an annual product by providing on-line computer access to users to retrieve approved data. The question of publication medium is a high-profile customer issue.

The other important question besides the medium of publication is the process of working, reviewing, and approving records. We are rapidly moving into a real-time data world. Hydrologic data are needed for real-time management decisions. It will be important to provide services, as high priorities, for two types of data: (1) Real-time provisional data and records, as accurate and up to date as possible (with correct rating tables and shifts kept up to date in the computer), for use by water managers; and (2) checked, reviewed, and approved data and records that will stand up in court and continue to set the standard for objective and unbiased data. The first type of service, when considered with other needs and interest for on-line access to data (as indicated by responses to question 6A, above), will be increasingly important to water users and managers. Our response will need to be easy computer access, user-friendly software for ease of use, and time- and cost-effective systems that easily interact with the rest of the water management and scientific community. The challenge for the second type of data will be to interact with the real-time data world to develop processes to work all data and records in a more real-time mode and to provide approved data faster for whatever "publication" mechanism is used.

### **Communications/Usability of Products**

The survey results indicated that many of the customers who cooperate with USGS on multi-year interpretative studies felt the need for better communication during the working years of the project as well as when the report was delivered. The primary needs were for reports of progress during the course of the project as well as more up-front indications of final technical results. Cooperators also indicated a need for more understandable final products as well as lay-reader reports.

### Geographic Information System (GIS) Support

Several cooperators identified the need for GIS assistance ranging from actual operation of systems to preparation and population of various databases for use by the public and water information community.

### **Training**

Training assistance was a need identified by several cooperators. This request included presentation of customized hydrologic training for their employees as well as continued and additional availability of cooperator attendance at training at the USGS National Training Center.

### **Customer Service Standards**

Although not established specifically as customer service standards, and not compiled to be readily obtainable as a body of information, and certainly not concise enough for providing clear, relevant information to customers, there are sets of goals, deadlines, guidelines, and practices that provide Division consistency in meeting customer requirements. More important at this point is whether these guidelines and practices are customer driven, or whether they are process artifacts of historically successful methods that have lost effectiveness over time. The following discussion on "Existing Division Standards" will briefly discuss current practices for providing data, consultation, and interpretative reports. The section following that will provide "Proposed Preliminary Customer Service Standards".

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### **Existing Division Standards**

### A. HYDROLOGIC DATA

The current practice for basic hydrologic data is to make the data available to the public immediately, following field and office checks to verify that equipment was operating properly and that computations were without major error. The data are provided provisionally until final checking and review, at which point the data are approved flagged "final" in the computer databases, and generally published. Data are stored in State (District) databases that use the National Water Information System (NWIS) which is comprised of four separate databases. The data base for continuous and real-time data (ADAPS) manages this provisional/approval flagging quite well. This is not the case with the water-quality database (QWDATA), the ground-water database (GWSI), or the water-use database (SWUDS). The data stored in these databases are assumed to be final and approved, but at any particular time, some of the data are in some State of checking and review until they are published. State data bases are also compiled into a national database (WATSTORE) where provisional flags are carried forward from the individual State NWIS databases. Additionally, data updated to WATSTORE are unavailable for retrieval for 20 days following the update. Updates from the State databases to WATSTORE are done periodically but the schedule and frequency varies widely.

Data collected as part of the basic hydrologic data program in a District office are published under guidelines established for the annual review and publication of hydrologic records. The standards for the review of hydrologic data and records in the USGS are extensive and comprehensive to include field equipment and practices, methods of data computation, training, periodic quality assurance reviews by national technical discipline teams, District field and office procedures, and a long list of other practices. The process involves large numbers of people nationwide in an annual cycle of data collection, checking, review, and approval. The end of the water year, September, marks the start of the job to finalize hydrologic records for the water year for final review and publication. The Division goal for completion of records and sending the Annual Data report to the printer is by 6 months after the last data for the water year are collected (April 1).

Data collected as part of interpretative investigations may be reviewed and published as part of the annual hydrologic data program publication. However, a District may choose to publish the data separately as a data report or as part of the final interpretative report for the study.

### **B. HYDROLOGIC CONSULTATION**

There is probably no specific guideline for responding to requests for technical assistance. Generally, cooperators are provided technical consultation, depending on the type of request, within a reasonable time frame. The time frame might range from less than an hour, to provide an instantaneous discharge, to a week or two for a more technical request such as advice on hydraulics of a bridge site or modeling scenarios.

### C. INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS

There is a significant and complex peer/editorial/policy review process for reports that is intended to provide a high level of quality assurance and quality control of the final product to USGS technical and publication standards. The requirements for completion of the product have been indirect to the present. The only Division control placed on timeliness has been the declaration of a report as "overdue" when it has not received Director's approval within 6 months of project completion. Once approved, there are no specific time requirements for printing the report.

Within the past few years there have been several efforts at the local, regional, and national levels to review problems related to late reports and to provide direction and solutions for these problems. These efforts include all aspects of the report process, from the project planning to the printing stages. The Division is working actively to solve problems that prevent the timely completion of reports.

### **Proposed Preliminary Customer Service Standards**

### A. HYDROLOGIC DATA

The timeliness and availability as well as the quality or accuracy, of hydrologic data collected by the USGS are essential to our cooperators. There are three important standards to maintain:

- 1. Provisional data are made available as soon as preliminary checks are completed, usually within one week of collection, or immediately if collected via satellite (or other telemeter) transmission.
- 2. Computer hydrologic records (continuous computation of discharge from gage-height records and continuous water-quality records) are updated with shift and datum corrections within one week of field measurement/visit. These provisional records are available by computer retrieval on request, or by on-line computer access by cooperators.
- 3. Hydrologic records and data are computed, reviewed, and approved for final release (usually publication) within 6 months of the end of the water year in which the data are collected.

### **B. HYDROLOGIC CONSULTATION**

The existing practice of individual response to requests for technical assistance from cooperators will continue. As suggested by responses to the survey, ongoing and periodic communication (whether monthly, quarterly, or annual) between USGS and cooperators is encouraged. This practice will encourage technical interchange and accommodate opportunities for discussions of ongoing project activities, management concerns, and water issues that may impact ongoing and potential mutual activities.

### C. INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS

The results of the pilot survey process indicated that there is significant concern over the amount of time it takes to provide a published report to the cooperators. It is clear that a report being "overdue" if Director's approval has not been attained within 6 months after project completion is unacceptable. Late reports have been a major problem to USGS for several decades, and as such it seems unreasonable to set division-wide standards in the one-month period of the pilot study. It is, however, reasonable to expect that the Division will address this issue in the near future and that timeliness standards will contain provisions for providing published reports by the end of the project completion date. In doing so, every aspect of project and report planning and management and review must be evaluated to avoid merely adding time to the project life to accommodate report completion. The Districts must do better planning and implementation with early quality assurance while the Division must look at re-engineering the entire peer review and publication process with the idea of saving major time and evaluating the degree of quality necessary.

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### APPENDIX - COMPILATION OF SURVEY RESPONSES

- 1. IS YOUR BUSINESS PRIMARILY: A) REGULATORY \_31\_\_, B) SCIENTIFIC \_21\_\_, C) WATER MANAGEMENT \_52\_\_, D) OTHER \_18\*\_
  - \*-Design of Highway Structures
  - -Transportation Engineering
  - -Geologic and Water Resources Information
  - -Planning
  - -State Fish and Wildlife Agency
  - -Sanitation Quality
  - -Power
  - -Fish and Wildlife Research and Management
  - -Data Base Management and Technical Assistance
  - -Environmental Restoration
  - -Geographic Information Systems
  - -Water Delivery

# 2. WHAT IS THE MOST SIGNIFICANT EFFECT OF THE USGS ON YOUR OPERATIONS?

- Collects streamflow data for the State of Texas
- Cost of getting data. USGS funding cuts requiring more money for less.
- Providing basic data for scientific studies and management
- Ability to obtain reliable data from stormwater analysis; sharing of reports and research projects in other parts of the U.S. on stormwater quality issues.
- Operation of gaging stations on Colorado River (Texas) mainstream.
- Data collection agency, maintain high-quality work and retain unbiased nature
- The USGS provides hydrologic data that assists the State Engineer
- Office in regulating use of Water Resources throughout the State of New Mexico.
- Providing hydrologic information for the Albuquerque basin upon which long-term management decisions will be based.
- Providing flood data.
- Assist with calculation of surface-water flows used to recharge ground-water basin.
- USGS provides the expertise in hydrologic data collection and research that provides the foundation for Carson City Utilities to develop sound water management programs.
- Rely on real-time data from river/lake gaging stations for reservoir operation and other water accounting procedures.
- Operation of stream gages and data derived.
- Provides virtually all of the streamflow and ambient water-quality information used in our water pollution control program.
- Pesticides sampling and analysis of both surface water and ground water.
- Acquisition and interpretation of basic hydrologic data allows us to estimate assimilative capacity of streams/rivers.
- Providing data and research for our programs.
- Ground water, water quality, and stream gaging databases.
- Provides needed water data and hydrologic investigations for the proper management of the State's surface- and ground-water resources.
- The service that keeps the municipality in compliance with the Clean Water Act.
- Provides streamflow, water-quality data, and special studies.
- Providing reliable water data through the cooperative program.

- Hydrologic data and procedures developed by the USGS are valuable tools used in the Department's hydraulic design process.
- Provide baseline data for a major portion of our work projects.
- USGS-Iowa City is providing technical/scientific assistance:
- Assessment of current well fields and potential sites. Studies to determine if wells are under direct influence of Cedar R.
- Investigations and GIS/data base information compilation for well-head protection programs.
- As a source of map products and hydrologic data.
- Providing us with information so we can make decisions.
- Accurate real-time data.
- Access to historic and real-time streamflow data for policy analysis and management decisions.
- Water quantity and quality monitoring on streams the Water District gets its water supply from.
- Source of information
- Provision of basic water-quantity data and special hydrologic studies.
- Operation of gaging and thermograph stations. Providing streamflow data upon request, doing technical water availability studies for us.
- Equipment and expertise in measuring water flow and collecting water quality samples.
- Measurement of stages and flows.
- USGS has provided valuable information for making several long-range, multimillion-dollar management decisions.
- Provide data and interpretations of regional scope that assist planning and regulatory decisions for ground-water resources.
- Quality hydrologic data.
- USGS is the primary operator of streamgages used to monitor the Salt-Verde watershed.
- Providing information on hydrogeologic topics through investigations focused on the Tucson Basin and Area Valley. The subsidence studies, the on-going maintenance of the subsidence network, are the most significant. At this time, the USGS has minimal impact on our operations.
- It has enhanced our ability to fund more sites due to the cooperative funding that has been available.
- Water quantity data collection and analysis. Water quality data. Hydrologic technical support.
- The supplying the State of Connecticut with national standardized monitoring, inventory, and special studies for support to the State regulatory and resource management program.
- USGS supplies nearly all surface-water data and over half of ground water data. Single biggest entity that our organization deals with for coop programs.
- Collecting data and conducting applied research and generating interpretative reports.
- Enhanced ability to perform scientific studies necessary for Water and Environmental Management.
- USGS provides needed design data in the form of quadrangle maps and stream gaging.

- Improved quality of final cooperative study reports through the USGS review process. Improved usability of final maps through use of USGS base materials. Source of additional hydrologic expertise to which we can refer inquiries when necessary. Source of technical expertise that we can draw on when developing our programs.
- Provide basic data influencing management of our watershed storage reservoirs.
- USGS provides streamflow, water-quality data and watershed analysis to support management programs.
- Ground-water expertise accepted by regulators and community.
- USGS provides important and critical support services.
- We rely on USGS data to determine flood discharge and drought flow estimates and to develop hydrologic methodologies.
- Cooperation in the development and implementation of stream monitoring programs and flow data from gages.
- Provide statewide data and information regarding State's water resources.
- Through cooperative agreements, our department has been able to utilize the expertise of the Survey to aid us with the hydrology and hydraulic theory needed to properly design our hydraulic structures.
- The expertise and cooperative spirit of USGS have allowed us to explore ground-water quality issues that otherwise would have been impossible.
- A dependable base line data source.
- Provides hydrogeologic data and technical expertise which are critically important to the success of State government's efforts to develop and implement water resources management and protection policies.
- Technical expertise for resource allocation that is not available within NJDEP.
- Assistance with Somerset County flood monitoring system.
- USGS provides technical assistance and reports/data that are recognized by the scientific community to be of high quality. This lends itself to significant support in the development of local management strategies.
- Offers credible water management support, including instantaneous and record streamflows.
- Difficult question--publish data and consult on technical issues.
- Providing water-quality data, flow measurements and information from special studies.
- Advancing the State-of-the-art in hydraulic design for highways.
- Maintaining and operating surface water streamgaging network. Furnishing streamand ground-water data.
- Hydrologic, hydrogeologic, and water-quality information.
- Stream gaging.
- Contract special studies (aquifer vulnerability, GIS, ground-water- quality data, etc.)
- Technical support; operation and maintenance of primary data collection sites--USGS streamflow data is essential to many of our programs and activities.
- Data for use in low-flow investigations; flow policy; flood frequency.
- Regional data.
- Provides basic data and analyses of hydrologic systems. Used to support management decisions.
- Coordinate ground-water modeling studies and collection of ground-water data.
- Provide data to make management decisions.
- Hydrologic investigations to produce a ground-water model which will assist in regional management.

- The USGS has skilled personnel in highly specialized fields. Their expertise cannot be found anywhere else. TNRCC has benefited from this expertise.

  's diverse governmental background has been very helpful to the
  - \_\_\_\_\_\_'s diverse governmental background has been very helpful to the Clean Rivers Program Technical Task Forces.
- Technical expertise and support.
- Monitoring and technical support.
- The collection, compilation, and storage of streamflow records are essential to our regulatory and management responsibilities.

### 3. HOW DO YOU ACCESS USGS PRODUCTS/SERVICES?

A) MAIL B) TELEPHONE C) FAX D) COMPUTER ACCESS E) CD-ROM *Third Party Ve	11(2*)	EASY? _72 EASY? _73 EASY? _64 EASY? _33 EASY?7	DIFFICULT? DIFFICULT? DIFFICULT? DIFFICULT? DIFFICULT?	3 4 19 4
-Reports 2	2			
-Regular progress meeting	ngs			
-Personal contact 2	2			

4. ON A BROAD SCALE, WE SEE OUR MAJOR PROJECTS [PRODUCTS] FOR OUR CUSTOMERS TO BE A) BASIC HYDROLOGIC DATA, B) HYDROLOGIC CONSULTATION, AND C) INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS. WHICH OF THE ABOVE DO YOU USE?

A)	BASIC HYDROLOGIC DATA	80
B)	HYDROLOGIC CONSULTATION	70
C)	INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS	72

# 5. WHAT OTHER PRODUCTS/SERVICES WOULD YOU LIKE TO RECEIVE FROM THE USGS?

- Statewide water conditions, reservoir levels, rainfall summaries, soil indexes, etc.
- We would like to connect on-line to the USGS Data Network
- Stormwater sampling. Continued sharing of stormwater quality related research and BMP's.
- Hydrogeological investigations of alluvial aquifer, use of Doppler flowmeter, if it can be done efficiently.
- Prefer to have data on floppy disks, distributed in book-like binders with the floppy disks and information regarding file names, access, formats, support, software, etc.
- State Engineer Office receives almost everything they need. There could be more specific data and interpretation needed as other issues come up.
  - The above three categories cover everything.
  - Special flood measurements; scour measurements
  - Statistical analysis of the reliability of the data.
  - None at this time.
  - Interaction with Geographic Information System
  - GIS (expansion of coverages); software development.
  - Give advice to cooperators on emergency basis without approval from Reston.
- A more easily accessible data base for flow and water-quality data by computer-phone modem access.
- Instead of expanding your product line, increase funding for cost share. Place hydrologic/water-use data on CD-ROM. Make more use of data servers over the Internet.
  - Level 2 (detailed) bridge scour evaluations.
  - USGS provides us with essentially any service we request.

- Long-term cooperative research activities would be of interest. For example, monitoring rivers, surface-water and ground-water sources, etc.
  - 2:1 cooperative match.
- Routine 1-page report on flow conditions at index stations Statewide to monitor floods and drought situations.
- Has the USGS looked into providing basic hydrologic data in CD-ROM format? EARTHINFO provides this service for the Water District but the expense is quite high.
  - We're receiving what we need at present.
  - Hydraulic analyses.
  - More help with GIS technology and coverages.
  - Increased routine background data collection for future reference.
- Recent products and services seem out of sink (sync?) with local needs. There is a need for meaningful interpretative reports, but recent work has in certain cases contained serious flaws. And as always, the turn around time takes too long. In general, our needs are very practical.
- You are providing our needs--only request would be new summary reports for WY 1970-1980, 1980-1990.
- Automated database of all topo maps for Alaska in 1:63,360 scale with hydrography and topography to expedite ungaged analyses.
- Direct computer access to District from CTDEP and DEP customers. More Federally supported scientific research on Connecticut and New England hydrologic processes and anthropogenic processes. Sponsorship with the Water Resources Institutes of area conferences on a regular basis on multistate topical hydrologic issues such as bedrock fracture flow and contaminate plume modeling. Include regional WRD, Geol. Div., NBS, NMD, as well as State and other Federal agencies. Public education and outreach to the academic community. More public/lay reader publications accessed through District rather than national orders. More lay publications on regional Federal studies.
- Product mix is about right; strongly prefer that additional funds be allocated for cooperative programs. Also urge that training programs continue to be available.
  - We seem to receive most every product we desire.
  - Peer review; laboratory analyses.
  - Scour coding for bridges to meet FHWA requirements.
- We would like to see easier access to water-quantity/water-quality data stored in USGS computer databases. As cooperators we have access to much of this data, but the methods of access are not especially user friendly, and the format of the data is difficult to change to fit our needs. Incorporation of basic data in geographic information systems (GIS) would also be nice. In general, access to database via computer is more desirable than CDROM products because of the timeliness of the data in the databases.
  - None known currently.
- Scheme for classifying waters for management decisions, i.e. potability, background (background-?), yield, size, etc.
  - Biological-related services, to augment DEP's existing program.
- We have asked for and received stream gaging assistance from USGS in the upper peninsula, where it wasn't feasible for us to make a trip. We would like to still have this upper peninsula help.
  - Access to technical expertise at USGS national level.
  - I am fully satisfied with the range of products and services provided by USGS.
- In-kind, no money exchanged cooperative projects. Quarterly meetings with States/users to review projects, access to data (automated), etc. More orthophoto priority to assist in GIS related work. IPA would facilitate communication and training.
- Training in the use of specific USGS software packages; access to computerized bibliographic data, such as "Selected Water Resources Abstracts".
  - None--we are receiving what we need.
  - Water-quality data for surface runoff, streamflow, and river flow.

- It would be nice if USGS had more public educational materials available at Regional offices. Get the topographical maps digitized.
  - Expanded water-quality program. Full funding of NAWQA.
  - Provide training opportunities for the cooperator at the USGS training center.
  - Become more involved in environmental issues.
  - Training by USGS or with USGS.
  - What else can you do?
- Develop bathymetric maps for all major reservoirs; complete and update 7.5 min. quad maps; delineation of all watersheds in South Carolina in ARC coverages at a scale of 1:24,000; hypsography for all digital 7.5' quadrangles automated in South Carolina.
  - Periodic statistical runs with the output on disk, including outlier analysis.
- Would like on-line hydrological data. Annual listings of ongoing studies and recently completed reports.
- More education at local or State level. Try to understand State's needs for educating public about water resources and the value of science/reliable knowledge.
- Assistance in biologic data analysis; training in QA/QC procedures, lab, field, and data QA/QC procedures; cooperation on development of GIS applications; continued participation in the Rio Grande/Rio Bravo GIS Consortium.
  - Computer, training, laboratory services, equipment.
- Additional GIS coverages; consistency in mapping between USGS, BLM, etc.; expand technical consultation.
  - Greater access to training sessions for cooperators would be beneficial.
  - Reports on time.

# 6. FOR 4 A, B, C (ABOVE), WHAT TIME AND QUALITY STANDARDS WOULD YOU LIKE TO SEE FOR DISSEMINATION OF THOSE PRODUCTS?

- -Need information available online so we can access it and answer immediate questions for decision-making purposes. Need output in digital format.
- -Well, the joke is that USGS operates on the geologic time scale. All data reports should be available to the public within a year following submittal for publication. It is crazy to get 1986 streamflow data in 1991 or later.
- -Currently adequate. Quality is generally more important to us than a hurried report.

### A) BASIC HYDROLOGIC DATA

- -24-hour access by computer to gaging station data, yearly publications, adequate to monitor completely in a State
- -Immediate, on-line electronic bulletin board
- -More timely; publish data, less than 1 year after work is completed. Quality is good now.
- -On-line access to current and historical data. Accurate advice without having to ask.
- -1 to 4 weeks--less than publications standards.
- -Monthly reports in ASCII format
- -Current practice meets the needs of the Carson City Utilities.
- -Highest quality standards and recognition of operational needs.
- -Currently acceptable. Would always prefer faster and better.
- -Acceptable--would like to see results sooner.
- -1 week to 1 month (phone, fax, mail)
- -Completion on time.
- -Faster process of reviewing and publishing data.

- -Turn-around for lab results too long.
- -Goal is to meet customer requirements.
- -Real-time flow, monthly water-quality data.
- -Near real-time data via Internet with quality indicators attached to data
- -Monthly and annual publication to include daily information at key sites.
- -Very high quality standards
- -Comprehensive; accurate; reliable
- -As soon as possible.
- -Time
- -Real-time, instantly. Published data, within 1 year.
- -Advance notice of scheduled trips to stations (for our information), otherwise service has been superb.
- -Quality standards are good. Improve time to press.
- -Specific streamflow data upon request (reasonably).
- -Annual--high
- -Real-time
- -As real-time as possible.
- -Available when collected.
- -Real time, annual reporting.
- -Real time, high quality
- -In general, the turn-around time and quality standards which were in place 15 to 20 years ago.
- -Data review seems a bit long. More timely reports would be helpful.
- -Hard copy annually with electronic access all the time.
- -Real-time preliminary data and report within 1 year of data collection that has national standards. Update trend analyses on basic data after first report is completed.
- -Quicker turn around time; preliminary data within 30 days.
- -Currently, it is very good.
- -Two week availability; greater than 95 percent accuracy.
- -Quad maps updated every 10-15 years.
- -As currently provided.
- -Currently satisfactory.
- -Official report 90 days.
- -Weekly
- -Quality standards are acceptable. Would like data as soon as possible but no major complaints on current timeliness.
- -Must be precise and accurate, available close to time taken.
- -Instant access; high quality.
- -Annual summaries.
- -Requires time for peer reviews and editorial critique.
- -Quality control is good. Lag before publication could be reduced but data are generally readily available prior to publication.
- -On time and have met our needs.
- -Accuracy, timeliness.
- -Annually. What we have now is okay.
- -High quality in less than 1 month.
- -One month approval for final reports.
- -Real time, all data available on computer (shift curve), publish report within 6 months.
- -Immediate access, standard QA/QC.
- -One year turn around time.
- -One week.

- -On-line. Current QC standards.
- -No opinion.
- -Quality good.
- -Your current quality standards are excellent, but the time required for completed reports is too long.
- -Periodic uploads of data should be delivered on a set date. New data (NAWQA data) should be available to partners ASAP.
- -Okay on timing.
- -Satisfactory.
- -As near to real time as possible--rated excellent.

### B) HYDROLOGIC CONSULTATION

- -On demand, with reasonable response time.
- -More timely response.
- -Competent straight-forward answers 1 to 2 days after asking for advice. Advice without having to ask.
- -Current practice meets the needs of the Carson City Utilities.
- -Currently acceptable. Would always prefer faster and better.
- -Acceptable.
- -1 week to 6 months (phone, fax, mail)
- -Better communication skills
- -No problems
- -Present standard is adequate.
- -As needed.
- -Currently adequate.
- -Should be accessible for consultation within several days of request.
- -Very high quality standards.
- -Comprehensive; accurate; reliable
- -Time
- -Quarterly meetings between staffs.
- -Upon request with reasonable advance notice.
- -Real-time help is needed; no change in quality.
- -Available by phone for info relative to current projects.
- -In general, the turn-around time and quality standards which were in place 15 to 20 years ago.
- -Year round.
- -Real time, through personal contact.
- -Reduced turn around time.
- -Currently, it is very good.
- -Reports available within 1 month.
- -As currently provided.
- -Currently satisfactory.
- -48 hours.
- -Almost immediately.
- -Okay.
- -Must be understandable, realistic, and usable.
- -Available on short notice.
- -As needed--minimum quarterly.
- -Immediate.
- -Timely and reliable at present.
- -Request basis--timely.
- -Accuracy, timeliness.

- -Set times for completion of project case by case. Meet the set times.
- -Good quality in less than 1 week.
- -One month approval for final reports.
- -As needed.
- -Timely reasonable response, confidence in quality.
- -One year turn around time.
- -Two weeks.
- -Rapid turnaround. current QC. Allow memo reports.
- -No problems that I am aware of.
- -Satisfactory.
- -Reasonable time response--top quality.

### C) INTERPRETATIVE REPORTS OF HYDROLOGIC INVESTIGATIONS

- -Only when report is needed by a customer
- -Short review time, product out within 6 months.
- -Reports should be reviewed and completed by the agreed completion date on JFA's.
- -According to due dates set in contract.
- -More timely; publish report less than 1 year after work is completed.
- -Need reports produced much more rapidly after completion of field work or data collection.
- -2 to 8 weeks--less than publication standards
- -Current practice meets the needs of the Carson City Utilities.
- -Faster dissemination and more willingness to extrapolate rating tables.
- -Currently acceptable. Would always prefer faster and better.
- -1 month to 1 year (report)
- -Good summation
- -Layers of unnecessary bureaucracy causes extreme delay in obtaining results in a timely fashion.
- -As available
- -Speed the review process for more timely reports.
- -Final report publication should follow draft document as quickly as possible.
- -Very high quality standards
- -Comprehensive; accurate; reliable
- -As soon as possible.
- -Time
- -As long as we have access to provisional data and reports, timing is okay. The wait for the approved report is excruciatingly long.
- -Within 2 to 3 months of study completion; a quality document that can be understood.
- -Monthly--high
- -1 year
- -More timely review; excellent quality already.
- -Shorten time of review; receive first "drafts" sooner.
- -Quality is excellent, time is always late.
- -In general, the turn-around time and quality standards which were in place 15 to 20 years ago.
- -More ungaged analyses and interpretation.
- -Within 6 months of completion of special studies.
- -Reduced turn around time.
- -Faster completion of the written portion of interpretative reports.
- -Report available within 6 months of study completion.
- -Reports take too long; need annual interpretative reports.
- -6 months.

- -Within 1 year after data collection.
- -We would like access to preliminary data and able to discuss methodologies and results early in time process for projects that impact our programs, even if we are not a sponsor.
- -Accurate, concise, available close to time when info was collected.
- -Timely and high quality.
- -Depends on project. Project reports annually are useful, but full analysis/reporting every 3-5 years.
- -Two types: 1) Non-technical users--weeks to a few months; 2) Technical--6 months to 1-2 years.
- -Quality control subsequent to colleague review and prior to publication has been problematic; time lag before publication has been excessive.
- -Must shorten time frame for final reports. Draft reports have met cooperative agreements (time frame).
- -Accuracy, timeliness.
- -Less (significantly) publishing delays.
- -Set times for completion of project case by case. Meet the set times.
- -High quality and much faster reporting.
- -One month approval for final reports.
- -Within 6 months of completion.
- -Reasonable turn around (which is one of USGS's major faults).
- -One year turn around time.
- -Reduce lag between end of contract period and delivery of final products.
- -Commitment to publish within 1 month following final approval; use outside contractors if necessary.
- -More timely reports.
- -High.
- -Your current quality standards are excellent but the time required for completed reports is too long.
- -Reports should be made available to the general public or drafts of reports before it is approved by USGS Reston office.
- -More timely delivery.
- -More timely to meet customers needs.
- -The time standard must be shortened.
- -On time--well reviewed and high quality.
- 7. IN ALMOST ALL STATES, USGS AND ITS CUSTOMERS HAVE A COOPERATIVE PROGRAM WHICH CONTAINS AN INVESTIGATIVE PROGRAM WITH WRITTEN INTERPRETATIVE REPORTS AS PRODUCTS. WHAT CUSTOMER SERVICE STANDARDS DO YOU THINK SHOULD APPLY TO THESE INTERPRETATIVE REPORTS?
  - Who are the reports for? Why are they needed? Does the State already do the same thing?
  - Shorter review time
  - The report review procedure is too long
  - On the work according to scope of services in contract and under schedule set in contract; do not invoice for work not done.
  - Use best engineering principles, State-of-the-art presentation media and currently accepted practices. Get it right the first time, accuracy is important, quality products yields customer trust. Quality not quantity is the key element.

- More timely submittal of reports with acceptable quality within 1 year.
- Reports should be thoroughly peer reviewed, answer pertinent questions, indicate follow-up work, make recommendations, and promptly be published.
- Faster publications; less internal USGS review.
- We have in-house staff for data interpretation.
- If there is a sole entity for which the research is being done provide a one-on-one presentation and review of the report.
- Faster response time in providing results.
- Opinions should be clearly identified as such. Degree of confidence in opinions or interpretations should be identified.
- The reports should be produced in a timely manner.
- Summation (easily understandable) and direct answer of questions.
- Standards acceptable to the State Geological Survey or set by the Association of American State Geologists.
- Anything but the present bureaucratic standards which require 4 to 5 layers (District, sub-region, region, HQ, etc.) of approval before a report can reach the cooperator and the public.
- Communication with customer(s); Mission/Goals; Customer requirements.
- Reports should be available within 3-6 months of project completion.
- Work is professional, on time, and accurate.
- These reports should be developed using a mutually agreed upon format and should be published in a timely fashion.
- Quality of the data is of utmost importance. It's what separates USGS from all the others.
- Given the mission of USGS, reports should be comprehensive or possibly better Stated studies/reports, etc., should be of a "broader" scope than those conducted by a private engineering firm.
- Shorter timeframe for publication (printing).
- Coop agreement with GS is O.K.
- State all assumptions, facts, and variables. Different techniques of hydrology result in different conclusions. Be careful.
- Adherence to study goals and deliverables arrived at jointly by USGS and customer. Tailored studies with sufficient interaction with customer during study.
- I assume that publishing those reports requires an internal peer review process--keep this of high quality.
- The issue of long turnaround and multiple reviews within USGS is overdone. Most of the interpretative info is non-controversial or not revealing, anyway. Publish reports in 1 year or less after completion of data compilation.
- We have had some difficulty getting technical reports completed within a reasonable time period, apparently due somewhat to the review process within USGS. Reports are usually well done but sometimes technically difficult to read and understand.
- I feel that USGS is respected for their quality control and scientific base.
- Objective, unbiased, solid science at reaching conclusions.
- Direction of projects should accommodate needs for agencies to make management and regulatory decisions.
- USGS should meet their agreed to deadlines. A report takes too long!
- Product should be finished within a usable time frame. Analysis should be thorough, meeting the requirements of good science. Adequate project management so that there are no surprises/misunderstandings.

- Your present standards are very high and quality is excellent.
- I presently do not know existing standards for customer service.
- Timeliness within 1 year of completion of study. Continued quality control reviews but speed up authorized approval.
- Quality is seen as good to excellent, but prefer quicker turn around and improved funding for cooperative programs.
- Need to have a faster delivery of the final products once your internal editorial process begins.
- Report available within 6 months of study completion.
- Timely publication.
- USGS reports for cooperative studies are high quality products; maintaining this high quality should be the first priority. The delay in publication of the final reports is the area that could stand the most improvement. This could be addressed in part by a more rapid dissemination of draft results, either in printed form or via computer.
- Quality remains excellent. Timeliness needs to be improved.
- Need more rapid turnaround on report preparation and release. Lengthy review process does not seem to do anything but delay release of reports.
- Timeliness, data customer needs, DQO's of customer.
- Interpretative reports should have a high standard for accurate and clear reporting of data.
- Closer cooperation by early review of methodologies and draft products.
- Report must be concise, understandable, and available shortly after data are collected.
- Timely and high quality.
- This would depend on the project and needs of the customer. For this agency, annual progress reports are useful; however, full analysis/reporting should be done on a reasonable (3-5 years?) interval.
- Designed for geologists and engineers not trained as hydrologists; also portions for non-technical persons [such] as planners.
- Rigorous quality control is essential but a means of expediting publication and delivery of consistent products is badly needed.
- As Stated above, draft reports are available for review within timeframe of agreement, final report should be produced faster.
- Accuracy, timeliness, cost-effective.
- As a cooperator, we have found that USGS worked closely with us to develop a product that closely meets our needs. Getting the reports out ASAP after submittal to Reston would help a lot.
- Provisional issuance followed by peer review, final issuance.
- 50 percent visual in the reports. Produce public outreach reports. More timely in completion/publication.
- The time frame between finishing the data collection and final report needs to be significantly shortened.
- Scientifically correct; results presented in a user friendly format; recommendations easily implemented by sponsors.
- Continue to maintain high product standards in quality and time management.
- Service standards may vary from customer to customer or report to report. The USGS representatives need to listen to the customer and provide reports to the standards asked for.
- Your standards are excellent.
- USGS needs to improve on time to final report.

- It would be helpful to receive the reports in a more timely manner.
- Support peer review. Also need customer review. Need glossary; improved readability. Faster turn-around of final reports.
- Upon approval for publication, give presentation of final results and discussion of how results can be applied. Quicker turn around of reviews and final publications. More realistic completion schedules; majority of projects run much longer than initially planned.
- Reports should meet the needs that were agreed upon.
- High.
- Timeliness of reports--less USGS national review time.
- Should be customer driven; i.e. specifically address management issues/questions.
- Meet customer needs and quicker; common QA/QC or understanding of procedure.
- Fulfill interpretative objectives; stay on schedule and within budget.
- They have to stand the test of time and court.

# 8. IF YOU HAD TO SET CUSTOMER SERVICE STANDARDS FOR THE USGS FOR THE ABOVE PRODUCTS (4 AND 6 A, B, C), WHAT WOULD BE THE MOST IMPORTANT COMPONENTS?

- Collecting data, providing data, interpretation of data
- 4-months review, print and distribute within 6 months
- Timeliness, accuracy, objectivity
- Schedule, deadlines, progress reports, due dates.
- All three elements are important, we depend on a total service.
- Timely submittal.
- Pertinence; answers should be to the point, answering direct questions in a timely manner.
- Timely response.
- Accuracy; timeliness; data format
- To provide data and information that was user friendly to the majority of users.
- Accurate basic data plus recognition of real-time data needs for system operation.
- Faster response time--data, rating curves.
- Timeliness and accuracy.
- Timeliness
- Accuracy, time
- Completion on time and direct answer of questions
- Accuracy of data.
- Reasonable accuracy, reasonable cost, reasonable turn-around time
- Quality team approach to problem solving and continuous improvement of services.
- Accurate data, presented timely, in a user-friendly format.
- Is the information accurate, timely, and is this work product of immediate use to meet a specific need.
- Timeliness of delivery; flexibility in format; follow-up service.
- Ouality of data.
- Comprehensive; accurate; reliable
- Timeliness
- 4 and 6 are not relevant to customer service; the USGS is mixed up (?).
- Accurate basic data (within a tolerance).

- Minimize regional and national overhead. Set priorities among gages to increase visitations at high priority sites. Increase access to studies by interested parties. Eliminate "proforma" liaison meetings (NAWQA) to concentrate limited resources. Interact with policy groups.
  - C\_\_\_\_\_(?) to avoid advocacy. Improve ADAPS procedures.
- Improve the time it takes to get hydrologic data to report form.
- Timing, cooperation.
- Timeliness, accuracy, technical quality.
- Maintain your present standards.
- Quality and reliability, time to complete product.
- Timeliness, and objective quality.
- Solid data bases for models; expeditious reviews.
- Time
- Reliability, accuracy, timeliness, value (cost)
- Maintain quality of basic data (QA/QC is critical). Timely release of data in "finalized" form. Interpretative analyses should have the highest quality.
- Quicker review process; report sooner.
- More assistance, more gage sites.
- National standards; QA and QC; and timeliness of product.
- More timely release of products.
- Mark 6c for improvement. Mark 6a and 6b as a high standard.
- Timeliness. Accuracy.
- Accuracy and timeliness.
- The most important component in setting customer service standards is assuring a consistently high quality of the product, whether it be basic data, consultation, or interpretative reports. Again, easier and more rapid access to data via computer and an easier way to reformat the data to meet our needs is something we would like to see. In summary, quality followed by timeliness and ease of access.
- Timeliness and accuracy.
- Streamlined review needed to get reports out to meet customer needs.
- Accuracy, timeliness, more layman's terms.
- More feedback early in process. Consult with us when considering program changes.
- Data quality, timeliness, clarity.
- Timeliness and high quality.
- Excellent quality in a timely manner.
- Communication among involved parties/agencies; timely analysis/reporting; high quality products.
- Report clarity written in direct user format.
- Consistent quality and timely delivery.
- Completion of final reports in an agreed upon time frame. High technical standards. Technical consultation (formal and informal).
- Accuracy, timeliness.
- Accuracy.
- Setting and maintaining timeliness.
- Very high quality and timely data.
- Scientifically correct; results presented in a user friendly format; recommendations easily implemented by sponsors.
- Quality.
- Quality of data and analysis.
- Timely response and greater interaction of personnel with customers.
- Quality and expediency.

- Timeliness and technical quality.
- Accuracy.
- Support peer review. Also need customer review. Need glossary; improved readability. Faster turn-around of final reports.
- Regular communication by supervisor and project chief (to cooperator).
- Good technical quality, more readable.
- Meet customer needs; quality work; timely reports.
- Timeliness--less national review time.
- Overkill on quality; timeliness is more important.
- Fulfill interpretative objectives; stay on schedule and within budget.
- Accuracy and On time.

### 9. WHAT COULD WE DO TO IMPROVE OUR CUSTOMER SERVICE?

- Coordinate Federal programs with State instead of embarking with a sole program irregardless of current State programs.
- Try to work on the coop programs where local agencies can do in kind services and not have to pay all cash.
- Streamline report reviews
- Do what you say you'll do and do it on time.
- Provide electronic media as the standard, and provide easy access to the databases.
- More timely submittal of products. More person to person contact with principal (Project Chiefs) involved.
- Prepare and update long-term visions for particular projects instead of sitting down each year and talking about modification. More quality feedback.
- Need more interim summary reports of data collection, rather than be asked for this information; i.e. Flood summaries for recent events.
- Don't wait until end of water year to compile/crunch data.
- Utilities is pleased with the service provided by the Carson City USGS Office.
- Increase communication with system operator and increased measurement frequency at selected sites.
- Provide complete accounting of expenditures in joint-funded activities; justify and explain reasons for increases from year to year.
- Currently satisfactory. Workshops describing available services or data would be useful.
- Provide a faster turnaround time for sample analysis.
- Improve turn-around time for annual report and interpretive reports.
- Communication with \_\_\_\_\_(?)
- Availability of publications, many older publications are hard to get, but very reliable.
- Eliminate unnecessary layers of bureaucracy. Provide meaningful authority to your District Chiefs with appropriate accountability so that the jobs could get done in a timely and cost-efficient manner.
- Training on quality-related topics.
- Reduce time required for review of draft data/reports. Improve data management and access to information using P.C. windows systems.
- Provide for in-kind services and speed report generation.
- Streamline the internal review process so that documents are published in a reasonable amount of time. Consider the needs of the customer together with agency requirements.

- It's getting better but more timely review and publication of final reports.
- City of Cedar Rapids has received excellent service (personal and professional) from USGS-Iowa City. All individuals in this office have been both extremely professional, dedicated, and cooperative.
- Provide earlier notice on projects with other cooperators.
- Improve time from start to finish.
- Mobile telephones in all field vehicles.
- Listen to customer needs; disaggregate protocol and costs from Reston; empower District to improvise data and research tasks.
- Review the USGS rate requirements. They are not competitive with private consultants even with the 50/50 local cost sharing.
- Lower costs, reduce number and duration of samples for water quality. Too much emphasis on "scientific" methodology which is in turn used to justify the costs. Studies take too long.
- Reduce the time it takes to publish a technical report.
- Speed up the review of publications and data release.
- District newsletter with status of all activities; joint studies; make costs more representative of a competitive market; make data more readily available to cooperators and the general public.
- Speed up review process, but maintain quality.
- Quicker review; retain quality of review.
- Set realistic time standards, increase Direct Credit.
- Quicker review and production of annual water supply papers.
- Look to the past when the USGS collected the highest quality basic data--how did they do it? More rapid release of final reports/basic data. Improve project management and communication with cooperators. Staff members with experience should lead project teams.
- More timely information.
- Fund your staff better and pay for more gage sites.
- Quicker turn around of completed published product.
- Increased cooperative funding, more timely release of products.
- Overall, it is very good now.
- Closer coordination with customer. Reduce cost of service.
- Have regular update and coordination meetings with consultation clients.
- See 8 above. Develop better and more user friendly front-ends to access basic data and draft results of cooperative studies.
- Improve timeliness on some products.
- Streamlined review needed to get reports out to meet customer needs.
- Lower overhead rates; co-location of investigations sites; more regulator meetings. Quarterly status meeting with cooperator.
- Continue to strive for timely report of data.
- More feedback early in process. Consult with us when considering program changes.
- Listen more closely to what the customer needs and then respond more directly to those needs.
- Streamline report processing and review.
- Replace the standard annual agreements with a single agreement for the total project.
- Your Rolla office is superb. I can offer no suggestions for improving the high quality of products and service we have received.
- Speed up report reviews and \_\_\_\_(?).
- Develop a flexible protocol which allows for the release of draft

interpretative products or interim reports; periodically distribute a comprehensive summary of all ongoing and upcoming District projects (on an annual basis).

- Only area that there is major concern is production of final report.
- Shorten time between end of studies and final publication of results.
- I'm not really sure. I can't say that we've been satisfied customer. Things come quickly in the mail from Denver (lab analysis) and our District/Subdistrict office have been very helpful.
- Technology transfer of products/use.
- Develop more specific project tracking tools and put them in mutually accessible space (for cooperator and USGS) for reference and management of the project activities.
- Expedite the reporting process.
- Faster internal review and approval of reports. Do not change report titles during review.
- Provide training or training opportunities.
- Shorten report titles and publication time.
- Structure projects to meet more mileposts, and information dissemination.
- Suggest that you thoroughly review your in-house review process--it's too long and cumbersome.
- Become more timely.
- Continue efforts to improve communication/coordination with cooperators throughout project, but especially at project inception.
- More formal presentations by project staff; train staff in delivering presentations. More attention to project schedules.
- Report review and publication should be performed in a more timely manner.
- Faster report turn around.
- Service with the Jackson, Miss., office is excellent but faster reporting and easier access to computer based hydrologic data.
- More involvement at local, Rio Grande, and Clean Rivers Program steering committees.
- Timeliness; reduce overhead cost.
- Improve communication and understanding of end product before beginning studies also. Timeliness; less review.
- Grant authors more interpretative latitude; establish a better balance between data quality and timeliness.
- Quit changing organizational structure.

# 10. WHAT HAVE YOU DONE TO IMPROVE YOUR CUSTOMER SERVICE THAT WE SHOULD DO?

- Develop priorities to fund first, provide a service that is what the customers expect.
- Improve timeliness of internal review process to meet project completion schedules.
- Freeze rates (automatic annual increases are not justified and actually fuel inflation); be more responsive to customers.
- Provide significant funding and more information on proposed work to keep the program going.
- Long-term programming, improved communication, turn inquiries around immediately, more feedback.

- Familiarize with available personnel and their specialties.
- Input monthly water-level and water-quality data into database quickly so it is readily available.
- Carson City Utilities continues to seek-out customer input and complaints of our operation so that change can continue.
- Increased measurement frequency from normal standards and improved flexibility of measurement scheduling, allowing for measurement following significant changes in flow rate.
- We are modernizing our computer/data system.
- Anticipate customer needs in planning for future.
- Make publications available for use to the public through our agency library.
- Minimize unnecessary bureaucracy and paper shuffling. Stay in touch with your customers needs and change procedures/standards as needed. Establish reasonable charges for services provided.
- Total Quality Management with emphasis on quality teams to solve specific problems.
- TQM/Service excellence--work teams for problem solving/efficiency improvements.
- Other ideas to improve customer service: Provide quarterly status reports for all projects. Meet with customers regularly to discuss products are used and efficiency.
- We have sought more input from the users of our facilities of services.
- Update mailing list and focus on particular users.
- No major suggestions or complaints. We are pleased with the services provided by USGS-Iowa City.
- We currently are dealing with the same issue.
- Attempt to follow the private sector practice of the customer being right.
- Frequent meetings with interested parties, evolve policy and programs to reflect changing priorities and clientele.
- The Water District is closer to its customers and can provide service more quickly and "locally". This may or may not be possible for the USGS.
- Be more flexible, cooperative with other agencies in conducting field studies and addressing water-quality needs. NAWQA seems to be inflexible and an end unto itself.
- First, recognize that we are customers, then provide quality services and products as if you depended upon them to stay in business.
- Communicate and transmit data through internet (some do--some don't).
- Don't use voice mail, it's a put-off.
- We always respond quickly to requests; this is a high priority in our agency.
- Provide more than the minimum. Treat customer with enthusiasm (USGS doing well in this regard).
- Implement "Total Quality Management".
- We have established our own basic data collection services since the USGS no longer seemed to provide the same level of service. The key may be to provide services which are needed as opposed to trying to generate a need for services. We have instituted aggressive customer service training priorities with staff to emphasize that we work for clients/customers who require a service.
- We have defined our work and what we are going to do so all parties know. In some way, it's "PR".
- Fight hard for funding and legislation to be able to provide support to

- other agencies and the public.
- Data management using GIS for spatial and attribute appraisal; upgrading physical facility for direct customer contact (new publication file facility and new retail map and publication outlet). Greater access to Staff for technical assistance.
- I am not so sure we have improved our customer service over the past several years very much. I believe the USGS does a better job regarding this issue than we do.
- Upgraded hydrologic data quality control.
- Try to improve response time for information requests.
- We are also involved in publishing maps/reports, in some cases the results of cooperative studies with the USGS. We have integrated geographic information systems (GIS) technology into our programs, which has significantly reduced the time required for the final stages of map and report preparation. This also provides for the coincidental development of GIS databases containing the basic data. The USGS should look towards more fully integrating GIS technology into its programs. Note, however, this will require an initial investment in monies and staff time to develop the expertise.
- Poll customers on focus or products provided and how to improve them.
- We have more flexibility in production of technical products. Decisions can be made at the local office level.
- Have held more informal status meetings.
- We are working hard to improve communications with our customers.
- COE--don't operate like this governmental agency.
- Listen and respond to the concerns of your customer to the maximum extent possible.
- You are already doing it.
- We have citizen-user advisory groups. They critique our proposed work and we adjust accordingly.
- Different organization. We are a regulatory vs. a technical/information. We have done a great deal of information dissemination to educate the regulated community and the public officials. Taken part in meetings, seminars, etc., to bring our program to regulated community or public officials.
- Meeting with cooperators on a regular basis.
- Our policy is that phones are answered in all program areas 8:00 am through 5:00 PM by staff that can answer most questions.
- We have initiated a Strategic Planning process involving all employees to establish goals and values for the Division of Water including customer service standards.
- Expanded our outreach to the private and public sectors regarding environmental and resource services/information.
- We are primarily a regulatory agency.
- Accessibility/response to customers--must be easy/timely. Work to improve readability of publications.
- Gave more attention to public inquiries; log-in and follow-up for all complaints; TQM training for staff.
- More timely and shorter publications.
- YMD customers are generally individual water users. There do not appear to be many similarities with YMD and USGS customer service.
- Voice mail--phones do not roll to a secretary; also, receptionist shouldn't respond, "I don't know a \_\_\_\_\_\_"--especially when he

- is an Assistant District Chief.
- Identifying customers and their needs.
- Better defining product and customer expectations.
- Giver higher priority to customer service in relation to internal activities. Early communication with customers when project schedules cannot be met.

# 11. IN YOUR EXPERIENCE, WHAT BUSINESS OR ORGANIZATION MIGHT THE USGS USE AS A BENCHMARK FOR COMPARING CUSTOMER SERVICE STANDARDS?

- IBM, United Parcel Service
- Consultant firms, State Geologic surveys, i.e. University of Texas Bureau of Economic Geology
- Corps of Engineers. The State Engineer Office looks at them most of the time for benchmarking.
- CH2M Hill--they show good responsiveness (CH2M Hill would always ask if the USGS was giving the city good service). Bureau of Reclamation would be a poor benchmark.
- Really none come to mind, other than to try and improve on existing services.
- Banks, phone companies.
- Smaller, more flexible private companies.
- Geological Survey of Alabama
- Other scientific government agencies within the State that the USGS serves.
- CDM. Geraghty Miller Inc. KPMG Peat Marwick.
- Unknown
- Engineering consultants.
- As far as quality of data, other organizations should be looking to you.
- Given the unique nature of USGS and its mission, my best suggestion would be the University of Iowa Hygienic Lab (Basic research/ Environmental monitoring/Testing for private and public organization).
- Large geotechnical consulting firms.
- NWS, State Geological Surveys.
- Can't help you here.
- For water-quality monitoring and interpretative services--Western Environmental Analysts--Dr. Bill Lewis at Univ. of Colorado.
- Federal Express.
- For timeliness, consultants are a benchmark; but weighed against the need for objectivity and quality, timeliness is secondary; USGS sets benchmark for quality work.
- The USGS of +20 years ago set the standard. Look to industries which have recovered from economic downturns.
- Consultants provide more timely information but at the costs of accuracy. The question may be: How accurate does the USGS need to be?
- Nordstrom, BLM Library in Anchorage.
- Regarding interpretative reports, use universities as a standard. They seem to complete reviews of interpretative reports much quicker than does the USGS.
- Private consulting companies.
- The mission of the USGS-WRD is fundamentally different from the profitoriented mission of a private company; as a result, you cannot

wholesale adopt many of the methods employed by private companies, which are free to eliminate non-profitable products. The USGS-WRD should have as its first priority maintaining the high quality of its products--whether it is basic data, consultation/expertise, or reports. Look at other public sector agencies with similar missions (data collection, dissemination) for ideas; these could include the Census Bureau, NOAA, the National Weather Service, etc.

- National Weather Service.
- I am not aware of any appropriate standards. USGS should develop its own.
- DOE Haz. Waste (Martin-Marietta); General Physics; Wal-Mart
- McDonald's--quality control reasonable good, employee training reasonably good, efficient, have not stagnated with success, mix older and younger employees. Whether you like the food you know what you will receive and delivered in a pleasant manner.
- Canada Post Corporation
- ? USGS has been as responsive to our needs as any organization.
- In many ways, USGS is similar to a news organization that investigates, analyzes, and reports on news events and circumstances. Perhaps comparing yourself to a news magazine or journal would increase timeliness of reporting.
- Look at other USGS Regions. USGS is unique entity.
- Use CCIW (Canadian Centre for Inland Waters). Use more lay reader, consumable reports (Reader's Digest format with graphics). Catalogue your services with costs (market your tools).
- Federal Express.
- Saturn.
- Hershey Foods.
- U.S. auto industry in general (over past 5 years). (i.e., quality products at competitive prices)
- Considering the quality of the product, no other organization is comparable.
- USGS should be more like a private corporation than a government agency given the nature of the work--they should be comparable to a consulting firm like Arthur Andersen.
- Private industry.

### NOTES:

- In recent meetings with the District Chief the cooperator stated that the reduction in Federal matching funds, and cuts in CBR Program, if continued, will result in customers going to less expensive alternatives for operation of gages.
- I have a couple of very general comments that may not be of much help to your effort: It seems that USGS documents take a very long time to get through the review and approval process. USGS overhead costs seem high.
- Alaska has 1 gage per 7,000 square miles. Lower 48 has 1 gage per 400 square miles. ALASKA NEEDS GAGES!
- Overall, we find USGS-WRD product quality very good; we would like to see easier and more timely access to the data, and easier ways to format the data to our needs.
- We are generally very pleased with our working relationship with USGS,

Michigan District. The cooperation on the basic hydrologic data is excellent! There have been a few occasions where we would have liked a closer working relationship on projects. We are very concerned that USGS is not fully supporting the basic hydrologic data program. This is of great importance to us, and we would rather see you do fewer studies than cut data collection.

# USGS Federal - STATE COOPERATIVE WATER PROGRAM CUSTOMER SERVICE INTERVIEW GUIDE

1.	<ol> <li>Is your business primarily? a) Regulatory</li> <li>c) Water Management, d) Other</li> </ol>	, b) Scientific,			
2.	2. What is the most significant effect of the T	What is the most significant effect of the USGS on your operations?			
3.	How do you access USGS products/services?				
	d) Computer Access Easy?	Difficult? Difficult? Difficult? Difficult? Difficult?			
4. On a broad scale, we see our major projects [products] for our cust to be a) basic hydrologic data, b) hydrologic consultation, and c) interpretative reports of hydrologic investigations. Which of the do you use?					
	b) hydrologic consultation	a) basic hydrologic data			
5.	What other products/services would you like to receive from USGS?				
(IN	(INQUIRIES FOR SETTING CUSTOMER SERVICE STANDARI	os):			
6.	6. For 4 a, b, c (above), what time and quality see for dissemination of those products?	y standards would you like to			
	<ul><li>a) basic hydrologic data</li><li>b) hydrologic consultation</li><li>c) interpretative reports of hydrologic inverse.</li></ul>				
7.	which contains an investigative program with	which contains an investigative program with written interpretative reports as products. What customer service standards do you think should			
8.	If you had to set customer service standards for the USGS for the above products (4 and 6 a, b, c), what would be the most important components?				
9.	What could we do to improve our customer service?				

- 10. What have you done to improve your customer service that we should do?
- 11. In your experience, what business or organization might the USGS use as a benchmark for comparing customer service standards?