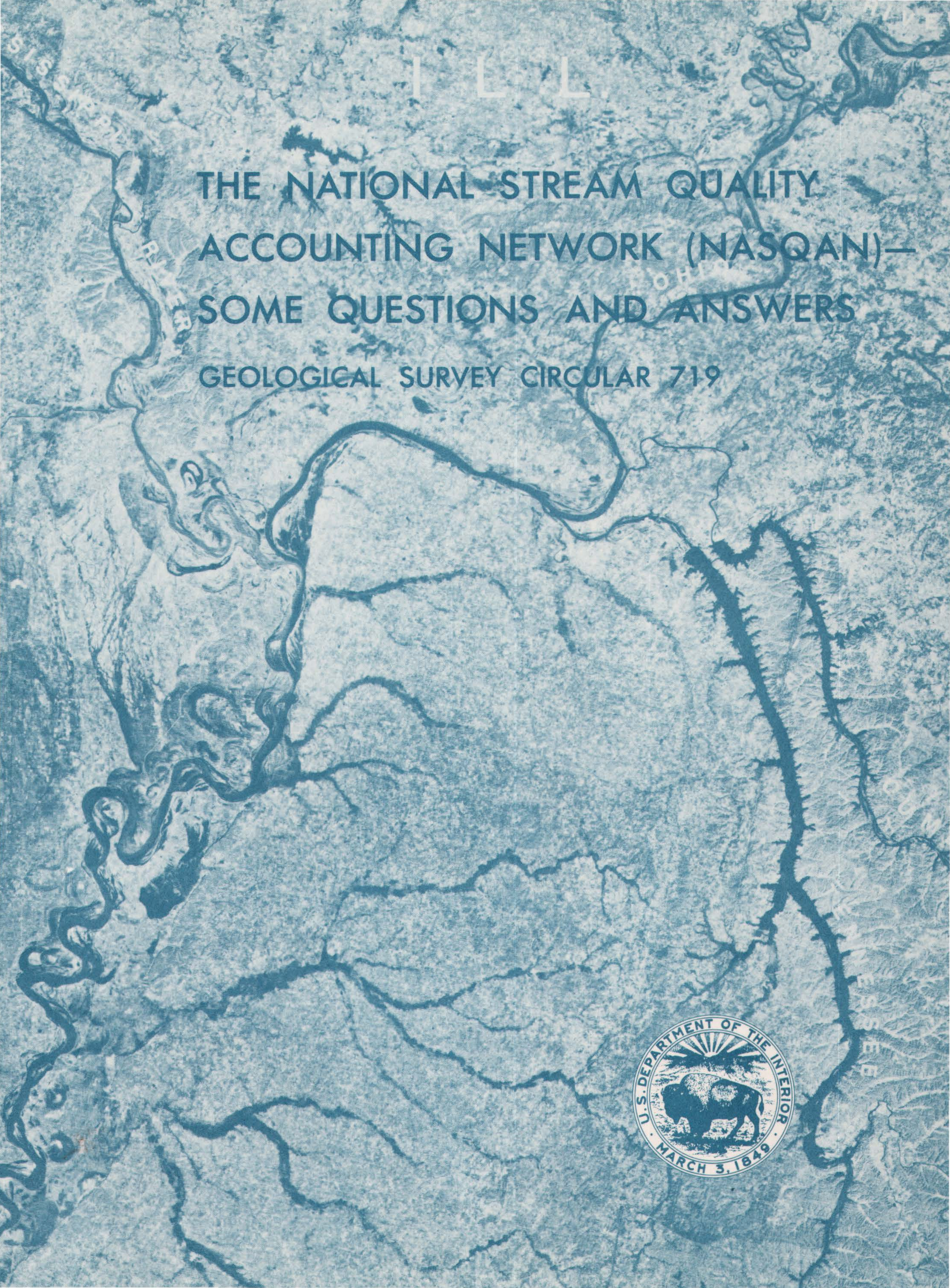

# THE NATIONAL STREAM QUALITY ACCOUNTING NETWORK (NASQAN)—SOME QUESTIONS AND ANSWERS

GEOLOGICAL SURVEY CIRCULAR 719

# THE NATIONAL STREAM QUALITY ACCOUNTING NETWORK (NASQAN)— SOME QUESTIONS AND ANSWERS

By John F. Ficke and Richard O. Hawkinson

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# The National Stream Quality Accounting Network (NASQAN)— Some Questions and Answers

By JOHN F. FICKE and RICHARD O. HAWKINSON

## INTRODUCTION

One of the major new efforts of the U.S. Geological Survey is the National Stream Quality Accounting Network (NASQAN). This circular is intended to answer some of the frequently asked questions concerning concepts used in establishing NASQAN, its purposes, design, value, and future plans.

## PURPOSE

#### What is NASQAN?

NASQAN is a series of stations at which systematic and continuing measurements are made to determine the quality of the Nation's streams. Design of the network specifies measurement of a broad range of water-quality characteristics which were selected to meet many of the information requests of groups involved in planning and management on a national or regional scale. The primary objectives are (1) to account for the quantity and quality of water moving within and from the United States, (2) to depict areal variability, (3) to detect changes in stream quality, and (4) to lay the groundwork for future assessments of changes in stream quality.

#### Why is it needed?

Data of the type needed to determine long-term trends in the physical, chemical, and biological characteristics of the Nation's surface waters are relatively sparse. Wolman (1971) and Enviro Control (1972) have documented the problems associated with the assessment of changes in characteristics of surface waters. Wolman stated some fairly obvious problems involving statistical analysis of water-quality data; these include (1) the relatively short length of hydrologic records, (2) changes in location and frequency of observations, (3) the fact that comparisons of specific variables related to surface-water quality require systematic correlation with hydrologic behavior, and (4) the fact that knowledge of temporal variability of a specific constituent is often essential to the detection of a trend. Enviro Control's study verified the existence of the first problem, noting that of 70,000 stations in the Environmental Protection Agency's water-quality data-storage system, only 142 stations had 8 or more years of records of samples taken as frequently as at quarterly intervals.

Another problem is the unbalanced areal distribution of existing stations having adequate data for statistical analysis. Seventy percent of the stations used in the Enviro Control study were in the northwestern and northeastern United States. Steele and others (1974) noted a deficiency of stations in the north-central and southeast United States. With continued operation of the series of stations established under NASQAN, a set of systematically collected baseline water-quality data will be available for nationwide studies involving transport of and changes in chemical constituents in surface waters.

NASQAN also will provide data needed to assess regional trends in order to evaluate the effectiveness of programs to control water quality. Such assessments will provide local and State officials with some of the information required to judge whether revisions in programs or new legislation is needed. However, the broad-scale information from NASQAN is not likely to be detailed enough to assess the effectiveness of pollution-control measures on a localized basis, as prescribed by Public Law 92–500. Enough insight should be supplied by the NASQAN data, however, to identify problem areas which require detailed monitoring of subbasins to evaluate the effects of land use and treatment measures.

#### How are NASQAN stations different from those that have operated for many years?

Stations in NASQAN are different in that they form a nationwide network in which station location was based upon hydrologic subdivision of river basins. This assures fairly uniform coverage of the entire United States, including Puerto Rico. NASQAN stations can be further characterized by the facts that a uniform operational design has been designated and station operations are committed to fulfilling the long-term objectives of detection of trends in water quality.

In the past, it has not been possible, on a nationwide basis, to determine areal differences and (or) changes in water quality over time because most data-collection programs have been operated to satisfy local objectives or objectives of special programs. Consequently, the stations have been operated for short periods, have been moved frequently, and have experienced variation in constituents sampled. However, it should be noted that many of the stations specified in NASQAN were previously operated for other programs and that some historical data exist for certain chemical constituents (primarily the common constituents) that will be useful in evaluation of trends. Unfortunately, most previous data-collection programs did not monitor the suites of constituents (nitrogen and phosphorus species, bacteria, minor elements, organic indicators, and biological parameters) that are of primary concern in establishing the suitability of water for a given use. The NASQAN program, as designed, will help to eliminate this deficiency as well as, in time, some of the problems which Wolman (1971) discussed; notably, establishing the data base needed for nationwide evaluation of trends in quality of surface waters, and the need to account for the movement of materials in surface waters.

Sampling from bridge.

In addition, NASQAN will use other agencies' documentation of the man-induced changes that occur within basins to help explain changes that may occur in water quality. Water-quality data from adjacent nonnetwork stations and other environmental data will also be used in the analyses and interpretation of NASQAN data, particularly where changes in the water-quality characteristics of a river are detected.

#### Who began NASQAN?

NASQAN was established by the U.S. Department of Interior, Geological Survey. The initial need for a national network to provide water data for Federal agencies was recognized in Bureau of the Budget Circular A–67, dated August 28, 1964. The circular stated that the national network is the mechanism for providing data on the quantity and quality of surface water and ground water, including sedi-

Sampling by boat in a large river.

ment load of streams, and it assigns the responsibility for network operation to the Department of the Interior. The Office of Water Data Coordination of the U.S. Geological Survey was designated by the Secretary of the Interior to design and coordinate the National Water Data Network.

As a basis for network design activities, the Office of Water Data Coordination used the "level-of-information concept" to specify three categories (levels I, II, and III) into which data-collection activities can be classified (Langford and Davis, 1970). Level I data constitute a basic level of information nationwide and thus are suitable for broad national and regional planning and as a foundation for more detailed work in the future.

The need for a national river-quality accounting network to provide broad-scale accounting data (Office of Water Data Coordination level I information) was a primary component of a Departmental "thrust document" on river-quality monitoring in March 1972. On the basis of this impetus, NASQAN became an official activity of the Geological Survey.

Data-collection activities were either initiated or upgraded at 50 stations in January 1973, and at another 50 stations in January 1974, to meet the design specifications for network operation. Appropriations during the 1975 fiscal year permitted expansion to at least one station in each unit of the level I accounting network, thereby placing the present level of network operations at 345 stations.

## ACCOUNTING NETWORKS

### What are the geographical units used in level I accounting?

Through the Water Resources Planning Act of 1965 (PL 89–80), the Water Resources Council was established to provide a framework that would facilitate coordination of water-resource and land-resource activities. In compliance with this charge, Water Resources Council (1970) divided the United States into water-planning regions and subregions. The U.S. Geological Survey's Office of Water Data Coordination has carried the division one step further by specification of accounting units. Figure 1 outlines the existing 21 regions and 324 accounting units in the United States.

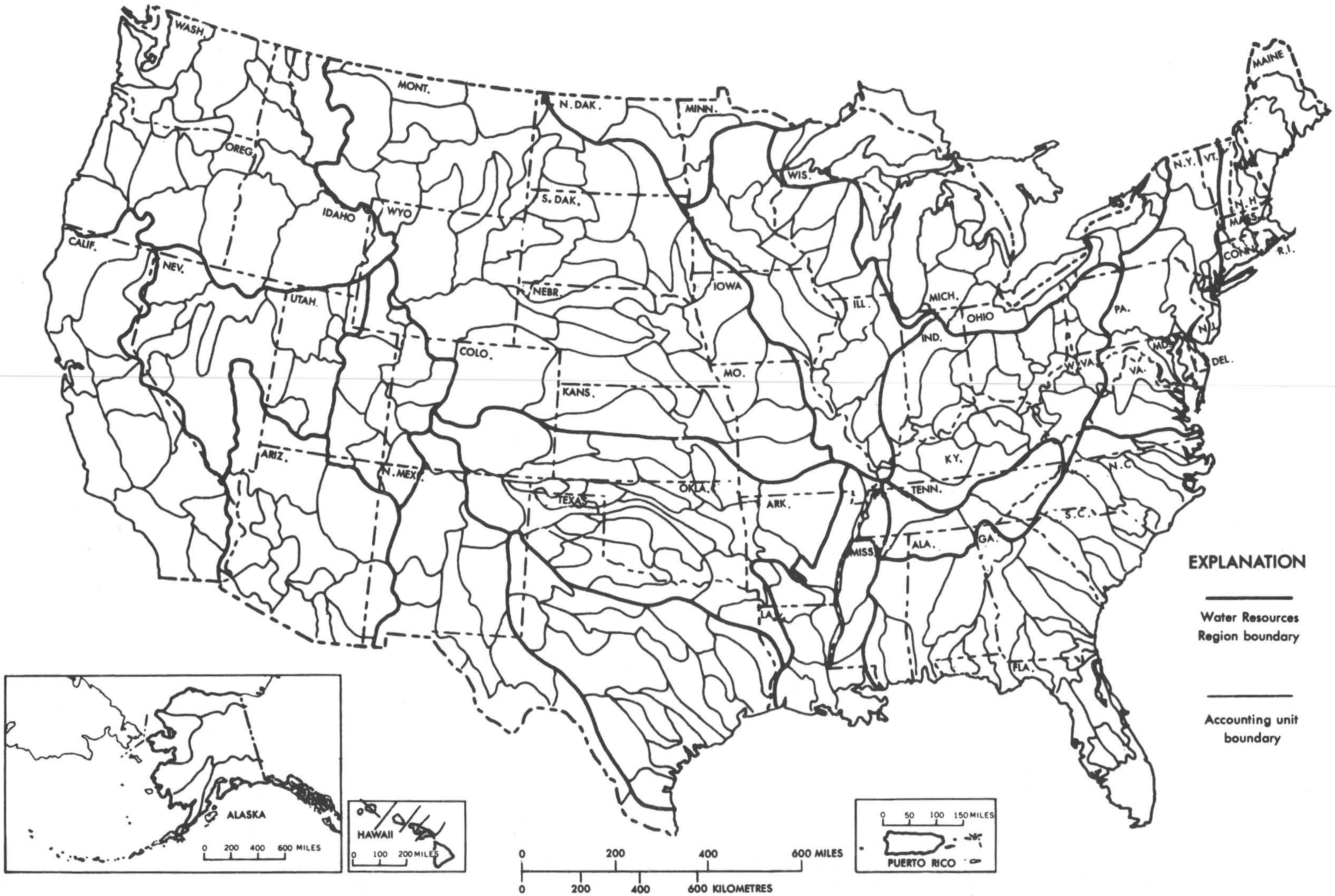



FIGURE 1.—Outlines of the 21 regions and the 324 accounting units as defined by the U.S. Water Resources Council and the Office of Water Data Coordination (U.S. Department of Interior, Geological Survey).

The Office of Water Data Coordination is presently revising certain accounting-unit boundaries, using input from other Federal, State, and local agencies. Revisions receive approval from the Water Resources Council before publication of base maps (Hydrologic Unit Map —1974, U.S. Geological Survey, issued by State) bearing the hydrologic subdivisions.

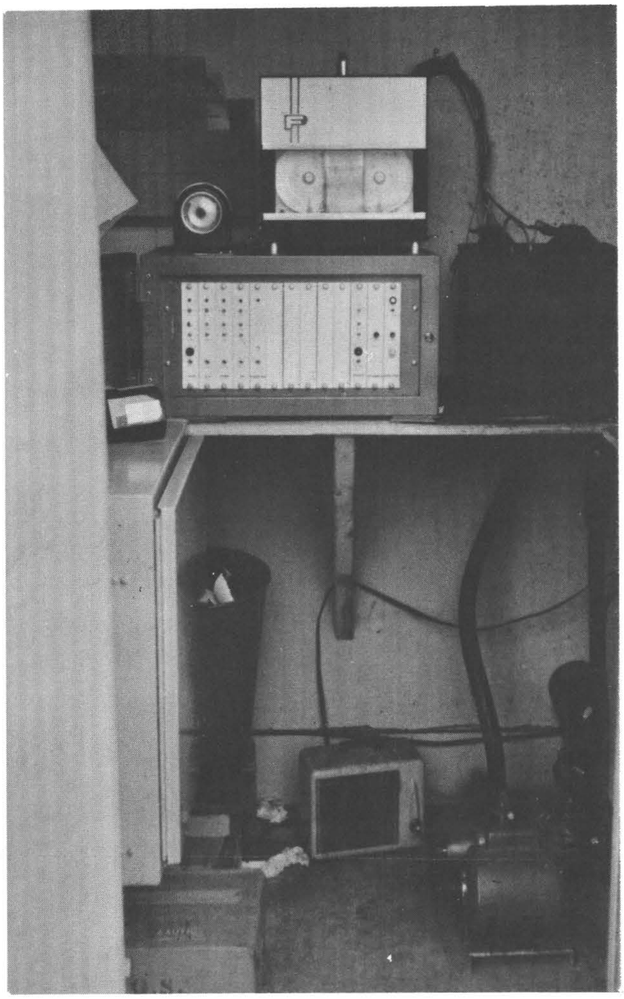
Accounting units in New England are shown at a larger scale (1:5,000,000) in figure 2 to illustrate in greater detail than in figure 1 how stream drainage patterns influence selection of station locations. Figure 2 shows that accounting units along coastlines are drained by numerous streams flowing into the sea; similar situations exist along the shores of the Great Lakes. In inland accounting units, however, most of the outflow drains by single streams.

#### How are NASQAN stations located within accounting units?

Guidelines for level I accounting that have been established specify that data will measure water discharge and water quality for approximately 90 percent of the surface water leaving an accounting unit. This means that most NASQAN stations will measure or account for discharge and quality at a stream station near the downstream end of each accounting unit. Obvious exceptions must be made for units that discharge to the oceans or to the Great Lakes, across international boundaries, or into closed basins. Current revisions of accounting-unit boundaries have been reviewed and apparently have little affect on the locations of stations specified in 1972 for inclusion in the network.

#### How are stations in coastal units selected?

As figure 2 shows, some units stretch along coastlines (oceans or the Great Lakes) where numerous stations would be needed to sample 90 percent of the flow. This problem has been recognized in the design of NASQAN, and special criteria have been established for selecting station locations within coastal accounting units. NASQAN stations have been located to provide a sampling of from 30 to 50 percent of the water flowing from the coastal accounting unit. Such sampling is possible because adjacent drainage basins usually have similar physiographic and hydrologic characteristics. Therefore, it may reasonably be inferred that water-quality data from properly selected stations may be extrapolated to represent the remainder of the discharge. In choosing sites for stations, short-term reconnaissance studies are needed to confirm similarity of waters. It is also necessary to recognize and evaluate obvious differences in such parameters as population patterns, geology, or industrial development.



Automatic continuous monitor.

#### How are sites selected for stations in closed basins?

Accounting units with only interior drainage have been considered on a case-by-case basis in the selection of NASQAN station locations. The principal policy has been to select sites on streams that represent as much of the drainage area of or flow within the accounting unit as possible.

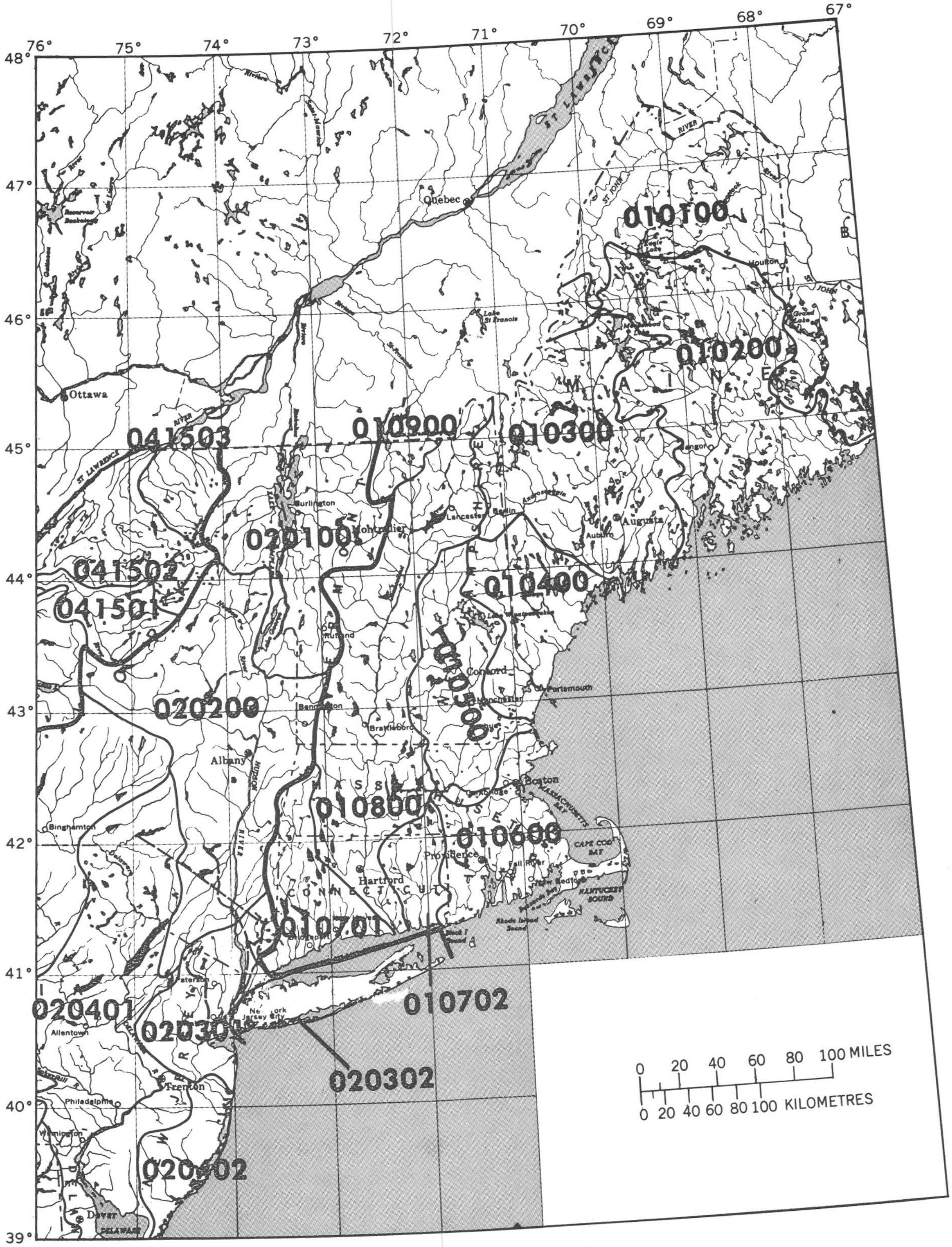
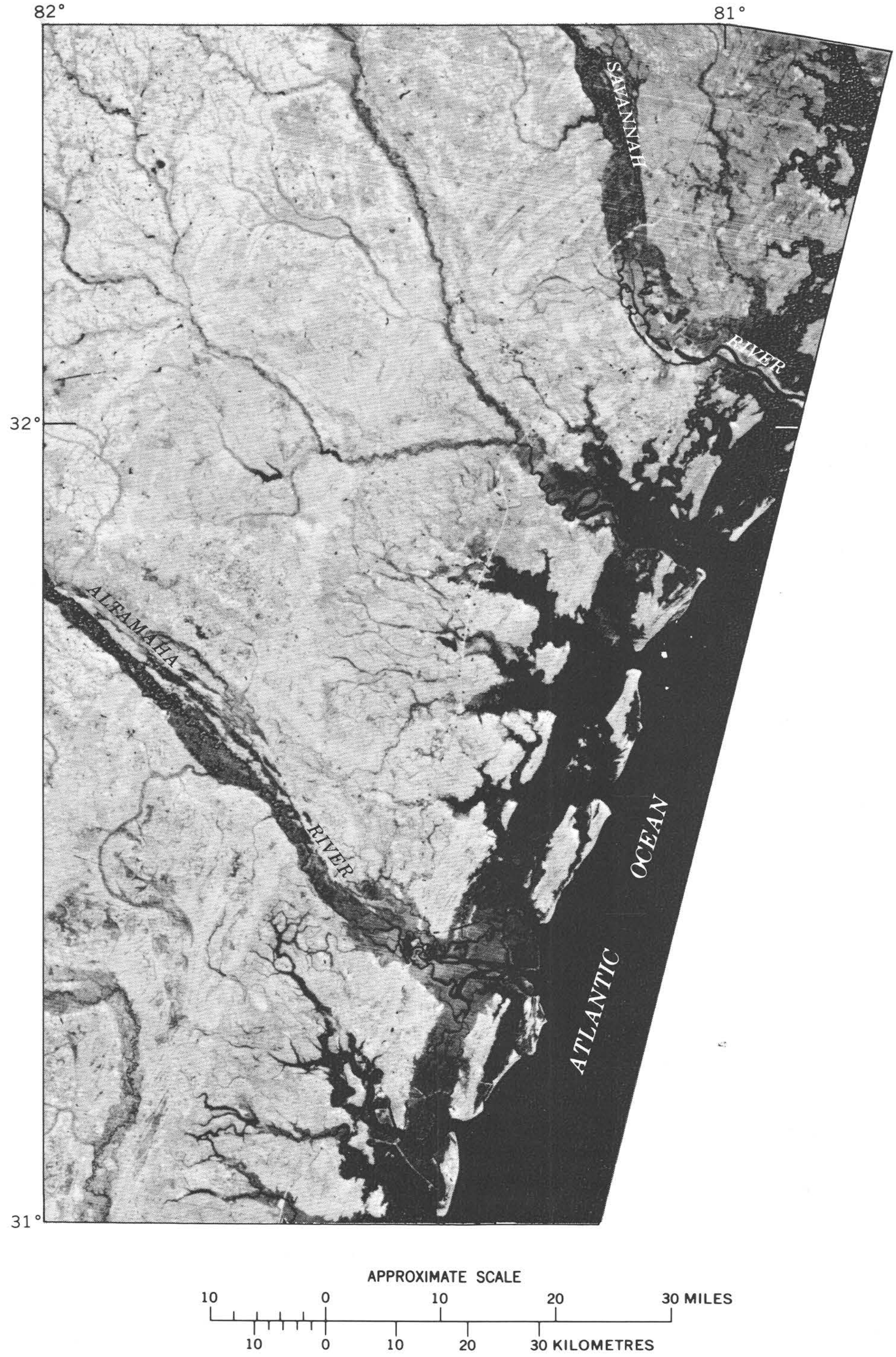



FIGURE 2.—Accounting units in New England.




Part of the coast of Georgia from ERTS imagery, February 1974. (NASA ERTS E-1568-15284, band 7.)

## OPERATION

### How many stations are in NASQAN and where are they?

As of January 1, 1975, 345 NASQAN stations were being operated. As stated earlier, the plan used in selecting locations of existing and future stations calls for most of them to be near the points of outflow from accounting units. Locations of the current 345 stations are shown in figure 3. Details of station location, including the names of towns or other cultural features near the stations, and latitudes and longitudes are given in table 1 (see p. 15).

Plans call for NASQAN to reach its final design size of 525 stations by October 1976. Figure 4 summarizes the network's past growth as well as the projected expansion to full implementation.

### What water-quality characteristics are measured at NASQAN stations?

The following list summarizes the characteristics measured at network stations and the minimum frequencies of measurements under present network design.

*Characteristics measured at NASQAN stations*

[Frequencies: C, continuous; D, daily; M, monthly; Q, quarterly]

| Characteristic | Frequency |
|---|---|
| Field determinations: | |
| Water temperature | [1] C, D, or M |
| Specific conductance | [1] C, D, or M |
| pH | M |
| Discharge | C |
| Coliform, fecal | M |
| Streptococci, fecal | M |
| Common constituents (dissolved)[2]: | [3] M or Q |
| (Bicarbonate, carbonate, total hardness, non-carbonate hardness, calcium, magnesium, fluoride, sodium, potassium, dissolved solids, silica, turbidity, chloride, and sulfate). | |
| Major nutrients: | |
| Phosphorus, total[4] as P | M |
| Nitrite plus nitrate, total as N | M |
| Nitrogen, total Kjeldahl as N | M |
| Trace elements (total and dissolved): | Q |
| (Arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, selenium, and zinc). | |
| Organics and biological: | |
| Organic carbon, total | Q |
| Phytoplankton, total, cells/ml | M |
| Phytoplankton, identification of 3 co-dominants | M |
| Phytoplankton, 3 co-dominants, percent of total | M |
| Periphyton, biomass, dry weight g/m² | Q |
| Periphyton, biomass, ash weight g/m² | Q |
| Periphyton, chlorophyll *a* | Q |
| Periphyton, chlorophyll *b* | Q |
| Suspended sediment: | |
| Suspended sediment concentration | M |
| Percent finer than 0.062-mm sieve diameter | M |

[1] Continuous or daily depending upon whether the station is equipped with a monitor or whether daily observations are made. Monthly measurements made at stations where a long-term record is available.

[2] Dissolved constituents in water are those remaining after filtering samples through 0.45-micrometre membrane filters.

[3] Quarterly or monthly, depending upon whether relationships have been established between conductance and concentrations of various common constituents.

[4] Total concentrations are those determined by analyses of unfiltered samples. They include both dissolved and suspended materials.

In addition to the measurements shown above, determinations of pesticide residues and radiochemical constituents are made at selected stations. These stations can be viewed as subnetworks of NASQAN.

### Will changes be made in the suite of characteristics measured at NASQAN stations?

Yes, but in a manner that conforms with the stated objectives of the network. A continual examination will be made for correlations among measured characteristics. If correlations are established so that changes in one characteristic can be used to estimate changes in others, certain measurements may be discontinued. Also, some measurements may be added as water-quality characteristics change in importance. Consideration presently is being given to including two 24-hour dissolved oxygen profiles each year, to be conducted during critical periods; to monthly determination of ammonia nitrogen; and to an increased frequency of determination of total organic carbon, from quarterly to monthly. Any such adjustments in the operational design of the network will be made to coincide with the beginning of a water year (October 1).

### Who collects data at NASQAN stations?

Most of the NASQAN data are and will be collected by the Geological Survey. However,

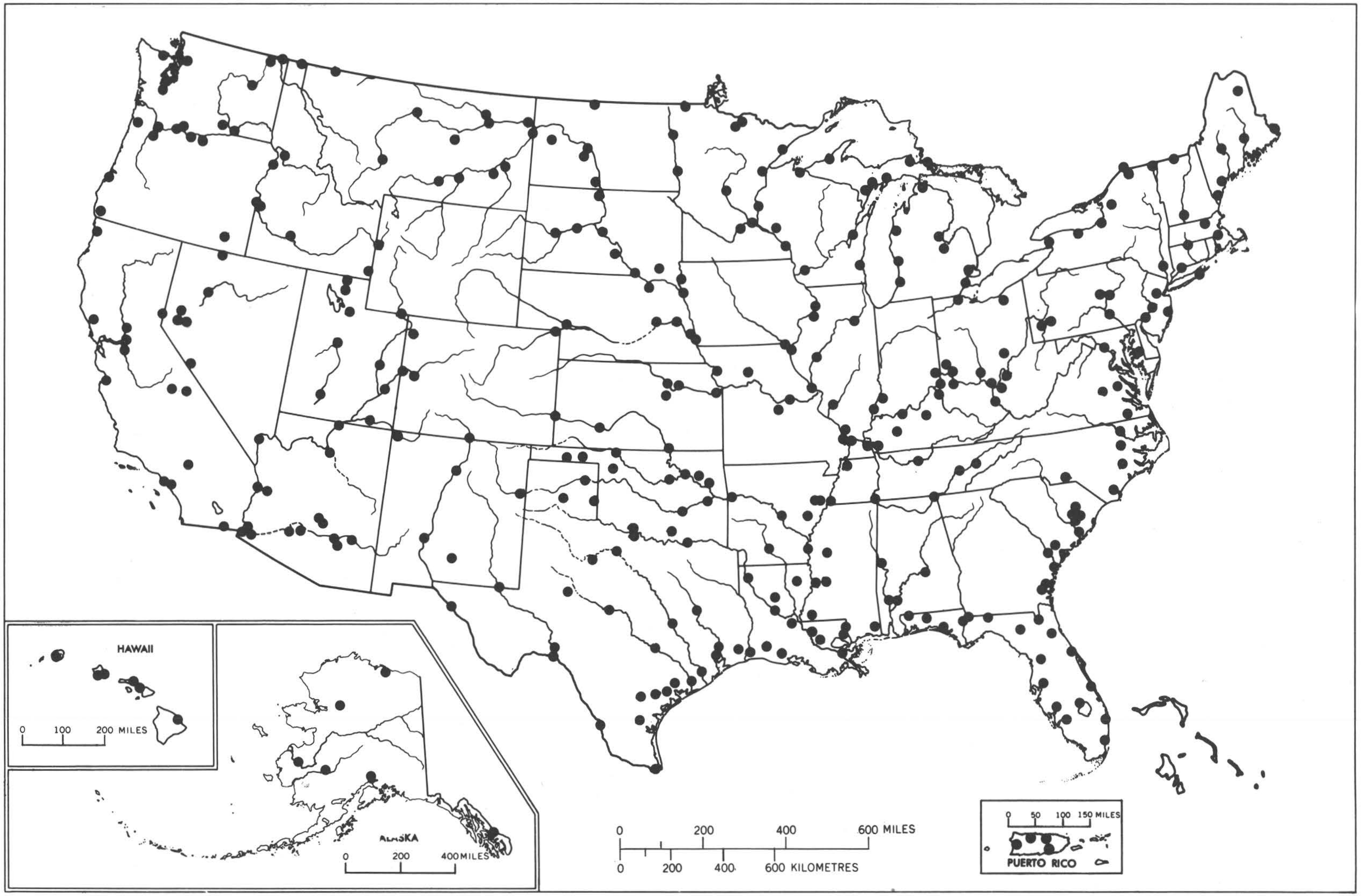



FIGURE 3.—Locations of stations in the National Stream Quality Accounting Network in operation as of January 1, 1975.

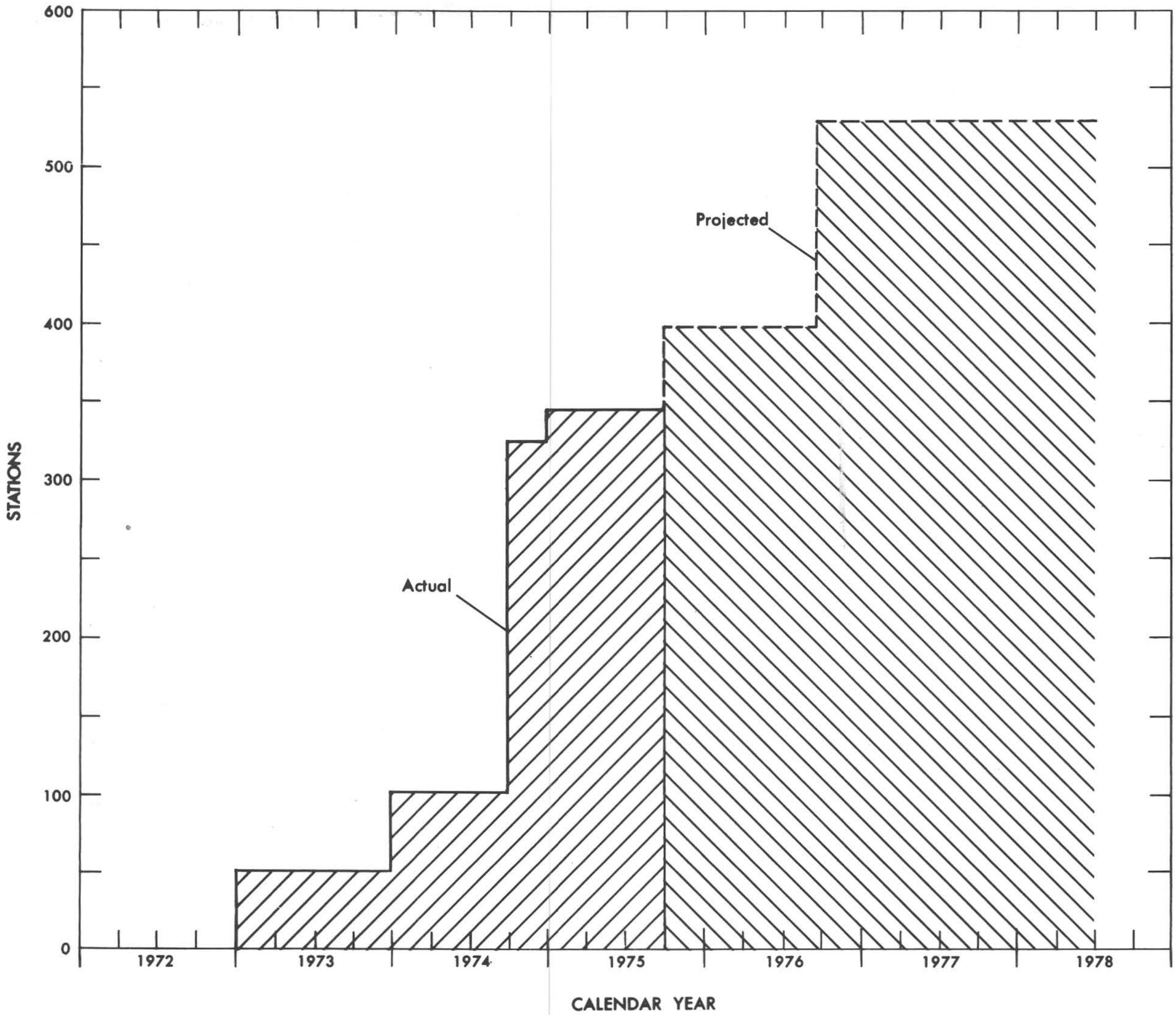



FIGURE 4.—Numbers of stations in the National Stream Quality Accounting Network, 1973–78.

some of the stations are operated partly by other Federal agencies, such as the Environmental Protection Agency and the U.S. Army Corps of Engineers, and some are operated partly by State and local organizations. For those stations operated by the Geological Survey, some are paid for partly by monies from other Federal agencies, from State and local cooperators, and from other more specialized Federal data-collection programs of the Geological Survey. Because of local interests or needs, it is not uncommon to have several different sources interested in and paying for total operations of a single station.

**How long will stations be operated?**

Indefinitely, as required by one of the network objectives—to assess changes in water quality with time. However, some changes in operating practices will be made, as explained previously in answer to a question regarding changes in the suite of characteristics. Such changes will be made only after it has been determined that the proposed modification, presumably a change in frequency of sampling, will not affect the fulfillment of network objectives.

Automatic analyzer in Central Laboratory, Doraville, Ga.

**What will be done with the data?**

Present plans call for data collected under the auspices of NASQAN to be published in three types of publications.

First, all data will be published in the annual Geological Survey basic-data reports on a State-by-State basis. Copies of these reports can be obtained from Geological Survey district offices or from Geological Survey headquarters, Reston, Virginia 22092. Users of STORET, the computerized data base of the Environmental Protection Agency, can retrieve NASQAN data by using Geological Survey station numbers (see table 1).

The second type of report is an annual summary report depicting the Nation's surface-water quality. This report, the prototype of which should be completed by August 1975, will use tabulations of the yearly range in concentrations of specific constituents, statistical summaries, and graphical presentations.

The third type of report, which will be more analytical, will deal with the changes (or lack thereof) in water quality. Preliminary work by the Geological Survey (Steele and others, 1974) employed an approach which may be used to evaluate trends in water quality. This type of report will be prepared less frequently (every 3 to 5 years).

NASQAN interpretive reports (the second and third types) will be published in forms suitable for use by hydrologists as well as non-technical persons.

#### What will be the principal problems in the interpretation of the data?

Undoubtedly there will be several problems in data interpretation, but two will probably be hardest to resolve: (1) Differentiating year-to-year variability (wet-year, dry-year effects) from the long-term trends and from the real areal differences in variables significantly affected by flow conditions, and (2) adjusting for the effects of streamflow regulation (particularly by reservoirs) or streamflow diversions on the water-quality conditions.

To resolve the first problem, several statistical and other analytical techniques are being evaluated to discover their utility in determining significant long-term trends from the data. For some water-quality characteristics, 5 or more years of data may be needed before adequate bases exist for detecting long-term trends.

Regarding the second problem, reservoirs are particularly significant because they alter the pattern of streamflow during the year and also influence many water-quality characteristics. Seasonal streamflow patterns are affected by patterns of reservoir release, but the annual volumes of flow usually do not change, except for evaporation losses. The quality of water released from reservoirs differs from that of inflow, in terms of temperature, dissolved solids, sediment, nutrients, dissolved oxygen, and other characteristics. There is much literature describing the processes that take place in reservoirs, but quantitative modeling is not far enough advanced to be helpful in determining the precise degree to which the reservoirs will affect water quality at NASQAN stations.

#### What is the policy regarding NASQAN stations near reservoirs?

The lower boundaries of many of the accounting units used to establish the hydrologic design of NASQAN cross stream channels at or just below dams. Because an objective of the network operation is to account for the quantity and quality of water actually flowing from one accounting unit into another, the placement of sampling stations below reservoirs is necessary. On the other hand, NASQAN's goal of interpreting changes in water quantity and quality in terms of cultural changes in the basin is not fully served by a station located below a reservoir because the effects of the reservoir will mask most other influences. Therefore, operation of NASQAN will involve evaluation of the effects of some reservoirs by placing secondary stations above several large reservoirs. These stations are referred to as secondary because they will be used to collect a more limited suite of data and probably will operate for a limited number of years.

## SUMMARY

NASQAN is designed to describe the water quality of the Nation's streams and rivers on a systematic and continuing basis. NASQAN station operation supplements the ongoing activities of the U.S. Geological Survey and other agencies. Whereas other operations meet local and short-term needs, NASQAN provides for nationwide quantitative descriptions of the physical, chemical, and biological characteristics of streams. There presently are 345 stations in the network, and network design allows for an ultimate size of 525 stations.

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TABLE 1

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*

| USGS STAT.NO. | STATION NAME | ST[1] | LATITUDE DEG/MIN | LONGITUDE DEG/MIN |
|---|---|---|---|---|
| 02420000 | ALABAMA RIVER NEAR MONTGOMERY | AL | 3224 | 08624 |
| 02429500 | ALABAMA RIVER AT CLAIBORNE | AL | 3133 | 08731 |
| 02449000 | TOMBIGBEE RIVER AT GAINESVILLE | AL | 3249 | 08809 |
| 02469762 | TOMBIGBEE R. AT COFFEEVILLE L&D NR. CFVL | AL | 3145 | 08808 |
| 15024800 | STIKINE RIVER NEAR WRANGELL | AK | 5642 | 13207 |
| 15294350 | SUSITNA RIVER AT SUSITNA STATION | AK | 6132 | 15033 |
| 15304000 | KUSKOKWIM RIVER AT CROOKED CREEK | AK | 6152 | 15807 |
| 15565447 | YUKON RIVER AT PILOT STATION | AK | 6156 | 16253 |
| 15744500 | KOBUK RIVER NEAR KIANA | AK | 6658 | 16007 |
| 15896000 | KUPARUK RIVER NEAR DEADHORSE | AK | 7017 | 14858 |
| 09380000 | COLORADO RIVER AT LEES FERRY | AZ | 3652 | 11135 |
| 09401200 | LITTLE COLORADO RIVER AT CAMERON | AZ | 3553 | 11125 |
| 09421500 | COLORADO RIVER BELOW HOOVER DAM | AZ | 3601 | 11444 |
| 09426600 | BILL WILLIAMS R BL MINERAL WASH NR PLANET | AZ | 3416 | 11402 |
| 09429490 | COLORADO RIVER ABOVE IMPERIAL DAM | AZ | 3253 | 11428 |
| 09466500 | GILA RIVER AT CALVA | AZ | 3311 | 11031 |
| 09473500 | SAN PEDRO RIVER AT WINKELMAN | AZ | 3259 | 11049 |
| 09474000 | GILA RIVER AT KELVIN | AZ | 3306 | 11059 |
| 09489000 | SANTA CRUZ RIVER NEAR LAVEEN | AZ | 3314 | 11210 |
| 09502000 | SALT RIVER BELOW STEWART MT DAM | AZ | 3334 | 11132 |
| 09510000 | VERDE RIVER BELOW BARTLETT DAM | AZ | 3349 | 11138 |
| 09518000 | GILA RIVER ABOVE DIV AT GILLESPIE DAM | AZ | 3314 | 11246 |
| 09520700 | GILA RIVER NEAR MOUTH NEAR YUMA | AZ | 3243 | 11433 |
| 09522000 | COLORADO RIVER AT N.INT.BDRY.AB MORELOS D | AZ | 3243 | 11443 |
| 07032000 | MISSISSIPPI RIVER AT MEMPHIS (TN) | AR | 3508 | 09004 |
| 07047800 | ST FRANCIS RIVER NEAR PARKIN | AR | 3516 | 09034 |
| 07047900 | ST FRANCIS BAY AT RIVERFRONT | AR | 3516 | 09041 |
| 07077800 | WHITE RIVER AT CLARENDON | AR | 3441 | 09119 |
| 07250550 | ARKANSAS RIVER AT DAM 13 NEAR VAN BUREN | AR | 3521 | 09418 |
| 07263620 | ARKANSAS RIVER AT L AND D 6 LIT ROCK | AR | 3440 | 09209 |
| 07265450 | MISSISSIPPI RIVER NEAR ARKANSAS CITY | AR | 3334 | 09115 |
| 07362000 | OUACHITA RIVER AT CAMDEN | AR | 3336 | 09249 |
| 09424190 | COLORADO RIVER AQUED. NR SAN JACINTO | CA | 3349 | 11658 |
| 10254970 | NEW RIVER AT INT. BDRY. NR. CALEXICO | CA | 3240 | 11530 |
| 10277400 | OWENS RIVER BLW TINEMAHA D. NR BIG PINE | CA | 3703 | 11813 |
| 10261500 | MOJAVE R. AT LOW NARROWS NR VICTORVILLE | CA | 3434 | 11719 |
| 11074000 | SANTA ANA RIVER BELOW PRADO DAM | CA | 3353 | 11739 |
| 11103010 | LOS ANGELES R.AT WIL.ST.BRDG.AT LONG BCH | CA | 3348 | 11812 |
| 11152500 | SALINAS RIVER NEAR SPRECKELS | CA | 3638 | 12140 |
| 11250000 | FRAINT-KERN CANAL AT FRAINT | CA | 3700 | 11942 |
| 11303500 | SAN JOAQUIN RIVER NEAR VERNALIS | CA | 3741 | 12116 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | ST[1] | LATI-TUDE DEG/MIN | LONGI-TUDE DEG/MIN |
|---|---|---|---|---|
| 11325500 | MOKELUMNE RIVER AT WOODBRIDGE | CA | 3810 | 12118 |
| 11447650 | SACRAMENTO RIVER AT FREEPORT | CA | 3827 | 12130 |
| 11467000 | RUSSIAN RIVER NEAR GUERNEVILLE | CA | 3830 | 12256 |
| 11530500 | KLAMATH RIVER NEAR KLAMATH | CA | 4131 | 12358 |
| 06764000 | SOUTH PLATTE RIVER AT JULESBURG | CO | 4059 | 10215 |
| 07137500 | ARKANSAS RIVER NR COOLIDGE (KS) | CO | 3802 | 10201 |
| 08251500 | RIO GRANDE NEAR LOBATOS | CO | 3705 | 10545 |
| 09152500 | GUNNISON RIVER NEAR GRAND JUNCTION | CO | 3859 | 10827 |
| 09163530 | COLORADO RIVER BLW. COLO-UTAH STATE LINE | CO | 3905 | 10906 |
| 09251000 | YAMPA RIVER NEAR MAYBELL | CO | 4030 | 10802 |
| 09260000 | LITTLE SNAKE RIVER NEAR LILY | CO | 4033 | 10825 |
| 01184000 | CONNECTICUT RIVER AT THOMPSONVILLE | CT | 4159 | 07236 |
| 01205500 | HOUSATONIC RIVER AT STEVENSON | CT | 4123 | 07310 |
| 02231000 | ST MARYS RIVER NEAR MACCLENNY | FL | 3022 | 08205 |
| 02244450 | ST JOHNS RIVER AT PALATKA | FL | 2939 | 08138 |
| 02248000 | SPRUCE CREEK NEAR SAMSULA | FL | 2903 | 08103 |
| 02253000 | MAIN CANAL AT VERO BEACH | FL | 2739 | 08024 |
| 02273000 | KISSIMMEE RIVER AT S65E NEAR OKEECHOBEE | FL | 2714 | 08058 |
| 02279000 | WEST PALM BEACH CANAL AT WEST PALM BEACH | FL | 2639 | 08004 |
| 02288600 | MIAMI CANAL AT NW 36TH STREET, MIAMI | FL | 2548 | 08016 |
| 02292400 | CALOOSAHATCHEE CNL AT ORTONA L.NR LABELLE | FL | 2650 | 08105 |
| 02296750 | PEACE RIVER AT ARCADIA | FL | 2713 | 08153 |
| 02303000 | HILLSBOROUGH RIVER NEAR ZEPHYRHILLS | FL | 2809 | 08214 |
| 02313000 | WITHLACOOCHEE RIVER NEAR HOLDER | FL | 2859 | 08221 |
| 02320500 | SUWANNEE RIVER AT BRANFORD | FL | 2957 | 08256 |
| 02329000 | OCHLOCKONEE RIVER NEAR HAVANA | FL | 3033 | 08423 |
| 02358000 | APALACHICOLA RIVER AT CHATTAHOOCHEE | FL | 3042 | 08452 |
| 02359000 | CHIPOLA RIVER NEAR ALTHA | FL | 3032 | 08510 |
| 02366500 | CHOCTAWHATCHEE RIVER NEAR BRUCE | FL | 3027 | 08554 |
| 02368000 | YELLOW RIVER AT MILLIGAN | FL | 3045 | 08638 |
| 02375500 | ESCAMBIA RIVER NEAR CENTURY | FL | 3057 | 08714 |
| 02202500 | OGEECHEE RIVER NEAR EDEN | GA | 3211 | 08125 |
| 02226000 | ALTAMAHA RIVER AT DOCTORTOWN | GA | 3139 | 08149 |
| 02228000 | SATILLA RIVER AT ATKINSON | GA | 3113 | 08152 |
| 16031000 | WAIMEA RIVER AT WAIMEA | HI | 2159 | 15940 |
| 16213000 | WAIKELE STREAM AT WAIPAHU | HI | 2123 | 15801 |
| 16229300 | KALIHI STREAM AT KALIHI | HI | 2120 | 15753 |
| 16400000 | HALAWA STREAM NEAR HALAWA | HI | 2110 | 15646 |
| 16618000 | KAHAKULOA STREAM NEAR HONOKOHAU | HI | 2059 | 15633 |
| 16704000 | WAILUKU RIVER AT PIIHONUA | HI | 1943 | 15509 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | | ST[1] | LATITUDE DEG/MIN | LONGITUDE DEG/MIN |
|---|---|---|---|---|---|
| 12318500 | KOOTENAI RIVER NEAR COPELAND | | ID | 4855 | 11625 |
| 13154500 | SNAKE RIVER AT KING HILL | | ID | 4300 | 11512 |
| 13213000 | BOISE RIVER NEAR PARMA | | ID | 4347 | 11659 |
| 13213100 | SNAKE RIVER AT NYSSA | (OR) | ID | 4353 | 11659 |
| 13290450 | SNAKE RIVER AT HELLS CANYON DAM | (OR) | ID | 4515 | 11642 |
| 13317000 | SALMON RIVER AT WHITE BIRD | | ID | 4545 | 11619 |
| 05446500 | ROCK RIVER NEAR JOSLIN | | IL | 4143 | 09011 |
| 05543500 | ILLINOIS RIVER AT MARSEILLES | | IL | 4120 | 08843 |
| 05585500 | ILLINOIS RIVER AT MEREDOSIA | | IL | 3949 | 09034 |
| 05594100 | KASKASKIA RIVER NEAR VENDY STATION | | IL | 3827 | 08938 |
| 05599500 | BIG MUDDY RIVER AT MURPHYSBORO | | IL | 3745 | 08921 |
| 03276500 | WHITEWATER RIVER AT BROOKVILLE | | IN | 3924 | 08501 |
| 03374100 | WHITE RIVER NEAR HAZELTON | | IN | 3829 | 08733 |
| 03378500 | WABASH RIVER AT NEW HARMONY | | IN | 3808 | 08756 |
| 05420500 | MISSISSIPPI RIVER AT CLINTON | | IA | 4147 | 09015 |
| 05474500 | MISSISSIPPI RIVER AT KEOKUK | | IA | 4024 | 09122 |
| 06486000 | MISSOURI RIVER AT SIOUX CITY | | IA | 4229 | 09625 |
| 06807000 | MISSOURI RIVER AT NEBRASKA CITY | (NB) | IA | 4041 | 09551 |
| 06856600 | REPUBLICAN RIVER AT CLAY CENTER | | KS | 3921 | 09708 |
| 06877600 | SMOKY HILL RIVER AT ENTERPRISE | | KS | 3854 | 09707 |
| 06887000 | BIG BLUE RIVER NEAR MANHATTAN | | KS | 3914 | 09634 |
| 06892350 | KANSAS RIVER AT DESOTO | | KS | 3859 | 09458 |
| 07139500 | ARKANSAS RIVER AT DODGE CITY | | KS | 3745 | 10001 |
| 07146500 | ARKANSAS RIVER AT ARKANSAS CITY | | KS | 3703 | 09704 |
| 03215000 | BIG SANDY RIVER AT LOUISA | | KY | 3810 | 08238 |
| 03216600 | OHIO RIVER AT GREENUP DAM | | KY | 3839 | 08252 |
| 03254000 | LICKING RIVER AT BUTLER | | KY | 3847 | 08422 |
| 03277200 | OHIO R. AT MARKLAND DAM NEAR WARSAW | | KY | 3846 | 08458 |
| 03290500 | KENTUCKY RIVER AT LOCK 2 AT LOCKPORT | | KY | 3826 | 08458 |
| 03301630 | ROLLING FORK NEAR LEHANON JUNCTION | | KY | 3749 | 08545 |
| 03303280 | OHIO RIVER AT CANNELTON DAM | | KY | 3754 | 08642 |
| 03321230 | GREEN RIVER NEAR BEECH GROVE | | KY | 3732 | 08716 |
| 03438220 | CUMBERLAND RIVER NEAR GRAND RIVERS | | KY | 3701 | 08813 |
| 03609750 | TENNESSEE RIVER AT HWY 60 NEAR PADUCAH | | KY | 3702 | 08832 |
| 03612500 | OHIO RIVER AT L&D 53 NEAR GRAND CHAIN | (IL) | KY | 3712 | 08902 |
| 02489500 | PEARL RIVER NEAR BOGALUSA | | LA | 3048 | 08949 |
| 02492000 | BOQUE CHITTO NEAR BUSH | | LA | 3038 | 08954 |
| 07344410 | RED RIVER ABOVE SHREVEPORT | | LA | 3233 | 09346 |
| 07355500 | RED RIVER AT ALEXANDRIA | | LA | 3119 | 09227 |
| 07367640 | OUACHITA RIVER AT COLUMBIA | | LA | 3206 | 09204 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | ST[1] | LATITUDE DEG/MIN | LONGITUDE DEG/MIN |
|---|---|---|---|---|
| 07369500 | TENSAS RIVER AT TEMDAL | LA | 3226 | 09122 |
| 07373420 | MISSISSIPPI RIVER NEAR ST FRANCISVILLE | LA | 3046 | 09124 |
| 07374508 | MISSISSIPPI RIVER AT NEW ORLEANS | LA | 2957 | 09008 |
| 07378510 | AMITE RIVER AT 4-H CAMP NR DENHAM SPGS | LA | 3026 | 09058 |
| 07381490 | ATCHAFALAYA RIVER AT SIMMESPORT | LA | 3059 | 09148 |
| 07385700 | BAYOU TECHE AT KEYST L&D NR ST MARTINSVL | LA | 3004 | 09150 |
| 08015900 | CALCASIEU RIVER NEAR LAKE CHARLES | LA | 3018 | 09311 |
| | | | | |
| 01017100 | AROOSTOOK RIVER AT CARIBOU | ME | 4651 | 06800 |
| 01021050 | ST. CROIX RIVER AT MILLTOWN | ME | 4510 | 06718 |
| 01034500 | PENOBSCOT RIVER AT WEST ENFIELD | ME | 4514 | 06839 |
| 01046500 | KENNEREC RIVER AT BINGHAM | ME | 4503 | 06953 |
| 01059000 | ANDROSCOGGIN RIVER NEAR AUBURN | ME | 4404 | 07013 |
| 01066000 | SACO RIVER AT CORNISH | ME | 4348 | 07047 |
| | | | | |
| 01491000 | CHOPTANK RIVER NEAR GREENSBORO | MD | 3900 | 07547 |
| 01645500 | POTOMAC RIVER AT GREAT FALLS | MD | 3900 | 07715 |
| | | | | |
| 01096550 | MERRIMACK RIVER ABOVE LOWELL | MA | 4238 | 07122 |
| 01103500 | CHARLES RIVER AT CHARLES RIVER VILLAGE | MA | 4215 | 07116 |
| | | | | |
| 04040000 | ONTONAGON RIVER NEAR ROCKLAND | MI | 4643 | 08912 |
| 04045500 | TAHQUAMENON R. NR TAHQUAMENON PARADISE | MI | 4643 | 08516 |
| 04045580 | ST MARYS RIVER ABOVE SAULT STE MARIE | MI | 4629 | 08425 |
| 04057005 | MANISTIQUE RIVER AT MANISTIQUE | MI | 4557 | 08615 |
| 04059000 | ESCANABA RIVER AT CORNELL | MI | 4555 | 08713 |
| 04059500 | FORD RIVER NEAR HYDE | MI | 4545 | 08712 |
| 04108690 | KALAMAZOO RIVER AT SAUGATUCK | MI | 4239 | 08612 |
| 04122030 | MUSKEGON RIVER AT BRIDGETON | MI | 4319 | 08602 |
| 04126520 | MANISTEE RIVER AT MANISTEE | MI | 4415 | 08619 |
| 04132052 | CHEBOYGAN RIVER AT CHEBOYGAN | MI | 4539 | 08428 |
| 04142000 | RIFLE RIVER NEAR STERLING | MI | 4404 | 08401 |
| 04157000 | SAGINAW RIVER AT SAGINAW | MI | 4325 | 08358 |
| 04165500 | CLINTON RIVER AT MT. CLEMENS | MI | 4236 | 08255 |
| 04165700 | DETROIT RIVER AT DETROIT | MI | 4221 | 08258 |
| | | | | |
| 04014500 | BAPTISM RIVER NEAR BEAVER BAY | MN | 4720 | 09112 |
| 04024000 | ST LOUIS RIVER AT SCANLON | MN | 4642 | 09225 |
| 05112000 | ROSEAU RIVER NEAR CARIBOU | MN | 4859 | 09628 |
| 05131500 | LITTLE FORK RIVER AT LITTLEFORK | MN | 4824 | 09334 |
| 05132000 | BIG FORK RIVER AT BIG FALLS | MN | 4812 | 09348 |
| 05267000 | MISSISSIPPI RIVER NEAR ROYALTON | MN | 4552 | 09422 |
| 05331000 | MISSISSIPPI RIVER AT ST PAUL | MN | 4457 | 09305 |
| 05378500 | MISSISSIPPI RIVER AT WINONA | MN | 4403 | 09138 |
| 05533000 | MINNESOTA RIVER NEAR JORDAN | MN | 4442 | 09338 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | ST[1] | LATI-TUDE DEG/MIN | LONGI-TUDE DEG/MIN |
|---|---|---|---|---|
| 02479020 | PASCAGOULA RIVER NEAR BENNDALE | MS | 3053 | 08846 |
| 07287000 | YAZOO RIVER AT GREENWOOD | MS | 3331 | 09011 |
| 07289000 | MISSISSIPPI RIVER AT VICKSBURG | MS | 3219 | 09054 |
| 07290000 | BIG BLACK RIVER NEAR ROVINA | MS | 3221 | 09042 |
| 07292500 | HOMOCHITTO RIVER AT ROSETTA | MS | 3119 | 09106 |
| 05490600 | DES MOINES RIVER AT ST FRANCISVILLE | MO | 4028 | 09134 |
| 05587550 | MISSISSIPPI RIVER BELOW ALTON (IL) | MO | 3852 | 09008 |
| 06818000 | MISSOURI RIVER AT ST JOSEPH | MO | 3948 | 09453 |
| 06902000 | GRAND RIVER NEAR SUMNER | MO | 3938 | 09316 |
| 06926500 | OSAGE RIVER NEAR ST. THOMAS | MO | 3820 | 09214 |
| 06934500 | MISSOURI RIVER AT HERMAN | MO | 3843 | 09126 |
| 07022000 | MISSISSIPPI RIVER AT THEBES (IL) | MO | 3713 | 08928 |
| 06054500 | MISSOURI RIVER AT TOSTON | MT | 4609 | 11125 |
| 06109500 | MISSOURI RIVER AT VIRGELLE | MT | 4800 | 11015 |
| 06130500 | MUSSELSHELL RIVER AT MOSBY | MT | 4700 | 10753 |
| 06132000 | MISSOURI RIVER BELOW FT PECK DAM | MT | 4803 | 10621 |
| 06174500 | MILK RIVER AT NASHUA | MT | 4808 | 10622 |
| 06185500 | MISSOURI RIVER NEAR CULBERTSON | MT | 4807 | 10428 |
| 06214500 | YELLOWSTONE RIVER AT BILLINGS | MT | 4548 | 10828 |
| 06294700 | BIGHORN RIVER AT BIGHORN | MT | 4069 | 10728 |
| 06308500 | TONGUE RIVER AT MILES CITY | MT | 4622 | 10548 |
| 06326500 | POWDER RIVER NEAR LOCATE | MT | 4627 | 10519 |
| 06329500 | YELLOWSTONE RIVER NEAR SIDNEY | MT | 4741 | 10409 |
| 12355000 | N.F. FLATHEAD RIVER AT FLATHEAD, B.C. | MT | 4900 | 11428 |
| 06465500 | NIOBRARA RIVER NEAR VERDEL | NB | 4244 | 09813 |
| 06686000 | NORTH PLATTE RIVER AT LISCO | NB | 4130 | 10238 |
| 06792499 | LOUP RIVER ON AT DIV NR GENOA | NB | 4124 | 09749 |
| 06796000 | PLATTE RIVER AT NORTH BEND | NB | 4127 | 09646 |
| 06805500 | PLATTE RIVER NEAR LOUISVILLE | NB | 4101 | 09609 |
| 10249900 | CHIATOVICH CREEK NEAR DYER | NV | 3750 | 11812 |
| 10301500 | WALKER RIVER NEAR WABUSKA | NV | 3909 | 11906 |
| 10312000 | CARSON RIVER NEAR FORT CHURCHILL | NV | 3918 | 11919 |
| 10335000 | HUMBOLDT RIVER NEAR RYE PATCH | NV | 4028 | 11818 |
| 10346000 | TRUCKEE RIVER AT FARAD (CA) | NV | 3926 | 12002 |
| 10351700 | TRUCKEE RIVER NEAR NIXON | NV | 3947 | 11920 |
| 10352500 | MC DERMITT CREEK NEAR MC DERMITT | NV | 4158 | 11750 |
| 01154500 | CONNECTICUT RIVER AT NORTH WALPOLE | NH | 4308 | 07226 |
| 01404100 | RARITAN RIVER NEAR SOUTH BOUND BROOK | NJ | 4031 | 07432 |
| 01408500 | TOMS RIVER NEAR TOMS RIVER | NJ | 3959 | 07413 |
| 01463500 | DELAWARE RIVER AT TRENTON | NJ | 4013 | 07447 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | ST[1] | LATI-TUDE DEG/ | LONGI-TUDE DEG/ |
|---|---|---|---|---|
| 07227140 | CANADIAN RIVER ABOVE NM-TEX STATELINE | NM | 3523 | 10303 |
| 08313000 | RIO GRANDE AT OTOWI BRIDGE NR S.ILDEFONSO | NM | 3552 | 10608 |
| 08358300 | RIO GRANDE CNV CH AT SAN MARCIAL | NM | 3341 | 10700 |
| 08407500 | PECOS RIVER AT RED BLUFF | NM | 3204 | 10402 |
| 08481500 | TULAROSA RIVER NEAR BENT | NM | 3309 | 10554 |
| 09368000 | SAN JUAN RIVER AT SHIPROCK | NM | 3648 | 10844 |
| 01304500 | PECONIC RIVER AT RIVERHEAD | NY | 4100 | 07241 |
| 01372043 | HUDSON RIVER NEAR POUGHKEEPSIE | NY | 4143 | 07356 |
| 04219640 | NIAGARA RIVER AT FORT NIAGARA | NY | 4316 | 07904 |
| 04232006 | GENESEE R AT CHARLOTTE DOCKS AT ROCHESTER | NY | 4313 | 07737 |
| 04249000 | OSWEGO RIVER AT LOCK 7, OSWEGO | NY | 4327 | 07630 |
| 04260500 | BLACK RIVER AT WATERTOWN | NY | 4359 | 07556 |
| 04264331 | ST LAWRENCE R AT CORNWALL ONT NR MASSENA | NY | 4500 | 07448 |
| 04269000 | ST REGIS RIVER AT BRASHER CENTER | NY | 4452 | 07447 |
| 04295000 | RICHELIEU RIVER AT ROUSES POINT | NY | 4500 | 07322 |
| 02081000 | ROANOKE RIVER NEAR SCOTLAND NECK | NC | 3612 | 07723 |
| 02083500 | TAR RIVER AT TARBORO | NC | 3554 | 07732 |
| 02089500 | NEUSE RIVER AT KINSTON | NC | 3515 | 07735 |
| 02105769 | CAPE FEAR RIVER AT LOCK 1 NEAR KELLY | NC | 3424 | 07818 |
| 02129000 | PEE DEE RIVER NEAR ROCKINGHAM | NC | 3457 | 07952 |
| 05054020 | RED RIVER OF THE NORTH BELOW FARGO | ND | 4656 | 09647 |
| 05083500 | RED RIVER OF THE NORTH AT OSLO (MN) | ND | 4812 | 09708 |
| 05124000 | SOURIS RIVER NEAR WESTHOPE (OUTFLOW) | ND | 4900 | 10057 |
| 06337000 | LITTLE MISSOURI RIVER NEAR WATFORD CITY | ND | 4735 | 10315 |
| 06338490 | MISSOURI RIVER AT GARRISON DAM | ND | 4730 | 10126 |
| 06340500 | KNIFE RIVER AT HAZEN | ND | 4717 | 10137 |
| 06354000 | CANNON RIVER NEAR BREIEN | ND | 4623 | 10056 |
| 03150000 | MUSKINGUM RIVER AT MCCONNELSVILLE | OH | 3939 | 08151 |
| 03234500 | SCIOTO RIVER AT HIGBY | OH | 3913 | 08252 |
| 03245500 | LITTLE MIAMI RIVER AT MILFORD | OH | 3910 | 08418 |
| 03274600 | GREAT MIAMI RIVER AT NEW BALTIMORE | OH | 3916 | 08440 |
| 04193500 | MAUMEE RIVER AT WATERVILLE | OH | 4130 | 08343 |
| 04208000 | CUYAHOGA RIVER AT INDEPENDENCE | OH | 4124 | 08138 |
| 07157950 | CIMARRON RIVER NEAR BUFFALO | OK | 3655 | 09924 |
| 07161000 | CIMARRON RIVER AT PERKINS | OK | 3558 | 09702 |
| 07164400 | ARKANSAS RIVER AT SD SPNG NEAR TUL | OK | 3607 | 09607 |
| 07178620 | NEWT GRAHAM L&D (VERDIGRIS R) NEAR INOLA | OK | 3603 | 09532 |
| 07193500 | NEOSHO R BL FT GIBSON RES NR FT GIBSON | OK | 3551 | 09514 |
| 07231500 | CANADIAN RIVER AT CALVIN | OK | 3459 | 09614 |
| 07232500 | N CANADIAN RIVER NEAR GUYMON | OK | 3643 | 10130 |
| 07234000 | NORTH CANADIAN (BEAVER) RIVER AT BEAVER | OK | 3649 | 10031 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | | ST[1] | LATI-TUDE DEG/MIN | LONGI-TUDE DEG/MIN |
|---|---|---|---|---|---|
| 07237500 | NORTH CANADIAN RIVER AT WOODWARD | | OK | 3626 | 09917 |
| 07245000 | CANADIAN RIVER NEAR WHITEFIELD | | OK | 3516 | 09514 |
| 07305000 | NF RED RIVER NEAR HEADRICK | | OK | 3438 | 09906 |
| 07331000 | WASHITA RIVER NEAR DURWOOD | | OK | 3414 | 09659 |
| 10396000 | DONNER UND BLITZEN R. NEAR FRENCHGLEN | | OR | 4247 | 11852 |
| 14048000 | JOHN DAY RIVER AT MCDONALD FERRY | | OR | 4535 | 12024 |
| 14103000 | DESCHUTES RIVER AT MOODY NEAR RIGGS | | OR | 4537 | 12054 |
| 14128910 | COLUMBIA RIVER AT WARRENDALE | | OR | 4537 | 12202 |
| 14207500 | TUALATIN RIVER AT WEST LINN | | OR | 4521 | 12240 |
| 14211720 | WILLAMETTE RIVER AT PORTLAND | | OR | 4531 | 12240 |
| 14301000 | NEHALEM RIVER NEAR FOSS | | OR | 4542 | 12345 |
| 14321000 | UMPQUA RIVER NEAR ELKTON | | OR | 4335 | 12333 |
| 14372300 | ROGUE RIVER NEAR AGNESS | | OR | 4235 | 12404 |
| 01474500 | SCHUYLKILL RIVER AT PHILADELPHIA | | PA | 4000 | 07512 |
| 01540500 | SUSQUEHANNA RIVER AT DANVILLE | | PA | 4057 | 07637 |
| 01553500 | W.BR. SUSQUEHANNA RIVER AT LEWISBURG | | PA | 4058 | 07653 |
| 01570500 | SUSQUEHANNA RIVER AT HARRISBURG | | PA | 4015 | 07653 |
| 03049625 | ALLEGHENY RIVER AT NEW KENSINGTON | | PA | 4034 | 07946 |
| 03085000 | MONONGAHELA RIVER AT BRADDOCK | | PA | 4024 | 07953 |
| 50038100 | RIO GRANDE DE MANATI | | PR | 1826 | 06632 |
| 50046000 | RIO DE LA PLATA AT TOA ALTA | | PR | 1824 | 06615 |
| 50092000 | RIO GRANDE DE PATILLAS NEAR PATILLAS | | PR | 1802 | 06602 |
| 50144000 | RIO GRANDE DE ANASCO NEAR SAN SEBASTIAN | | PR | 1817 | 06703 |
| 02132000 | LYNCHES RIVER AT EFFINGHAM | | SC | 3403 | 07945 |
| 02136000 | BLACK RIVER AT KINGSTREE | | SC | 3340 | 07950 |
| 02170500 | LAKE MARION MOULTRIE CANAL NR PINEVILLE | | SC | 3323 | 08008 |
| 02171500 | SANTEE RIVER NEAR PINEVILLE | | SC | 3327 | 08009 |
| 02175000 | EDISTO RIVER NEAR GIVHANS | | SC | 3302 | 08024 |
| 02176500 | COOSAWHATCHIE RIVER NEAR HAMPTON | | SC | 3250 | 08108 |
| 02198500 | SAVANNAH RIVER NEAR CLYO | (GA) | SC | 3232 | 08116 |
| 06357800 | GRAND RIVER AT LITTLE EAGLE | | SD | 4530 | 10049 |
| 06438000 | BELLE FOURCHE RIVER NEAR ELM SPRINGS | | SD | 4422 | 10234 |
| 06439300 | CHEYENNE RIVER AT CHERRY CREEK | | SD | 4436 | 10129 |
| 06440000 | MISSOURI RIVER AT PIERRE | | SD | 4422 | 10022 |
| 06452000 | WHITE RIVER NEAR OACOMA | | SD | 4345 | 09933 |
| 06453000 | MISSOURI RIVER BELOW FT RANDALL DAM | | SD | 4304 | 09833 |
| 06478500 | JAMES RIVER NEAR SCOTLAND | | SD | 4311 | 09738 |
| 06485500 | BIG SIOUX RIVER AT AKRON | (IA) | SD | 4250 | 09634 |
| 03425000 | CUMBERLAND RIVER AT CARTHAGE | | TN | 3615 | 08557 |
| 03470500 | FRENCH BROAD RIVER NEAR KNOXVILLE | | TN | 3558 | 08346 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | ST[1] | LATITUDE DEG/MIN | LONGITUDE DEG/MIN |
|---|---|---|---|---|
| 03543005 | TENNESSEE R. AT WATTS BAR DAM (TAILWATER) | TN | 3537 | 08447 |
| 03571850 | TENNESSEE RIVER AT SOUTH PITTSBURG | TN | 3501 | 08542 |
| 03593005 | TENNESSEE R. AT PICKWICK LAND. D.(L.LOCK) | TN | 3504 | 08815 |
| 07026000 | OBION RIVER AT OBION | TN | 3615 | 08912 |
| 07228000 | CANADIAN RIVER NEAR CANADIAN | TX | 3556 | 10022 |
| 07297910 | PDTF RED RIVER NEAR WAYSIDE TEXAS | TX | 3450 | 10125 |
| 07300000 | SALT FORK RED RIVER NEAR WELLINGTON | TX | 3457 | 10013 |
| 07308500 | RED RIVER NEAR BURKBURNETT | TX | 3406 | 09832 |
| 07331600 | RED RIVER AT DENISON DAM NEAR DENISON | TX | 3349 | 09634 |
| 08030500 | SABINE RIVER NEAR RULIFF | TX | 3018 | 09345 |
| 08041000 | NECHES RIVER AT EVADALE | TX | 3021 | 09406 |
| 08065350 | TRINITY RIVER NEAR CROCKETT | TX | 3120 | 09539 |
| 08066500 | TRINITY RIVER AT ROMAYOR | TX | 3026 | 09451 |
| 08068000 | WEST FORK SAN JACINTO RIVER NEAR CONROE | TX | 3015 | 09527 |
| 08082000 | SALT FORK BRAZOS RIVER NEAR ASPERMONT | TX | 3320 | 10014 |
| 08082500 | BRAZOS RIVER AT SEYMOUR | TX | 3335 | 09916 |
| 08098290 | BRAZOS RIVER NEAR HIGHBANK | TX | 3108 | 09649 |
| 08116650 | BRAZOS RIVER AT ROSHARON | TX | 2921 | 09535 |
| 08123800 | BEALS CREEK NEAR WESTBROOK | TX | 3212 | 10101 |
| 08136700 | COLORADO RIVER NEAR STACY | TX | 3130 | 09934 |
| 08158000 | COLORADO RIVER AT AUSTIN | TX | 3015 | 09742 |
| 08162000 | COLORADO RIVER AT WHARTON | TX | 2919 | 09606 |
| 08164500 | NAVIDAD RIVER NEAR GANADO | TX | 2902 | 09633 |
| 08176500 | GUADALUPE RIVER AT VICTORIA | TX | 2848 | 09701 |
| 08188500 | SAN ANTONIO RIVER AT GOLIAD | TX | 2839 | 09723 |
| 08210000 | NUECES RIVER NEAR THREE RIVERS | TX | 2826 | 09811 |
| 08212400 | LOS OLMOS CREEK NEAR FALFURRIAS | TX | 2716 | 09808 |
| 08370500 | RIO GRANDE AT FT QUITMAN | TX | 3105 | 10536 |
| 08377200 | RIO GRANDE AT FOSTER RANCH | TX | 2947 | 10145 |
| 08447410 | PECOS RIVER NEAR LANGTRY | TX | 2948 | 10127 |
| 08459000 | RIO GRANDE AT LAREDO | TX | 2730 | 09930 |
| 08475000 | RIO GRANDE AT BROWNSVILLE | TX | 2553 | 09727 |
| 09180500 | COLORADO RIVER NEAR CISCO | UT | 3849 | 10918 |
| 09234500 | GREEN RIVER NEAR GREENDALE | UT | 4054 | 10925 |
| 09315000 | GREEN RIVER AT GREEN RIVER | UT | 3859 | 11009 |
| 09379500 | SAN JUAN RIVER NEAR BLUFF | UT | 3709 | 10952 |
| 10059500 | BEAR LAKE OUTLET CANAL NEAR PARIS (ID) | UT | 4213 | 11121 |
| 10126000 | BEAR RIVER NEAR CORINNE | UT | 4135 | 11206 |
| 10141000 | WEBER RIVER NEAR PLAIN CITY | UT | 4117 | 11205 |
| 10171000 | JORDAN RIVER AT SALT LAKE CITY | UT | 4044 | 11155 |
| 10224000 | SEVIER RIVER NEAR LYNNDYL | UT | 3929 | 11224 |
| 10237000 | BEAVER RIVER AT ADAMSVILLE | UT | 3815 | 11246 |
| 04296500 | CLYDE RIVER AT NEWPORT | VT | 4456 | 07211 |

[1] See footnote at end of table.

TABLE 1.—*Stations in the National Stream Quality Accounting Network on January 1, 1975*—Continued

| USGS STAT.NO. | STATION NAME | ST[1] | LATITUDE DEG/ | LONGITUDE DEG/ |
|---|---|---|---|---|
| 01673000 | PAMUNKEY RIVER NEAR HANOVER | VA | 3746 | 07720 |
| 02035000 | JAMES RIVER AT CARTERSVILLE | VA | 3740 | 07805 |
| 02049500 | BLACKWATER RIVER NEAR FRANKLIN | VA | 3646 | 07654 |
| 12031000 | CHEHALIS RIVER AT PORTER | WA | 4656 | 12319 |
| 12045500 | ELWHA R AT MCDONALD BRIDGE NR PT ANGELES | WA | 4803 | 12335 |
| 12200500 | SKAGIT RIVER NEAR MT VERNON | WA | 4831 | 12220 |
| 12398600 | PEND OREILLE R AT INTERNATIONAL BOUNDARY | WA | 4900 | 11721 |
| 12400520 | COLUMBIA RIVER AT NORTHPORT | WA | 4855 | 11747 |
| 12433000 | SPOKANE RIVER AT LONG LAKE | WA | 4750 | 11751 |
| 12510500 | YAKIMA RIVER AT KIONA | WA | 4615 | 11929 |
| 13353200 | SNAKE RIVER AT BURBANK | WA | 4613 | 11901 |
| 14113000 | KLICKITAT RIVER NEAR PITT | WA | 4545 | 12113 |
| 03201300 | KANAWHA RIVER AT WINFIELD | WV | 3832 | 08155 |
| 03204500 | MUD RIVER NEAR MILTON | WV | 3823 | 08207 |
| 04027000 | BAD RIVER NEAR ODANAH | WI | 4629 | 09042 |
| 04085000 | FOX RIVER AT WRIGHTSTOWN | WI | 4420 | 08810 |
| 04087000 | MILWAUKEE RIVER AT MILWAUKEE | WI | 4306 | 08755 |
| 05340500 | ST. CROIX RIVER AT ST. CROIX FALLS | WI | 4524 | 09239 |
| 05369500 | CHIPPEWA RIVER AT DURAND | WI | 4438 | 09158 |
| 05407000 | WISCONSIN RIVER AT MUSCODA | WI | 4312 | 09026 |
| 13022500 | SNAKE RIVER ABOVE RESERVOIR NEAR ALPINE | WY | 4318 | 11047 |

[1] If two States are shown, that in parentheses is the State in which the station is located. The other State designates the Geological Survey district that operates the station.