PUBLIC WATER-SUPPLY AGENCIES, GREATER PITTSBURGH REGION

ALLEGHENY COUNTY

1 Aleppo Township Water Authority
2 Arch-Lhorner
3 Aspinwall Water Works, Borough of
4 Blawnox Municipal Water Works
5 Brackenridge Water Authority
6 Braddock Municipal Water Works
7 Chewick Water Works
8 Clearview Water Supply Company
9 Coraopolis Water Works, Borough of
10 Duquesne Municipal Water Works
11 East Deer Water Co.
12 East McKeesport Water Company
13 Edgeworth, Municipal Authority of the Borough of
14 Etna Municipal Water Works
15 Fawn-Frazer Municipal Water Authority
16 Findley Township Water Authority
17 Forward, Municipal Authority of the Township of
18 Fox Chapel Water Authority
19 Glenfield, Borough of
20 Harmar Municipal Water Authority
21 Hemer, Municipal Authority of the Township of
a Eastern Section
b Western Section
22 Homestead, Borough of
23 Liberty Water Authority, Borough of
24 Lincoln Borough Water Authority
25 McKeesport Municipal Water Works
26 Millvale Municipal Water Works
27 Monroeville Water Authority
28 Moon Township Municipal Authority
29 Mount Lebanon, City of
30 Neville, Township of
31 North Versailles Township Authority
32 Oakdale Municipal Water Authority
33 Oakmont, Municipal Authority of the Borough of
34 O'Hara, Township of
35 Pittsburgh Municipal Water Works
36 Plum Borough Municipal Authority
37 Port Vue Water Authority, Borough of
38 Rankin, Municipal Authority of the Borough of
39 Reserve Township Water Department
40 Richland Township Municipal Authority of Allegheny County
41 Robinson Township Municipal Authority
42 Sewickley Water Works, Commissioners of
43 Shaler Township of
44 Sharpsburg Municipal Water Works
45 Springdale Borough Municipal Water Works
46 Springdale Township Municipal Water Works
47 Terentum Municipal Water Works
48 Wall Borough Water Department
49 Western Allegheny County Municipal Authority
50 Western Pennsylvania Water Company-Pittsburgh District
51 West View, Municipal Authority of the Borough of
52 White Oak Borough Authority
53 Wilkinsburg-Penn Joint Water Authority

ARMSTRONG COUNTY

60 Applewold Borough
61 Armstrong Water Company
62 Cadogan Township
63 Dayton Water Company
64 Dayton Borough Water Company
65 Eastern Armstrong County Municipal Authority
66 Ford City Borough Water Department
67 Freeport Water Company
68 Furnace Run
69 Kiskiminetas Township Municipal Authority
70 Mahoning Township Municipal Authority
71 Manor Township Joint Municipal Authority
72 Parker City Municipal Authority
73 Perks Township Municipal Authority
74 Rayburn Township Municipal Authority
75 Rural Valley Water Company
76 Templeton Water Company
77 Water Improvement Association (Brady's Bend)
78 West Kittanning Municipal Authority

BEAVER COUNTY

80 Aliquippa, Municipal Authority of
81 Ambridge Water Authority, Borough of
82 Baden Borough Water Department
83 Beaver, Water Authority of the Borough of
84 Beaver Falls Municipal Authority
85 Big Beaver Water Authority
86 Brighton Township, Municipal Authority of
87 Center Township, Water Authority
88 Conway, Borough of
89 Cresswell Heights Joint Authority
90 Darlington Township Authority, Borough of
91 Koppel, Borough of
92 Midland, Water Authority of the Borough of
93 Monaca, Water Authority of the Borough of
94 North Sewickley Township Water Authority
95 Ohioville, Municipal Authority of

BUTLER COUNTY

100 Boyers Water and Sewer Company
101 Buffalo Township Municipal Authority
102 Center Township Municipal Water and Sewer Authority
103 Chicora Borough Water Department
104 Cranberry Township Municipal Water and Sewer Authority
105 Evans City Municipal Authority
106 Harmony Borough Municipal Authority
107 Mars Borough Water Works
108 Number not used.
109 Northview Water Company Incorporated
110 Petrolia Water Company
111 Slippery Rock Municipal Authority of
112 Slippery Rock Water Municipal Authority
113 Western Pennsylvania Water Company-Butler District
114 Zelienople Borough Water Department

WASHINGTON COUNTY

120 Bentleyville, Municipal Authority of Borough of
121 Brownsville Water Company
122 California Water Company
123 Charleroi, Authority of the Borough of
124 Citizens Water Service Department
125 Cokeburg Water Company
126 Crescent Heights Water Company
127 Independence Municipal Authority
128 Ellsworth Borough Water Company
129 Mill Top Water Association
130 Paris and Florence Water Association
131 Marianna Water Company
132 McCormick Water Company
133 Western Pennsylvania Water Company-Monongahela District
134 Smith Township Municipal Authority
135 Southview Water Company
136 Southwestern Pennsylvania Water Authority
137 Tri-County Joint Municipal Authority
138 Van Voorhis Water Company
139 Washington Township Municipal Authority
140 West Bethlehem Township Municipal Authority
141 Number not used.
142 Western Pennsylvania Water Company-McDonald District
143 Western Pennsylvania Water Company-Washington District

WESTMORELAND COUNTY

150 Avonmore, Municipal Authority of the Borough of
151 Bell Township Municipal Authority
152 Belle Vernon Borough, Municipal Authority of
153 Bresster Community Water Association
154 Derry, the Municipal Authority of the Borough of
155 Fitz Henry Water Company
156 Greensburg Water Works
157 High Ridge Water Company
158 Humphrey Water Association
159 Latrobe Municipal Authority
160 Ligonier Borough Water Works
161 Ligonier Township Municipal Authority
162 Lowber Water District
163 Mace Springs Water Company
164 New Alexandria Municipal Authority
165 New Florence Municipal Water Works, Borough of
166 New Kensington, the Municipal Authority of the City of
167 Penn Water Company
168 Pittsburgh Water Company
169 Saltsburg Water Department
170 Scott Haven, Community of
171 Smithton Municipal Water Authority
172 Number not used.
173 Treager Water Service Company
174 Waterford Water Works
175 West Leechburg Water Authority
176 Westmoreland County Municipal Authority of
177 Williams, R.T.
178 Youngstown, Borough Municipal Authority

INTERRELATIONSHIPS IN MANAGEMENT OF URBAN WATER RESOURCES

From: Anderson, J.J., 1971, Case study on design of urban water data acquisition systems, in Albertson, M.L., et al, eds., Treatise on urban water systems: Colorado State Univ., p. 559.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF-607
SHEET 1 of 2

INTRODUCTION

Urban water planning, development, and management are many sectored, costly efforts, subject to a multitude of controls and demands including those imposed by nature. One primary concern in development is for providing a dependable and safe water supply. In spite of a bountiful natural availability, the process of satisfying consumer needs involves the resolution of a variety of problems, not the least of which are cooperation and coordination among suppliers.

One of the fundamental requisites in seeking sound solutions to developmental and environmental problems is inventory documentation. This map is one facet of documentation; the data listing, given on sheet 2, is the companion inventory. These supplement State, regional, and local efforts directed toward both long-range planning and current evaluation programs. Such documentation also assists the assessment of the effect of one water-management subsystem on hydrologic characteristics.

PURPOSE AND SCOPE

The map and data tabulation are intended to be a reasonably up-to-date regional compilation of general information on the titled types of systems. The terms "public water supply systems and(or) agencies" as used here include municipal agencies and authorities, public utilities, and private companies, that provide water service to municipal areas or subareas.

Although several classes of users are supplied by these public systems, this tabulation does not include data on a substantial number of commercial, industrial, and institutional systems that are independently supplied, nor does it include agricultural or rural domestic use. Privately supplied industrial use is many times that of rural domestic use, and rural use is many times less. Public water use documented here is probably less than a tenth of the total water withdrawn for all uses in the region.

The data on numbers of customers and daily average water used are interpolations and extrapolations of information (from a 1969-70 data base) compiled and furnished as noted in acknowledgments and references, and as updated or affirmed by a number of system representatives. Numbers of residential customers, and to a lesser extent numbers of customers in other categories, should not be construed to be as exact as implied by the number of significant figures. Similarly, there should be an appreciation of probable inconsistency in some of the data owing to the nature of the information available to system representatives and to their interpretation of information requested in questionnaires. The information is constantly changing because of growth patterns and system improvements or changes in organization, all features of a dynamic developmental process.

CHARACTERISTICS

Only 11 systems of the Greater Pittsburgh Region serve more than 10,000 residential customers, and only two of these, the Pittsburgh Municipal Water Works and the Westmoreland Water Company, serve more than 100,000. A residential customer is commonly assumed to represent about 3.5 persons. About 18 of the 153 listed systems are involved in inter-county operations. A county summary of selected system data is given elsewhere on this sheet.

Water-use distribution by categories varies widely among the systems, reflecting land-use variability and the degree to which industrial and commercial users depend on municipal systems.

About 30 percent of the systems purchase supply from other systems; a few of these provide treatment but most are primarily distribution systems. Less than a third of the listed systems are privately owned and operated.

ACKNOWLEDGMENTS AND SOURCES OF DATA

Data have been derived largely from information provided by water-system representatives in response to a questionnaire distributed by the Pennsylvania Department of Environmental Resources (DER) during 1970. Computer summaries of information extracted from these responses were provided by the DER to assist the present compilation effort. The extracted information, which has been used in the preparation of the system data tabulation, represents but a small part of that initially provided by system representatives.

Where insufficient data were available from DER, supplemental data and information were obtained from sources listed below, from follow-up inquiries to selected water-system officials, and from county planning officials. Technical service and assistance in the preparation of the map and tabulation were provided by Green Engineering Company, Sewickley, Pa., Donald M. Simmons, project engineer.

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SUMMARY OF SELECTED PUBLIC WATER-SUPPLY SYSTEM DATA

	COUNTY						REGION
	Allegheny	Armstrong	Beaver	Butler	Washington	Westmoreland	
Map numbers	1-53	60-78	80-95	110-114	120-143	150-178	1-178
Number of systems	53	19	16	14	23	28	153
Type of ownership: public	49	11	16	10	8	15	109
private	4	8	0	4	15	13	44
System size - by estimated number of residential customers:[a]							
under 1,000	18	16	6	11	15	19	85
1,000-10,000	29	3	8	3	6	4	53
over 10,000	6	0	1	0	2	2	11
System size - by estimated daily average water used:[b]							
under 0.1 mgd	6	7	2	6	6	13	40
0.1-1.0	30	6	7	7	10	7	67
over 1.0	16	2	6	1	4	4	33
Estimated total daily average water use, in mgd	244.8	5.0	26.3	9.4	24.2	55.0	366.7

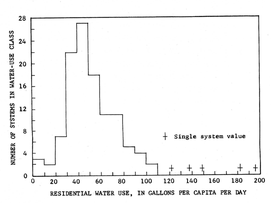
a Number for 28 systems estimated; 4 not determined.
b Water use data not available for 13 systems; all classes of use included.

Selected data for the systems shown and listed here are given on sheet 2

EXPLANATION

- SYSTEM MAP NUMBER
- SERVICE AREA
- INTERCONNECT
- INTAKE
- WELL
- SPRING

Number within symbol indicates multiple facilities



VARIATION IN ESTIMATED AVERAGE DAILY PER CAPITA RESIDENTIAL WATER USE AMONG 117 WATER-SUPPLY SYSTEMS OF THE GREATER PITTSBURGH REGION, COMPUTED FROM DATA IN SHEET 2, ASSUMING 3.5 PERSONS PER RESIDENTIAL CUSTOMER.

LOCATIC DIAGRAM

SCALE 1:125 000
1 inch equals approximately 2 miles
1 centimeter equals 1.25 kilometers

50,000-foot grids based on Pennsylvania coordinate system, south and north zones
10,000-meter Universal Transverse Mercator grid ticks, zone 17

Base from U.S. Geological Survey, 1:125,000, Greater Pittsburgh region, southwestern Pennsylvania, 1971

GREATER PITTSBURGH REGION
SOUTHWESTERN PENNSYLVANIA

COUNTIES OF ALLEGHENY, ARMSTRONG, BEAVER, BUTLER, WASHINGTON, AND WESTMORELAND

For sale by U.S. Geological Survey, price $1.00 per set

MAP SHOWING AREAS SERVICED BY PUBLIC WATER-SUPPLY AGENCIES IN 1973 GREATER PITTSBURGH REGION, SOUTHWESTERN PENNSYLVANIA

BY
ROBERT M. BEALL

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