

**Technical Memorandum
WRE # 363**

**Internal and External Access
To the
South Florida Water Management District's
Hydrometeorologic and Water Quality Data**

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EXECUTIVE SUMMARY

This report provides information on the services available from the District to provide access to its water resource data and associated information. The South Florida Water Management District's database DBHYDRO acts as a repository for central and south Florida hydrometeorologic and water quality data. The District also has additional environmental data in the form of electronic and hard copy maps with GIS coverages such as vegetation cover, land use, monitoring site locations, and surface elevations.

The District seeks to provide the public with a high level of service by providing timely access to all data and information in its possession at no cost. The District also acquires data from other agencies and stores the information in its database for access by any user. External customers primarily acquire District data through the Hydrologic Reporting Unit in the Resource Assessment Division of the Water Resources Evaluation Department (WRE). Local, county, state and federal agencies, universities, consultants, lawyers, students and any other individuals and entities who have interest in the south Florida ecosystem are the main customers. District staff mainly access data directly from DBHYDRO and occasionally through the Hydrologic Reporting Unit of the Resource Assessment Division.

Initially, external customers were provided data on diskette and hard copy media. As the demand for data increased, the District installed REMO (Remote Electronic Access) so that external customers could have access to information on the District database, DBHYDRO, through a direct computer link established under a user contract issued by the District. In the last three years, the volume of data distributed by the District has increased greatly and the media of access has shifted substantially from hard copy to electronic. REMO access through TELNET (protocol application that logs on to other computers to obtain information) and FTP (file transfer protocol) are currently the main mode of data acquisition. Requests for hard copy data and diskette shipment has been declining consistently. In the near future, the District is planning to provide Web-based access to agency data.

Most data requests also require technical support. The Hydrologic Reporting Unit provides technical support by identifying the data needs of its customers and providing information on the data and related technical issues.

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TABLE OF CONTENTS

INTRODUCTION	1
INTERNAL AND EXTERNAL DATA REQUESTS	1
REMOTE ELECTRONIC ACCESS	4
DBHYDRO, DATABASE SUPPORT AND PROGRAMS	5
DATA ACQUISITIONS	6
SUMMARY	7
REFERENCES	7
APPENDICES	
I. List of clients and data requested	11
II. Remote Electronic Access contracts	23
III. External Data Acquisitions:	
a. Everglades National Park	27
b. United States Geological Survey	29
c. National Oceanic and Atmospheric Administration	31
d. United States Army Corps of Engineers	32
e. Department of Environmental Protection	33

TABLES

Table I. Entities that requested data	2
Table II. Types of data requested	3
Table III. Data distribution media	3
Table IV. Entities with REMO contracts	5

FIGURE

Figure I. Monthly data requests for 1997	2
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INTRODUCTION

The Hydrologic Reporting Unit (HRU), within the Resource Assessment Division (RAD) of the Water Resources Evaluation Department (WRE), handles internal and external water quality and hydrometeorologic requests for data. The unit also manages and supports external customer access to District data through Remote Electronic Access (known as REMO), and acquires and loads central and south Florida hydrometeorologic data from external agencies into DBHYDRO, the District corporate database.

Data collected, processed and stored by the South Florida Water Management District (SFWMD) is used to resolve complex water resources questions facing the region. In recent years, there has been a large increase in the number of public requests for data and the volume of data per request. The District's answer to handling large increases in external data requests in a timely and cost effective manner is REMO (SFWMD, 1993). REMO is a remote UNIX workstation dedicated to providing external data users with direct access to water quality, hydrologic and meteorologic data stored in the District's database, DBHYDRO (SFWMD, 1997).

DBHYDRO acts as a repository for historical water quality and hydrometeorologic data for the 16-county region covered by the District. This database contains more than 7,000 hydrometeorologic and 4,000 water quality station names, with several related data sets at each station. The number of monitoring stations continues to increase. The District also acquires data from external agencies that have monitoring networks in Florida. A few of the agencies that contribute data to the District database are the United States Geological Survey (USGS), Everglades National Park (ENP), National Oceanic and Atmospheric Administration (NOAA), United States Army Corps of Engineers (COE), and Department of Environmental Protection (DEP).

INTERNAL AND EXTERNAL DATA REQUESTS

In 1997, WRE received over 20 percent more data requests than in 1996; 725 data requests were recorded by the Hydrologic Reporting Unit in 1997, as compared to 608 in 1996 and 481 in 1995 (Chong, 1997). These totals do not include the large amounts of data directly accessed through REMO by external clients. Appendix I lists the types of customers and data requested in 1997. These records show the changes in volume of data requested, client types, data types requested, and the technology used to distribute data. Figure 1 shows, for each month, the amount of incoming data requests and the number of requests which were fulfilled.

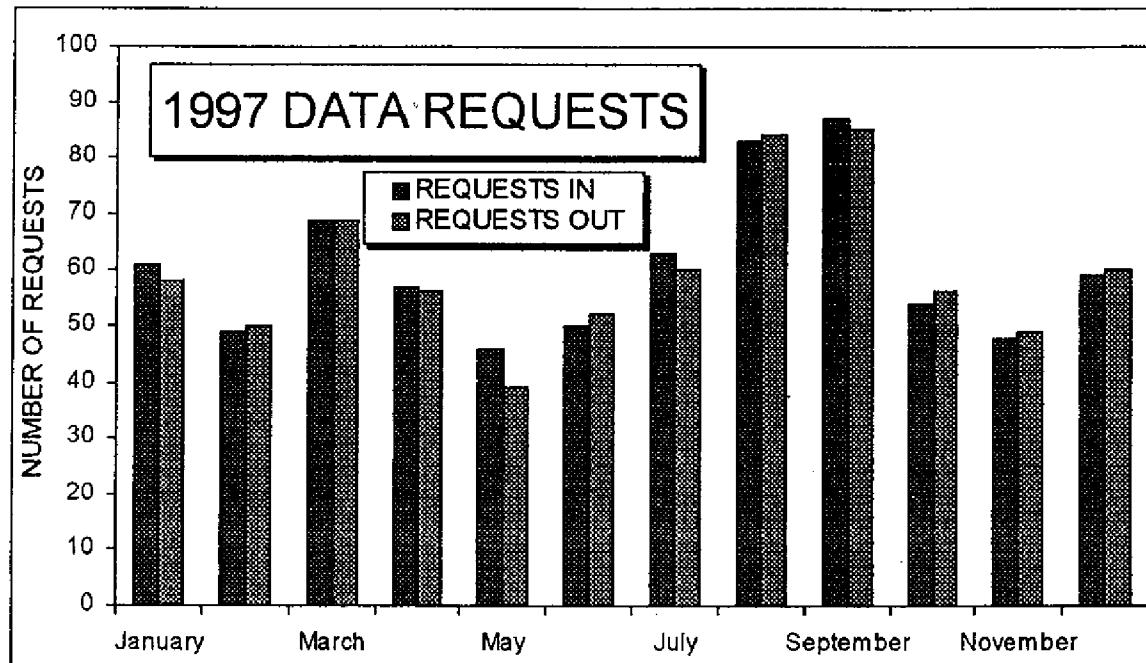


Figure 1. Monthly data requests for 1997

In 1996 and 1997, the percent of internal and external requests remained the same with 85 percent of recorded data requests made by external clients. Table I shows the diversity of entities who requested data from the District. Since the introduction of REMO, the percentage of data requests made by external customers has decreased. In 1995, 86 percent of requests were made by external clients and in 1997 the percentage was 75.

Table I. Entities that requested data

Client	Year		
	1995	1996	1997
Consulting/engineering firms	50 %	36 %	36%
Other government agencies	13 %	18 %	20%
Universities	6 %	16 %	12%
Other clients (including utilities, law firms, construction firms, societies, newspapers, etc.)	17 %	6 %	7%
SFWMD *	14 %	24 %	25%

* internal requests

Table II shows the types of data that were distributed in 1995, 1996 and 1997. There has been an increasing interest in new data types which were not readily available in the past. These new data types include data on flow structure operations, GIs coverages, conductivity, and weather data (e.g., humidity, wind speed, and wind direction).

Table II. Types of data requested

Data Types	Year		
	1995	1996	1997
Stage (water levels)	30 %	26 %	28 %
Rainfall amounts	34 %	26 %	23 %
Flow rates	19 %	16 %	15 %
Water Quality	N/A	15 %	13%
Other types (including GIS maps, gate operations, evaporation, conductivity, publications, etc.)	17 %	17 %	21 %

The 1995, 1996 and 1997 data distribution media are summarized in Table III. In 1995, 60 percent of data requests was distributed by means of hard copy paper printouts, while only 40 percent was by electronic means. In just 2 years, the reverse occurred with 70 percent of data requests fulfilled by electronic means (FTP (file transfer protocol), E-mail or telephone). These changes reflect the District's commitment to data sharing and its responsiveness to handling the increasing volume and number of data requests with new technology.

Table III. Data distribution media

Method	Year		
	1995	1996	1997
Printouts	58 %	42 %	29 %
Diskettes	26 %	20 %	14 %
E-mail or FTP	10 %	28 %	41 %
FAX or phone	6 %	10 %	16 %

REMOTE ELECTRONIC ACCESS

Since the introduction of REMO in April of 1995, over 400 organizations have requested and received information packages on how to access District data independently. These packages include:

- a) Public notice announcement letter of the availability of Remote Electronic Access to the District's water quality and hydrometeorologic databases, from the Deputy Executive Director.
- b) REMO contract, "Remote Electronic Access Agreement Between the South Florida Water Management District and Customer".
- c) Manual to guide the user through access and retrieval of data, "User's Guide to REMO".
- b) DBHYDO database manual, "User's Guide to Accessing the South Florida Water Management District Hydrometeorologic and Water Quality Databases".
- c) Map of "South Florida Water Management District Structure and Canal Locations".

The customer may access information stored on REMO in the read-only mode, twenty-four hours per day, seven days per week, with the exception of one day per month when the database is updated. Through a legal contract with the District, customers are advised that REMO is not accessible on the first Friday of every month and may continue to be inaccessible through the first Sunday of every month due to database updates. The District staff in RAD provides REMO users with the assistance to resolve administrative and technical problems to assure them success in accessing the agency's data; these include:

- a) filling out the legal contract between the District and customer and providing a temporary user id and password to the client while their contract is being executed.
- b) assisting the client with setting up and using modem to modem, TELNET (protocol application that logs on to other computers to obtain information) and FTP communication to REMO.
- c) adding users to existing contracts, resetting users passwords, and changing permission on REMO accounts.
- d) providing training in the use of REMO universal key mapping and getting the desired data from the hydrometeorologic and the water quality databases.

Organizations executing REMO contracts have increased by over 50 percent in the last year. To date, 90 REMO contracts have been executed and more than 275 user ids/passwords have been issued (Appendix II), as compared to May of 1996, when 59 REMO contracts had been executed and 180 user ids/passwords were issued. This large increase in corporate and government entities executing REMO contracts reflects the growing interest in water resource data, and the clients' desire to access data on their own, at their convenience without dependence or delay. Table VI shows the diversity of entities having executed REMO contracts.

Table IV. Entities with REMO contracts

Client	
Consulting/engineering firms	54%
Government agencies	27%
Universities	12%
Other entities (utility company, high school, etc.)	7%

REMO users often make suggestions on ways to improve the database and express interest in kinds of information they would like to see made available. The District attempts to accommodate these ideas when possible. Recent suggestions include making REMO Web accessible, allowing access to archived and real time breakpoint data, adding format and detail options for data, and increasing data collection sites and data types.

DBHYDRO, DATABASE SUPPORT AND PROGRAMS

A database is an indispensable tool for engineers and scientists as it facilitates the access, handling, and organization of enormous volumes of data. The "DBHYDRO" database was designed and developed by the SFWMD, and presently stores water quality and hydrometeorologic data collected by the SFWMD and many other agencies, along with additional supplementary information about sites, structures, and stations where data are collected.

The District provides technical support, database training and comprehensive technical manuals to help clients understand data collection, processing and analysis methods. A comprehensive user's guide is available to database users: "User's Guide to Accessing the South Florida Water Management District Hydrometeorologic and Water Quality Databases, (HYDRO_PREP), DBHYDRO". The DBHYDRO manual describes how to access and use the District database, DBHYDRO, along with a sample of the details, formats and special reports in which data is available. It also explains how the database can be searched by location and data qualifiers, and provides a comprehensive list of water quality projects, test types, sample types, and codes. A list of measurement units, tag descriptions, and commonly asked questions are also included.

Other WRE support manuals are also provided to clients on a case-by-case basis covering the following topics:

- water quality, hydrometeorologic or ground water networks.
- flow computations and equations.
- data collection and quality assurance methods.
- hydrologic conditions and storm event reports.
- atlas for counties and basins, with maps.

With the increased capacity of computers, scientists and engineers are able to handle vast amounts of archive and real time breakpoint data, which are used for developing and calibrating complex models. Universities, government agencies and consultants often request archive or statistical (hourly maximum, mean, and minimum) data. However, these special data requests cannot be handled by REMO because archive and real time breakpoint data are not available through DBHYDRO, which contains mostly summary data. Thus, the HRU must handle these types of requests for data by using internal District programs and scripts which can extract archive and real time breakpoint data directly from the District's Data Collection/Validation Processing (DCVP) system, where these data are stored.

An example of a client who periodically requests large amounts of archive real time data, is the National Aeronautics and Space Administration (NASA), at Goddard Space Flight Center in Maryland. Since 1995, the District has provided central and south Florida rainfall data for the Tropical Rainfall Measuring Mission (TRMM) Satellite Global Validation Program, which uses quality tipping bucket raw data to improve the accuracy of rain products produced from radar.

Listed below are internal District programs used to meet the changing needs of the database users:

- a.) The Interval Value Generator (IVG) program extracts archive data and computes specified statistics for a specified interval and date range. Choices of interval are: year, month, day, hour or number of minutes. Statistics types are: MAXIMUM, MINIMUM, MEAN, INSTANTANEOUS or SUM.
- b) The Extract program retrieves archive data for South Florida Water Management District (WMD) stations.
- c) The Hydrograph program runs the flow computation program, to obtain instantaneous stage, operation, and flow data for South Florida Water Management District (SFWMD) structures.
- d) Oracle SQL scripts are used to obtain data directly from Oracle database tables. These scripts are used to extract water quality control samples or flagged data.

DATA ACQUISITIONS

The Hydrologic Reporting Unit acquires and loads into DBHYDRO data from various external agencies for use by District and external data users. Appendix III lists these agencies and their respective sites. The United States Geological Survey (USGS) collects flow and stage data under an interagency contract agreement with the District and the Everglades National Park (ENP) collects rainfall, flow, stage and water quality parameters. The National Oceanic and Atmospheric Administration (NOAA) collects climatological data, the United States Army Corps of Engineers has rainfall, stage and flow measurement networks within the District area and the Department of Environmental Protection (DEP) possesses flow data.

Recently the District acquired and loaded daily period of record ENP data for 1 flow, 57 stage and 36 rain sites. This recent data acquisition increased the District's ENP database coverage by over 50 percent, ENP now provides the District with monthly data updates free of charge.

The District purchases data collected by NOAA and each month the HRU receives a diskette with daily mean evaporation and precipitation data for 50 NOAA sites, which are loaded into DBHYDRO. All available NOAA climatological data for the south Florida region has been purchased by the District, this includes hourly precipitation, temperature and wind data. However, due to lack of available staff, these data have not yet been loaded into the database.

SUMMARY

The South Florida Water Management District database, DBHYDRO, provides access to central and south Florida water resources data, and the number of requests for this data continues to grow. In 1997, the number of direct data requests addressed by the District through the Resource Assessment Division of the Water Resources Evaluation Department increased by 20 percent. The District is responsive to this increase in demand and continues to look forward to making data more accessible to users. The volume of data that the District provides has increased far more than what has been reported. Because, remotely accessed data is not included in this report.

Interest in remote electronic access to the District database is expected to continue. The District is working towards providing a Web-based access to the database, which will further facilitate the services that the District provides. However, technical questions and material requests associated with the data and database will continue to be an important customer service and will also increase along with demand for the information.

REFERENCES

- Chong, A. 1997. Remote Electronic Access of Hydrometeorologic and Water Quality Data and Internal and External Requests. Summary Report. Resource Assessment Division. WRE. SFWMD.
- SFWMD. 1997. User's Guide to Accessing the South Florida Water Management District Hydrometeorologic and Water Quality Databases. Database Manual. WRE. SFWMD.
- SFWMD. 1993. External Electronic Access to District Computers Subcommittee Report to the TMAC. Report. SFWMD

APPENDIX I
LIST OF CLIENTS AND DATA REQUESTED

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
1	university	01-06-97	01-06-97	structure info S33	structure info	1	e-mail / FAX
2	SFWMD	01-06-97	01-06-97	all water quality for project ENRH, P.O.R.	water quality	N/A	diskette-1
3	consulting / engineering	01-06-97	01-06-97	Coker Co. flow 1996	flow	12	FAX
4	SFWMD	01-06-97	01-06-97	G250_P.G250S_P.G251_P.G258_C.G259_C, Dec'95-Nov'96	flow	5	ftp network
5	SFWMD	01-07-97	01-07-97	all rain data WCA2A 1978-present	rain	7	diskette-1
6	SFWMD	01-07-97	01-07-97	Palm Beach Gardens area, site SIRG archive 11-26 to 12-26-96	rain	1	printout
7	consulting / engineering	01-08-97	01-08-97	average 3, 5, 10 yrs stage C-10 basin, format 2	stage	1	FAX
8	government	01-08-97	01-08-97	location of Broward rain sites	rain	63	FAX
9	consulting / engineering	01-08-97	01-08-97	P.O.R. S13_T format 2	stage	1	FAX
10	SFWMD	01-08-97	01-08-97	info C10 after 5 year return storm	stage	N/A	phone
11	university	01-03-97	01-09-97	update wind speed & direction DBKEYS 15081,15082,15670	wind	N/A	printout
12	government	01-09-97	01-09-97	US Sugar outflow sites & S177 period of record	flow	2	e-mail / ftp
13	government	01-10-97	01-10-97	O.P. Logs report	gate operation	21	printout
14	consulting / engineering	01-08-97	01-09-97	area_Lat 264229/Lon 814000_P.O.R. turbidity	water quality	1	printout/e-mail
15	government	01-14-97	01-14-97	P.O.R. DBKEYS 06966, 06967, 05424, 13001 & 13002	stage	5	printout
16	SFWMD	01-14-97	01-15-97	BOGGY, SHINGLE, & REEDY CREEKS info	flow	27	e-mail
17	government	01-15-97	01-15-97	location sites < Lat 266000 SQL script	water quality	2294	e-mail
18	consulting / engineering	01-16-97	01-16-97	basin J. Dicken P.O.R. Detail 4/Format 2 error in DBHYDRO	well	N/A	e-mail
19	SFWMO	01-16-97	01-18-97	G56 flow & stage P.O.R.	flow/stage	1	printout
20	SFWMO	01-16-97	01-16-97	CAL00 station upstream S79 P.O.R.	water quality	1	printout/e-mail
21	consulting / engineering	01-15-97	01-15-97	rain Ft. Pierce 1993-1996 township 36/35 & range 40	rain	1	FAX
22	consulting / engineering	01-16-97	01-16-97	S29 structure info	structure info	N/A	e-mail
23	SFWMD	01-17-97	01-17-97	SQL script, project RAIN control sample 09, TPO4	water quality	N/A	e-mail
24	consulting / engineering	01-21-97	01-21-97	G54-T & G13-T Oct. 1,2,3 '93 max archive hourly	stage	1	diskette-1
25	consulting / engineering	01-21-97	01-21-97	100 year storm stage Taylor Creek area, structure info S192	structure info	1	FAX
26	consulting / engineering	01-21-97	01-21-97	Jupiter rain info Palm Beach and Martin county	rain	N/A	phone
27	consulting / engineering	01-21-97	01-21-97	fix SQL scripts and run ENPTP.SQL & EAATP.SQL	water quality	N/A	ftp remo
28	consulting / engineering	01-21-97	01-21-97	fix and run 4 SQL scripts PREF data for EAA & ENP	rain/stg/flow	37	ftp remo
29	SFWMD	01-22-97	01-22-97	runextract Jan 13-17, 1997 rain ENR data	rain	N/A	ftp network
30	SFWMD	01-22-97	01-22-97	sample 01, TPO4 project rain P.O.R.	water quality	N/A	ftp network
31	university	01-21-97	01-22-97	info on rain sites Dade Co.	rain	N/A	e-mail
32	SFWMD	01-22-97	01-22-97	ENR% info list G25% runextract & runvg	stage	54	ftp network
33	consulting / engineering	01-16-97	01-21-97	archive data S18C, S29 and S197 year 1997	stage	3	e-mail
34	inspection	01-22-97	01-22-97	1996 rain Boca area	rain	2	FAX
35	government	01-21-97	01-22-97	update rain Keransville	rain	1	printout
36	inspection	01-21-97	01-23-97	update rain area Boca Raton	rain	1	printout
37	government	01-00-97	01-15-97	on going report on S65 for Dec '96	stage/gate	1	printout
38	private investigation	01-13-97	01-15-97	'96 rain selected area	rain	2	printout
39	university	01-22-97	01-22-97	evap Dade Monroe county	evap	12	e-mail
40	SFWMD	01-24-97	01-24-97	ENR TPO4 10/95-3/96 SQL script	water quality	13	diskette-1
41	SFWMD	01-23-97	01-24-97	ENR TPO4 April-June 1996 SQL script	water quality	13	diskette-1
42	SFWMD	01-24-97	01-24-97	ENR% info list G25% runextract edif_CMD files	flow	34	ftp network
43	inspection	01-23-97	01-28-97	rainfall coastal area Boca	rain	1	printout
44	SFWMD	01-27-97	01-27-97	P.O.R. 2A-159, 2A-17 & 2A-300, format 6 '94-present	stage	3	printout/diskette-1
45	institute	01-27-97	01-27-97	inflow Taylor Slough_S12, C111 basin year 1996	rain/flow	N/A	printout/diskette-1
46	consulting / engineering	01-23-97	01-28-97	stage L_KISS '85-present	stage	1	printout
47	government	01-28-97	01-28-97	eng info list hydro and water quality	all hydro & WQ	300	e-mail
48	university	01-23-97	01-24-97	archive operation data S334 (D186) & G211(16769), yr '96	stage/gate operation	2	ftp remo
49	SFWMD	01-29-97	01-29-97	ENR002, ENR004 ENR012, & G25%, TPO4 7/94-12/95	water quality	7	diskette-1
50	consulting / engineering	01-21-97	01-29-97	stage S70_T 1989-1996	stage	1	printout
51	SFWMD	01-30-97	01-30-97	TSS(018), SO4(033) & DOC(181) 1/93-12/96 ENR & G254	water quality	5	diskette-1
52	consulting / engineering	01-29-97	01-30-97	stage S70_H 1989-1996	stage	1	printout
53	SFWMD	01-24-97	01-30-97	rain 1995 selected location	rain	1	printout
54	SFWMD	01-23-97	01-27-97	max and min S29 period of record	stage	1	printout
55	consulting / engineering	01-28-97	01-31-97	stage headwater and tailwater S153 P.O.R.	stage	2	printout
56	consulting / engineering	01-31-97	01-31-97	township 54/55, & range 40 info 1st Dade county	stage/flow	50	FAX
57	government	01-22-97	01-31-97	all data sites < Lat 266000 SQL script period of record	water quality	2294	ftp remo
58	university	01-23-97	01-29-97	archive data S338 (16711), S335(DJ191), S338(15589) yr '96	stage/gate operation	3	ftp remo
59	consulting / engineering	02-03-97	02-03-97	township 43 & range 41 1996-January 1997	rain	N/A	FAX
60	college	02-03-97	02-03-97	S79 flow and structure info 1995	flow/structure info	1	e-mail
61	consulting / engineering	02-04-97	02-05-97	S70 stage 1989-present	stage	1	ftp remo
62	consulting / engineering	02-05-97	02-05-97	SSAY, S5AW_T, S352_T, & SSA_R archive data, Jan. 1991	stage/rain	4	printout/diskette-1
63	government	02-05-97	02-05-97	MRF117 period of record archive data	rain	1	ftp remo
64	college	02-05-97	02-06-97	S79 flow and structure info 1996-present	flow	2	e-mail
65	consulting / engineering	02-07-97	02-07-97	rain DBKEY 06122 19960101-present	rain	1	e-mail
66	SFWMD	02-07-97	02-10-97	MR15, TM08 project BISC all water data P.O.R.	water quality	2	e-mail
67	government	02-10-97	02-10-97	AVON_P_R & AVON_P_G, period of record	rain / stage	2	ftp remo
68	consulting / engineering	02-10-97	02-10-97	township 54/55, Range 40/39 flow and stage	stage/flow	97	FAX
69	consulting / engineering	02-11-97	02-11-97	S5A chloride and conductivity data 2/5, 1/22 & 1/23 '96	water quality	1	FAX
70	SFWMO	02-11-97	02-11-97	project CAL site locations lat/lon	water quality	N/A	e-mail
71	consulting / engineering	02-10-97	02-11-97	structure info S2, S3, S352, S351 & S354	structure info	5	e-mail
72	university	02-11-97	02-11-97	LKSS, WCA2A & WCA3A period of record stage data	stage	10	diskette-1
73	SFWMD	02-13-97	02-13-97	G252_A-J, G253_A-J, G254_A-E, G256, G255, '95-'96 Aug.	flow	36	diskette-1
74	government	02-01-97	02-13-97	sites < Lat 266000 SQL script control sample WQ	water quality	2294	ftp remo
75	university	02-10-97	02-12-97	S335 (15621), S24 (04595) hydrograph inst. flow data	stage/flow/gate op	2	ftp remo
76	consulting / engineering	02-14-97	02-14-97	C16 & C16N Basin info list	all hydro types	46	FAX
77	government	02-13-97	02-14-97	hydrograph, inst. flow then hourly flow ivg '89 - '91	flow	1	ftp remo

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
78	consulting / engineering	02-18-97	02-18-97	location Lat 285000-253000/Lon 800000-812000 SQL	water quality	1625	ftp remo
79	consulting / engineering	02-18-97	02-18-97	S8 & Mient 15 1991 July data, info range 35/36 & town 46-48	stage	49	FAX
80	consulting / engineering	02-18-97	02-19-97	Orlando Airport rain P.O.R.	rain	1	printout
81	government	02-18-97	02-19-97	G203D Holylead 1986-present data	stage	1	printout
82	consulting / engineering	02-14-97	02-19-97	TPO4, Lat 285000-253000/Lon 800000-812000 SQL	water quality	1625	ftp remo
83	consulting / engineering	02-07-97	02-19-97	hydrograph S2, S3MP_P, S352, & G334_S, '961201-'97	stage/flow/age op	4	ftp remo
84	law office	02-27-97	02-27-97	G54_T, G54_R, S13 & FT LAUD Township 50/Range 40/41	rain / stage	4	printout
85	college	02-21-97	02-21-97	S79 flow and structure info 1995-1996	flow	1	e-mail
86	SFWMD	02-24-97	02-24-97	G254B 4/96-8/96 TPO4 ENR	water quality	1	diskette-1
87	consulting / engineering	02-24-97	02-24-97	S5AW, S5AY, S352-T, S5AX-T, SSAX-H, month Jan 1991	stage	1	diskette-1/printout
88	SFWMD	02-26-97	02-26-97	SQL_ENR002.004.012,102,103,203,204,302,303,401,402	water quality	1	diskette-1
89	university	02-26-97	02-26-97	archive JBTs+WS, RT, RP, TO, BP, VS, C, AT, RH VO, R	weather data	11	ftp remo
90	SFWMD	02-25-97	02-25-97	SQL_L40-1 & L40-2 period of record, ref. Maxine C.	water quality	2	diskette-1/printout
91	SFWMD	02-27-97	02-28-97	SQL_12 LIMS numbers, period of record all water quality	water quality	N/A	e-mail
92	university	02-19-97	02-28-97	hydrograph & extract, S335 & S336 1/96-present	rain/stage/flow/op	2	e-mail
93	university	02-28-97	02-28-97	list of sites with barometric pressure, WCA2A	barometric pressure	12	e-mail
94	SFWMD	02-27-97	02-27-97	SQL_G254B 7/96-9/96 TPO4	water quality	1	diskette-1
95	government	02-28-97	03-03-97	hydrograph & ivg-hourly S177/S18C/S174/S175/S176	flow/stage/op	7	ftp remo
96	consulting / engineering	01-29-97	02-04-97	rainfall area Miami Beach '95/'97	rain	1	printout
97	consulting / engineering	01-31-97	02-06-97	Analysis So. Fl. Rainfall	rain	N/A	printout
98	law office	01-28-97	02-07-97	Rainfall Selected Areas For 1995	rain	1	printout
99	SFWMD	02-06-97	02-07-97	DBHYDRO Sorted List	all hydro types	N/A	printout
100	consulting / engineering	02-07-97	02-10-97	Info C102N	N/A	N/A	printout
101	consulting / engineering	02-10-97	02-10-97	Rainfall 3 days/100yr Storm	rain	N/A	printout
102	consulting / engineering	02-03-97	02-11-97	Rainfall Pahokee Area	rain	1	printout
103	consulting / engineering	02-11-97	02-13-97	Rainfall Selected Area	rain	1	printout
104	private	02-13-97	02-14-97	Rainfall 1996/1997 Selected Area	rain	1	printout
105	SFWMD	02-21-97	02-24-97	Stage Selected Four Different Locations	stage	5	printout
106	SFWMD	02-24-97	02-24-97	Sets (two) Complete Dbhydro Lists	all hydro types	N/A	printout
107	consulting / engineering	02-13-97	02-19-97	Rainfall Selected Area	rain	2	printout
108	SFWMD	02-25-97	02-25-97	Breakpoint Stage Info Selected Stations	stage	2	printout
109	SFWMD	02-24-97	02-25-97	Dbhydro List Special Sorts (two Sets)	all hydro types	N/A	printout
110	SFWMD	02-28-97	03-03-97	Max Daily Values Selected Wells	stage	7	diskette-1
111	government	03-03-97	03-04-97	Daily Stage Selected Location	stage	1	printout
112	consulting / engineering	03-04-97	03-05-97	Rainfall Selected Area	rain	1	printout
113	consulting / engineering	03-06-97	03-07-97	Rainfall Selected Area	rain	1	printout
114	government	03-01-97	03-13-97	Lake Kissimmee 10 years Record	stage	1	printout
115	consulting / engineering	03-17-97	03-17-97	Annual District Rainfall (30 years+ Records)	rain	N/A	printout
116	consulting / engineering	03-17-97	03-18-97	Information Loxahatchee River Stations	stage	N/A	printout
117	consulting / engineering	03-19-97	03-19-97	Flow Information (Period Of Record)	flow	1	printout
118	university	03-03-97	03-03-97	LOXW-AP 1996-1997 breakpoint date, nunextract	barometric pressure	1	ftp remo
119	law office	03-03-97	03-03-97	IVG GS4_R Sept 1 - Dec 31, 1996	rain	1	printout
120	SFWMD	03-10-97	03-10-97	Hendry Co. info list rain, stage, well & flow	rain/stg/flow/well	N/A	printout
121	SFWMD	03-10-97	03-10-97	info on water quality sites description	water quality	N/A	e-mail
122	consulting / engineering	03-06-97	03-07-97	hydrograph S5AX flow, stage & operation data	flow/stg/operation	1	printout
123	SFWMD	03-07-97	03-07-97	G150 & G155 all TPO4, site close lat/lon	water quality	N/A	diskette-1
124	university	03-01-97	03-10-97	hydrograph data S334_S	flow/stg/operation	1	ftp remo
125	university	03-10-97	03-10-97	archive JBTs weather sites 9/01/96-12/12/96	weather data	11	ftp remo
126	consulting / engineering	03-11-97	03-11-97	rain BLSW & EA42, Feb. 1997	rain	2	FAX
127	consulting / engineering	03-11-97	03-11-97	archive Jan 1-31, 1991 S6Z stage	stage	1	printout
128	SFWMD	03-10-97	03-11-97	sites CA3A_NNR1 & C4_SQL all WQ data P.O.R.	water quality	2	diskette-1
129	consulting / engineering	03-12-97	03-12-97	SSAX 19910101-19910118 hourly flow data, ivg on inflow	flow	1	FAX
130	university	03-03-97	03-13-97	monthly flow rate and volumes for S79 1986-1996	flow	1	e-mail
131	university	03-13-97	03-13-97	S77, S78 & S79 - 5/95 to present	flow	3	ftp remo
132	university	03-13-97	03-13-97	SQL project CR, select sample types, 5 stations	water quality	5	ftp remo
133	government	03-13-97	03-14-97	project BCWQ, and site TAMBR105 P.O.R.	water quality	N/A	diskette-1
134	SFWMD	03-14-97	03-14-97	42 solids Mar-Dec 1994 sample 7 SQL	water quality	N/A	e-mail
135	SFWMD	03-14-97	03-14-97	SQL project rain Jan 1989 to present, test type TPO4	water quality	N/A	e-mail
136	consulting / engineering	03-14-97	03-17-97	run 4 .CMD files EAQ01, EAQ02, EAAR1, EAA2.CMD	stage/flow	N/A	ftp remo
137	consulting / engineering	03-14-97	03-17-97	SQL TPO4 projects CAMB/ENRP/HOLE/HOLY/RIX	water quality	N/A	ftp remo
138	consulting / engineering	03-17-97	03-17-97	SQL TPO4 S12A-D, S18C, S332 S333 LOX1-16 P.O.R.	water quality	N/A	ftp remo
139	consulting / engineering	03-14-97	03-17-97	run ENP.CMD file	stage/flow	N/A	ftp remo
140	university	03-18-97	03-18-97	Info list of sites township 57/58, range 34/35 near NP35	stage	2	e-mail
141	SFWMD	03-17-97	03-18-97	SQL project rain Jan 1988 to present, test type TPO4	water quality	N/A	e-mail
142	SFWMD	03-18-97	03-18-97	SQL ENR102,103,203,204,302,303,401,402, test SO4	water quality	N/A	diskette-1
143	consulting / engineering	03-17-97	03-17-97	description of DBHYDRO	information	N/A	FAX
144	SFWMD	03-17-97	03-18-97	SQL projects ARS, TCNS, 8 sites all data, period of record	water quality	N/A	e-mail
145	government	03-18-97	03-19-97	G250, G251, S6, S5 1986-1995	flow	4	diskette-1
146	SFWMD	03-19-97	03-19-97	SQL project TCHW, site TCHW18 P.O.R.	water quality	N/A	e-mail
147	university	03-19-97	03-19-97	G54 rain October 1995	rain	1	e-mail
148	SFWMD	03-19-97	03-19-97	water quality/info projects BISC and FLAB	water quality	N/A	ftp network
149	consulting / engineering	03-19-97	03-19-97	Info 1st township 58 / range 40 stage	stage	31	FAX
150	consulting / engineering	03-19-97	03-19-97	1995-present S122, S149, S21A, S21 head & tail water	stage	8	ftp remo
151	consulting / engineering	03-20-97	03-21-97	S13_H, S13_T, G54_H, G54_T P.O.R. max data	stage	4	printout
152	consulting / engineering	03-21-97	03-21-97	IVG S13 & G54_T hourly mean 1996 Nov.-Dec.	stage	4	printout
153	consulting / engineering	03-20-97	03-21-97	hydro and water quality info lists	all hydro & WQ	N/A	ftp remo
154	consulting / engineering	03-21-97	03-24-97	S39 flow P.O.R.	flow	1	diskette-1

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
155	consulting / engineering	03-21-97	03-24-97	S39 all water quality data P.O.R.	water quality	1	diskette-1
156	consulting / engineering	03-24-97	03-24-97	all rain sites in Palm Beach Co. period of record	rain	236	diskette-4
157	consulting / engineering	03-24-97	03-24-97	G201H(15284), MACE(15816) & G203D(13157) P.O.R.	stage	3	diskette-1
158	government	03-21-97	03-24-97	S31, TAMBR1, TM08, S39, S34, TAMBR2, TAM-16.0 P.O.R.	water quality	7	ftp remo
159	consulting / engineering	03-24-97	03-25-97	max & min C1, C25, S39, T, S99 H, S-275 G P.O.R.	stage	5	FAX
160	government	03-24-97	03-24-97	TPO4 S39, S34, S31, TAMB1 report statistics	water quality	4	FAX
161	government	03-24-97	03-25-97	G32 flow 1995-present	flow	1	e-mail
162	consulting / engineering	03-25-97	03-25-97	Info 1st LWD(agency) and LWD in site name	flow/stg/rain	N/A	printout
163	government	03-25-97	03-25-97	S70_H Jan1-present, IVG	stage	1	e-mail
164	SFWMD	03-25-97	03-25-97	TM08, MR15, SK09 P.O.R. project BISC, RPT file statistics	water quality	3	FAX/e-mail
165	university	03-21-97	03-26-97	S9 all metals, period of record	water quality	1	printout/diskette-1
166	SFWMD	03-27-97	03-27-97	ENR308AT, WS, RP, +R, Jan-March 1997, extract program	weather data	1	diskette-1
167	SFWMD	03-27-97	03-27-97	ENR101, 301, 003, .005 year 1996	stage	4	printout
168	government	03-27-97	03-27-97	S5AE operation log Jan. 2, 1997	operation log	1	FAX
169	electric company	03-27-97	03-27-97	S13_P, S13_S, 1996-present	flow	2	FAX
170	consulting / engineering	03-27-97	03-27-97	archive data S13_T Oct. 19, '94 to Sept. 8, '95	stage	1	printout
171	SFWMD	03-21-97	03-21-97	Info 1st well sites in SFWMD, WRE tech pub list	well / tech pub list	1	printout/e-mail
172	consulting / engineering	03-28-97	03-28-97	P.O.R. max/min 13 DBKEYS	stage/flow	13	FAX
173	consulting / engineering	03-28-97	03-28-97	set GIS maps, Palm Beach Co. rain info list	GIS maps / rain	230	printout
174	consulting / engineering	03-28-97	03-28-97	info Lat 254500-261000/Lon 800730-803230, structure info	all hydro & GIS maps	N/A	printout/diskette-1
175	university	03-28-97	03-28-97	S178 all metals, period of record	water quality	1	printout/diskette-1
176	consulting / engineering	03-27-97	03-28-97	S173, S174, S176, S177, S331, S337 structure operation info	structure op info	1	e-mail
177	consulting / engineering	03-27-97	03-31-97	Lat 252703-254654/Lon 802347-804157 P.O.R. all WQ	water quality	N/A	ftp remo
178	consulting / engineering	04-01-97	04-01-97	ftp GIS files 80 MB ref. Ken Rutty Fedx files on diskettes	GIS maps	N/A	diskette-9
179	university	04-01-97	04-01-97	tech pub 88-6 Frequency Analysis of SFWMD Rainfall	tech pub	N/A	printout
180	government	03-27-97	04-02-97	stage CA2A, CA2B, CA3A, CA3B period of record	stage	N/A	diskette-4
181	SFWMD	04-01-97	04-01-97	G54 and S13 TW daily MAX for P.O.R.	stage	2	printout
182	SFWMD	04-03-97	04-03-97	S151, S6 S10E, L67 area	water quality	1	diskette-1
183	consulting / engineering	04-04-97	04-04-97	S78 & S79 C43 area	water quality	1	FAX
184	SFWMD	04-04-97	04-04-97	ENR dissolved oxygen nearest to ENR308	water quality	1	ftp network
185	SFWMD	03-31-97	03-31-97	mean daily flow/hydrograph P.O.R. 1/193 - 12/31/95, S143	flow	1	ftp network
186	electric company	04-02-97	04-02-97	S13_P & S13_S 1994 - 1995 structure info	flow	2	FAX
187	SFWMD	04-02-97	04-02-97	breakpoint S13_T & G54_T for selected dates in 1996	stage	2	e-mail
188	electric company	04-07-97	04-07-97	monthly mean DBKEYS 15150,15311,15312,03838,06755	flow	5	ftp remo
189	electric company	04-07-97	04-07-97	S13_P, S13_S, G54, G54_S 1995 - present	flow	4	ftp remo
190	SFWMD	04-04-97	04-04-97	CHARGLA/LEEHEN rain sites	rain	N/A	printout
191	consulting / engineering	04-04-97	04-04-97	P.O.R. list of LWD sites, hourly data S40, LWD E4	flow/stage/rain	1	diskette-3
192	consulting / engineering	04-07-97	04-08-97	GIS maps C18W, G92, LNHRT hydrograph & ivg	GIS maps/flow/stg/op	5	diskette-3
193	SFWMD	04-08-97	04-08-97	DBHYDRO ENP info list, Florida Bay sites	all wq & hydro	255	e-mail / FAX
194	SFWMD	04-09-97	04-09-97	set of GIS maps	GIS maps	N/A	printout
195	consulting / engineering	04-09-97	04-09-97	Orange Co. hydro and water quality info list	all wq & hydro	N/A	ftp remo
196	SFWMD	04-09-97	04-09-97	G253CDO archive provisional data 19951001-present	water quality	1	ftp network
197	SFWMD	04-21-97	04-21-97	info Lat 254500-261000/Lon 802200-820000	all wq & hydro	10,000	ftp remo
198	SFWMD	04-21-97	04-21-97	Florida Bay stage data, TPTS stage 1995 & 1996	stage	1	ftp remo
199	university	04-21-97	04-21-97	info list of ENR sites	all hydro	254	e-mail
200	consulting / engineering	04-22-97	04-22-97	S39_S & G56_S 1990 to present	flow	2	diskette-1
201	university	04-22-97	04-22-97	runextract breakpoint data ENR301, March 17, 1997	stage	1	e-mail
202	consulting / engineering	04-22-97	04-22-97	BELLE, ARCHBO 2_R, OKEE F2_R, years 1976-1995	rain	3	ftp remo
203	government	04-21-97	04-23-97	All water quality data BCWQ project, period of record	water quality	N/A	ftp remo/diskette-1
204	SFWMD	04-23-97	04-23-97	all ENP% site, information list	all wq & hydro	300	ftp remo
205	consulting / engineering	04-23-97	04-24-97	project WGM, 11 sites, period of record	water quality	11	diskette-1
206	government	04-24-97	04-24-97	S4 & S169, all water quality data, period of record	water quality	2	diskette-1
207	government	04-24-97	04-24-97	S4 & S169, flow data, period of record	flow	2	diskette-1
208	consulting / engineering	04-24-97	04-25-97	of evap SFWMD, years 1987-present info, CLEW_E, P.O.R.	evap	2	FAX
209	university	04-24-97	04-24-97	FT, PT2_E, FT, PIER_E, VERO 4W_E, period of record	evap	3	ftp remo
210	SFWMD	04-25-97	04-25-97	L-3 canal stage, G88_H, G89_H, L3BRS_O, L3DF	structure info/stage	4	printout
211	university	04-28-97	04-28-97	ENP-TR & ENPLM, dbkeys, D0558, DJ215, 16492	water quality	2	ftp remo
212	government	04-28-97	04-28-97	S4, S169, G136, CR, DO, 2T, INDUSCAN, S235	wq & hydro	N/A	diskette-1
213	consulting / engineering	04-30-97	04-30-97	S22_H, S22_T, 1997 to 19970428 provisional data	stage	1	FAX
214	SFWMD	05-01-97	05-01-97	project CAMB, period of record, station S31 turbidity	water quality	1	ftp network
215	SFWMD	05-01-97	05-01-97	SQL TP04,S3,S352,SSA,S6,S7,S8,S2,S150,L3,G200,ENR002	water quality	12	ftp network
216	consulting / engineering	05-02-97	05-02-97	hourly data Thursday Point (TPTS) Oct '95 - Dec '96	stage	1	ftp remo
217	university	05-05-97	05-05-97	dokey 15046, S10_T, years 1996 - present	flow	1	ftp remo
218	university	05-02-97	05-02-97	info list Lat 262000-260900/Lon 804700-802600	all hydro	300	printout
219	university	05-06-97	05-06-97	S143, years 1996 - present flow data	flow	1	ftp remo
220	government	05-06-97	05-07-97	2A-17, B, 3A-4, Info list ENP, ENR, WCA1, WCA2, WCA3	all hydro	N/A	diskette-1/printout
221	consulting / engineering	05-07-97	05-07-97	EVPM69 year 1996	evap	1	FAX
222	government	05-07-97	05-07-97	ENP%, conductivity, Florida Bay sites (DBHYDRO)	water quality	25	ftp remo
223	government	05-08-97	05-08-97	Project Florida Bay, FLAB1-FLAB28 salinity data	water quality	28	ftp remo
224	university	05-08-97	05-08-97	hydrograph, operation S33, March and April 1997	rain/stg/flow/op	1	ftp remo
225	consulting / engineering	05-08-97	05-08-97	Info list sites in Lee Co., map of Charlotte Co.	rain	7	FAX
226	consulting / engineering	04-02-97	04-08-97	Period of Record Rainfall Selected Area	rain	1	diskette-1
227	law office	04-02-97	04-08-97	Rainfall 1991 Palm Beach Gardens	rain	2	printout
228	SFWMD	04-02-97	04-03-97	Daily Peak Stages	stage	6	diskette-1
229	government	04-01-97	04-02-97	Actual/Average District	rain	N/A	printout
230	government	04-05-97	04-10-97	March Op. Logs Selected Stations	stage/gale	17	printout
231	SFWMD	04-09-97	04-12-97	STG & Q s65a 7 1993/1994	stage	1	diskette-1

Appendix I. List of clients and data requested

CLIENT #:	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
232	private	04-05-97	04-12-97	Rainfall Selected Area 1992/1997	rain	1	printout
233	SFWMD	04-05-97	04-16-97	Rainfall and Flow Information	flow / rain	9	diskette-1
234	consulting / engineering	04-15-97	04-16-97	Discharge & Stage_C13 & C14	stage / flow	2	diskette-1
235	consulting / engineering	04-16-97	04-17-97	Period of Record Rain at S5a	rain	1	diskette-1
236	consulting / engineering	05-08-97	05-09-97	set GIS maps, Palm Beach Co. rain info list	GIS maps / rain	230	printout
237	consulting / engineering	05-09-97	05-09-97	SLEEE_R , Lee Co. 1985-present rain date, range 25 and township 43	rain	1	FAX
238	consulting / engineering	05-12-97	05-12-97	Stuart rainfall Martin Co.	rain	1	FAX
239	SFWMD	05-09-97	05-09-97	hydrograph, operation date S2 year 1996	stage/flow	1	ftp network
240	SFWMD	05-14-97	05-14-97	GIS coverages put on REMO from venus	GIS coverage	5	ftp remo
241	consulting / engineering	05-14-97	05-14-97	1987-present, SSA,LWD,SS,DUP3,LWD,36+N+S,LWD,17W,LWD12,LWD,2	stage / rain	10	diskette-1
242	consulting / engineering	05-15-97	05-15-97	1995 - 1996, LWD,30N & LWD,30S, S40 monthly data	stage / rain	3	diskette-1
243	government	05-16-97	05-16-97	1996 May - present, S177, TAMBR105, S6, USSO, S65E	water quality	5	ftp remo
244	consulting / engineering	05-19-97	05-19-97	1987-present,LWD,SS,LWD,36+N+S,LWD,17W,LWD12,LWD,2,LWD,30N & S	stage/flow	8	e-mail
245	SFWMD	05-19-97	05-19-97	C4.CORAL T5 info	stage	1	FAX
246	university	05-19-97	05-19-97	location Lat 252400-252800/Lon 801800-802200 info list	stage	N/A	e-mail
247	consulting / engineering	05-19-97	05-19-97	C9,S29Z, monthly summary 1988 to present	stage	N/A	FAX
248	consulting / engineering	05-19-97	05-21-97	C4.CORAL T5 period of record T5@H, T5+STG	stage	1	diskette-1
249	consulting / engineering	05-21-97	05-21-97	DBKEY 06116 1996-present	rain	1	FAX
250	SFWMD	05-21-97	05-21-97	location Lat 253000-264500/Lon 800700-805230 period of record, project RAIN	water quality	N/A	diskette-1
251	SFWMD	05-22-97	05-22-97	SSA_P, SSA+SSAW_T, SSA_R, S6_1-C, 1-C_R, 1978 - present	stage/evap/flow/rain	3	diskette-1
252	university	05-16-97	05-27-97	GIS base Distinct rip rap and basin map	GIS maps	N/A	e-mail / ftp remo
253	university	05-23-97	05-23-97	ENR301 provisional data May 21 - 22, 1997	stage	1	e-mail
254	consulting / engineering	05-22-97	05-23-97	S174 June 1, 1988 - July 31, 1989	stage	1	ftp remo
255	consulting / engineering	05-23-97	05-26-97	structure info G211, S331, S333, S334, S335, S173, S176, S194, S196, G596	structure info	10	FAX / e-mail
256	university	05-29-97	05-29-97	LOOP2 and S197 1996-present	stage	2	ftp remo
257	university	05-29-97	05-29-97	WCA3A & ENP info #st and stage levels 1990-present	stage	4	printout
258	university	05-29-97	05-30-97	ILOOP2, MBLS18 and S197 1996-present water quality	stage	2	ftp remo
259	SFWMD	05-30-97	05-30-97	info list St. Lucie, Martin and Palm Beach Co., air temp and radiation	air temp / radiation	N/A	e-mail
260	consulting / engineering	06-02-97	06-02-97	Info GIS map and data directory	GIS maps	N/A	FAX
261	university	06-02-97	06-02-97	S33_S, dbkey 15580, April 9-18 & May 12-22, 1997 archive provisional, exact	flow/stg/gate op	1	ftp remo
262	consulting / engineering	06-03-97	06-03-97	S176, S177 & S18C, June 1, 1988 to July 31, 1989	stage	3	ftp remo
263	university	05-23-97	06-03-97	ENR203 provisional data May 21 - 22, 1997	stage	1	e-mail
264	consulting / engineering	06-03-97	06-03-97	stage 1990-present, township 4/43 and range 41/42/43	stage	3	diskette-1/printout
265	consulting / engineering	06-05-97	06-05-97	SLEEE_R missing data loaded for 1991-1992 and 1996-present	rain	1	FAX
266	consulting / engineering	06-06-97	06-06-97	S68_H, Lake Istokpoga, S68_R, years 1996 - present	rain/stage	1	FAX
267	government	06-06-97	06-06-97	GIS coverage from venus for ftp and data directory for GIS contact person	GIS maps	N/A	ftp venus
268	consulting / engineering	06-06-97	06-06-97	Collier Co., rain site info, P.O.R. 3 sites dbkeys	rain	3	FAX
269	SFWMD	06-06-97	06-09-97	hydro info list, sort by station	all hydro	14000	printout
270	government	06-11-97	06-11-97	S338, S119, S188 & S123, monthly summary 1989-present, structure info	stage/structure info	4	e-mail / ftp remo
271	consulting / engineering	06-11-97	06-11-97	S118, S119, S120, S121 and S122, structure info	structure info	5	e-mail
272	university	06-12-97	06-13-97	S12A-S12D, S333, S18C, S176, S177, S178, S332, P3-P37, NE1, NP201, EP, TSB	water quality	19	ftp remo
273	consulting / engineering	06-13-97	06-13-97	S282, 1997 rainfall data	rain	1	FAX
274	university	06-13-97	06-13-97	G520 stage USGS site 1996-present	stage	1	ftp remo
275	SFWMD	06-13-97	06-13-97	YNRG_L001, TEMP 1994-present, sample wddorax	water quality	3	ftp network
276	consulting / engineering	06-13-97	06-16-97	run SQL scripts EAIAFLOW, EAARAIN, REESTG, ENPFLOW	rain/flow	N/A	ftp remo
277	consulting / engineering	06-13-97	06-16-97	run SQL scripts EAATP, REFTP, ENPTP, test total phosphorus	water quality	N/A	ftp remo
278	consulting / engineering	06-16-97	06-16-97	structure info for S338	structure info	1	e-mail
279	consulting / engineering	06-16-97	06-16-97	TP04, ENR002, G136, G200, L3, S150, S2, S3, S352, SSA, S6, S7, & S8, SQL	water quality	N/A	ftp remo
280	consulting / engineering	06-16-97	06-16-97	run CMD files EAAQ1, EAAQ2, EAAR1, & EAAR2	water quality	N/A	ftp remo
281	university	06-13-97	06-16-97	1996-present all water near stations S197 & G520, SQL search area	rain/flow	N/A	ftp remo
282	consulting / engineering	06-18-97	06-18-97	TP04_SQL, G12A, S12B, S12C, S12D, S333, S18C, S332, LOX1-LOX16	water quality	N/A	ftp remo
283	consulting / engineering	06-18-97	06-18-97	run CMD file ENP_CMD	water quality	N/A	ftp remo
284	consulting / engineering	06-19-97	06-19-97	structure info, G54, G56, G93, S155, S123, & S179	rain/flow	15	ftp remo
285	SFWMD	04-17-97	04-18-97	Stage Lake Istokpoga 1997	stage	1	printout
286	SFWMD	04-18-97	04-22-97	Gale operation s32A,G211	gate op	2	printout
287	private	04-22-97	04-22-97	Normal RF for Palm Beach,Broward and Dade Co.	rain	N/A	printout
288	consulting / engineering	04-22-97	04-25-97	Max & Min Selected Stations	stage/flow	9	printout
289	consulting / engineering	04-22-97	04-25-97	Rainfall	rain	1	printout
290	government	04-22-97	04-25-97	Rainfall Jupiter Area	rain	2	printout
291	consulting / engineering	04-05-97	04-17-97	Rainfall s127	rain	1	printout
292	consulting / engineering	04-25-97	04-25-97	Rain s44 1995/1997	rain	1	printout
293	consulting / engineering	04-17-97	04-25-97	Mex & Min Rainfall Clewiston Area	rain	1	printout
294	consulting / engineering	04-17-97	04-25-97	Stage & Rainfall W.C.A.	rain/stage	6	diskette-1
295	government	04-25-97	05-06-97	Stage Selected Lakes	stage	4	printout
296	consulting / engineering	04-25-97	05-06-97	Stage & Discharge S46 P/R	stage/flow	1	diskette-1
297	SFWMD	05-06-97	05-09-97	B/P Stage g34 1996	stage	1	printout
298	golf club	04-25-97	05-09-97	Rainfall and Wind Speed Storm Gordon	rain/wind speed	N/A	printout
299	news paper	05-16-97	05-17-97	Info when S68 had last Discharge	flow	1	printout
300	consulting / engineering	05-17-97	05-25-97	Stage Selected Wells and Canals	stage	21	diskette-1
301	SFWMD	05-25-97	05-25-97	Rainfall 96/97 E.N.R. Stations	rain	6	printout
302	consulting / engineering	05-16-97	05-21-97	Stage s139 96/97 HW & TW	stage	2	printout
303	consulting / engineering	05-06-97	05-09-97	Sig S9 & S13	stage	2	printout
304	consulting / engineering	05-25-97	06-04-97	Rainfall 1996/1997	rain	1	printout
305	consulting / engineering	05-25-97	06-04-97	Max & Min Stage S197	stage	1	printout
306	consulting / engineering	06-04-97	06-05-97	Rainfall Jupiter Area	rain	2	printout
307	SFWMD	05-28-97	06-05-97	Period of Record Stage Holey Land Stations	stage	29	diskette-1/printout
308	consulting / engineering	06-17-97	06-19-97	Rainfall Area NW Corner St Lucie Co.	rain	↑	printout

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
309	SFWMD	06-17-97	06-19-97	Discharge Hillsboro Canal	flow	2	printout
310	SFWMD	06-17-97	06-19-97	Complete List Stations Different Sorts	all hydro types	N/A	printout
311	SFWMD	06-05-97	06-08-97	Complete List Stations Different Sorts	all hydro types	N/A	printout
312	government	06-19-97	06-25-97	Daily Rainfall Area Pembroke Pines	rain	2	printout
313	SFWMD	06-26-97	06-27-97	Spread Sheet Discharge Info	flow	N/A	diskette-1
314	government	06-23-97	06-27-97	Water Levels WCA	stage	4	diskette-1
315	consulting / engineering	06-18-97	06-18-97	daily data S5AE, S5AW, & S5AS 1980-present	flow	3	e-mail
316	consulting / engineering	06-19-97	06-20-97	hydro info list sort by station	all hydro types	14000	printout
317	consulting / engineering	06-19-97	06-20-97	G56 19970101-present hydrograph data, stage, flow & operations	stage/flow/gate op	1	diskette-1
318	consulting / engineering	06-19-97	06-20-97	T5+STG, rain Miami area June 9-11, 1997, Miami Field Station	rain/stage	1	FAX
319	consulting / engineering	06-19-97	06-19-97	stage towns/twp 38 & range 36, L64C, H and L65C, H, 1996-present	stage	2	FAX
320	consulting / engineering	06-20-97	06-23-97	1997 WPB Airport & S155 rainfall	rain	2	FAX
321	SFWMD	06-23-97	06-23-97	hourly G252A-J,G253A-J,ENR101,ENR105WS,G252E,G253EF,March21-23,'96	stage/flow/wind speed	24	ftp remo
322	consulting / engineering	06-18-97	06-23-97	hourly flow date, hydrograph & runoff years 1992 to 1995 S5AE, S5AW, S5AS	flow	3	e-mail
323	government	06-25-97	06-25-97	EMPGB, depth year 1996, assist using REMO	depth	1	ftp remo
324	government	06-25-97	06-25-97	well sites Lake Gerity area P.O.R. Osceola Co.	well	1	ftp remo
325	government	06-26-97	06-26-97	surface water and well township 50/49 and range 42/41 1983-present	well/stage	N/A	ftp remo
326	government	06-26-97	06-26-97	LARBUCK (00199), LARBUCK_R, USGS sites ARBUCK and MARGAN	rain/stage/flow	N/A	diskette-1/ftp remo
327	consulting / engineering	06-26-97	06-26-97	1985-present Lat 261100-261300 Lon 800800-801200 SQL all water quality	water quality	N/A	diskette-1
328	consulting / engineering	06-26-97	06-26-97	1985-present Lat 261100-261300 Lon 800800-801200 well	well	N/A	diskette-1
329	consulting / engineering	06-30-97	06-30-97	dbkey 16583, S155_R, 1995-1996	rain	1	FAX
330	government	06-30-97	06-30-97	63 rain sites with archive rain data SQL	rain	N/A	ftp remo
331	government	06-30-97	07-01-97	1960-present township/range, T50/R42, T50/R41 and T49/R41	stage/well	N/A	ftp cos
332	university	07-01-97	07-01-97	page 1-9, 1997 data, dbkey 07628	stage	N/A	FAX
333	government	07-01-97	07-01-97	dbkey 16288, 1994 data, depth	depth	1	ftp remo
334	consulting / engineering	07-02-97	07-02-97	SLEE_R 19960801-19961231, archive data MRF5004	rain/structure info	4	ftp remo/FAX
335	government	07-02-97	07-02-97	monthly stage S20F, S179, S174, & S176, dates 1989-present	stage/structure info	2	ftp remo
336	government	07-02-97	07-02-97	period of record BCNPA10 and BCNPA11	stage	1	FAX
337	private	07-03-97	07-03-97	West Toho stage level 1995, S61_H	stage	1	FAX
338	consulting / engineering	07-03-97	07-03-97	S5AS+E-W-O structure info USGS	flow/structure info	1	FAX
339	government	07-03-97	07-03-97	G3273/G318/S333, 1997 data	stage	3	FAX
340	university	07-08-97	07-09-97	S119 area, period of record, all water quality	water quality	4	ftp remo
341	SFWMD	07-09-97	07-09-97	S152, S5A, SSAX, S2, S6, S150, S7 period of record	flow	7	diskette-1/printout
342	university	07-09-97	07-10-97	Lake Okeechobee water temp, period of record 15 dbkeys	water temp	5	ftp remo
343	government	07-10-97	07-10-97	hourly data, runoff, runoff, FAKA, daily, USGS, P.O.R.	stage	1	ftp remo
344	government	07-10-97	07-11-97	8 dbkeys 1996-1997, pages	stage	8	printout
345	society	07-09-97	07-10-97	all WQ data, S2,S3,S352,S5A,S6,S7,S8,G204,G200,G205,G206, P.O.R	water quality	11	ftp remo
346	consulting / engineering	07-11-97	07-11-97	Max & Min P.O.R., S59/S63/S63A structure info	flow	3	FAX
347	government	07-10-97	07-11-97	Solar radiation and temp. data Broward Co. info only S140W	temp/radiation	1	ftp remo
348	university	07-14-97	07-14-97	LOXWS, LXWS/AP, Jan. 1997 to present	baro pressure	3	e-mail
349	SFWMD	07-14-97	07-14-97	2 GIS maps, weather and stage	weather/stage	N/A	printout
350	consulting / engineering	07-15-97	07-15-97	monthly average historical rainfall Palm Beach Co.	rain	N/A	FAX
351	SFWMD	07-15-97	07-15-97	S6 May 1, 1994 - April 30, 1997 all water quality data	water quality	1	e-mail
352	SFWMD	07-16-97	07-16-97	1994 - 1995 township 47/48 and range 39 stage	stage	3	diskette-1
353	private	07-17-97	07-17-97	S61_H 1994 - 1983	stage	1	FAX
354	SFWMD	07-17-97	07-17-97	CIS maps rain, stg, flow, & weather	weather/stg/flow/rain	N/A	printout
355	government	07-18-97	07-18-97	S197, tech pub 1994 Extended Wet Season Hydrologic Condition	flow/rain/tech pub	N/A	printout
356	SFWMD	07-18-97	07-18-97	Water quality P.O.R., TP04, G211 and S331	water quality	3	printout / ftp network
357	university	07-21-97	07-21-97	flow and structure info S197, S18C S332, demo remo info list	flow	3	e-mail / ftp remo
358	consulting / engineering	07-22-97	07-22-97	hourly rain and archive data CORKHQ_R, BONITA_S_R, period of record	rain	2	ftp remo
359	consulting / engineering	07-22-97	07-22-97	WB# township S7/56 and range 37/38 years 1888-1889	well	6	ftp remo
360	consulting / engineering	07-23-97	07-23-97	stage 1994-present Orange and Lake Co.	stage	20	ftp remo
361	consulting / engineering	07-22-97	07-23-97	C18W 1894 daily and 15 minute stage data	stage	1	FAX
362	consulting / engineering	07-23-97	07-23-97	S5A evap 1995-present	evap	1	e-mail
363	consulting / engineering	07-23-97	07-23-97	flow data Orange and Lake Co. period of record	flow	N/A	ftp remo
364	government	07-23-97	07-23-97	S176 and S177	flow/stage	2	ftp remo
365	consulting / engineering	07-24-97	07-24-97	tech pub DRE 216, program to compute flow through gated culverts	tech pub	1	printout
366	university	07-24-97	07-24-97	4 GIS Maps, stage, flow, weather and rain	gis maps	4	printout
367	government	07-24-97	07-24-97	rain sites Broward Co. tipping bucket sites	rain	3	FAX
368	SFWMD	07-25-97	07-25-97	S2, S3, S6 Pump 1990-present	flow	3	e-mail
369	government	07-23-97	07-25-97	S178 and S177 archive hydrograph data	stage/flow/gate op	2	ftp remo
370	SFWMD	07-25-97	07-25-97	WCA2AE1, E4, F1, F4, RT, U1, U3	well/stage	19	diskette-1
371	SFWMD	07-26-97	07-28-97	Info list of well sites WCA2A	well	31	printout
372	SFWMD	07-28-97	07-28-97	SQL info list of all WQ station by name	water quality	3712	e-mail
373	consulting / engineering	07-28-97	07-28-97	Tam 40M 1994-1995 Data USGS site, stage	stage	1	FAX
374	university	07-21-97	07-28-97	2 satellite and 1 hurricane poster	gis maps	3	printout
375	society	07-09-97	07-29-97	SQL WQ sites and data in EAA, given lat / lon	water quality	20	diskette-1
376	consulting / engineering	07-29-97	07-29-97	Lat 251222-253110/Lon 801500-803430 all stage and depth	stage/depth	270	diskette-2
377	SFWMD	07-29-97	07-29-97	WCA2A info list stage and well sites WCA2Au%	well/stage	N/A	diskette-1
378	government	07-29-97	07-30-97	S2, G.P.O.R. stage and flow hydrograph archive data, date 7/23/97	flow/stage	1	ftp xweb
379	SFWMD	07-29-97	07-30-97	update dbkey 00185 and 15704 USGS sites	stage	1	e-mail
380	government	07-31-97	07-31-97	G211 1996 data flow, dbhydro info list	all hydro types	14800	printout
381	SFWMD	07-31-97	07-31-97	evap site, Holy Land S140, stage GIS map	gis maps/evap	N/A	printout/ftp network
382	consulting / engineering	07-03-97	07-17-97	Specifications on Structures	structure info	N/A	printout
383	government	07-17-97	07-17-97	Fax info on s-33	general information	N/A	printout
384	consulting / engineering	07-08-97	07-24-97	Rainfall Data Stations Broward Co. Inc	rain	3	printout
385	Agriculture Group	07-17-97	07-24-97	Stage Data Hamey Pond Canal P/R	stage	2	e-mail

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
386	SFWMD	07-28-97	07-28-97	Fax Rainfall Info Selected Stations	rain	1	printout
387	consulting / engineering	07-28-97	07-29-97	Period of Record Stage Lake Tiger	stage	1	printout
388	consulting / engineering	07-10-97	07-31-97	Stage & rainfall Data Selected Stations	stage	5	printout
389	consulting / engineering	07-31-97	08-01-97	Stage E Lake Toho	stage	1	printout
390	consulting / engineering	07-07-97	07-22-97	Stage & Discharge c-24	stage/discharge	N/A	diskette-1
391	consulting / engineering	07-17-97	07-24-97	Stage & discharge	stage/discharge	N/A	printout
392	government	07-31-97	08-04-97	Rainfall & Evap.	rain/evap	6	printout
393	government	08-05-97	08-05-97	Update Stations List	all hydro types	N/A	printout
394	government	07-24-97	08-05-97	Inflow to WCA #1	discharge	2	printout
395	private	08-05-97	08-08-97	Lake Okeechobee	stage	2	printout
396	consulting / engineering	07-31-97	08-08-97	Data 135a	stage	1	printout
397	government	08-14-97	08-18-97	P/R Stage L Jackson	stage	1	printout
398	government	08-21-97	08-21-97	Discharge s65	stage	1	printout
399	government	08-19-97	08-21-97	Stg Dat E. L Tohopekaliga	stage	2	printout
400	consulting / engineering	08-21-97	08-22-97	Info Dixie Well Field Broward Co.	information	N/A	phone
401	government	08-22-97	08-26-97	Stage S25b,S26 period of record	stage	2	diskette-1
402	private	08-25-97	08-26-97	Rainfall Selected Area	rainfall	3	printout
403	insurance	08-26-97	08-27-97	Rainfall Selected Area	rainfall	2	printout
404	government	08-21-97	08-28-97	1997 Rainfall P.B.I.A.	rainfall	2	printout
405	university	08-26-97	08-28-97	Stage & Rainfall selected stations wca3A	stage & rainfall	11	diskette-1
406	consulting / engineering	08-29-97	09-03-97	Stage S36 & s37	stage	4	printout
407	SFWMD	08-01-97	08-01-97	Lat 252500-264500N Lon 802000-804500 turbidity data FAA, use SQL script	water quality	N/A	ftp network
408	SFWMD	08-01-97	08-01-97	running P.O.R. on WCA2% well and stage sites	well/stage	12	diskette-1
409	consulting / engineering	08-04-97	08-04-97	S30 structure information	structure info	1	FAX
410	SFWMD	08-08-97	08-08-97	IVG inst. Hourly data 19930901-19960101 MARKH+	stage	1	e-mail
411	university	08-04-97	08-04-97	BELLW+WS, VS, VD, RT, RP, RH, AT, AP, R	all weather types	1	e-mail
412	private	08-05-97	08-05-97	Stuart area, Hobe Sound rainfall 1996-present data	rain	N/A	FAX
413	SFWMD	08-05-97	08-05-97	project EVPA period of record, select water quality	water quality	N/A	ftp network
414	consulting / engineering	08-06-97	08-06-97	Historical stage for Lake Okeechobee, WCA1, WCA2, WCA3	stage	1	printout
415	SFWMD	08-05-97	08-06-97	WCA2% stage and well WCA2E1, E4, F1, F4, RT, U1, U3	well/stage	31	diskette-1
416	government	08-06-97	08-06-97	BCNPA1 through BCNPA14 period of record	stage	14	ftp remo
417	government	08-06-97	08-07-97	S31, S32, S32A, S337, S335, S336, S30, G72, S25, S25A, S26, G93	structure info	12	e-mail
418	government	08-06-97	08-07-97	all water quality include sample 9 in project BCWQ, period of record	water quality	N/A	ftp remo
419	SFWMD	08-07-97	08-07-97	WCA2E1, E4, F1, F4, RT, U1, U3 19970201 - present	stage/well	31	diskette-1
420	consulting / engineering	08-06-97	08-07-97	Lat 262200-261200/Lon 802000-80000, 1965-1990	stage/well/rain/evap	N/A	diskette-1
421	government	08-07-97	08-07-97	5 GIS maps, rain, stage, weather, well and flow, 2 satellite, 1 hurricane	gis maps	5	printout
422	consulting / engineering	08-07-97	08-07-97	S30 structure picture and graphs	structure info	1	printout
423	university	08-06-97	08-08-97	2B-Y and CA3-2B, 1993-1997 data, max, min and mean	stage	2	ftp remo
424	consulting / engineering	08-08-97	08-08-97	1-BC and 1-ST period of record	stage	2	diskette-1
425	consulting / engineering	08-08-97	08-08-97	info list rain site in SFWMD area	rain	1100	e-mail
426	SFWMD	08-11-97	08-11-97	running, MARKH, hourly, 199201220015-199801010000, INST	stage	1	e-mail
427	SFWMD	08-08-97	08-11-97	1990-1995 data, GOLD.W1, GOLD.W4 flow data	flow	2	e-mail
428	university	08-11-97	08-11-97	satellite and hurricane maps, tech pubs DOR 273 & DCR 265	maps/tech pubs	N/A	printout
429	organization	08-11-97	08-11-97	GIS rain, sig, flow, weather, satellite & hurricane, tech pubs DOR 273 & 265	gis maps/tech pubs	N/A	printout
430	consulting / engineering	08-12-97	08-12-97	hydro and water quality list, update	all hydro & wq types	N/A	ftp remo
431	government	08-11-97	08-11-97	S33 stage and flow, 1975 - present info list township 49/50, range 41/42	all hydro types	284	ftp remo
432	society	08-11-97	08-11-97	pest data EAA and Holy Land, 2 files floodhyd dos & floodpest dos	pesticide	N/A	diskette-1
433	government	08-12-97	08-13-97	hourly data MRF157, 191, 186, 32, 35, 28, S65B+R, 6/94 to 6/96, running	rain	7	ftp remo
434	SFWMD	08-13-97	08-13-97	GOLD.W1 dbkeys 05386 & DO536	flow	1	e-mail
435	university	08-13-97	08-13-97	water quality for C102, C103, C113, S194 & S195	water quality	5	ftp remo
436	consulting / engineering	08-14-97	08-14-97	township 45 and range 42, 1894 rain LWD.E2_R and LWD.MIL_R	rain	2	FAX
437	SFWMD	08-14-97	08-14-97	NOAA data period of record, Tmax, Tmin, Orlando and Vero Beach area	temperature / rain	2	e-mail
438	government	08-12-97	08-14-97	Lat 260000-240000/Lon 805000-800000, all water quality Dade Co., SQL script	water quality	N/A	diskette-3
439	consulting / engineering	08-18-97	08-18-97	Flow info G56, flow units	flow	1	FAX
440	SFWMD	08-18-97	08-18-97	township 40/41 & range 41/42, rain, stage, flow	rain/stage/flow	N/A	printout
441	consulting / engineering	08-18-97	08-18-97	S68_H and S61_R	min/stage	1	FAX
442	SFWMD	08-18-97	08-18-97	CULV10A, stage period of record	stage	1	e-mail
443	university	08-18-97	08-18-97	Period of record water quality project FLAB, salinity and chloride	water quality	50	ftp remo
444	consulting / engineering	08-18-97	08-18-97	info list well and stage, Palm Beach, Broward counties	stage/well	720	ftp remo
445	government	08-19-97	08-19-97	structure info and hydro info list	all hydro types	N/A	FAX
446	SFWMD	08-19-97	08-19-97	S14, S12D, LWD.S3, period of record	flow	3	e-mail
447	university	08-19-97	08-19-97	satellite maps from Joe Chepe, archive weather data for Belle Glades	gis maps / weather data	1	diskette-2
448	SFWMD	08-20-97	08-20-97	S343A, S343B, S343 total, period of record	flow	3	ftp network
449	university	08-20-97	08-21-97	S33 Aug 3-12 hydrograph data, instantaneous flow data	flow	1	ftp remo
450	consulting / engineering	08-21-97	08-22-97	G54-T break point data select dates 1994-1995	stage	1	diskette-1
451	society	08-21-97	08-21-97	GIS maps, stage, flow and rain	gis maps/stage/flow	3	printout
452	consulting / engineering	08-21-97	08-21-97	S46 all data format 6, period of record	stage/flow/rain	1	ftp remo
453	SFWMD	08-22-97	08-22-97	projects FLAB, EVER, CAMB, ENP 1995-present, TKN, NOX, NH4, OPO4, TPO4	water quality	N/A	ftp network
454	SFWMD	08-22-97	08-22-97	S331, S18C, S332, ROYAL PALM, 15 dbkeys Florida Bay area, period of record	rain	N/A	ftp network
455	consulting / engineering	08-18-97	08-22-97	70 well sites Dade, Broward, Palm Beach Co, period of record	well	70	ftp remo
456	SFWMD	08-21-97	08-22-97	info list on all hydro sites	all hydro types	14400	printout
457	consulting / engineering	08-21-97	08-22-97	G54 hydrograph data 19941001-19941231 and 19950901-19950915	stage/flow/operation	1	ftp remo
458	news paper	08-21-97	08-25-97	S119 head, tail and operation date, June 7-11, 1997, S119 & S118, 1997, flow	stage/flow/operation	2	printout
459	development	08-25-97	08-25-97	rain sites township 25 & range 28, POINCI_R	rain	1	FAX
460	SFWMD	08-25-97	08-25-97	11 dbkeys, Florida Bay and ENP area 1995-1996, water quality S175 P.O.R.	water quality / flow	12	ftp network
461	organization	08-25-97	08-25-97	S9 flow and all S9 water quality	water quality / flow	1	printout
462	SFWMD	08-26-97	08-26-97	GIS maps, stage, flow, well, weather and rain	gis maps	5	printout

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
463	university	08-26-97	08-26-97	S332_H 19961201 -19970301 hourly and breakpoint data, extract & ivg	stage	1	ftp remo
464	organization	08-26-97	08-26-97	Lat 260000-261000/Lon 801000-803000, water quality c11 Basin, SQL script	water quality	N/A	diskette-1
465	organization	08-26-97	08-26-97	all hydro data C11E and C11W basin	all hydro types	N/A	diskette-1
466	university	08-26-97	08-26-97	structure info S333, S335, and G69	structure info	3	e-mail
467	government	08-26-97	08-26-97	water levels S65, H June 30 - July 1, 1997	stage	1	FAX
468	government	08-26-97	08-26-97	water quality Frog Pond area	water quality	N/A	ftp remo
469	SFWMD	08-21-97	08-26-97	PBF-7, PBF-9, period of record, SQL script	water quality	2	ftp network
470	university	08-27-97	08-27-97	S332_H 19951201 -19960301 hourly and breakpoint data, extract & ivg	stage	1	ftp remo
471	government	08-26-97	08-27-97	22 dbkeys flow sites G54, S13, S33, S124	flow	22	ftp remo
472	SFWMD	08-26-97	08-28-97	G54-T hydrograph plots 1993-1996	stage	1	printout
473	government	08-26-97	08-28-97	annual water levels S61_H, S59_H, S65_H, S77_H, 2A-17_B, CAJAVG	stage	6	printout
474	university	08-26-97	08-29-97	KROME_G dbkeys 05736_15930 archive data 1986-present	well	1	ftp remo
475	consulting / engineering	08-29-97	08-29-97	township 42/43/44, range 42/43 West Palm Beach area	rain	N/A	ftp remo
476	SFWMD	08-29-97	08-29-97	extract archive data wind direction and speed ENR sites, ENR info list	wind	N/A	ftp network
477	SFWMD	09-02-97	09-02-97	14 rain dbkeys Everglades National Park area	rain	14	ftp network
478	consulting / engineering	09-03-97	09-03-97	rain township 36 and range 35/36, 4 rain sites 1995-present	rain	4	FAX
479	government	09-02-97	09-03-97	list of water quality sites in project BCWQ, SQL script	water quality	N/A	ftp remo
480	government	09-03-97	09-03-97	period of record S3_H (00532) and 2B-Y	stage	2	FAX
481	government	09-02-97	09-04-97	well S-329, G1221 period of record	well	2	ftp remo
482	government	09-04-97	09-04-97	archive data period of record, range 39 to 43, township 46 to 50	rain	N/A	diskette-1
483	consulting / engineering	09-04-97	09-04-97	stage Lake Okeechobee, 1-8T period of record	stage	2	diskette-1
484	consulting / engineering	09-04-97	09-04-97	township 36/37 and range 36/37 1995-present 3 sites	rain	3	FAX
485	government	09-04-97	09-04-97	P.O.R., S34_H & S38_T annual means, info 1st town 48/49, range 39/40	stage	N/A	FAX
486	government	09-05-97	09-05-97	S68_H and S68_R, 1994 - present	stage/rain	N/A	FAX
487	university	09-06-97	09-08-97	April 6-8 all rainfall in Dade County	rain	N/A	ftp remo
488	government	09-09-97	09-10-97	Info 1st S27, S28, S29S, S21, S20F, temp, rain, gate operation	all hydro types	50	e-mail
489	government	09-09-97	09-10-97	archive wind speed & direction, period of record, sites South of Tamiami Trail	wind	4	ftp remo
490	consulting / engineering	09-10-97	09-10-97	rain township 47, range 42, section 35, 1986 - present, G56_R	rain	1	e-mail
491	government	09-10-97	09-11-97	DRE - 216, "A General Program to Compute Flow Through Gated Culverts"	tech pub	N/A	printout
492	government	09-11-97	09-11-97	eE water quality data Frog Pond, project FCPD	water quality	N/A	ftp remo
493	SFWMD	09-11-97	09-11-97	G250 pump and operation date, hydrograph and extract	stage/flow/operation	1	ftp network
494	SFWMD	09-11-97	09-11-97	G63 stage and operation data, hydrograph 19970301-present	stage/operation	1	printout/diskette-1
495	university	09-06-97	09-11-97	DRE - 286 "Analysis of the 1989-1990 Drought"	tech pub	N/A	printout
496	- SFWMD	09-15-97	09-15-97	S258 gate operation	opération	1	e-mail
497	- SFWMD	09-12-97	09-12-97	stage and well sites WCA3B	stage/well	63	printout
498	SFWMD	09-15-97	09-15-97	S13T 19981016-19981019 archive data, extract	stage	1	printout
499	government	09-16-97	09-16-97	S20, S21, S21A, S20A, S20F, S20G, structure info	structure info	6	e-mail
500	consulting / engineering	09-12-97	09-16-97	run 3 SQL scripts on internal water quality database for TPO4	water quality	N/A	ftp remo
501	consulting / engineering	09-12-97	09-16-97	run 4 scripts on internal hydro database for rain, stage, flow	stage/flow/rain	N/A	ftp remo
502	consulting / engineering	09-16-97	09-16-97	run 3 SQL scripts on internal water quality database, TPO4, EAA and ENP sites	water quality	N/A	ftp remo
503	consulting / engineering	09-16-97	09-16-97	run 3 scripts on internal hydro database for rain, stage, flow, EAA & ENP sites	stage/flow/rain	N/A	ftp remo
504	consulting / engineering	09-16-97	09-16-97	SIRG 1996 and 1997 data	rain	1	FAX
505	consulting / engineering	09-16-97	09-16-97	all water quality data, project BCWQ, period of record	water quality	14	ftp remo
506	consulting / engineering	09-16-97	09-16-97	all hydro data, BCNP11 TO BCNP14, period of record	stage	14	ftp remo
507	society	09-16-97	09-16-97	tech pub "Water Budget Analysis for EAA Drainage Basin, June 1994"	tech pub	N/A	printout
508	consulting / engineering	09-17-97	09-17-97	structure info S34, S38, S141, S142 & S143	structure info	5	e-mail
509	consulting / engineering	09-17-97	09-17-97	Palm Beach County rain average for 30 year period	rain	N/A	FAX
510	SFWMD	09-17-97	09-17-97	water quality projects LWSB, period of record	water quality	N/A	ftp network
511	land owner	09-17-97	09-17-97	rain township 48/49, range 39/40, stage S144, S145, S146, 1993-present	structure info/rain/stage	9	printout
512	government	09-17-97	09-17-97	dbhydro info list, hydrograph, ivg, extract	all hydro types	14400	printout
513	consulting / engineering	09-18-97	09-18-97	info list of sites in Glade county, stage and well, Nicodemus area	well/stage	68	printout
514	government	09-18-97	09-18-97	structure info S25B	structure info	1	e-mail
515	government	09-19-97	09-19-97	S61_R, S60_H, S63_H, years 1986 to 1987	rain/stage	3	FAX
516	SFWMD	09-19-97	09-19-97	rain and stage, township 47, range 37, section 15, 22, years 1980 - present	rain/stage	2	e-mail
517	SFWMD	09-19-97	09-19-97	May & June 1997, MIAMI FS rainfall	rain	1	e-mail
518	SFWMD	09-19-97	09-19-97	8 Florida Bay sites, period of record, FLAB8, 10, 11, 12, 14, 33, 35, 45	water quality	8	printout
519	SFWMD	09-19-97	09-19-97	ENPBR, CN, NR, GB, TB, LM, JB, LS, period of record	conductivity	8	printout
520	SFWMD	09-19-97	09-19-97	Lat 261500-270000/Lon 820730-8052300, archive rain data, SQL script	rain	80	ftp network
521	SFWMD	09-19-97	09-19-97	copy of all NOAA data purchased, P.O.R., hourly rain, temperature, wind, etc.	rain/wind	60	ftp network
522	SFWMD	09-19-97	09-19-97	Lee, Glade, and Hendry counties data period of record	rain/stage/flow/well	300	ftp network
523	government	09-22-97	09-22-97	1987 - present, S61_R, rainfall	rain	1	FAX
524	consulting / engineering	09-22-97	09-22-97	SSAX_H, SSAX_T, year by year summary, period of record	stage	1	FAX
525	SFWMD	09-22-97	09-22-97	14 ENR sites hourly data 199608170000 - 199708210000, runvg	stage	14	ftp network
526	news paper	09-23-97	09-23-97	SSAE, SEP, S8P, G93, S22, S25B, 1991 and 1997, tech pub DRE 304, DRE297	tech pub/operation	6	printout
527	law office	09-23-97	09-23-97	1993 - present, G34 stage and flow	stage/flow	1	printout
528	private	09-23-97	09-23-97	PREF data S5A, S6, S7, S8 outflow from the EAA	flow	4	diskette-1
529	university	09-23-97	09-24-97	structure info for G211 and G119	structure info	2	e-mail
530	government	09-24-97	09-24-97	G203D (dbkey 13157), HOLYG (05424), G200A (15154), year 1997	stage	3	FAX
531	university	09-24-97	09-24-97	1996 operation, stage, flow, hydrograph data for DBKEYS 06929, 16554	stage/flow/operation	1	ftp remo
532	consulting / engineering	09-24-97	09-24-97	township 5657 and range 38/39, Homestead area, 1996, info list of area	stage/well	83	ftp remo
533	SFWMD	09-24-97	09-24-97	Project SEAA, 040197-present, TPO4	water quality	N/A	ftp network/e-mail
534	SFWMD	09-19-97	09-25-97	Lat 261500-270000/Lon 820730-8052300, archive hydro data	all hydro types	N/A	ftp network
535	government	09-25-97	09-25-97	township 54/55, range 40/41 10/89 to 9/96, G93	stage	1	ftp remo
536	SFWMD	09-25-97	09-25-97	dbhydro hydro info list, tech pub DRE 216, Gated Culverts, by Andrew Fan	all hydro types/tech pub	14792	printout
537	SFWMD	09-25-97	09-25-97	dbhydro hydro info list	all hydro types	14792	printout
538	government	09-25-97	09-25-97	rain data township 50, range 42, Ft. Lauderdale area, period of record	rain	1	ftp remo
539	SFWMD	09-25-97	09-25-97	month-by-month summary, 10 dbkeys, Canals 6, 1, 2, 7, 8, 111 & 9	stage	10	e-mail

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTION
540	government	09-26-97	09-26-97	1975-present, format 6, G-617, G-561, G-1220, G-2032, G-1224	well	83	ftp rem.
541	consulting / engineering	09-26-97	09-26-97	info NGVD of 1929, ? Land surface level for BCNP stations	stage	N/A	FAX
542	SFWMD	09-25-97	09-29-97	Lat 284000-271000/Lon 805000-814000, hydro info list	all hydro types	3241	diskette
543	SFWMD	09-25-97	09-29-97	Lat 284000-271000/Lon 805000-814000, water quality info list	water quality	41959	diskette
544	consulting / engineering	09-25-97	09-26-97	Lat 267000-252000/Lon 802000-812000, water quality, SQL, 14 test types	water quality	1605	ftp rem.
545	university	09-29-97	09-29-97	1997 data G789_G, FRGPD1_G, FRGPD2_G, FRGPD3_G, G-613	well	5	ftp rem.
546	consulting / engineering	09-29-97	09-29-97	Lat 267000-252000/Lon 802000-812000, water quality, SQL, 3 test types	water quality	N/A	ftp rem.
547	government	09-30-97	09-30-97	breakpoint flow USSO, rain data S6, S177, rain site Tam Bridge 105	water quality	N/A	ftp rem.
548	government	09-10-97	09-30-97	S10E flow data corrected, 1995-present	flow	1	e-mail
549	consulting / engineering	08-29-97	09-03-97	Stage_S36 & s37	stage	4	print
550	consulting / engineering	09-03-97	09-04-97	Rainfall Data 15 yrs Jupiter Area	rainfall	1	print
551	consulting / engineering	09-03-97	09-08-97	Rainfall Selected Area	rainfall	1	print
552	government	09-04-97	09-08-97	Info Lake Tohopekaliga	stage	1	print
553	private	09-11-97	09-12-97	Info Lake Okeechobee	stage	2	print
554	private	09-17-97	09-18-97	Rainfall Selected Area	rainfall	1	print
555	SFWMD	09-18-97	09-18-97	Updated Complete DBHYDRO list	general information	7	print
556	university	09-18-97	09-22-97	Rainfall Selected Area	rainfall	7	print
557	government	09-18-97	09-18-97	Copy Op.Logs and Pump Logs Aug 97	operations/pumping	13	print
558	government	09-18-97	09-23-97	Copy Op.Logs August 1997	operation logs	1	print
559	consulting / engineering	09-23-97	09-25-97	Stage and Operating Criteria Selected Stations	stage and info	4	print
560	consulting / engineering	09-24-97	09-26-97	Stage and Info Selected Structures	stage/info	2	print
561	SFWMD	09-22-97	10-10-97	P.O.R changes for 13 dbkeys, water levels data from USGS, ADAPS database	stage/well	12	printout
562	SFWMD	10-13-97	10-31-97	processing and loading USGS AVIM sites, L-28, FF808, FF809, FF812	flow	3	e-mail
563	SFWMD	09-23-97	10-02-97	P.O.R changes for 28 dbkeys, water levels data from USGS, ADAPS database	stage/well	14	printout
564	SFWMD	10-02-97	10-08-97	P.O.R changes for 17 dbkeys, water levels data from USGS, ADAPS database	stage/well	15	printout
565	SFWMD	10-01-97	10-01-97	hourly data, BCSI+R, CFSW+R, LEHI+R, PALM+R, S78W+R, WHID+R, 92-97	rainfall/weather types	6	ftp net
566	SFWMD	10-01-97	10-01-97	archive weather data for S78W, period of record	rainfall/weather types	11	ftp net
567	news paper	10-03-97	10-03-97	hourly data, June 9-10, 1997 S11B, S119, April 26-27, 1997, S22, S25B, G93	stage	5	print
568	SFWMD	10-03-97	10-03-97	project ENRH, period of record, all stations	water quality	N/A	ftp rem.
569	consulting / engineering	10-03-97	10-03-97	Lat 267000-252000/Lon 802000-812000, mercury data, period of record	water quality	1605	ftp rem.
570	consulting / engineering	10-06-97	10-06-97	run EAA_Q2.CMD and EAA_R2.CMD on internal database	stage/flow	N/A	ftp rem.
571	consulting / engineering	10-06-97	10-06-97	SQL script TPO4, S10A, S10C, S10D, S10E, water quality internal database	water quality	N/A	ftp rem.
572	government	10-06-97	10-06-97	Lat 260000-251000/Lon 803000-802230, 1995-present, rainfall	rain	N/A	ftp rem.
573	SFWMD	10-06-97	10-06-97	max, min, G56_T and G56_H	stage	1	e-mail
574	consulting / engineering	10-06-97	10-06-97	Lat 260000-290000/Lon 810000-830000, Info list all hydro & water quality sites	all hydro/water quality	5878	ftp rem.
575	government	09-03-97	10-06-97	archive data FAKA^H, FAKA^T August 25, 1997	stage	1	e-mail
576	government	10-06-97	10-06-97	rain data 1997, less than LAT_254500	rain	N/A	ftp rem.
577	SFWMD	10-06-97	10-06-97	2-17 WCA2A, period of record, test types 23, 25 (TPG4)	water quality	1	ftp rem.
578	consulting / engineering	10-06-97	10-06-97	L0X4,6,7,11,13,14,16, HOLVSD1, D2, D3, D4, S18C, period of record	water quality	12	ftp rem.
579	university	10-07-97	10-07-97	Lat 283000-281500/Lon 811000-812700, Lake Hart area, Kiss, 1990-present	rain/evap	1	FAX
580	government	10-07-97	10-07-97	S68_R and S68_H, 1994-present	rain/stage	1	FAX
581	government	10-08-97	10-08-97	list hydro sites in Dade Co., archive rain data period of record, SQL	all hydro types	510	diskette
582	consulting / engineering	10-08-97	10-08-97	rain Ft. Pierce area, 1969-present	rain	2	FAX
583	consulting / engineering	10-09-97	10-09-97	range 38/39, township 56/57, Homestead area	stage/depth	N/A	ftp rem.
584	university	10-10-97	10-10-97	barometric pressure, LXWS+AP, WCA-2A, May 7, 1997 -present	barometric pressure	1	e-mail
585	SFWMD	10-08-97	10-10-97	range 39/40, township 47/48, WCA2A area, info list and stage/month-by-month	stage	N/A	diskette
586	SFWMD	10-28-97	10-28-97	Lat 263000-261500/Lon 802500-802500, SQL script, rain sample, '90-present	water quality	N/A	e-mail
587	consulting / engineering	10-28-97	10-28-97	years 1992-1996, S6, S9, SSA, S8, S39, rainfall sites	rain	5	e-mail
588	government	10-28-97	10-28-97	Lat 250000-251000/Lon 801500-803000, 1996-present data	all hydro types	N/A	diskette
589	consulting / engineering	10-28-97	10-29-97	S20G and S20F, period of record rain and stage	rain/stage	25	diskette
590	government	10-08-97	10-29-97	3 GIS maps, rain, stage, and flow	gis maps	3	print
591	consulting / engineering	10-29-97	10-29-97	G25% and ENR%, January 1997, H20T and AIRT, remo not working hard drive	temperature	12	e-mail
592	consulting / engineering	10-29-97	10-30-97	archive data S20F-H, S20F-T, MRF122 (S20_R), S20G-H, S20G-T, P.O.R.	rain/stage	5	diskette
593	consulting / engineering	10-30-97	10-30-97	G25% and ENR%, January 1997, H20T and AIRT, archive data	temperature	12	e-mail
594	SFWMD	10-30-97	10-30-97	EAA1, EAA5, S8, S7 1990-present, rain preferred data	min	4	ftp rem.
595	university	10-30-97	10-31-97	10 weather types, JBTs, 12-12-96 to 5-1-96	rain/rainfall weather types	10	ftp rem.
596	consulting / engineering	10-31-97	10-31-97	Miami, rain sites, 1995-present, dbkeys 16609 and 16615	rain	2	diskette
597	university	10-31-97	10-31-97	35 DOR and DRE tech pubs	tech pub/operation	N/A	print
598	consulting / engineering	10-31-97	11-03-97	archive data for S44, 1980-present, stage, flow and operations	stage/flow/operation	N/A	diskette
599	government	10-05-97	10-07-97	Copy Op.Logs and Pump Logs Aug 97	operations/pumping	13	print
600	consulting / engineering	09-23-97	10-08-97	Stage and Operating Schedules c-19,c-40,c41a	stage & schedules	4	diskette
601	SFWMD	10-01-97	10-08-97	Info Selected dbkeys (23)	Info	23	print
602	consulting / engineering	10-01-97	10-09-97	Rainfall s65 a969 and 1997	rain	2	print
603	SFWMD	10-09-97	10-09-97	Max,Min,Mean G56	stage & info	1	print
604	government	10-09-97	10-10-97	Discharge Rainfall and Evaporation Selected Stations	stage/rain/evap	11	diskette
605	consulting / engineering	10-17-97	10-22-97	P/R Rainfall Selected Stations (10)	rain	10	diskette
606	consulting / engineering	10-14-97	10-15-97	Groundwater Levels Discharge Selected Area	stage/discharge	4	diskette
607	consulting / engineering	10-14-97	10-16-97	Rainfall	rain	2	diskette
608	consulting / engineering	10-14-97	10-17-97	Rainfall Data Jupiter Area	rain	1	diskette
609	private	10-09-97	10-17-97	Rainfall Ft. Pierce Area	stage	1	print
610	SFWMD	10-17-97	10-22-97	Stage s60	gate	1	e-mail
611	SFWMD	10-22-97	10-23-97	Gate Operation Hourly	rain	N/A	print
612	consulting / engineering	10-22-97	10-23-97	Info Rainfall Broward & dade Co.	stage	4	print
613	SFWMD	10-23-97	10-23-97	Stage L23 Canal	Info	N/A	print
614	consulting / engineering	10-24-97	10-24-97	Info Wells Highlands County	rain	23	diskette
615	government	10-24-97	10-26-97	1991 RF Selected Stations (23)	rain	14	diskette
616	government	10-24-97	10-28-97	Rainfall 1991 Selected Stations	rain	1	diskette

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
617	government	10-28-97	10-30-97	Rainfall Ft Lauderdale Area	rain	2	FAX
618	consulting / engineering	10-28-97	11-03-97	Stage C-11 Canal	stage	2	FAX
619	SFWMD	11-03-97	11-05-97	project SEAA water quality SQL script, flag, unregistered and good data	water quality	N/A	ftp network/printout
620	consulting / engineering	11-03-97	11-03-97	rain, evap period of record, C-17 basin	evap/rain	N/A	diskette-1
621	government	11-04-97	11-05-97	period of record, S9, S8, S11, S140, S10, S39, S34, S5A, S6, S7	flow	10	ftp remo
622	consulting / engineering	11-05-97	11-05-97	McCoy rain site, 1997 dbkey 16634	rain	1	FAX
623	government	11-05-97	11-05-97	1995 Wet Season Report, tech pubs, WRE-348, WRE-344, DRE129	tech pub	N/A	printout
624	consulting / engineering	11-05-97	11-05-97	LOX3,F1,CA2-7,U3,CA3-3,CA3-15, P33, SQL script, QC samples 09, 1992-96	water quality	N/A	ftp remo
625	SFWMD	11-03-97	11-03-97	S6, S5A PREF rain, annual sum, period of record	rain	2	e-mail
626	SFWMD	11-06-97	11-06-97	S5A PREF rain, flow 1996	rain/flow	1	printout
627	SFWMD	11-05-97	11-05-97	2 copies hydro info fist, 2 copies of PREF key Info list	all hydro types	14849	printout
628	SFWMD	11-07-97	11-07-97	S7_R, 1990 - present, PREF data, rain sites in area township 47 & range 37	rain	1	e-mail
629	consulting / engineering	11-07-97	11-07-97	rain township 55 and range 40, year 1997	rain	2	FAX
630	university	11-10-97	11-10-97	maps, planning, well, stage, rain, weather, basin, satellite, hurricane, etc.	gis maps	N/A	printout
631	government	11-12-97	11-12-97	dbkey 04148 2B-Y,WCA2B, 1975-present	stage	1	ftp remo
632	government	11-12-97	11-12-97	info list rain sites in Dade Co.	rain	168	e-mail
633	consulting / engineering	11-12-97	11-12-97	S44 structure info C-17 area, township 42 and range 42/43	stage/Well	1	ftp remo/FAX
634	government	11-14-97	11-14-97	rain gage recorder info "Weather Bureau Observing Hand Book No. 2" ESSA	rain	N/A	printout
635	university	11-14-97	11-14-97	year of construction S79 dam, check COE book, Part IV, Supplement 19B	structure info	1	e-mail
636	government	11-18-97	11-18-97	1970-present 2A-17_B, (dbkey 16016)	stage	1	ftp remo
637	university	11-18-97	11-18-97	ENR203, ENR204, G255, G254B, G254D, Sept. 1997-present, SQL script	water quality	N/A	ftp remo
638	consulting / engineering	11-19-97	11-19-97	S5A, S6, TPO4, 19951001-present, SQL Script	water quality	2	ftp remo
639	university	11-17-97	11-18-97	H2OT, July 1996 -Dec. 1996, archive and hourly data, SFWMD	water quality	40	ftp remo
640	consulting / engineering	11-19-97	11-19-97	SSA, S6, PREF data, flow 19951001-present	water quality	2	ftp remo
641	university	11-20-97	11-20-97	Water Quality Conditions, quarterly report, October 1997	flow	2	ftp remo
642	consulting / engineering	11-21-97	11-21-97	township 46/47, range 34, period of record, L3, L3BRN	tech pub	N/A	printout
643	university	11-21-97	11-21-97	BCNP10, BCNP11, BCNP9, period of record	stage	2	diskette-1/FAX
644	university	11-21-97	11-21-97	mid pool A, B, C, D, last year no data, P.O.R., SQL script	stage	3	ftp remo
645	SFWMD	11-24-97	11-24-97	well info fist	water quality	N/A	printout
646	SFWMD	11-25-97	11-25-97	Lm 262500-264000/Lon 812000-805500, Info fist water quality sites, C139	water quality	N/A	ftp network
647	government	11-25-97	11-25-97	water quality, project MBLS, period of record	water quality	N/A	ftp remo
648	government	11-21-97	11-25-97	G201_R, period of record, info fist, dbkey 15181 EA41, 7G200 on map G200A an	all hydro types	N/A	FAX
649	consulting / engineering	11-26-97	11-26-97	evap sites & dbkeys, Lower East Coast area, period of record	evap	6	diskette-1
650	government	11-26-97	11-26-97	location of water quality project FLAB sites	water quality	50	ftp remo
651	government	11-26-97	11-26-97	month by month summary & composite, period of record, dbkey 06817 & 06818	stage	2	FAX/e-mail
652	SFWMD	11-26-97	11-26-97	ROTT_S and ROTT_N, period of record	stage	2	printout
653	consulting / engineering	11-03-97	11-04-97	Info Discharge Lee Co.	discharge stations	N/A	FAX
654	landscape	11-04-97	11-07-97	Rainfall and Air Temp	rainfall / temp 10 yrs	2	printout
655	private	11-07-97	11-07-97	Info Stage Keller Canal	stage	1	phone
656	consulting / engineering	11-04-97	11-07-97	Rainfall Miami Beach Area	rain	1	FAX
657	SFWMD	11-07-97	11-10-97	Gate Openings S61	gate operation	1	e-mail
658	consulting / engineering	11-07-97	11-10-97	Discharge Meade Station	discharge	1	FAX
659	consulting / engineering	11-06-97	11-13-97	Stage Data C-11	stage	2	FAX
660	SFWMD	11-10-97	11-14-97	Hourly Gate Openings S58 and S61	gate operation	2	e-mail
661	government	11-07-97	11-18-97	Run-off Info, East Coast Publication	tech pub	1	printout
662	SFWMD	11-14-97	11-15-97	Complete List Of Stations	all hydro types	N/A	printout
663	consulting / engineering	11-14-97	11-19-97	Stage Data Selected Stations	stage	6	printout
664	SFWMD	12-01-97	12-03-97	Holley Land Report	stage	24	printout
665	consulting / engineering	11-26-97	12-03-97	Rainfall Information	rain	2	FAX
666	government	12-03-97	12-08-97	Rainfall Cape Coral Area	rain	2	FAX
667	government	11-07-97	11-18-97	Op_Logs	stage/gate operation	21	printout
668	government	11-07-97	11-19-97	Op_Logs	stage/gate operation	1	FAX
669	consulting / engineering	12-04-97	12-10-97	Stage Data and Info on Regulation	stage/gate operation	6	printout
670	government	12-18-97	12-18-97	Op_Logs	stage/gate operation	21	printout
671	government	12-18-97	12-18-97	Op_Logs	stage/gate operation	1	FAX
672	consulting / engineering	12-06-97	12-18-97	Rainfall Report, rainfall by 24 hrs.	rain	15	FAX
673	consulting / engineering	12-10-97	12-19-97	Barometric Pressure	barometric pressure	2	FAX
674	consulting / engineering	12-10-97	12-31-97	Rainfall 24 hrs 100 Years Storm	rain	N/A	FAX
675	private	12-30-97	12-31-97	Rainfall Palm Beach Co. 24 HRS	rain	N/A	FAX
676	consulting / engineering	12-01-97	12-01-97	1-9 surface elevation, 14.60 ft, WCA1, will check with electronics	stage	1	phone
677	consulting / engineering	12-01-97	12-01-97	township S1, range 26, section 3, HENDTAMI_H, HENDTAMI_T, HENDTAMI	stage	3	FAX
678	land owner	12-01-97	12-04-97	S333, S334, S12A,B,C,D,E,F,S12, 1985-present monthly	stage/flow	3	printout
679	consulting / engineering	12-02-97	12-02-97	township 47#B, range 25, 1997, COC1_R, BONITA_S_R, CCWWTP_R	rain	N/A	FAX
680	private	12-03-97	12-03-97	G56_H max for period of record, structure info	stage	1	FAX
681	consulting / engineering	12-03-97	12-03-97	S155_H, 1994 data	stage	1	FAX
682	school	12-02-97	12-03-97	WD data test types 24, 25, 26, EAA area & location of sites in the EAA	water quality	N/A	diskette-1/printout
683	university	12-01-97	12-02-97	Snell Kite, sites, CA1-7, CA1-8, CA2-17, 2B-Y, July 1997-present, monthly stage	stage	4	e-mail
684	government	12-03-97	12-03-97	safinity project FLAB water quality, CSTS, JBTS, MBTS, MDTs, TPTS, 1996	water quality/scond/H02	N/A	ftp remo
685	university	12-03-97	12-04-97	ENR101 daily stages 1994-present	stage	1	ftp remo
686	government	12-04-97	12-04-97	1995-1997 saInity data, CSTS, JBTS, MBTS, MDTs, TPTS, info fist ENP sites	water quality/scond/H02	N/A	ftp remo
687	government	12-05-97	12-05-97	all 15 minute data for Joe Bay collected by SFWMD	all weather/water quality	1	ftp remo
688	government	12-05-97	12-05-97	info fist Broward rain sites	rain	N/A	FAX
689	government	12-08-97	12-08-97	63 rain sites with archive rain data SQL	rain	N/A	FAX
690	SFWMD	12-08-97	12-08-97	township 45/46, range 40/41 info fist stage, 1-8C period of record	stage	63	ftp remo
691	government	12-08-97	12-08-97	Lel <252000, wind, depth archive data, P.O.R., Florida Bay data	wind / depth	N/A	ftp network
692	consulting / engineering	12-09-97	12-09-97	G54 flow G54_T archive max daily, hydrograph, ivg data, 7 dbkeys	stage/flow	1	ftp remo
693	private	12-10-97	12-10-97	Lst 262500-263700/Lon 801500-801800, ACME1 & ACME2 area, 1996-1997	water quality	N/A	printout

Appendix I. List of clients and data requested

CLIENT #	TYPE OF CLIENT	REQ. IN	REQ. OUT	REQUEST DESCRIPTION	DATA TYPE	# STATIONS	DISTRIBUTED
694	government	12-11-97	12-11-97	info list 1996-1997, stage sites WCA1, WCA2, WCA3, 3A-4, 2A-17, 5-7	stage	N/A	FAX
695	SFWMD	12-11-97	12-11-97	HENDER*T, period of record, yearly max	stage	1	e-mail
696	consulting / engineering	12-11-97	12-11-97	1997 data for dbkey, 06081, 06087, 06195, 16602	rain	3	FAX/e-mail
697	consulting / engineering	12-12-97	12-12-97	Tech Pub WRE 354, ENR Water Budget Report	tech pub	N/A	printout
698	law office	12-15-97	12-15-97	July 1-15 1997 data, Palm Beach County rainfall	rain	92	e-mail
699	university	12-15-97	12-15-97	structure book info S22, S123, S21, S21A, S20G, S20F, S197	flow	7	e-mail
700	SFWMD	12-15-97	12-15-97	period of record IMMOK3, CLEWISTON, S79, 4 dbkeys	rain	3	e-mail
701	SFWMD	12-15-97	12-15-97	stage and rain site info 1997 < tel 254500	rain	N/A	printout
702	private	12-16-97	12-16-97	questions on Kissimmee (S65 H), W. Toho (S61 H), L Okee stages	stage	3	e-mail
703	university	12-16-97	12-16-97	WRE 328 "...Gated Culvert Water ...", DRE 239 "...Atlas of Eastern Dade..."	tech pub	N/A	printout
704	university	12-16-97	12-16-97	10 years rain info 1st SFWMD	rain	690	ftp remo
705	consulting / engineering	12-16-97	12-16-97	run 3 SQL scripts on internal water quality database for IPO4	water quality	N/A	ftp remo
706	consulting / engineering	12-16-97	12-16-97	run 4 scripts on internal hydro database for rain, stage, flow	stage/flow/rain	N/A	ftp remo
707	consulting / engineering	12-16-97	12-16-97	run 2 SQL scripts on internal water quality database, TPO4, EAA and ENP sites	water quality	N/A	ftp remo
708	consulting / engineering	12-16-97	12-16-97	run 5 scripts on internal hydro database for rain, stage, flow, EAA & ENP sites	stage/flow/rain	N/A	ftp remo
709	university	12-16-97	12-16-97	structure info G250, G250S, hydrograph data for G250, period of record	tech pub/flow/gate op	2	e-mail/ftp remo
710	private	12-17-97	12-17-97	maps of District structures, Public land use, Kissimmee River	gis maps	N/A	printout
711	consulting / engineering	12-17-97	12-17-97	S33, S36, S125 stage and rain data close to area	rain/stage	3	printout
712	law office	12-16-97	12-17-97	township 42/43/44, ranges 42/43, rain sites July 1-15, 1997, GIS map of area	gis map/rain	5	e-mail/FAX
713	university	12-15-97	12-17-97	hydrograph data S22, S123, S21, S21A, S20G, S20F, S197, year 1995	stage/flow/gate op	7	ftp remo
714	university	12-16-97	12-19-97	all water quality ENR002, G250, period of record	all hydro types	2	ftp remo
715	government	12-19-97	12-19-97	lat 260000-240000N on 800000-820000, info list all hydro types	all hydro types	3163	ftp remo
716	university	12-17-97	12-19-97	period of record, 223 dbkeys rain site format 4 monthly sum and annual	rain	223	ftp remo
717	SFWMD	12-22-97	12-22-97	Orlando area rain, period of record, dbkeys 06104, 05859, 05876, 06185	rain	4	ftp remo
718	consulting / engineering	12-22-97	12-22-97	Royal Palm Beach area, ENR105, ENR308, barometric pressure, Dec. 3-5, 1997	barometric pressure	2	e-mail
719	consulting / engineering	12-22-97	12-22-97	C13.UNIV stage 1994-present, structure S125, S33, S36	stage	4	FAX
720	university	12-22-97	12-22-97	ENR002 period of record stage archive data and daily mean, SSA info list	stage	2	ftp remo
721	government	12-23-97	12-23-97	S308, Canal Point, Bell Glade, East Sho, Clew.FS, 1988-present, format 2	rain	5	FAX
722	SFWMD	12-23-97	12-23-97	4 GIS maps, rain, well, stage, flow	gis maps	4	printout
723	SFWMD	12-23-97	12-23-97	copy of data sent to Ms. Purdue, ACME1 and ACME2 area	water quality	N/A	printout/e-mail
724	government	12-23-97	12-23-97	location of SIRG and SSA letion rain sites	rain	2	e-mail/ftp remo
725	consulting / engineering	12-29-97	12-29-97	rain info for S28Z and S29Z	rain	2	printout

APPENDIX II
REMOTE ELECTRONIC ACCESS CONTRACTS

Appendix II. Remote Electronic Access contracts

CLIENT #	CLIENT TYPE	LOCATION	DATE
C-R001	consulting / engineering	Gainesville	04/25/95
C-R002	consulting / engineering	Gainesville	04/25/95
C-R003	consulting / engineering	Fort Myers	06/01/95
C-R004	consulting / engineering	West Palm Beach	06/06/95
C-R005	government	Jupiter	06/19/95
C-R006	other	Hollywood	01/16/96
C-R007	university	Durham, NC	10/31/95
C-R008	consulting / engineering	Pembroke Pines	11/08/95
C-R009	consulting / engineering	Holmes Beach	11/08/95
C-R010	government	Pompano Beach	01/16/96
C-R011	consulting / engineering	Jupiter	02/07/96
C-R012	consulting / engineering	Miami	01/16/96
C-R013	consulting / engineering	Fort Myers	01/16/96
C-R014	consulting / engineering	Jacksonville	01/16/96
C-R015	consulting / engineering	Sterling, VA	01/16/96
C-R016	government	Coral Gables	03/21/96
C-R017	N/A	N/A	N/A
C-R018	government	Tallahassee	04/23/96
C-R019	government	West Palm Beach	02/26/96
C-R020	government	St. Petersburg	03/21/96
C-R021	consulting / engineering	Jupiter	03/25/96
C-R022	university	Miami	04/29/96
C-R023	government	Greenbelt, MD	03/21/96
C-R024	university	Baton Rouge, LA	03/21/96
C-R025	other	North Palm Beach	04/23/96
C-R026	consulting / engineering	Palm Beach Gardens	04/23/96
C-R027	university	Boca Raton	04/23/96
C-R028	government	Hollywood	05/28/96
C-R029	government	Ocala	06/12/96
C-R030	university	Gainesville	06/12/96
C-R031	consulting / engineering	Tallahassee	06/12/96
C-R032	government	St. Petersburg	06/24/96
C-R033	university	Gainesville	07/16/96
C-R034	government	Vicksburg, MS	07/16/96
C-R035	consulting / engineering	Lutz	08/02/96
C-R036	government	Miami	08/15/96
C-R037	consulting / engineering	West Palm Beach	08/02/96
C-R038	consulting / engineering	Tampa	09/18/96
C-R039	consulting / engineering	Belle Glade	09/18/96
C-R040	government	Miami	09/18/96
C-R041	government	Melbourne	11/04/96
C-R042	consulting / engineering	Naples	11/14/96
C-R043	consulting / engineering	Ft. Myers	12/19/96
C-R044	consulting / engineering	Orlando	12/31/96
C-R045	consulting / engineering	Orlando	01/07/97
C-R046	consulting / engineering	Miami	02/06/97
C-R047	consulting / engineering	West Palm Beach	02/06/97
C-R048	government	Ochoppee	02/18/97
C-R049	government	Lake Placid	03/28/97
C-R050	consulting / engineering	Miami	03/13/97

Appendix II. Remote Electronic Access contracts

CLIENT #	CLIENT TYPE	LOCATION	DATE
C-R051	consulting / engineering	Punta Gorda	03/10/97
C-R052	government	Homestead	04/08/97
C-R053	government	Jacksonville	04/08/97
C-R054	consulting / engineering	Tequesta	04/08/97
C-R055	N/A	N/A	N/A
C-R056	government	Cape Coral	05/15/97
C-R057	consulting / engineering	Waterloo, Canada	04/08/97
C-R058	consulting / engineering	Gainesville	05/15/97
C-R059	consulting / engineering	Deerfield Beach	05/19/97
C-R060	consulting / engineering	Gainesville	06/12/97
C-R061	consulting / engineering	Ft. Pierce	06/12/97
C-R062	government	Miami	06/30/97
C-R063	university	Miami	06/30/97
C-R064	university	Miami	07/10/97
C-R065	consulting / engineering	Palm Beach Gardens	07/24/97
C-R066	government	Washington, DC	07/24/97
C-R067	other	Winter Park	07/24/97
C-R068	government	Reston, VA	08/21/97
C-R069	consulting / engineering	Davie	09/05/97
C-R070	consulting / engineering	Ann Arbor, MI	09/08/97
C-R071	consulting / engineering	Gainesville	09/24/97
C-R072	other	Miami	09/24/97
C-R073	consulting / engineering	Boise, ID	10/28/97
C-R074	consulting / engineering	St. Petersburg	11/07/97
C-R075	university	Knoxville, TN	11/07/97
C-R076	consulting / engineering	Lake Worth	11/19/97
C-R077	consulting / engineering	West Palm Beach	12/16/97
C-R078	government	Boynton Beach	12/16/97
C-R079	university	Gainesville	12/24/97
C-R080	consulting / engineering	West Palm Beach	12/16/97
C-R081	government	Wellington	12/16/97
C-R082	consulting / engineering	Miami	01/08/98
C-R083	consulting / engineering	Boca Raton	03/27/98
C-R084	consulting / engineering	Sacramento, CA	03/03/98
C-R085	consulting / engineering	West Palm Beach	03/27/98
C-R086	consulting / engineering	Naples	05/06/98
C-R087	consulting / engineering	Orlando	05/21/98
C-R088	consulting / engineering	Santa Fe, NM	05/21/98
C-R089	government	Avon Park AFR	06/08/98
C-R090	consulting / engineering	Jacksonville	05/26/98

APPENDIX IIIa, b, c, d & e
EXTERNAL DATA ACQUISITIONS

EVERGLADES NATIONAL PARK

ENP - HYDROLOGICAL MONITORING STATION NETWORK

SFWMD Name	ENP File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
NP-112	112	E112	25:25:22.8N	80:35:55.3W
NP-127	127	R127	25:21:15.4N	80:36:23.5W
NP-146	146	E146	25:15:18.0N	80:40:01.0W
NP-158	158	R158	25:23:45.7N	80:34:41.4W
NP-201	201	NP201	25:43:04.6N	80:43:10.7W
NP-202	202	NP202	25:39:47.2N	80:42:31.6W
NP-203	203	NP203	25:37:26.3N	80:44:20.5W
NP-205	205	NP205	25:41:22.8N	80:50:53.4W
NP-206	206	NP206	25:32:43.5N	80:40:20.3W
NP-207	207	NP207	25:17:08.0N	80:41:19.0W
NP-311	311	R3110, G3110	25:26:50.5N	80:37:35.5W
NP-31W	31W	L31W, L31W Canal, Due East of NT1	25:26:17.6N	80:35:24.0W
NP-A13	A13	A13	25:29:54.8N	80:42:46.4W
NP-C27	C27	CT27R, C111 Cut # 27 Recorder	25:18:07.6N	80:29:19.9W
NP-C50	C50	CT50R, C111 Cut # 50 Recorder	25:18:49.5N	80:31:16.5W
NP-CHP	CHP	CP,Craighead Pond	25:13:44.0N	80:42:15.0W
NP-CR2	CR2	Context Road 2	25:29:59.6N	80:37:19.6W
NP-CR3	CR3	Context Road 3	25:29:52.8N	80:39:47.4W
NP-CT3R	CT3R	CT3R, C111 Cut # 3 Recorder	25:17:25.0N	80:27:17.6W
NP-CV1N	CV1N	C111 Culvert # 1 North	25:17:30.3N	80:27:14.8W
NP-CV1S	CV1S	C111 Culvert # 1 South	25:17:30.3N	80:27:14.8W
NP-CV2N	CV2N	C111 Culvert # 2 North	25:17:45.0N	80:27:56.4W
NP-CV2S	CV2S	C111 Culvert # 2 South	25:17:45.0N	80:27:56.4W
NP-CV3N	CV3N	C111 Culver # 3 North	25:17:52.0N	80:28:17.9W
NP-CV3S	CV3S	C111 Culvert #3 South	25:17:52.0N	80:28:17.9W
NP-CV4N	CV4N	C111 Culver #4 North	25:18:02.9N	80:28:45.1W
NP-CV4S	CV4S	C111 Culvert #4 South	25:18:02.9N	80:28:45.1W
NP-CV5N	CV5N	C111 Culver #5 North	25:18:14.1N	80:29:18.4W
NP-CV5S	CV5S	C111 Culvert # 5 South	25:18:11.3N	80:29:14.9W
NP-CV6N	CV6N	C111 Culvert # 6 North	25:18:22.7N	80:29:43.7W
NP-CV6S	CV6S	C111 Culvert # 6 South	25:18:22.7N	80:29:43.7W
NP-CV7N	CV7N	C111 Culvert # 7 North	25:18:29.5N	80:30:04.1W
NP-CV7S	CV7S	C111 Culvert # 7 South	25:18:29.5N	80:30:04.1W
NP-CV8N	CV8N	C111 Culvert # 8 North	25:18:43.4N	80:30:45.0W
NP-CV8S	CV8S	C111 Culvert # 8 South	25:18:43.4N	80:30:45.0W
NP-CV9N	CV9N	C111 Culvert # 9 North	25:18:51.2N	80:31:06.2W
NP-CV9S	CV9S	C111 Culvert # 9 South	25:18:51.2N	80:31:06.2W
NP-CY2	CY2	Cypress No. 2	25:19:44.0N	80:40:59.0W
NP-CY3	CY3	Cypress No. 3	25:19:44.9N	80:45:03.5W
NP-DO1	DO1	Donut No. 1	25:22:23.6N	80:41:28.1W
NP-DO2	DO2	Donut No. 2	25:23:22.6N	80:44:40.7W
NP-EP12R	E12	EP12R, Eastern Panhandle #12 Recorder	25:16:26.1N	80:26:43.1W
NP-EP1	EP1	EP1R, Eastern Panhandle #1 Recorder	25:17:15.1N	80:27:11.4W
NP-EP10	EP10	Eastern Panhandle # 10	25:16:23.3N	80:31:38.1W
NP-EP11	EP11	Eastern Panhandle # 11	25:16:23.1N	80:29:30.7W
NP-EP12R	EP12	Eastern Panhandle # 12	25:16:26.1N	80:26:43.1W
NP-EP9R	EP9	EP9R, Eastern Panhandle #9 Recorder	25:16:19.8N	80:33:16.6W
NP-EPG	EPG	EPGW,Eastern Panhandle Groundwater	25:16:48.5N	80:30:12.2W
NP-EPGW	EPGW	EPGW,Eastern Panhandle Groundwater	25:16:48.5N	80:30:12.2W
NP-EPR	EPR	EPGW/SW Rain	25:16:48.5N	80:30:12.2W
NP-EPS	EPS	EPSW, Eastern panhandle Surfacewater	25:16:48.5N	80:30:12.2W
NP-EV6	EV6	EVER6	25:17:53.5N	80:30:43.4W
NP-EV7	EV7	EVER7	25:18:35.0N	80:32:34.4W
NP-EV8	EV8	EVER8	25:20:45.8N	80:28:44.2W

ENP - HYDROLOGICAL MONITORING STATION NETWORK

SFWMD Name	ENP File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
NP-EVC	EVC	Everglades City Rngr Sta (NOAA Rpt)	25:51:11.4N	81:22:50.1W
NP-FLA	FLA	Flamingo Rngr Sta (NOAA Rpt)	25:08:29.0N	80:54:53.0W
NP-FMB	FMB	Forty Mile Bend, Tamiami Rngr Sta	25:45:30.9N	80:49:42.5W
NP-N10	N10	NTS10, North Taylor Slough # 10	25:27:42.0N	80:36:19.0W
NP-N14	N14	NTS14, North Taylor Slough #14	25:25:03.0N	80:38:21.0W
NP-NE1	NE1	NESRS1	25:41:29.9N	80:38:06.2W
NP-NMP	NMP	Nine Mile Pond	25:15:13.5N	80:47:55.2W
NP-NTS1	NT1	NTS1, North Taylor Slough # 1	25:26:17.1N	80:35:35.3W
NP-NTS3	NTS3	North Taylor Slough # 3	25:26:16.0N	80:35:60.0W
NP-NTS5	NTS5	North Taylor Slough # 5	25:26:16.0N	80:36:43.0W
NP-OAS	OAS	Oasis Rngr Sta (NOAA Rpt)	25:51:25.6N	81:02:05.7W
NP-OT3	OT3	OT,O3,Ornithology Transect	25:34:47.0N	80:57:54.0W
NP-P33	P33	P33	25:36:53.9N	80:42:09.3W
NP-P34	P34	P34	25:36:31.6N	80:56:27.6W
NP-P35	P35	P35	25:27:39.4N	80:51:53.3W
NP-P36	P36	P36	25:31:42.4N	80:47:45.0W
NP-P37	P37	P37 & NP207 combined	25:17:08.0N	80:41:19.0W
NP-P38	P38	P38	25:22:14.4N	80:50:00.9W
NP-P44	P44	NP44	25:26:04.0N	80:43:14.0W
NP-P46	P46	NP46	25:19:10.0N	80:47:46.0W
NP-P62	P62	NP62	25:26:22.0N	80:46:59.0W
NP-P67	P67	NP67	25:19:50.0N	80:39:02.0W
NP-P72	P72	NP72	25:23:45.0N	80:42:12.0W
NP-RCR	RCR	Research Center, RC, NADP	25:23:23.6N	80:40:51.2W
NP-RG1	RG1	Rocky Glades 1	25:34:57.6N	80:36:29.4W
NP-RG2	RG2	Rocky Glades 2	25:32:37.8N	80:36:22.4W
NP-ROB	ROB	Robblee	25:26:26.5N	80:33:07.8W
NP-RPL	RPL	Royal Palm, RPLM (NOAA Rpt)	25:23:10.0N	80:35:38.0W
NP-SP1	SP1	Sisal Pond 1	25:23:23.9N	80:47:51.7W
NP-TMC	TMC	Ten Mile Corner	25:36:54.8N	80:52:21.1W
NP-TSB	TSB	Taylor Slough Bridge	25:24:05.0N	80:36:25.0W
NP-TSH	TSH	Taylor Slough Hilton	25:18:43.8N	80:37:51.6W

UNITED STATES GEOLOGICAL SURVEY
USGS - HYDROLOGIC MONITORING STATION NETWORK

SFWMD Name	USGS File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
S-308_L	02276870	Port Mayaca Lock	265906	803706
FISHP_O	02256500	Fisheating Creek at Palmdale	265556	811854
INDUST	264514080550700	Industrial Canal at Clewiston	264514	805507
S-352	02278000	HGS-5 Hurricane Gate on Lake Okeechobee	265149	803756
S-65	02268903	S-65 Gate Opening from USGS	274803	811154
S-65E	02273000	S-65E Spillway/Lock on C-38 at	271330	805746
S-77_T	02292000	S-77 Spillway and Lock on Caloosahatchee	265020	810508
L8_441	265501080364900	L-8 Canal at US Highway 441 near Canal	265501	803649
S-2	02283498	Combined S-2 and HGS-4 Stations at Hills	264200	804259
S-3	02286400	Miami Canal at HGS-3 and S-3 at Lake	264155	804827
S12A_S	254543080491101	S-12A Spillway on Levee L-29 at	254541	804918
S12B_S	02289019	S-12B Spillway on Levee L-29 at	254541	804612
S12C_S	02289041	S-12C Spillway on Levee L-29 at	254542	804338
S12D_S	254543080405401	S-12D Spillway on Levee L-29 at	254543	804054
S12_T	02289040	Tamiami C Outlets L67A to 40 Mile Bend	254542	804334
S333	02289050	Tamiami Canal below S-333 near Miami	254542	804028
S332	252523080352500	S-332 Pump Station on L-31W Borrow Canal	252517	803524
S18C	02290769	Canal 111 at S-18C near Florida City	251949	803131
1-7	263180080205001	CA 1-7 Corps Rain/Well in Center of	263133	802020
1-8C	263000080120001	CA1-8C Corps Stage in Levee L-40 near	262955	801321
1-9	262750080175001	CA 1-9 Corps Rain/Well in Southeast	262741	801728
S5A+S5AW_T	02278450	West Palm Beach Canal above S-5a	264105	802215
S-6	02281200	Hillsboro Canal at S-6 near Shawano	262819	802645
S-7	02284300	North New River Canal at S-7 at Terrytown	262008	803213
S-150	262007080321500	S-150 Culvert on Levee L-5 at	262002	803222
S-8	02286700	S-8 Pump and Spillway on Miami Canal at	261955	804268
G-88	02289032	CMP Culvert in Northwest Corner of Water	261952	805251
G-136	02289027	L-1 Control Culvert at Bend in	264003	805657
L28U_O	261543080495000	L-28 Interceptor below S-190 near Clewiston	261531	805714
L28IN_O	261533080571600	L-28 Interceptor below S-190 near Clewiston	264531	805714
L28IS_O	260823080524100	L-28 Interceptor South at Collier Border	260821	805240
SWEVER2B	251855080283400	South West Everglades 2-B (Surface) Paired	251855	802834
L67EX.E_B	254100080402200	North East Shark Slough East of L67EXT	254100	804022
PB1661	262410080090801	Monitor USGS Observation Well in Boca	262408	800908
PB1639	263656080033502	USGS Observation Well in Lake Worth	263654	800335
PB-88_G	263652080033801	PB-88	263652	800338
PB-99_G	264005080033501	PB-99	264005	800335
PB-1660	262415080074501	USGS Monitor Well in Boca Raton	262416	800745
PB-1495_G	262435080043002	USGS Observation Well at Boca Raton	262435	800430
PB900_G	262534080085102	Carter Road 2 Miles South of Atlantic Delray	262534	800851
PB-109	264841080114901	PB-109	264841	801149
PB-1515_G	263540080112101	USGS Observation Well at Lantana	252750	802834
PB-1494_G	262424080074701	USGS Observation Well at Boca Raton	252750	802834
G-1222_G	260025080230401	USGS Observation Well near Pembroke	260025	802304
G-616_G	261710080135001	USGS Observation Well near Coral Springs	261710	801350
G-2030_G	261837080163001	USGS Observation Well near Fort Lauderdale	261837	801630
G-1472_G	255916080085401	USGS Observation Well at Hallendale	255916	800854
G-1322_G	260253080184801	USGS Observation Well near Cooper City	260253	801848
G-2275_G	261150080094602	USGS Observation Well near Oakland Park	261150	800946
G-2444_G	261238080105501	G-2444	261238	801055
G-2443_G	261337080103401	G-2443	261337	801034
G-1262_G	261152080115201	USGS Observation Well at Margate	261152	801152
G-2148_G	261458080070301	USGS Observation Well near Pompano	261458	800703
G-613_B	252425080320001	G-613	252425	803200
G-799_G	254202080232601	USGS Observation Well near South Miami	254202	802326

USGS - HYDROLOGIC MONITORING STATION NETWORK

SFWMD Name	USGS File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
G-972_G	255522080261401	USGS Observation Well near Hialeah	255522	802614
G-858_G	253854080242801	USGS Observation Well near Miami	253854	802428
G-974_G	255207080241301	USGS Observation Well near Pennsuco	255207	802413
G-594_G	255250080270801	G-594	255250	802708
NP-201	02290861	Everglades 201-NP near Miami	254305	804333
NP-33	02290815	Everglades P-33 near Homestead	253630	804130
NP-206	02290811	Everglades 206-NP near Miami	253242	804022
NP-36	02290828	Everglades P-36 near Homestead	253139	804745
THSO	02290800	Taylor Slough near Homestead	252405	803625
NP-207	02290810	Everglades 207 near Homestead	602888	346138
L67E.S	253735080402100	Levee 67 Extended at South End near	253735	804021
NP-202	02290862	Everglades 202-NP near Miami	253940	804245
ROBLK	02290950	Roberts Lake Slough near Monroe	254705	810500
2A-159	262300080263501	CA2A-159 Well in North-Central Conservation	262247	802642
L28	02289037	Levee 28 Tie Back	260020	805230
C-296_G	260640081204301	50S30E18 C-296	260640	812043
C-495_G	255748081181801	52S30E09 C-495	255748	811818
S-65H	02268903	S-65 Gate Opening from USGS	274803	811154
3-99	260810080222001	Site 99 near L-35A in Conservation Area 2B	260821	802202
S80_T	02277000	S-80 Spillway and Lock on St. Lucie Canal	270639	801706
S79_T	02292900	S-79 Spillway and Lock on Caloosahatchee	264325	814155
L_OKEEE	02276400	Lake Okeechobee No Name #1	265700	805000
3A-28	02289043	CA3A-28 Corps Well in Conservation Area	254843	804320
3A-3	02286998	CA3A-3 Corps Well in Conservation Area 3A	261118	803209
3A-4	02286970	CA3-4 Corps Well in Conservation 3A Marsh	255824	804018
1-8T	263050080145001	CA1-8T Corps Telemetry Stage East of	262956	801338
S2 HILLS	02280500	Hillsboro Canal below HGS-4 near South Bay	264200	804259
S2 NNR	02283500	North New River Canal Below HGS-1 near	264200	804259
S5AS+E-W_O	02278550	Levee 8 Canal at West Palm Beach Canal	264101	802151
S5A+S5AS_T	02278500	Diversions to Conservation Area 1 at S-5A	264100	802210
S5AE_C	02278600	S-5AE Culvert on Canal c-51 at Levee L-8	264105	802149
2-15	262400080250001	Site 15 near L-39 in Conservation Area	262554	802456
2-17	262240080258001	Site 17 near L-38 in Conservation Area	261711	802440
2-19	261710080190001	Site 19 in Conservation Area 2A	261655	801823
3-34	255215080291000	Site 34 near L-30 in Conservation Area	255215	802910
3-62	261023080443001	Site 62 in Conservation Area 3A	261028	804505
3-63	261117080315201	Site 63 in Conservation Area 3A	261119	803152
3-64	255828080401301	Site 64 in Conservation Area 3A	255831	804010
3-65	254848080432001	Site 65 in Conservation Area 3A	254852	804312
3-69	255300080370001	Site 69 in Conservation Area 3B	255300	803700
3-71	255250080335001	Site 71 in Conservation Area 3B	255304	803325
3-76	260037080303401	Site 76 in Conservation Area 3B	260027	802858
FT DRUM	02231342	Fort Drum Creek at Sunshine Street	273406	804747
L3	02289030	Levee 3 Canal near Clewiston	262550	805650
L3.2	262310080555001	L-3 Canal near Clewiston midway	262310	805550
L3.2A	262310080555002	L-3 Canal near Clewiston	262310	805550

**Appendix IIIc. NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NOAA - CLIMATIC MONITORING STATION NETWORK**

SFWMD Name	NOAA File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
ARCADIA_R	Pc80228a	Arcadia	271400	815200
ARCHBO_2_R	Pc80236a	Archbold Biological-Station	271053	812603
AVON PRK_R	Pc80369a	City Of Avon Park	273527	813108
BARTOW_R	Pc80478a	Bartow	275359	815037
BELLE GL_E	Ev80611a	Belle Glade Experiment Station	263924	803748
BELLE GL_R	Pc80611a	Belle Glade Experiment Station	263924	803748
CANAL P2_R	Pc81276a	Canal Point Usda	265204	803737
CLERMONT_R	Pc81641a	Clermont	282847	814652
CLEW_E	Ev81654a	Clewiston	264500	805500
CLEW_R	Pc81654a	Clewiston	264500	805500
DESOTO C_R	Pc82288a	Desoto City 8SW	272245	813026
DEVILS_R	Pc82298a	Devil's Garden Tower	263609	810743
EVERGL 2_R	Pc82850a	Everglades	255042	812314
FLAMIN 2_R	Pc83020a	Flamingo	250829	805453
FORT DRU_R	Pc83137a	Fort Drum 5NW	273500	805000
FORT LAU_R	Pc83163a	Fort Lauderdale	260604	801200
FT MEYER_R	Pc83186a	Fort Myers	263450	815152
FORT PIE_R	Pc83207a	Fort Pierce	272615	802100
HIALEAH_E	Ev83909a	Hialeah	254938	801710
HIALEAH_R	Pc83909a	Hialeah	254938	801710
HILLSBOR_R	Pc83986a	Hillsborough River State Park	280839	821329
IMMOKA 3_R	Pc84210a	Immokalee 3nnw	262740	812615
KEY WE 2_R	Pc84570a	Key West Wso Airport	243300	814500
KISS 2_R	Pc84625a	Kissimmee 2	281658	812508
LA BELLE_R	Pc84662a	La Belle	264510	812620
L ALF EX_E	Ev84707a	Lake Alfred Exper	280600	814300
L ALF EX_R	Pc84707a	Lake Alfred Exper	280600	814300
LAKELA 5_R	Pc84797a	Lakeland WB City	280200	815700
LISBON_E	Ev85076a	Lisbon	285200	814700
LISBON_R	Pc85076a	Lisbon	285200	814700
MELBOURN_R	Pc85612a	Melbourne	280400	803700
MIAMI BE_R	Pc85658a	Miami Beach	254648	800749
MIAMI.AP_R	Pc85663a	Miami Airport Wsmo Ap (Noaa Sta	254900	801700
HGS1_E	Ev85895a	HGS-1 Hurricane, Moore Haven	265022	810515
HGS1_R	Pc85895a	HGS-1 Hurricane, Moore Haven	265022	810515
MOUNTIN_R	Pc85973a	Mountain Lake	275615	813604
NAPLES_R	Pc86078a	Naples	261004	814724
HGS6_R	Pc86485a	HGS-6/S-193 Hurricane Gate On Taylo	271225	804746
ORLAN AP_R	Pc86628a	Orlando WB Airport	283300	812000
PLANT CI_R	Pc87205a	Plant City	280100	820800
POMPANO B_R	Pc87254a	Pompano Beach	261400	800900
PUNTA G4_R	Pc87397a	Punta Gorda 4	265456	820000
ROYAL PA_R	Pc87760a	Royal Palm Ranger	252310	803539
	Pc87982a	Sanford		
STUART 1_R	Pc88620a	Stuart 1N	271200	801500
TAMITR40_E	Ev88780a	Tamiami Trail At 40 Mile Bend	254536	804930
TAMITR40_R	Pc88780a	Tamiami Trail At 40 Mile Bend	254536	804930
TAVERNIE_R	Pc88841a	Tavernier	250013	803110
TITUSVIL_R	Pc88942a	Titusville 2W	283700	805000
VERO 4W_E	Ev89219a	Vero Beach 4W	273748	802736
VERO 4W_R	Pc89219a	Vero Beach 4W	273748	802736
	Pc89401a	Wauchula		
WPB AIRP_R	Pc89525a	West Palm Beach Airport	264040	800636
WINTERHA_R	Pc89707a	Winterhaven	280047	814449

UNITED STATES ARMY CORPS OF ENGINEERS
COE - MONITORING STATION NETWORK

SFWMD Name	COE File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
CA3AVG	CA3AVG	Conservation Area 3 (3 Gage Ave)	254843	804320
S10A_C	S10A	S-10a Culvert On Hillsboro Canal	262134	801845
S10C_C	S10C	S-10c Culvert On Hillsboro Canal	262217	802109
S10D_C	S10D	S-10d Culvert On Hillsboro Canal	262318	802255
S11A_C	S11A	Culvert On Levee L-38w Fr	261036	802656
S11B_S	S11B	Spillway In Levee L-38w F	261208	802716
S11C_S	S11C	Spillway In Levee L-38w F	261345	802737
S12_T	S12_T	Mi C Outlets L67a To 40 Mi	254542	804334
S12A_S	S12A	Spillway On Levee L-29 At	254541	804918
S12B_S	S12B	Spillway On Levee L-29 At	254541	804612
S12C_S	S12C	Spillway On Levee L-29 At	254542	804338
S12D_S	S12D	Spillway On Levee L-29 At	254543	804054
S308_R	S308	Port Mayaca Lock Rainfall (Corp	265906	803706
S308_S	S308	S-308 Spillway (Only) On St. Lucie	265906	803706
S77_R	S77	S-77 Spill. & Lock On Caloosaha	265020	810508
S77_S	S77	S-77 Spillway (Only) On Caloosa	265020	810508
S78_R	S78	S-78 Spillway & Lock On Caloosa	264722	811811
S78_S	S78	S-78 Spillway On Caloosahatchee	264722	811811
S79_R	S79	S-79 Spillway & Lock On Caloosa	264325	814155
S79_S	S79	S-79 Spillway(Only) On Caloosah	264325	814155
S80_R	S80	S-80 Spillway And Lock On St.Lucie	270639	801706
S80_S	S80	S-80 Spillway (Only) On St. Lucie	270639	801706

Appendix IIIe. **DEPARTMENT OF ENVIRONMENTAL PROTECTION**
DEP - MONITORING STATION NETWORK

SFWMD Name	DER File ID	Full Name Description	Latitude Deg:Min:Sec	Longitude Deg:Min:Sec
C-10	C-10	Station At Sr441 In Pahoke	264753	804146
C-12	C-12	Sta 2 Miles South Of Pahok	264455	804105
C-12A	C-12A	Station 1.5 Miles S. Of P	264643	804137
C-4A	C-4A	Station West Of Belle Glad	264056	804502

