Special Publication SJ96-SP15

Final Report

INVESTIGATION OF LAKE AND SURFICIAL AQUIFER INTERACTION IN THE UPPER ETONIA CREEK BASIN

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SJRWMD Contract Number: 93W296
UF Number: 49104510425
Gainesville, Florida 32611

September 1996

EXECUTIVE SUMMARY

The Upper Etonia Creek Basin (UECB) is located in north-central Florida and comprises parts of Alachua, Bradford, Clay, and Putnum counties. Over the last 5 to 10 years, many of the lakes in this basin have experienced significant declines in lake stage, adversely affecting both recreational use and surrounding property values. Previous investigations have cited below-average rainfall, cessation of surface-water inflows, and vertical leakage to and declining levels in the underlying upper Floridan aquifer as significant factors contributing to the fluctuating lake stage levels.

This project was authorized by the St. Johns River Water Management District in October 1993 to examine lake and surficial-aquifer interactions for lakes Lowry, Magnolia, Brooklyn, and Geneva and to refine previously calculated water-budgets. This report details the investigation of four lakes located in the UECB. Lakes Lowry, Magnolia, Brooklyn, and Geneva were monitored over a period of 12 months from August 1994 through July 1995.

To quantify the exchange of water between the lakes and the surficial aquifer, 33 new surficial aquifer monitoring wells were installed around lakes Brooklyn, Geneva, Halfmoon, Lowry, and Magnolia to measure water table elevations. Hydraulic properties in the study area were obtained from slug tests and two pump tests. Flow-net calculations were performed, with the aid of the ARC/INFO®, for the four lakes in the study area. Using the water table elevations measured in wells around each lake, the slope of the water table into or out of the lake boundary was used to estimate the flow of ground water in the surficial aquifer. The well information also was used to generate surficial aquifer water table maps on a monthly basis.

The calculated water flow between the surficial aquifer and each lake was incorporated into water budgets representing the period over which the well data were collected. The water budgets were then used to estimate the amount of water leaving the lake and surficial aquifer and that flowing deeper to the upper Floridan aquifer. The budgets were also used to determine the magnitude of each component in the water budget for each lake.

Lakes Lowry, Magnolia, Brooklyn, and Geneva are in close proximity and interact hydraulically. The water budgets indicate that the lakes receive approximately the same rainfall and lose approximately the same amount of water per unit of surface area to evaporation, but each lake also has unique hydrologic characteristics. Lowry Lake receives surface water inflow from Blue Pond via Alligator Creek and from the spring northeast of the lake, and it also receives inflow from the surrounding surficial aquifer. It loses water to surface water outflow and vertical leakage to the underlying upper Floridan aquifer. The stage of Lowry Lake is very stable. Magnolia Lake receives surface water inflow from Lowry Lake and surficial-aquifer inflow from the north, and it loses water via surficial-aquifer outflow to the south. Magnolia Lake also loses water by means of vertical leakage to the upper Floridan aquifer. Large losses by means of surface water outflow also have occurred since the resumption of surface water discharge from Magnolia Lake at the end of 1991. The volume and surface area of Magnolia Lake are smaller than the volumes and surface areas of the other lakes, and the surface water inflow and outflow components (when expressed in length per time units) for Magnolia Lake are much larger than the corresponding components for the other lakes.

Lake Brooklyn receives surficial-aquifer inflow from the north and southwest, and it discharges to the surficial aquifer to the northwest, south, and east. The surficial-aquifer inflow and

outflow are variable from month to month, but generally the outflow exceeds the inflow. Relatively large amounts of water discharge via vertical leakage to the upper Floridan aquifer. The stage of Lake Brooklyn responds quickly to changes in surface water inflow, and its fluctuations are greatest of the four lakes investigated. From August 2, 1994, to July 5, 1995, its stage increased more than 5 ft, mostly in response to the resumption of surface water inflow in Alligator Creek from Magnolia Lake. Surface water outflow has not occurred from Lake Brooklyn since 1973. Lake Geneva is a true seepage lake, i.e., it has not received surface water inflow since 1973, and surface water discharge has not occurred since before 1965. Inflow occurs via surficial aquifer inflow, and outflow occurs via vertical leakage to the upper Floridan aquifer. The stage at Lake Geneva has been relatively stable, but at a lower than normal level, in the period during which no surface water flow has been received from Lake Brooklyn. Until surface water flow resumes from Lake Brooklyn, the stage in Lake Geneva likely will remain below what is considered normal for this lake.

Leakance is a measure of the conductance of the confining unit to vertical flow between the lake/surficial aquifer system and the underlying upper Floridan aquifer. The values for leakance at lakes Lowry, Magnolia, and Geneva are similar in magnitude (1.76×10^{-4} to 3.10×10^{-4} day^{-1}), and the value for leakance at Lake Brooklyn is somewhat greater (9.61×10^{-4} day^{-1}). This difference in leakance values helps to explain the different response that Lake Brooklyn has to cessation of surface water inflow. At Lake Brooklyn, when surface water inflow decreases, vertical leakage to the upper Floridan aquifer continues at a greater rate than at the other lakes, and, thus, the stage at Lake Brooklyn decreases at a faster rate than the stages at the other lakes. This is consistent with long-term observations that Lake Brooklyn is more affected by drought

periods, when surface water inflow decreases or ceases altogether, than many of the other lakes in the UECB.

The water budgets reveal that surficial aquifer inflow ranges from 4 to 30 percent of the water flowing into these lakes. The highest percentages are associated with the most stable lakes (Lowry, Magnolia, and Geneva). This suggests that the surficial aquifer interaction plays an important role in lake stability.

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CHAPTER 1
INTRODUCTION

BACKGROUND

The Upper Etonia Creek Basin (UECB) is located in north-central Florida and is comprised of parts of Alachua, Bradford, Clay, and Putnam counties (Fig. 1). Well-known for its numerous lakes, this region provides multiple recreational uses that influence the local economy. Many of these lakes have experienced significant declines in lake stage over the last five to ten years, however, adversely affecting both recreational use and property values. Lakes Lowry, Magnolia, Brooklyn, and Geneva (listed in downstream order) all lie within the UECB and were the focal point of this study.

The St. Johns River Water Management District (SJRWMD) authorized the University of Florida (UF) in January 1990 to investigate long-term hydrologic trends to help identify factors causing lake stage reductions. In Phase I of this investigation, below average rainfall was cited by UF as the primary factor influencing lake stage levels (Motz et al., 1991). A second phase of this project was authorized by SJRWMD in December 1990 to gather more information on the relation between ground water, surface water, and lake stage. The Phase II investigation (Motz et al., 1993) concluded that a regional decline in water levels in the upper Floridan aquifer also had significantly affected Lake Brooklyn. It was established that Lake Brooklyn has a very good hydraulic connection via vertical leakage with the underlying upper Floridan aquifer and that potentiometric-head declines in the upper Floridan aquifer have had an adverse effect on Lake Brooklyn's stage levels.

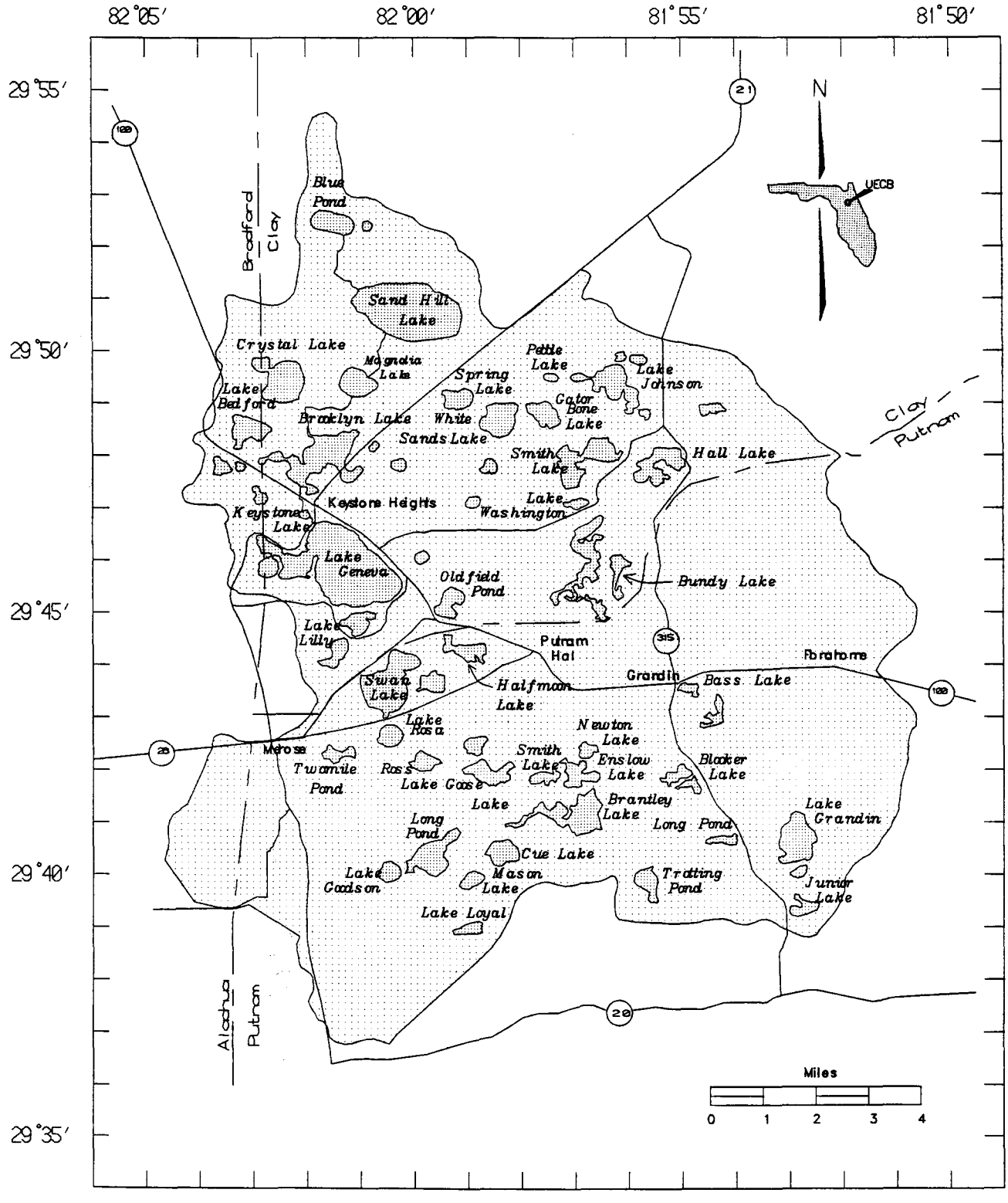


Figure 1. Upper Etonia Creek Basin

To quantify better the leakage component of the lake water budgets, it was recommended that the hydrologic factors affecting the lake control volumes be further analyzed. It was specifically recommended that the interactions between the lakes and the surficial aquifer be examined in more detail.

PROJECT OBJECTIVES

Following the recommendation in the Phase II hydrologic study of the UECB, SJRWMD authorized UF to examine lake and surficial aquifer interactions in October 1993. The primary objective of the study was the determination of the surficial aquifer inflow and outflow components for lakes Lowry, Magnolia, Brooklyn, and Geneva and the use of these data to improve water budget calculations through a full year of monitoring-well data collection. An additional objective was to quantify better the hydraulic properties and connections of the surficial aquifer, the upper Floridan aquifer, and each of the lakes.

PROJECT TASKS

In order to achieve the project objectives, the following tasks were accomplished:

Task 1. New well sites were selected, and water level data were collected monthly;

Task 2. Existing hydrologic data were compiled and reviewed;

Task 3. Monthly flow net analyses were made;

Task 4. Data were acquired to create updated water budgets and water table maps of the surficial aquifer;

Task 5. Future lake stages were considered; and

Task 6. Draft and final reports were prepared.

Task 1 consisted of collecting data on a monthly basis from a recently installed network of surficial aquifer monitoring wells that surround the four lakes (Annable et al., 1994). Task 2 consisted of compiling hydrologic data for the lakes, wells, climate, and geology. Much of the data were obtained from Motz et al. (1993). Task 3 consisted of analyzing surficial-aquifer ground water inflow and outflow for each of the four lakes for each month of data collection. Task 4 consisted of compiling the acquired and existing data to create new water budgets and water table maps for each of the four lakes. These updated water budgets reflected the additional surficial aquifer data collected. Task 5 consisting of considering the impacts that projected changes in ground water pumping from 1995 to 2010 will have on lake-stage elevations. Task 6 consisted of preparing draft and final reports.

PREVIOUS INVESTIGATIONS

Beginning in 1958, the hydrology of Lake Brooklyn was investigated as part of a study examining the water resources of Alachua, Bradford, Clay, and Union counties (Clark et al. 1963). A 20-foot decline in lake stage that was experienced during 1954-1958 prompted the Lake Brooklyn investigation. By October 1959, the lake had recovered to capacity and was discharging to Lake Geneva.

More recently, Bentley (1977) studied surface and ground water interactions in Clay County. In 1979, Yobbi and Chappell summarized the hydrology of the UECB. Motz et al. (1991, 1993) prepared two comprehensive hydrologic studies in the UECB that quantified lake and hydrologic interactions. It was concluded that low rainfall and a regional decline in the upper Floridan aquifer potentiometric surface had adversely affected some of the area lakes. Subse-

quently, Motz et al. (1994) modeled the Floridan aquifer system in north-central Florida to predict future impacts from ground water pumping.

Boyes reported to the Clay County Commission in 1992 that the surficial aquifer system in the UECB consists of two different hydrogeologic regions. The report concluded that in the northern section of the basin, the surficial aquifer system was characterized by "low transpiration, high recharge from rainfall and relatively stable water tables that parallel local topography (Boyes, 1992, p. 13)." Boyes also stated that in the southern Interlachen Karstic Highlands, the surficial aquifer is an area of "low transpiration, high recharge from rainfall and relatively unstable water tables due to vertical leakage (Boyes, 1992, p. 18)."

CHAPTER 2
REGIONAL SETTING

LOCATION

Listed in downstream order, lakes Lowry, Magnolia, Brooklyn, and Geneva all lie within the UECB (Fig. 2). A part of the St. Johns River Basin, the UECB lies adjacent to the Suwannee River Basin. It is located in north-central Florida and is comprised of parts of Alachua, Bradford, Clay, and Putnam counties. Lakes Lowry and Magnolia are located on the Camp Blanding Military Reservation, and lakes Brooklyn and Geneva are near Keystone Heights, south and downstream of Camp Blanding. The basin has an area of approximately 172 square miles, and it lies between 29°37' and 29°53' north latitude and 81°51' and 82°04' west longitude (Yobbi and Chappell, 1979).

WATER MANAGEMENT PROBLEMS

Rainfall and lake-levels in the UECB have fluctuated over the years. Well documented by local newspaper articles as well as the U.S. Geological Survey (USGS), the variable wet and dry periods that have occurred are not unusual. Water levels throughout the basin began to rise in 1942, only to cause flooding in 1948. Then from 1954 to 1957, a dry period caused many lakes to decline to their lowest recorded levels prior to that date (Clark et al., 1963). Subsequently, many lakes rose to the highest levels of record in 1973 and 1974.

Man has also altered the hydrology of the basin. A culvert from Lake Brooklyn was installed to raise the level of Lake Geneva. An outlet from Lake Geneva to Old Field Pond was enlarged after Lake Geneva's levels rose due to excess rainfall. In another recent instance,

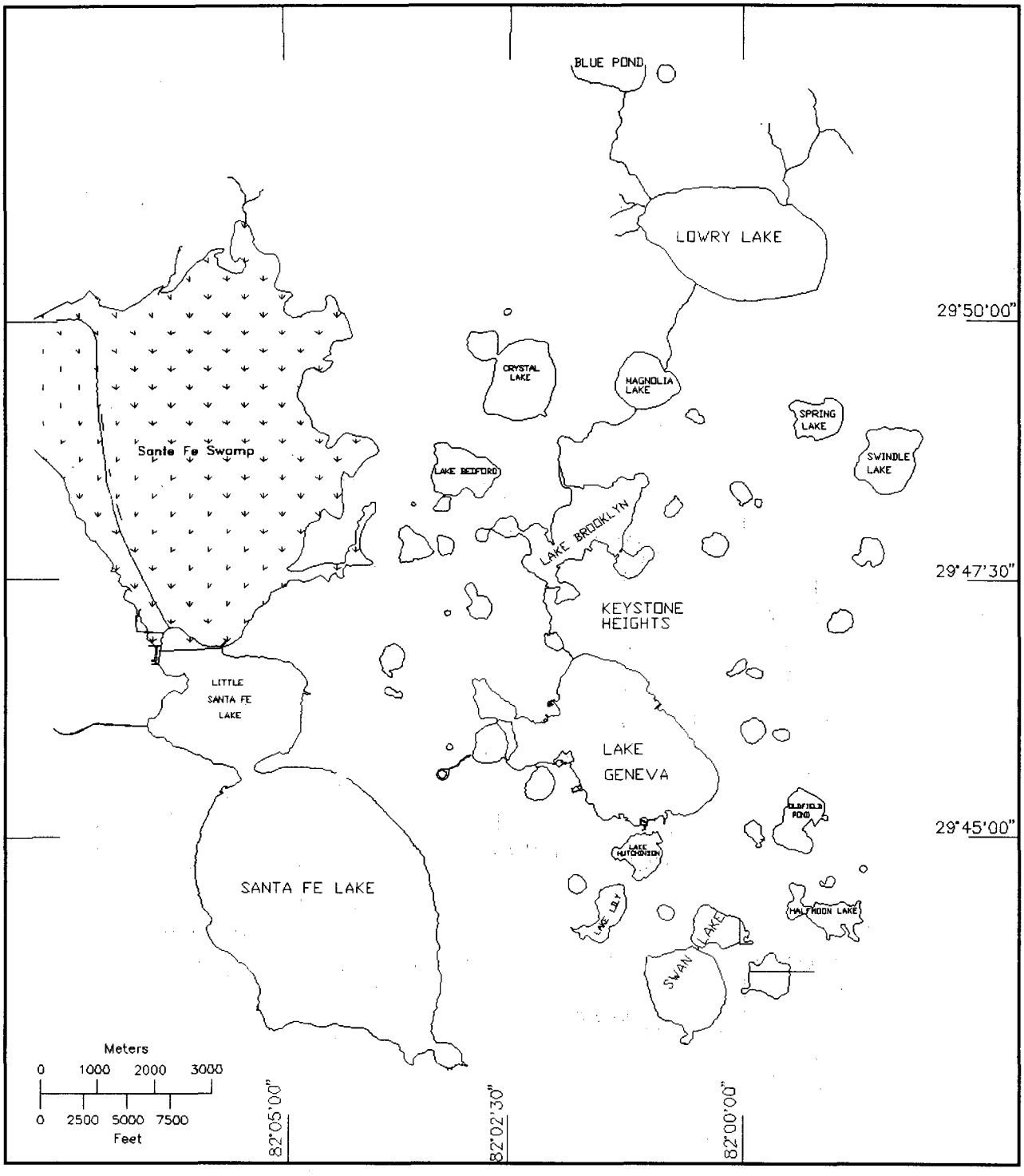


Figure 2. Lakes in Study Area

outflow from Magnolia Lake ceased, eliminating downstream flow to Lake Brooklyn and Lake Geneva (Motz et al., 1993).

CLIMATE

The climate in north-central Florida is classified as humid subtropical (Yobbi and Chappell, 1979). The division between the tropic and subtropic lies approximately 50 miles south of Gainesville, locating the basin in a zone of transition between the humid temperate climate of the southeastern U.S. and the tropical climate of the lower latitudes. The average annual temperature is approximately 72°F.

Precipitation

The area receives most of its rainfall during the summer months (June to September) while the winter is relatively dry. Rainfall in the winter and early spring generally is the widespread type associated with frontal activity. Local showers and thunderstorms are the main forms of summer rainfall (Clark et al., 1964).

The nearest long-term gaging station in Gainesville shows an average rainfall of 51.08 inches per year (Motz et al., 1994). Additional long-term stations are located in Melrose, Palatka, and Starke, all located outside but adjacent to the UECB. Statistical comparisons of monthly and annual rainfall data from these four gages for periods of record containing comparable data indicate that each gage receives approximately similar rainfall amounts (Motz et al., 1991).

Daily precipitation values measured at lakes Lowry, Brooklyn, and Geneva were used in the water budget calculations. Magnolia Lake data were not available, so the values from the adjacent Lowry Lake were substituted. These data were applied to quantify accurately the rainfall amounts at each lake. In previous studies, Gainesville data were used for all lakes. While no

critical differences were observed between any of the lakes and Gainesville's precipitation, some differences may occur over an extended water budget period.

Over the last 100 years, there have been three general trends in precipitation as indicated by the cumulative rainfall departure curve for 1897-1992 (Fig. 3). From 1897 through 1943, rainfall was below average. Rainfall was above average from 1944 through 1972, and it fell below average again from 1973 through 1992 (Motz et al., 1994).

Evaporation and Evapotranspiration

Evaporative processes play an important role in lake hydrology in the UECB. Pan evaporation, measured at Gainesville, averages 61.72 inches per year for the period 1954 to 1989 (Motz et al., 1991). Pan evaporation is proportional to lake evaporation and generally greater. The mean annual evapotranspiration in north-central Florida ranges from 33.5 to 35.4 inches, and mean annual lake evaporation is approximately 45 inches (Fernald and Patton, 1984).

PHYSIOGRAPHY

The UECB lies in the major physiographic division known as the Northern Highlands (Puri and Vernon, 1964). Trail Ridge, which consists of a series of sand hills extending southward from southern Georgia, terminates near the lakes at Keystone Heights. Elevations extend to above 200 feet NGVD and drop below 80 feet NGVD (Pirkle et al., 1977). The lakes have developed in numerous solution depressions.

More than 100 named and unnamed lakes lie in the UECB. Most of the lakes exhibit a surface area of less than 200 acres (Motz et al., 1991). A large part of the basin's drainage occurs through a chain of eight lakes (Fig. 4). At the upstream end of the chain, Blue Pond has a stream-

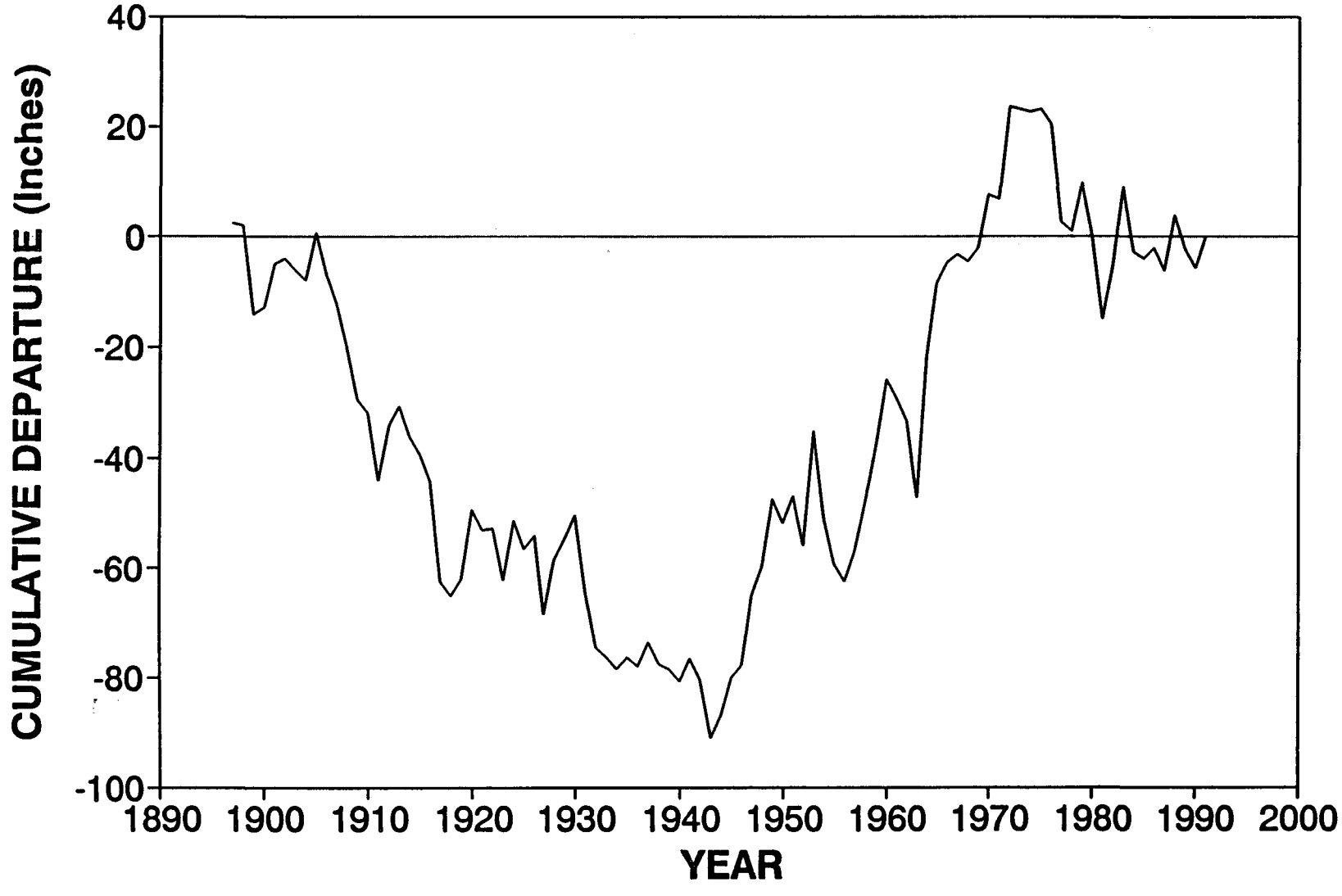


Figure 3. Cumulative Departure from Average Rainfall Measured at Gainesville for 1897-1992

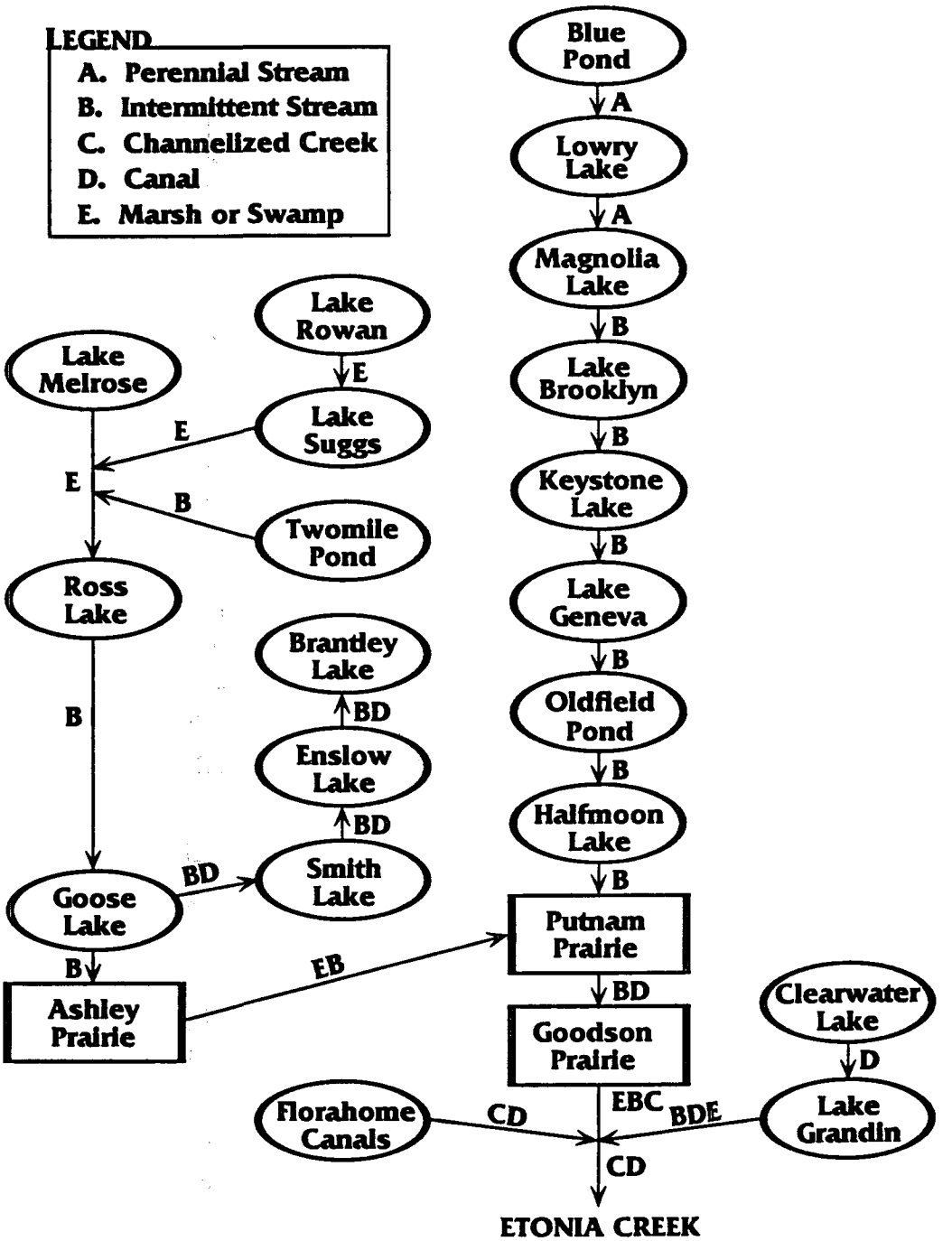


Figure 4. Lake Chain in UECB

bed profile elevation of more than 170 ft, NGVD, while the inlet to Putnam Prairie below Halfmoon Lake at the downstream end of the chain is at approximately 90 ft, NGVD (Yobbi and Chappell, 1979) (Fig. 5).

Intermittent streamflows are typical downstream of Magnolia Lake. Surface water flow from both Lake Brooklyn and Lake Geneva has rarely occurred in the last twenty years (Fig. 6).

OBSERVED LAKE BROOKLYN STAGE FLUCTUATIONS AND DROUGHT

The decline of the lake level of Lake Brooklyn has raised concern in the UECB in recent years. From 1957 to 1991, the lake stage fluctuated more than 24 feet (Fig. 6). For this reason, the lake is considered to be highly unstable (Motz et al., 1991).

Lake Brooklyn receded to a level of approximately 20 feet below what was considered the normal stage during 1954-1958. During that period, its lowest stage of record was 97.2 feet, NGVD, which occurred in February of 1958. This minimum lake stage followed three years of below-average rainfall. Lake Brooklyn declined to such a low stage that it separated into a number of small lakes and ponds, which also occurred more recently in 1991. As surface water inflow resumed from Magnolia Lake in March 1958, Lake Brooklyn began its recovery (Clark et al., 1963). At the end of 1959, after 2 1/2 years of excessive rainfall, the lake had filled, and water began flowing again from the outlet to Keystone Lake and on to Lake Geneva.

A report by Clark et al. (1962) concluded that the major cause of low lake stages at Lake Brooklyn and other lakes in the UECB was the rainfall deficiency during the 1954-1956 period. They concluded that the "low lake levels will not be permanent, although they may recur (Clark et al., 1962, p. 19)."

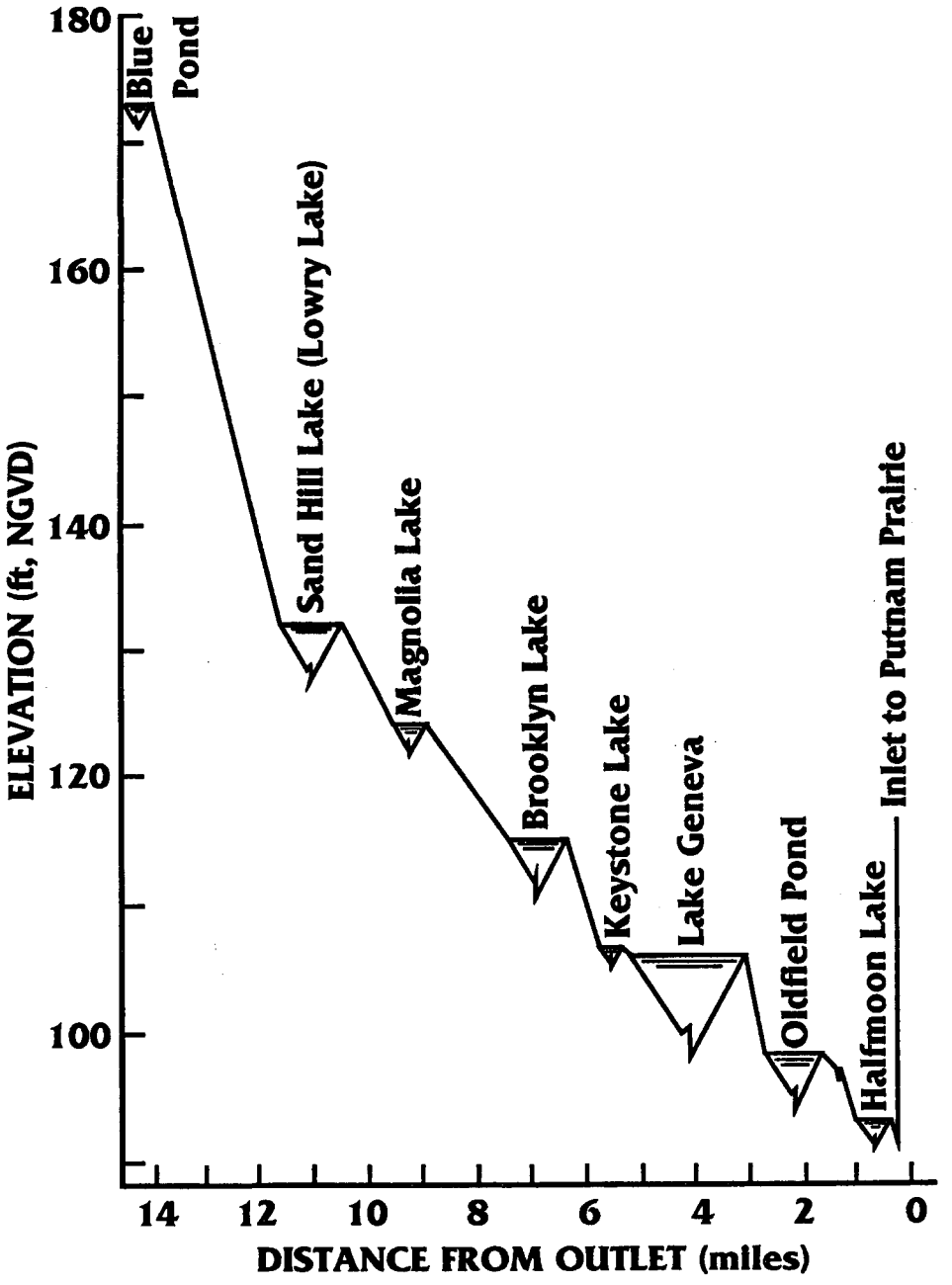


Figure 5. Lake and Stream Profile from Blue Pond to Halfmoon Lake

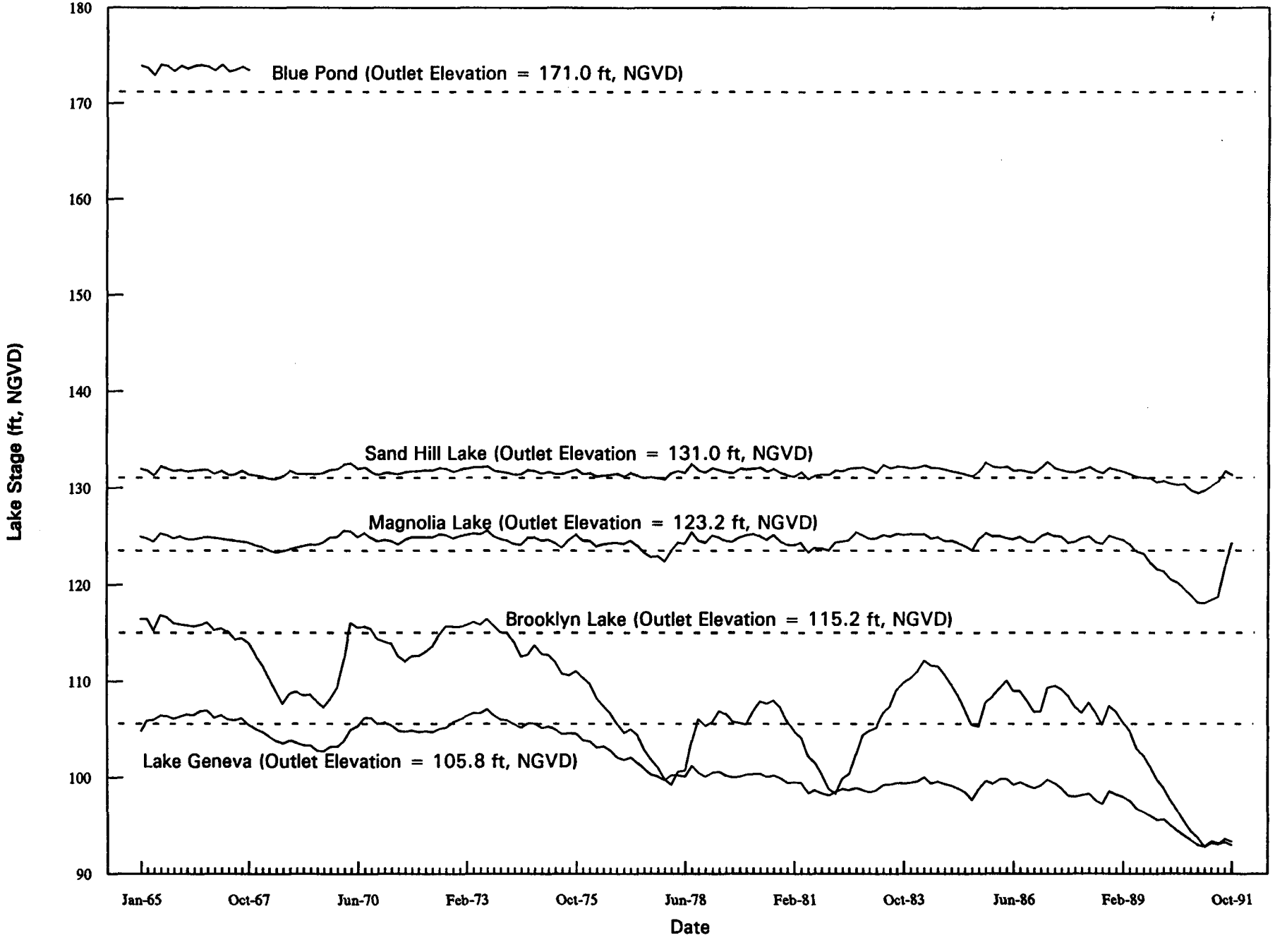


Figure 6. Lake Stage Records for Selected Lakes in the UECB for 1965-1991

CHAPTER 3
GEOLOGY

INTRODUCTION

Unconsolidated to semi-consolidated sand, clayey sand, marl, and shell make up the majority of surficial geologic deposits in the UECB. The thickness of these sediments ranges from 10 to 100 feet, and the sediments are associated with the Pleistocene and Pliocene periods. These deposits are underlain by the Hawthorn Group, a marine deposit of Miocene age which consists of clay, quartz, sand, carbonate, and phosphate (Clark et al., 1964). The Ocala Limestone lies below the Hawthorn Group. This formation ranges in thickness from 200 to 400 feet and is of the Late Eocene period. The major geologic layers in the area of the UECB (Table 1) are discussed sequentially in the following sections.

PRE-HAWTHORN FORMATIONS

Paleocene Series

The Cedar Keys Formation of Paleocene age consists predominantly of interbedded dolomite and anhydrite. The recognized base of the Floridan Aquifer system occurs at the base of the upper third of this formation, which consists of relatively impermeable, extensive anhydrite beds.

Elevations of the top of the Cedar Keys Formation range from -1,500 to -2,000 feet, NGVD, in western Clay and Putnam Counties to eastern St. Johns County, respectively. No wells are known to penetrate this formation in the UECB, so its total thickness is unknown.

Eocene Series

Stratigraphic units from the Eocene period include the Oldsmar Formation, the Avon Park Formation and the Ocala Formation. The deposits consist of porous and interbedded limestone and dolomite. The total thickness of the Eocene layers ranges from about 1,500 to 2,500 feet.

Table 1 Geologic layers in the Upper Etonia Creek Basin (Motz et al., 1993)

Geologic Age	Stratigraphic Unit	Approximate Thickness (ft)	Lithology
Pleistocene and Recent	Post-Hawthorn Deposits	10-100	Discontinuous beds of loose sand, clayey sand, sandy clay, marl, and shell
Pliocene	Post-Hawthorn Deposits	10-100	Clay, clayey sand, sandy clay, shell, and limestone
Miocene	Hawthorn Group	100-400	Interbedded clay, quartz, sand, carbonate, phosphate
Late Eocene	Ocala Limestone	200-400	Porous limestone
Middle Eocene	Avon Park Formation	500-1,200	Interbedded limestone and dolomite
Early Eocene	Oldsmar Formation	300-800	Interbedded limestone and dolomite
Paleocene	Cedar Keys Formation	Unknown	Interbedded dolomite and anhydrite

Sources: Bermes et al. 1963; Clark et al. 1964; Fairchild 1972; Hoenstine and Lane 1991; Leve 1966; Miller 1986; and Scott 1988.

HAWTHORN GROUP

The Hawthorn Group, which is semi-contiguous throughout the UECB, is a marine deposit of Miocene age composed of clay, sand, and phosphate. The formation ranges in thickness from 100 to 200 feet in most areas in the UECB, and it is easily identifiable using well gamma logs because of the presence of radioactive phosphate (Clark et al., 1964).

The elevation of the top of the Hawthorn Group ranges from 50 to 100 feet, NGVD, in western Clay and northwestern Putnam counties, and it decreases to between -50 and -100 feet, NGVD, in eastern Clay and northeastern Putnam counties (Scott, 1988). The Hawthorn Group generally decreases in thickness from north to south in Clay and Putnam counties. In central and northern Putnam County, its thickness is between 100 and 200 feet. This thickness increases to between 200 and 300 feet in Clay County.

POST-HAWTHORN DEPOSITS

Pliocene Deposits

The transition zone between the upper Pleistocene deposits and the Hawthorn Group is delineated by deposits of Pliocene age. These deposits contain "interbedded clay, clayey sand, ... shell and soft limestone" (Motz et al., 1993). The clay content may vary considerably (Boyes, 1992).

Pleistocene and Recent Deposits

Deposits associated with the northern Trail Ridge consist mainly of coarse sands that are relatively uniform in size (Pirkle et al., 1974), as evidenced by the sand mining operations in the area. Higher percentages of clay and sandy clay, which may be partially stratified by semi-permeable clayey lenses, are likely to be found south of Trail Ridge.

CHAPTER 4
GROUND WATER HYDROLOGY

INTRODUCTION

Three aquifer systems exist in the UECB: the surficial, intermediate, and Floridan aquifer systems (Table 2). The uppermost water bearing unit in the UECB is the surficial aquifer system, which plays an important role in the recharge of the basin's surface water bodies. The intermediate aquifer system lies within the Hawthorn Group, and it is an artesian aquifer that is utilized primarily for self-supplied drinking water. The Floridan aquifer system is also an artesian aquifer system, and it is separated from the intermediate aquifer by the lower confining unit of the Hawthorn Group. This system is the deepest of the three aquifer systems and is made up of two zones, the upper and lower Floridan aquifers. The upper Floridan aquifer is the major source of industrial and drinking water supplies in the UECB. Water levels in this aquifer are important in controling leakage from overlying surface water bodies.

SURFICIAL AQUIFER SYSTEM

The deposits of the Pliocene, Pleistocene, and Recent deposits make up the surficial aquifer system (Kane, 1984; and Clark et al., 1964), which can range in thickness from 20 to more than 110 feet. The surficial aquifer is a phreatic aquifer, and the water table generally follows the local topography (Miller, 1986). The lake stages of the UECB generally coincide with the water table elevation in the surficial aquifer, with recharge and precipitation producing fluctuating ground water levels.

Table 2 Hydrogeologic Units of the Upper Etonia Creek Basin (Motz et al., 1993)

Geologic Age	Geologic Unit	Hydrologic Unit	Description
Pleistocene and Recent	Pleistocene and Recent deposits	Surficial Aquifer System	Consists of sands, clayey sand, and shell. Thickness ranges from 20 to more than 110 ft.
Pliocene	Pliocene deposits		
Miocene	Hawthorn Group	Upper Confining Unit	Consists of clay marl, and discontinuous beds of sand, shell, dolomite, and limestone. Thickness ranges from 150 to 450 ft.
		Intermediate Aquifer System	
		Lower Confining Unit	
Late Eocene	Ocala Limestone	Upper Floridan Aquifer	Consists mainly of limestone of high primary and secondary porosity. Thickness ranges from 300 to 700 ft.
Middle Eocene	Avon Park Formation	Middle Confining Unit	Consists of leaky, low permeability limestone and dolomite. Thickness ranges from 50 to 200 ft.
Early Eocene	Oldsmar Formation	Lower Floridan Aquifer	Consists primarily of interbedded limestone and dolomite. Thickness ranges from 1,100 to 1,500 ft.
Paleocene	Cedar Keys Formation	Lower Confining Unit	Consists of low permeability anhydrite beds.

Sources: Clark et al. 1964; Hoenstine and Lane 1991; Miller 1986; Scott 1988; and Southeastern Geological Society 1986.

INTERMEDIATE AQUIFER SYSTEM

The top of the Hawthorn Group serves as the upper confining unit that separates the surficial and intermediate aquifer systems. The degree of hydraulic connection between the two systems varies throughout the UECB as the formation thickness ranges from 25 feet to complete absence. Discontinuous limestone, dolomite, shell, and sand beds make up the intermediate aquifer system. Due to breaches in the lower confining unit, which can allow significant vertical leakage, the base of the intermediate aquifer is connected hydraulically to the upper Floridan aquifer.

FLORIDAN AQUIFER SYSTEM

Four major components make up the Floridan aquifer system: an upper zone of a relatively high permeability, a middle confining zone of low permeability, a lower zone of low-to-high permeability, and a lower confining unit. The karst limestone formations that constitute the Floridan aquifer system are of Eocene age. The upper Floridan aquifer is a zone of high permeability, and its thickness generally increases from west to east within the study area. The middle confining unit exhibits lower permeability, and its thickness ranges from 50 to 200 feet. Little is known of the lower Floridan aquifer because few wells have penetrated its depths. Its thickness ranges from about 1,100 to 1,200 feet. The lower confining unit, which has a low hydraulic conductivity, is considered to be the bottom of the Floridan aquifer system.

RECHARGE AND DISCHARGE

Surficial Aquifer System

Precipitation and discharge from lakes are the primary means of recharge to the surficial aquifer system. Although precipitation is the main source, some lakes contribute recharge during

periods of low or negligible rainfall. This phenomenon is a consequence of declining ground water levels in the surficial aquifer surrounding the lakes.

Ground water discharges from the surficial aquifer include vertical leakage into the intermediate and upper Floridan aquifers, flux into lakes within the UECB, evapotranspiration, and pumping from domestic wells.

Intermediate Aquifer System

Through vertical leakage, the overlying surficial aquifer supplies most of the recharge to the intermediate aquifer. Recharge can occur from lakes directly on the upper confining unit of the Hawthorn Group. Ground water moves through direct hydraulic connections in the confining unit.

The intermediate aquifer mainly discharges in the form of vertically downward leakage to the Floridan aquifer system through the lower confining unit in the Hawthorn Group. Leakage also occurs through breaches and cavities in the formation. Pumping from private wells in the region is another form of discharge.

Floridan Aquifer System

Recharge to the Floridan aquifer system is derived from the intermediate aquifer system and from areas where lakes and the surficial aquifer system have a direct hydraulic connection. Overall, rainfall has a significant effect on recharge to the Floridan aquifer system. The recharge from the intermediate aquifer occurs through the lower confining unit of the Hawthorn Group. In addition, dissolution cavities in the upper Floridan aquifer may create hydraulic connections to the overlying intermediate aquifer because the lower confining unit becomes discontinuous, and they can even form connections completely through the Hawthorn Group into the surficial aquifer

system. Water level changes in the upper Floridan aquifer due to precipitation may have a lag-time of approximately one to two months (Hoenstine and Lane, 1991).

Potentiometric maps prepared by the USGS and SJRWMD consistently delineate a major ground water mound in the upper Floridan aquifer in the western part of the UECB (Figs. 7 through 10). Centered in the Keystone Heights area, this mound, or potentiometric high, indicates that the lakes and surficial aquifer system are a major source of recharge to the underlying Floridan aquifer system.

LONG-TERM DECLINE IN GROUND WATER LEVELS

The elevation of the potentiometric recharge mound decreased approximately five feet from May 1978 to September 1989 (Motz et al., 1991a). Longer-term records for the UECB also indicate a decline in the upper Floridan aquifer. A similar declining trend in ground water levels in the Floridan aquifer system was noted for an earlier period by Bentley (1977).

DOUBLE-MASS CURVE FOR FLORIDAN AQUIFER AND LAKE BROOKLYN

The water level in the upper Floridan aquifer is one of the major factors that affects the stage at Lake Brooklyn. The water level in well C-0120 for 1965-1991 was plotted by Motz et al. (1991) to investigate whether this relation between ground water and lake levels has remained constant (Fig. 11). The relationship between the upper Floridan aquifer water level at well C-0120 and Lake Brooklyn stage did not change during 1965-1991 as evidenced by the constant slope of the double-mass curve for the ground water and lake-levels (Fig. 12).

REGIONAL WATER USE

Ground water is pumped from the upper Floridan aquifer in and adjacent to the UECB for public supply, agriculture, and mining (Motz et al., 1991a) (Table 3). The largest ground water

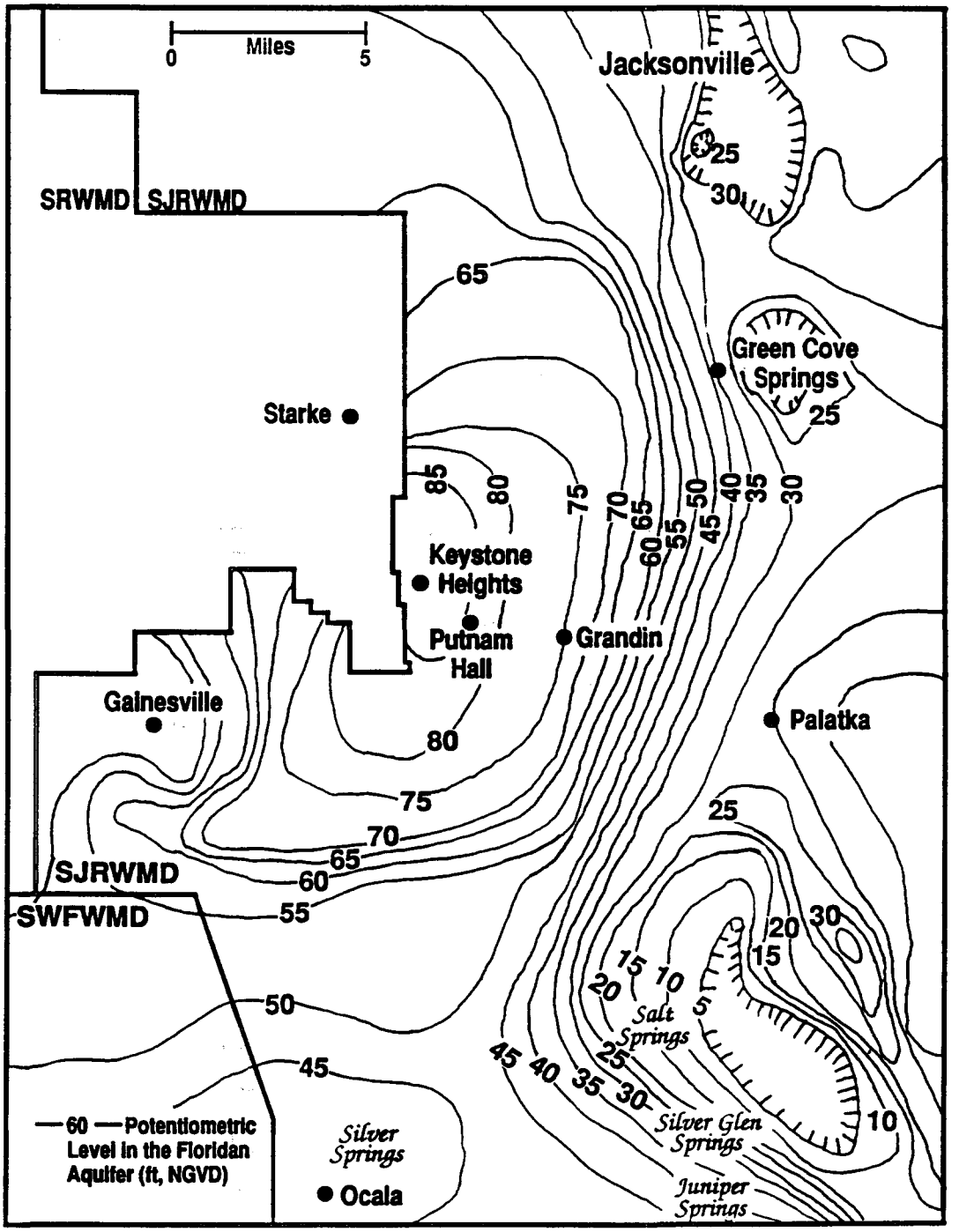


Figure 7. May 1978 Potentiometric Map of the Upper Floridan Aquifer in Vicinity of UECB and Surrounding Region

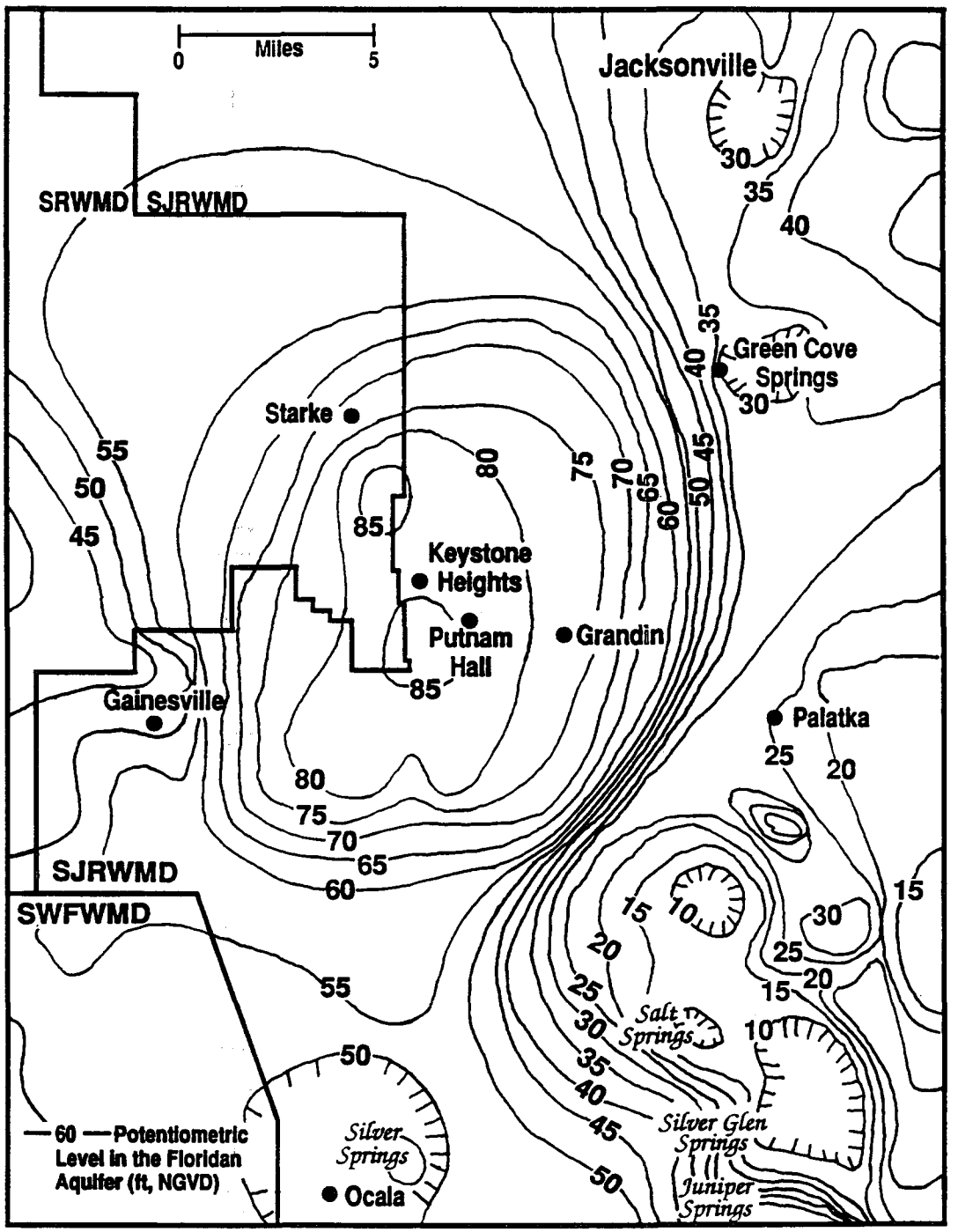


Figure 8. September 1982 Potentiometric Map of the Upper Floridan Aquifer in Vicinity of UECB and Surrounding Region

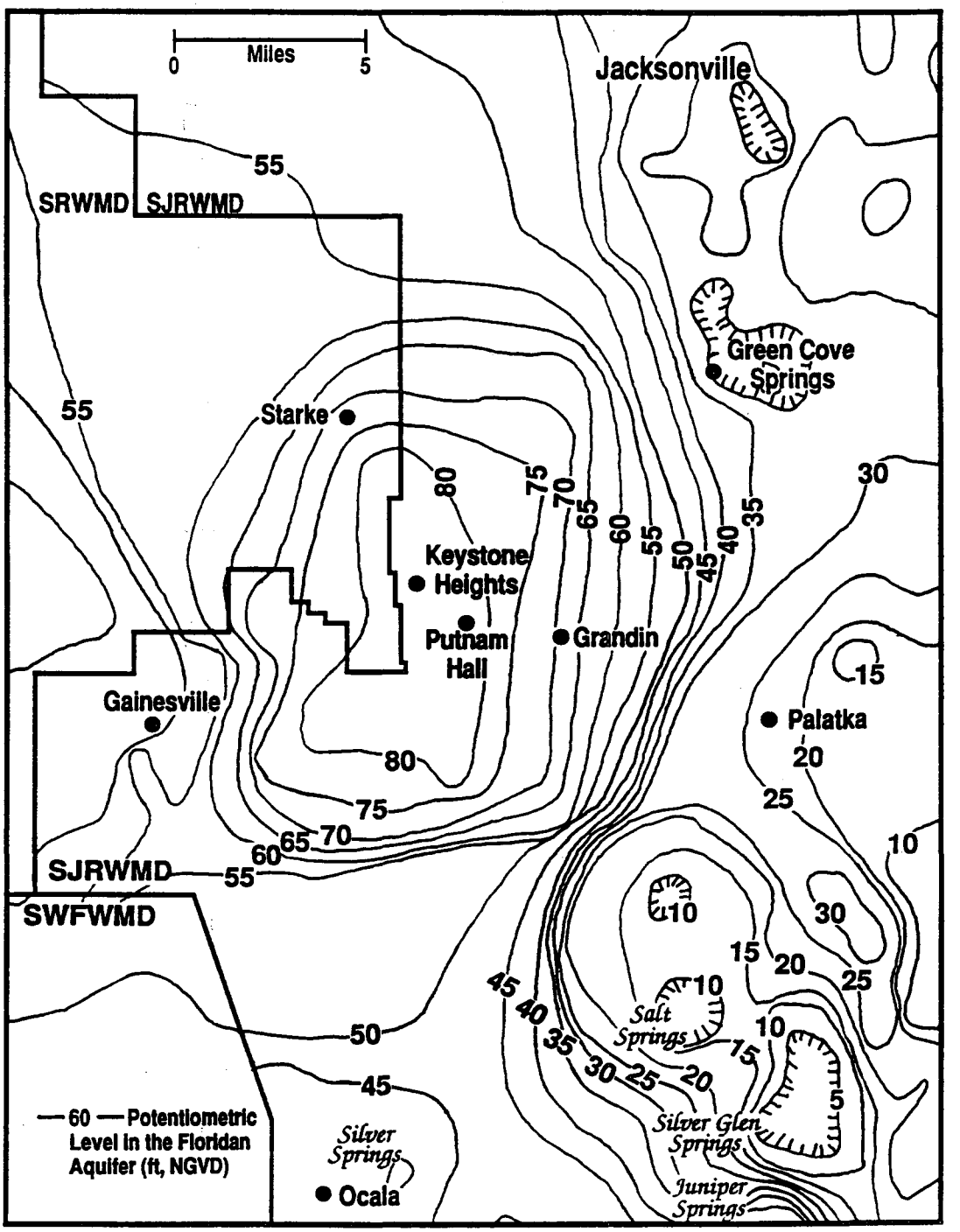


Figure 9. September 1986 Potentiometric Map of the Upper Floridan Aquifer in Vicinity of UECB and Surrounding Region

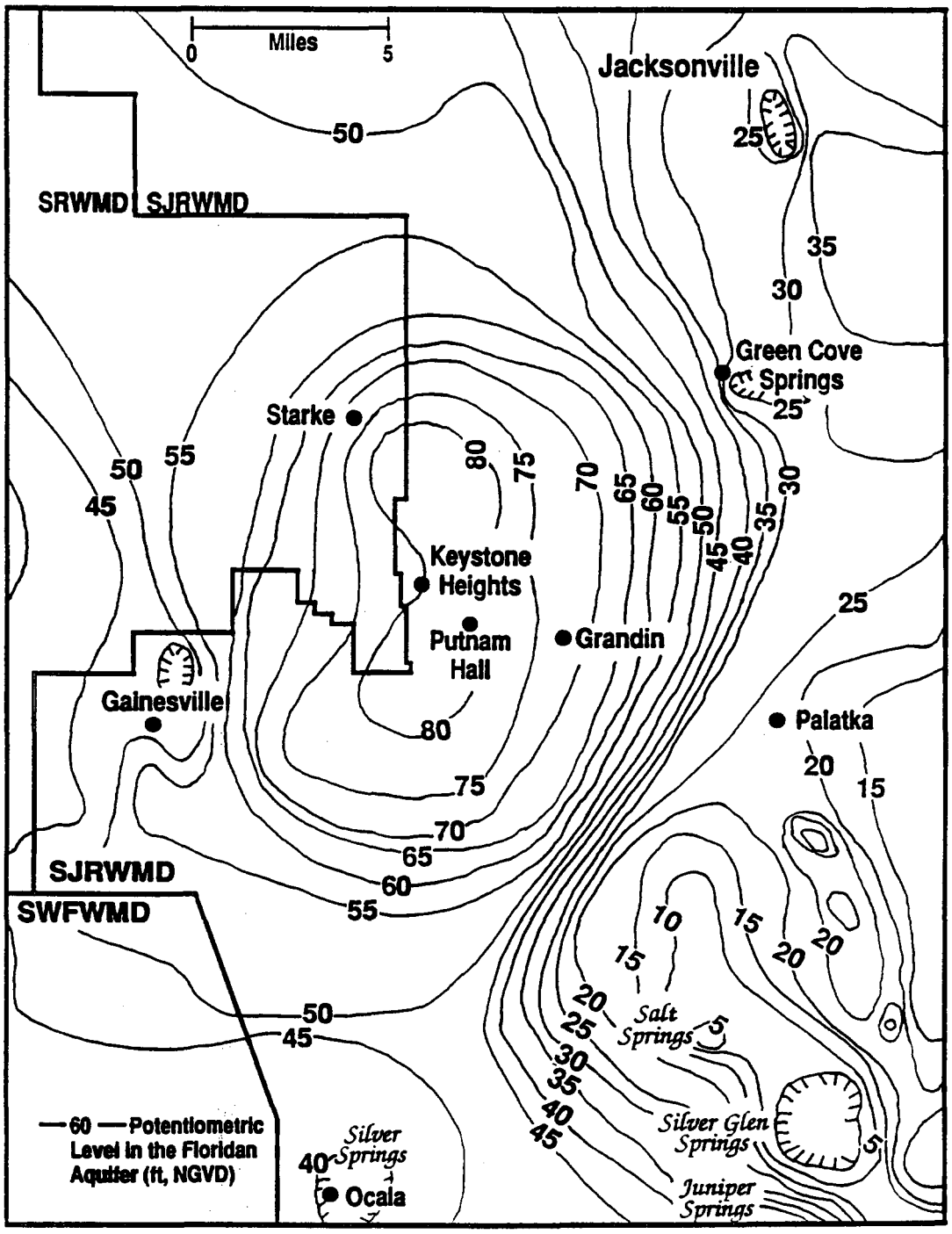


Figure 10. September 1989 Potentiometric Map of the Upper Floridan Aquifer in Vicinity of UECB and Surrounding Region

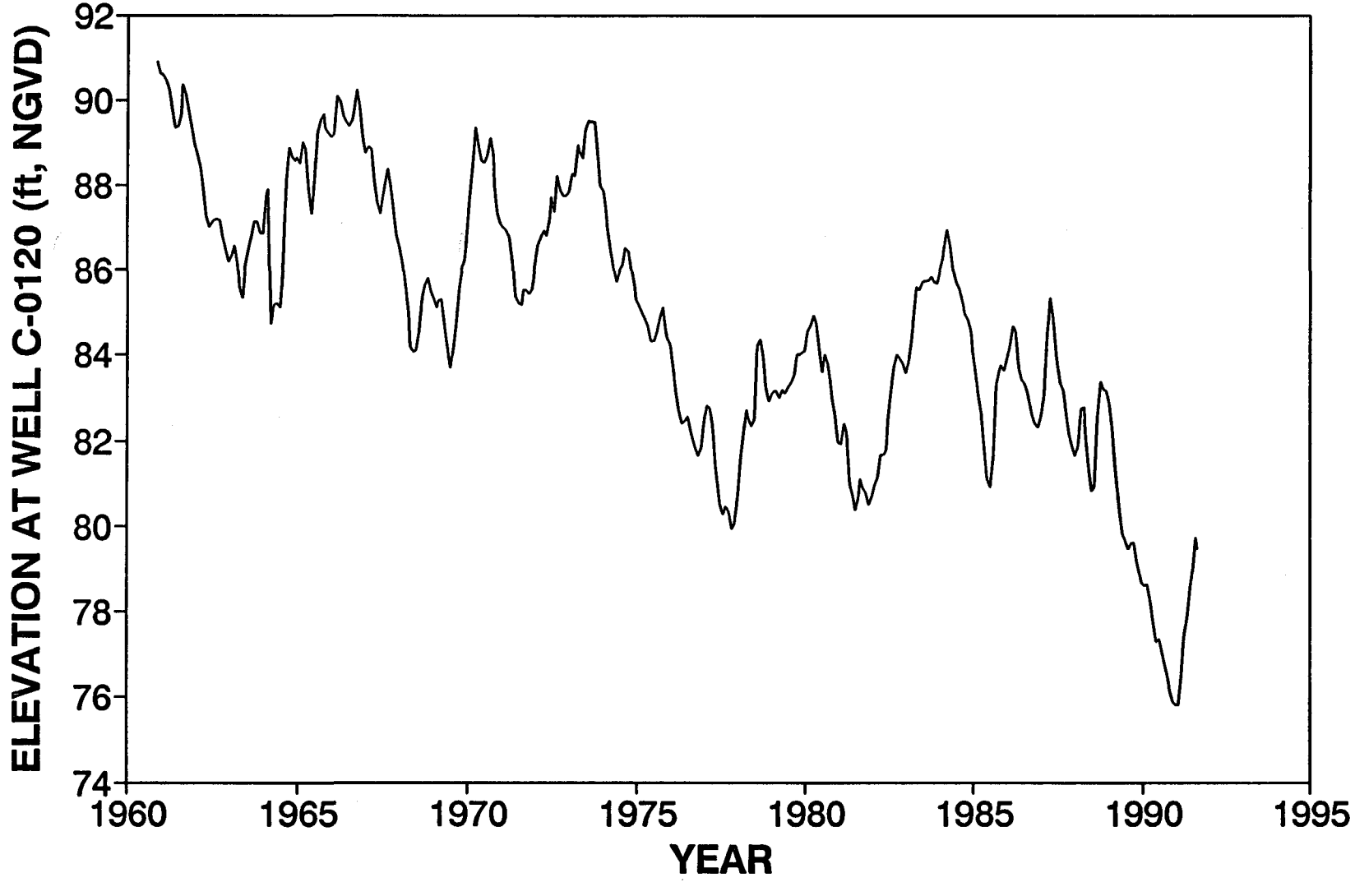


Figure 11. Upper Floridan Aquifer Water Level at Keystone Heights

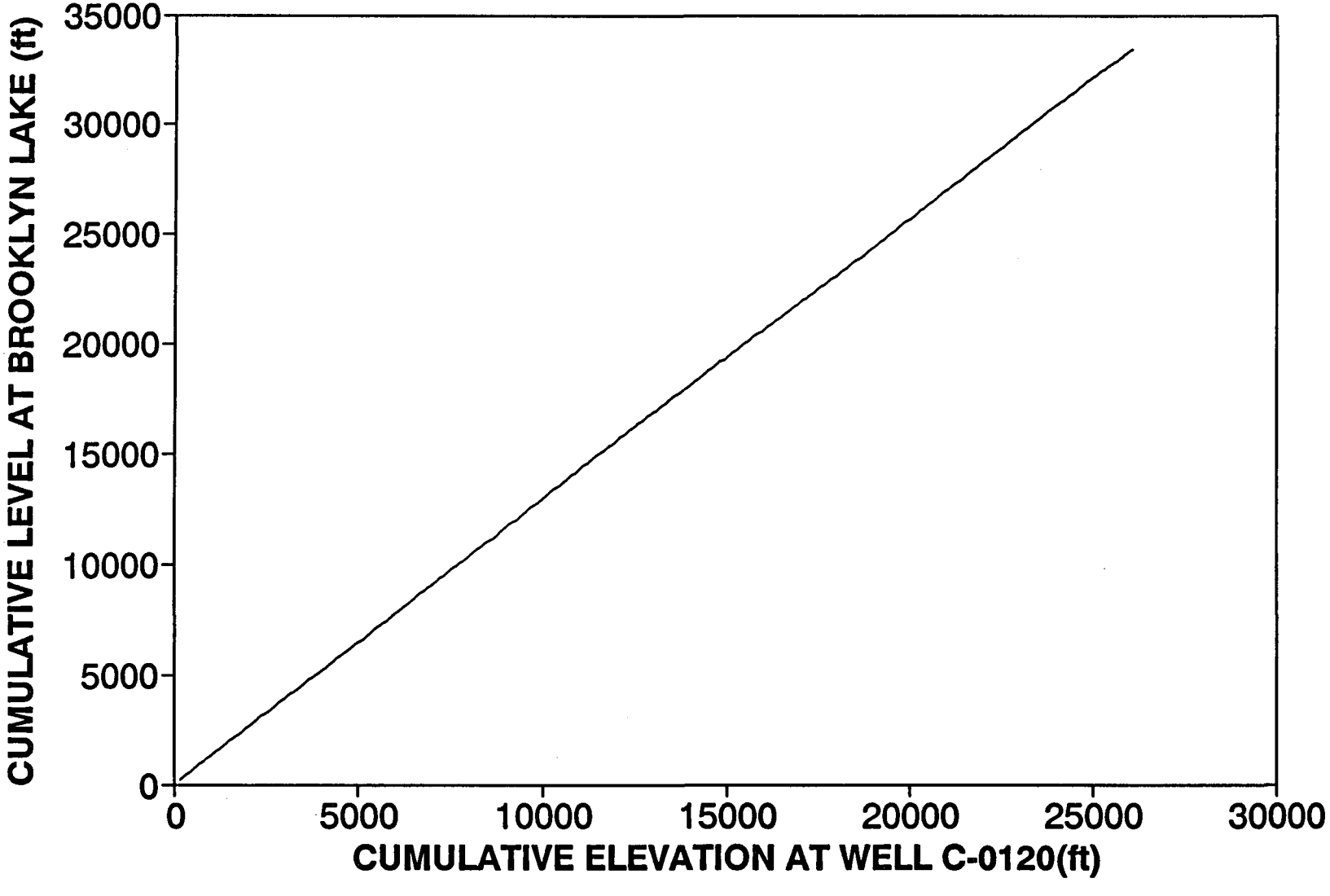


Figure 12. Double-Mass Curve for Lake Brooklyn Stage and Upper Floridan Aquifer Water Level at Well C-0120 for 1965-1991

Table 3. Major Water Users in the Floridan Aquifer Systems In and Adjacent to the Upper Etonia Creek Basin

Owner	County	Pumpage (mgd)	Use
City of Gainesville	Alachua	19.69	Public supply
Southern States Utilities	Bradford	0.038	Public supply
Camp Blanding	Clay	0.494	Public supply
City of Keystone Heights	Clay	0.394	Public supply
E.I. Dupont De Nemours & Co.	Clay	2.341	Mining
Florida Rock Industries Gold Head Sand Mine	Clay	2.09	Mining
Gold Head State Park	Clay	0.021	Agriculture
Jacksonville (metropolitan area)	Duval	173.06	Total water use
City of Palatka	Putnam	2.572	Public supply
Edgar Von Scheele R&R Peat Farms	Putnam	0.5	Agriculture
Florida Rock Industries Grandin Sand Mine	Putnam	0.78	Mining
Georgia Pacific Palatka Plant	Putnam	35.362	Industrial use
John W. McInarnay, Jr.	Putnam	0.15	Agriculture
Melrose Water Association	Putnam	0.067	Public supply

Source: Marella, 1990. (1987 values)

user is Florida Rock Industries, which operates the Grandin and Gold Head sand mines (see Fig. 13). Dupont operates a mine that is permitted to pump 2.341 mgd, but its center of pumping is located generally north of the UECB (Motz et al., 1991a). Other relatively large users include Southern States Utilities, Camp Blanding, and the City of Keystone Heights. The total pumpage from the upper Floridan aquifer in the UECB is approximately 7 mgd. In comparison, approximately 173 mgd of ground water is pumped in Duval County and 20 mgd at the Gainesville Regional Utilities Murphee Wellfield (Motz et al., 1994). Ground water is also pumped from the intermediate aquifer system for domestic supplies (Clark et al., 1964).

HYDRAULIC CHARACTERISTICS

In the UECB, hydraulic characteristics vary greatly for the surficial, intermediate, and Floridan aquifers.

Surficial Aquifer

Estimates of transmissivity for the surficial aquifer range from 60 to 7,000 feet squared per day (ft^2/day), and estimates for the storativity, or specific yield, range from 0.1 to 0.2 in Nassau, Putnam, Duval, and St. Johns Counties (Brown, 1984; Hayes, 1981; and Franks, 1980).

Intermediate Aquifer

Transmissivity estimates for the intermediate aquifer in Duval and St. Johns counties range from 250 to 7,000, ft^2/day, and the storativity estimates range from 0.00001 to 0.001 (Brown, 1984).

Upper Floridan Aquifer

Transmissivity values for the upper Floridan aquifer in the UECB and adjacent areas range from 80,500 to 497,000 ft^2/day (Andrews, 1990; Motz, 1989). Leakance values for the confining

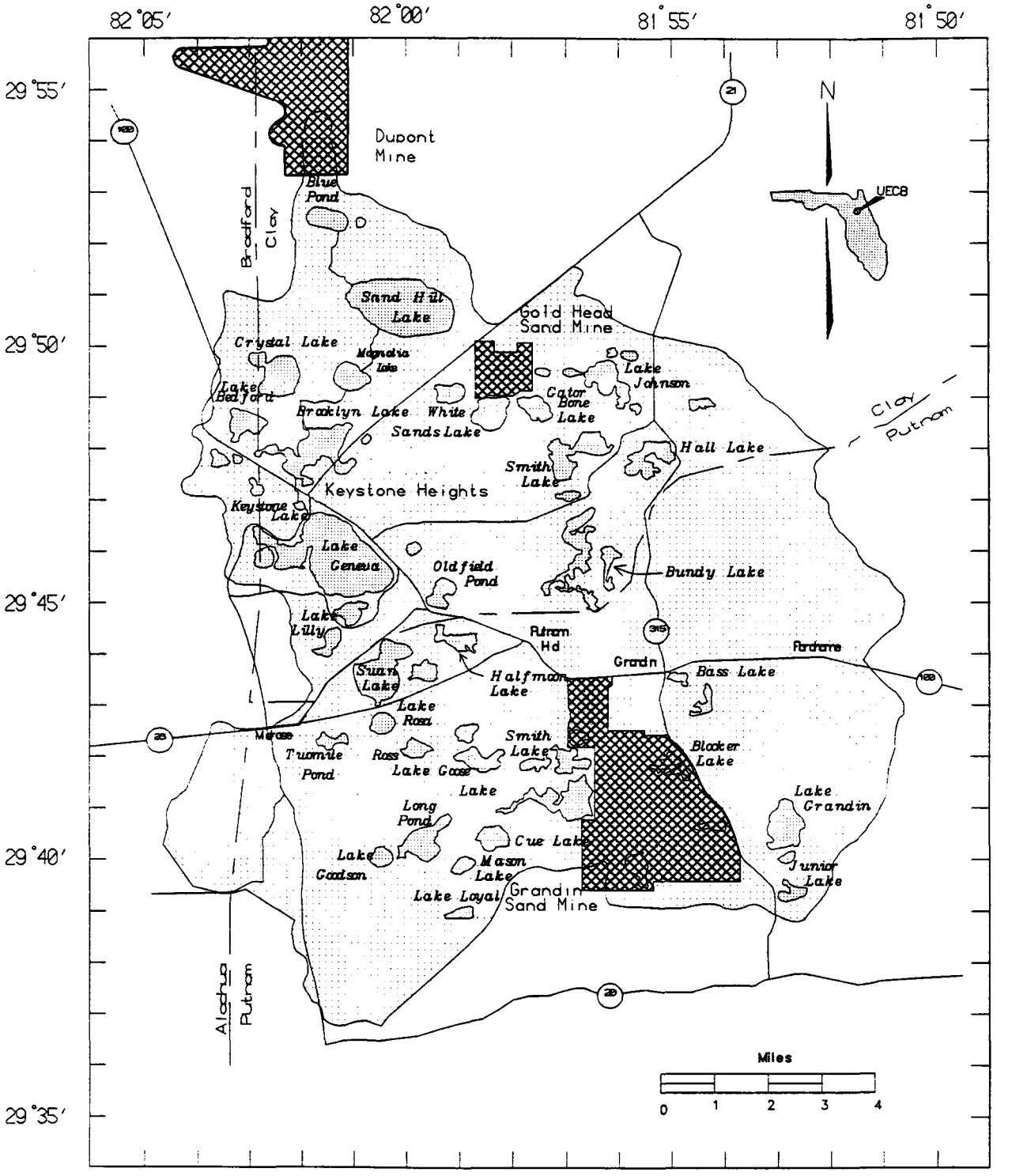


Figure 13. Location of Mines In and Adjacent to the UECB

unit overlying the upper Floridan aquifer range from 6.59×10^{-5} to 1.74×10^{-3} day^{-1} (Motz, 1989; Missimer and Associates, 1991). Storativity values generally range from 0.0001 to 0.001 (Johnston and Bush, 1989; Missimer & Associates, 1991; and Motz, 1989).

CHAPTER 5
HYDROGEOLOGIC INVESTIGATION

NEW WELLS IN UECB STUDY AREA

Wherever possible, data from existing SJRWMD wells were used in this study. In addition, to improve hydrologic characterization of the surficial aquifer in the UECB, 33 new surficial-aquifer monitoring wells were installed over the two-year period of this project (Fig. 14 and Table 4). The wells were placed primarily on county road rights-of-way areas and on the Camp Blanding Military Reserve. They were located to provide the best allowable coverage of all four lakes. In some cases, narrow road rights-of-way, sloping topography, and/or high-traffic areas necessitated the location of wells on private property (Appendix A). Water levels were measured for an entire calendar year at each of the wells to characterize an annual cycle of ground water level fluctuations (Appendix B).

The water table elevations exhibited a distinct trend during the year of data collection. Figure 15 shows the average water level differentials for well groups, relative to the initial data collected in May 1994. The wells were separated into two groups: Camp Blanding and Keystone Heights wells. The wells surrounding Lowry and Magnolia Lakes are on the Camp Blanding Military Reserve (C-0512 through C-0524), and they are representative of the northern region of the study area (Camp Blanding wells). The remaining wells are in the southern portion of the study area near Keystone Heights surrounding Lake Brooklyn and Lake Geneva (Keystone Heights wells).

A yearly sinusoidal cycle is exhibited by the Camp Blanding wells (Fig. 15). The water levels peaked in September 1994 and proceeded to decline to their minimum level in April 1995.

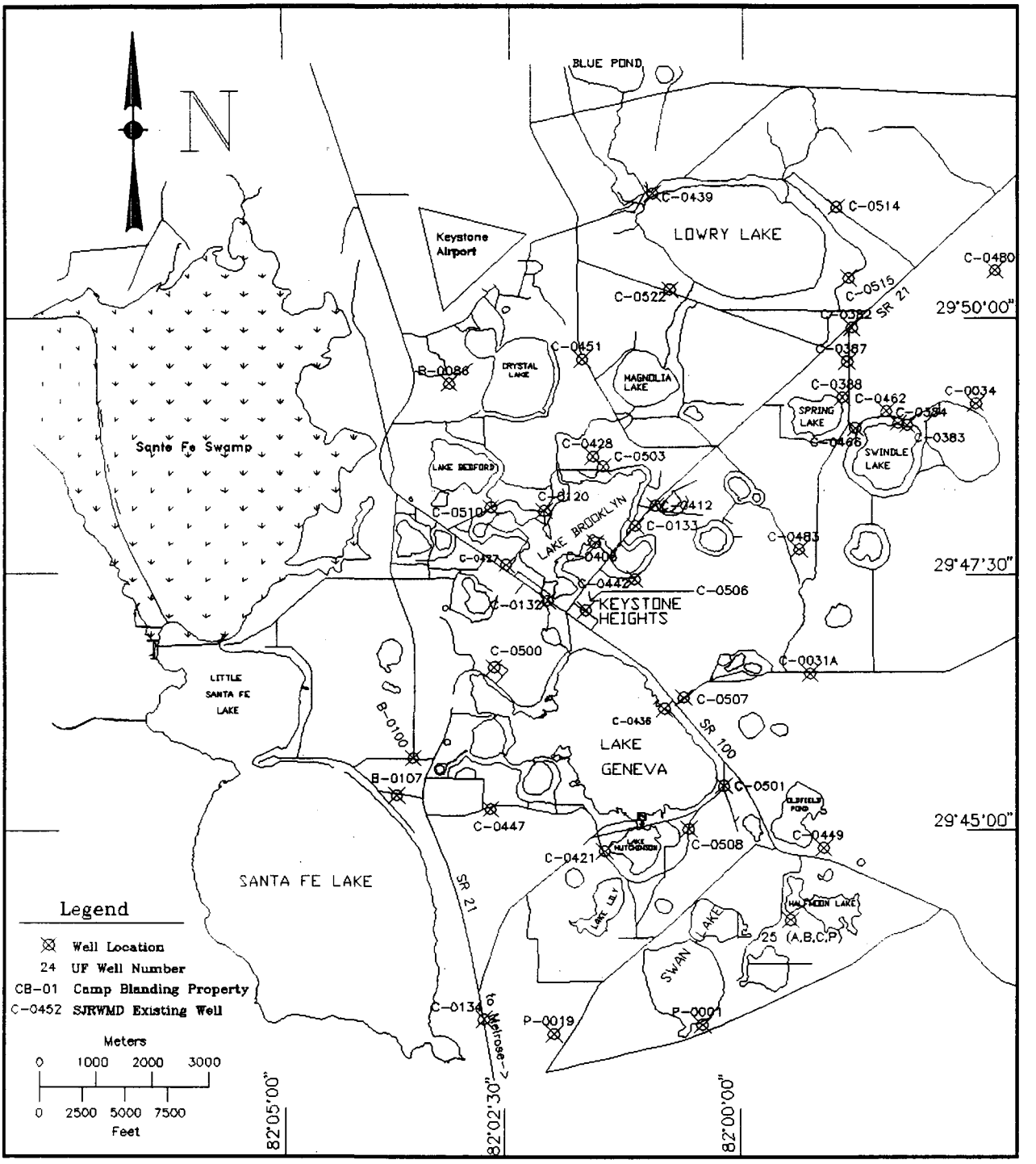


Figure 14. Surficial Aquifer Monitoring Wells in the UECB

Table 4. Elevations of Wells in UECB

Camp Blanding Well I.D.	Top of Casing Well Elevation (ft, NGVD)
C-0512	185.614
C-0513	185.904
C-0514	186.836
C-0515	173.266
C-0516	180.468
C-1517	179.382
C-0518	147.647
C-0519	144.712
C-0520	165.595
C-0521	174.356
C-0522	166.166
C-0523	165.878
C-0524	181.344

Keystone Heights Well I.D.	Top of Casing Well Elevation (ft, NGVD)
B-0098	151.516
B-0099	143.604
C-0500	134.691
C-0501	120.482
C-0502	127.537
C-0503	145.034
C-0504	No Well
B-0100	148.664
B-0101	155.020
B-0102	150.312
C-0505	139.986
B-0103	152.422
C-0506	148.829
C-0507	136.738
C-0508	141.829
C-0509	No Well
C-0510	164.950
C-0511	147.327
B-0104	164.166
B-0105	167.433
B-0106	156.767
B-0107	156.552

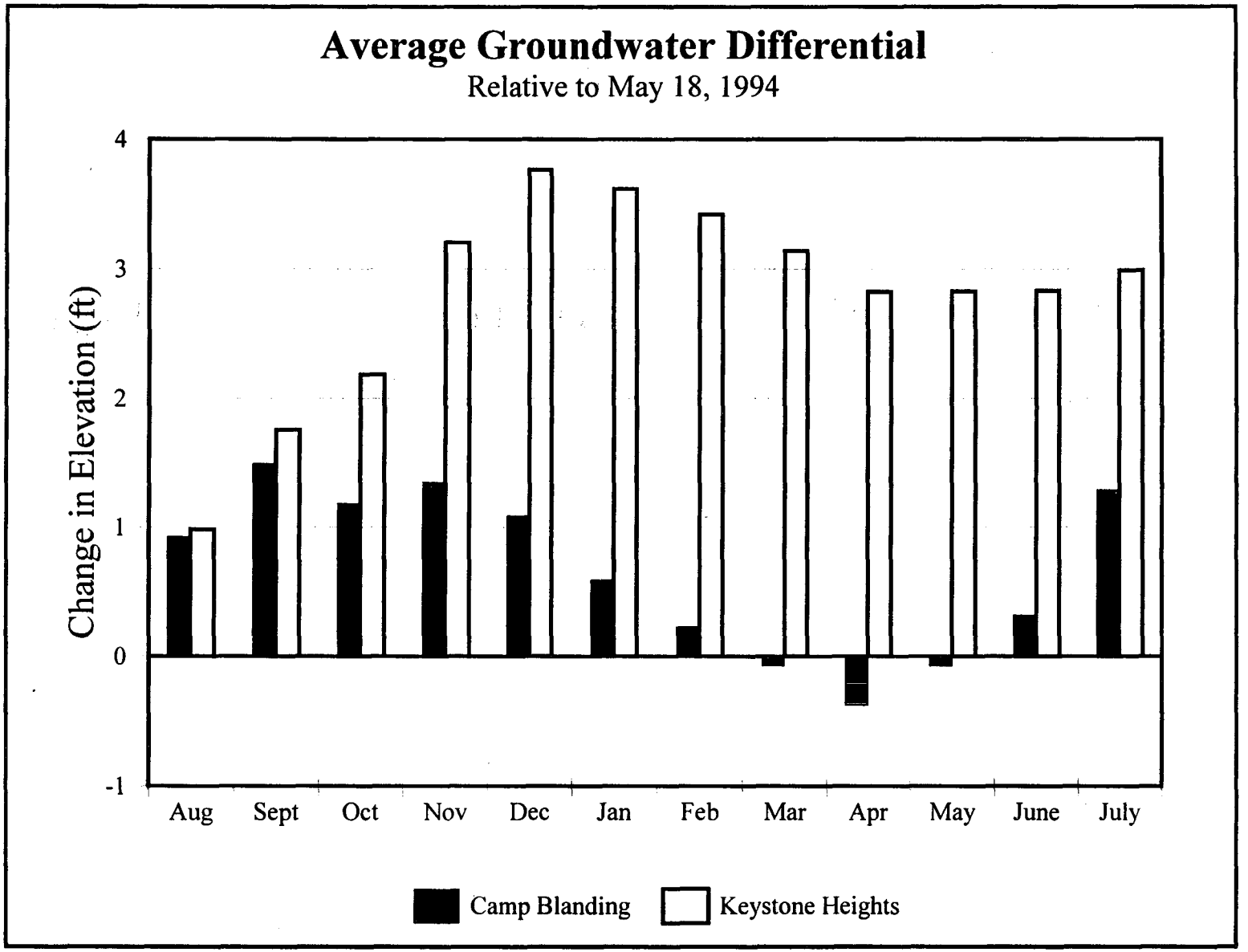


Figure 15. Ground Water Level Elevation Differential (August 1994 - July 1995)

In May 1995, the ground water table had returned to May 1994 levels. This suggests that during the year of study, the Camp Blanding wells, which surround stable lakes, exhibited a complete yearly cycle.

The Keystone Heights wells exhibited a similar pattern over the period of study. However, these wells did not decrease to the initial May 1994 levels and were nearly 2.5 feet higher in May 1995. After peaking in December 1994, the water table declined, reaching a level in April 1995 that remained fairly constant for the remainder of the data collection period. During the study period (August 1994 to July 1995), Lake Brooklyn rose more than 5 feet, indicating that the lake was in a dynamic recovery. This observation implies that the storage in the ground water system substantially increased during this period, and therefore this period is not representative of a typical annual cycle.

SURFICIAL AQUIFER TESTS

Slug and pump tests were performed to quantify the aquifer parameters transmissivity, hydraulic conductivity, and specific yield.

Slug Tests

Slug tests were performed in most of the surficial wells drilled for this study. The slug test data were analyzed using the Bower and Rice (1976) method for an unconfined aquifer (Table 5). The arithmetic and geometric means for hydraulic conductivity (K_H) are 5.6 and 4.0 ft/day, respectively.

Pump Tests

Two separate pump tests and recovery tests were conducted over a two-week period between December 15, 1993 and December 31, 1993 at Halfmoon Lake. The first test was run at

Table 5. Slug Test Results for New UECB Wells

Well Number	Date Performed	Saturated Thickness (feet)	Horizontal Hydraulic Conductivity (feet/day)
B-0098	02/05/94	36.0	2.73
B-0099	02/05/94	0.5	7.70
C-0500	02/10/94	36.0	2.10
C-0501	02/05/94	46.3	1.59
C-0502	02/10/94	34.2	7.35
C-0503	01/11/94	4.8	2.06
B-0100	01/25/94	15.4	8.60
B-0101	01/25/94	23.1	6.91
B-0102	01/25/94	24.2	8.41
C-0505	02/10/94	30.3	1.46
B-0103	02/05/94	29.7	8.81
B-0104	02/05/94	15.0	17.6
B-0107	01/11/94	13.8	7.25
25A	10/29.93	10.0	1.04
25B	10/29/93	10.0	2.00
25C	10/29/93	10.0	1.45
25P	10/29/93	10.0	7.31
		Geometric Mean =	4.0
		Average =	5.6

a flow rate of 8.7 gallons per minute (gpm) for two days. Water was discharged nearly 400 feet north of the pumped well into Halfmoon Lake.

Excessive drawdowns in the pumped well at the end of the first test required a slightly premature shutdown. After the recovery test was completed, another test was run at a smaller flow rate of 5.0 gpm for 11 days. The drawdowns appeared to reach a quasi steady-state in about 2 days.

Data from the pump tests were analyzed using the Neuman (1975) method for unconfined aquifers (Appendix C). Transmissivity values range from 601 to 1,233 ft^2/day for the 8.7 gpm and 5.0 gpm pumping rates, respectively, and the average transmissivity was 784 ft^2/day. The hydraulic conductivity is 40 ft/day, based on a saturated thickness of approximately 20 feet determined from gamma logs run at the site. Values for specific yield range from 0.0098 to 0.032, with an average value of 0.018.

The data from pump tests conducted on the Camp Blanding reserve (wells C-0522 and C-0523) also were analyzed (Appendix C). These results produced a lower average transmissivity of 560 ft^2/day and a hydraulic conductivity value of approximately 10 ft/day. A saturated thickness of 58 feet was estimated based on other wells in the region because the pumping well did not reach the top of the Hawthorne Group based on gamma logs. Further information is being collected to determine the depth of the Hawthorn Group at this test site.

GEOPHYSICAL TESTS

Geophysical methods were used to gather information concerning the monitoring wells and investigated lakes. Ground penetrating radar (GPR) transects and gamma-ray well logs were used to collect this information.

Ground Penetrating Radar

Due to the limited number of monitoring wells, GPR was used at Lake Brooklyn to gain more information about the elevation and extent of the water table. The first test involved mapping the water table at strategic areas between existing monitoring wells. Use of GPR has the potential to reduce the number of monitoring wells, present an increasingly more accurate schematic of the water table, and help locate anomalies in the subsurface terrain.

Unfortunately, GPR did not provide any additional information about the water table elevations. A high clay content in the upper strata of the soil above the water table apparently prevented the radar from reaching the water table. In addition, large water table depths in this area, some in excess of 70 feet, limited the ability of GPR to locate the water table.

A second GPR experiment was conducted six months later on the dry bottom of Lake Brooklyn. It was hoped that GPR could distinguish water table gradients between some of the larger isolated pools that made up the lake at that time. It was reasoned that since the water table should be nearer to the surface and that there should be less clay than found in the previous trial, GPR would function much more effectively.

This second exercise located the water table near the edge of the pools, although this could only be confirmed by piezometers. There was no indication of steep water table gradients, but evidence of downwarped confining beds along the bottom of the lake was found. This may be an indication of a subsurface collapse.

Gamma Well Logs

Gamma logs were run by SJRWMD in all of the new wells in the study (see Appendix D). Radioactive phosphorous, which is concentrated in the clay in the Hawthorn Group, emits radia-

tion as it decays, producing a relatively large response signal as measured by a gamma log. Thus, differentiation between the lesser background gamma radiation from surficial-aquifer deposits and the significantly greater radiation from the clay in the Hawthorn Group can readily be made. Wells for which the gamma logs did not show a significant positive reaction were assumed not to intersect the Hawthorn Group.

Based on the gamma logs, the elevation of the top of the Hawthorn Group ranges from approximately 45 to 130 ft, NGVD, in the region (see Fig. 16). This information was utilized in the flow net analyses described in Chapter 6 to determine the depth to the top of the Hawthorn Group for each streamtube.

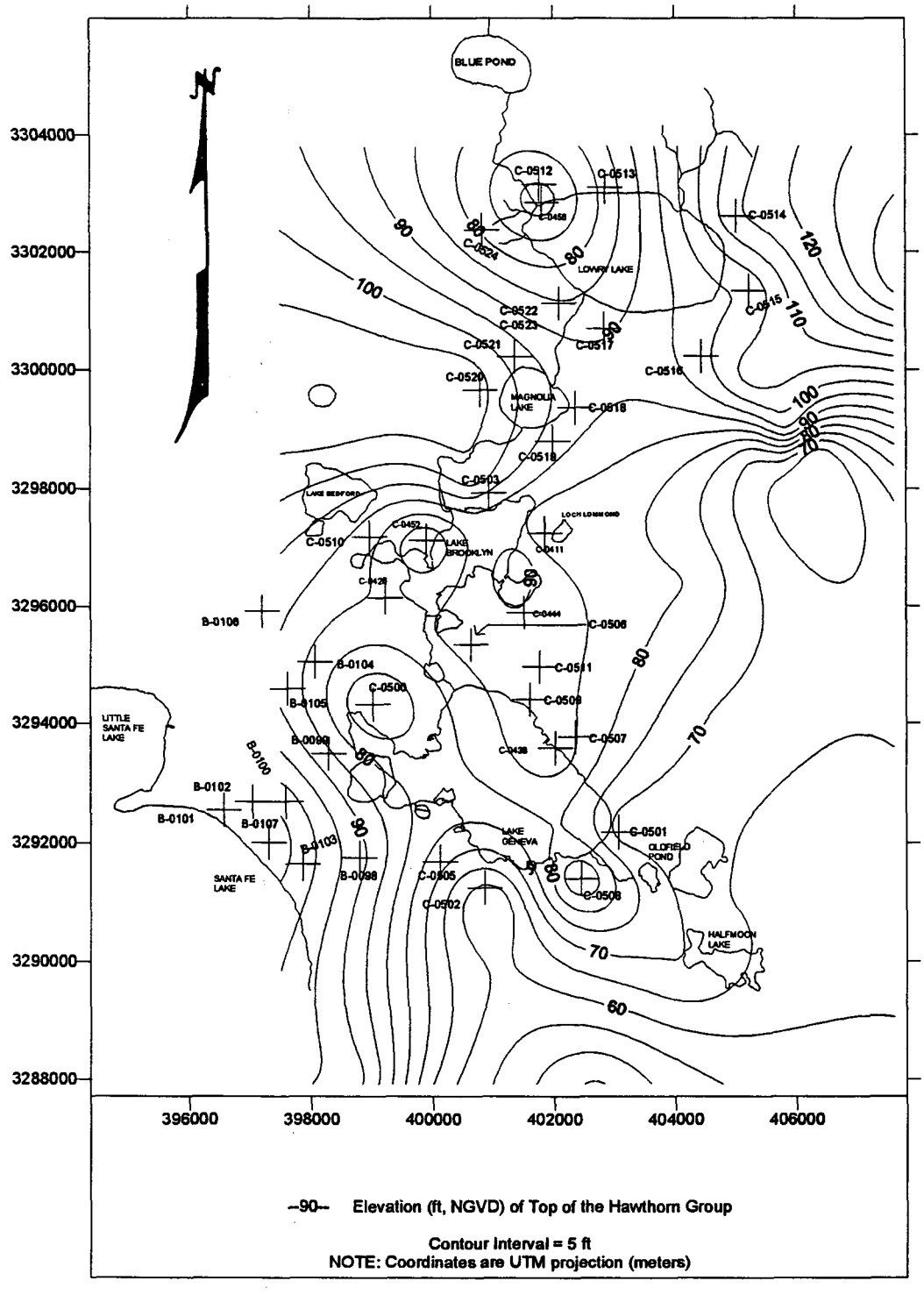


Figure 16. Elevation of the Top of the Hawthorn Group in the UECB

CHAPTER 6
FLOW NETS

INTRODUCTION

Flow nets were constructed for each lake on a monthly basis from August 1994 through July 1995 in order to calculate surficial aquifer inflows and outflows. The inflow and outflow components were calculated using Darcy's equation, which can be written as:

$$Q = K*I*A \tag{6-1}$$

where: Q = flow volume of water per unit time [L^3/T];

K = hydraulic conductivity of aquifer [L/T];

I = hydraulic gradient [L/L]; and

A = cross sectional flow area [L^2]

The volumetric flow within the flow net was determined by summing the individual flow-rates (Q) in each of the flowtubes delineated around the lake. A flowtube is defined as a theoretical aquifer flow section that encompasses a volume between adjacent flow fields. These flow fields were designated by lines that are tangent to the water velocity vectors and perpendicular to the equipotential lines within the aquifer.

The flow within each section of the flow net is a function of the hydraulic gradient sloping toward or away from each lake. Given a gradient along the normal component of a boundary, there must be a flux along this boundary (Domenico and Schwartz, 1990). Thus, the term flow boundary (flux boundary) indicates where flow either enters or leaves a control volume.

Applying Darcy's equation to this problem required simplifications. The aquifer was assumed homogenous, and only horizontal flow was considered. While vertical flow gradients are

likely to be important near the lake boundary, for the purpose of calculating total flow into the lake system from the surrounding aquifer, this was considered a reasonable simplification.

An average hydraulic conductivity of 27 ft/day was used for the flow net analysis. This value is an average derived from data collected during the pump test performed as part of this study (described in Chapter 5) and the value of 30 ft/day that was obtained by Dupont in a surficial-aquifer pump test that was conducted in 1993 in the southern Trail Ridge area (Annable et al., 1994).

The cross-sectional area (A) in Equation 6.1 was calculated by multiplying the average flowtube vertical thickness (water table elevation minus the confining-unit elevation averaged using values at each end of the flow tube) by the average width of the flowtube (the arithmetic mean of the widths at each end of the flow tube). The hydraulic gradient of each flowtube was calculated by dividing the head differential (the difference between the lake elevation and the water table elevation at the upstream boundary of the flow tube) by the length of the flowtube, which is an average of the lengths of each side.

When applying the flow net analysis method, some additional assumptions were made to conceptualize the flow across its boundary (Fig. 17). The flow boundary for each lake was located at the surface water/ground water interface (lake shoreline). This interface bounds the control volume through which all ground water flow enters or leaves. This boundary was extended vertically downward to intersect the confining unit (Hawthorn Group). This depth was used when calculating the cross-sectional area of the flow-interface boundary. The sloping nature of the lake bottom was not considered. The average thickness of the flow tube was approximated as the arithmetic mean of the thickness at the two ends. The average aquifer thickness using these

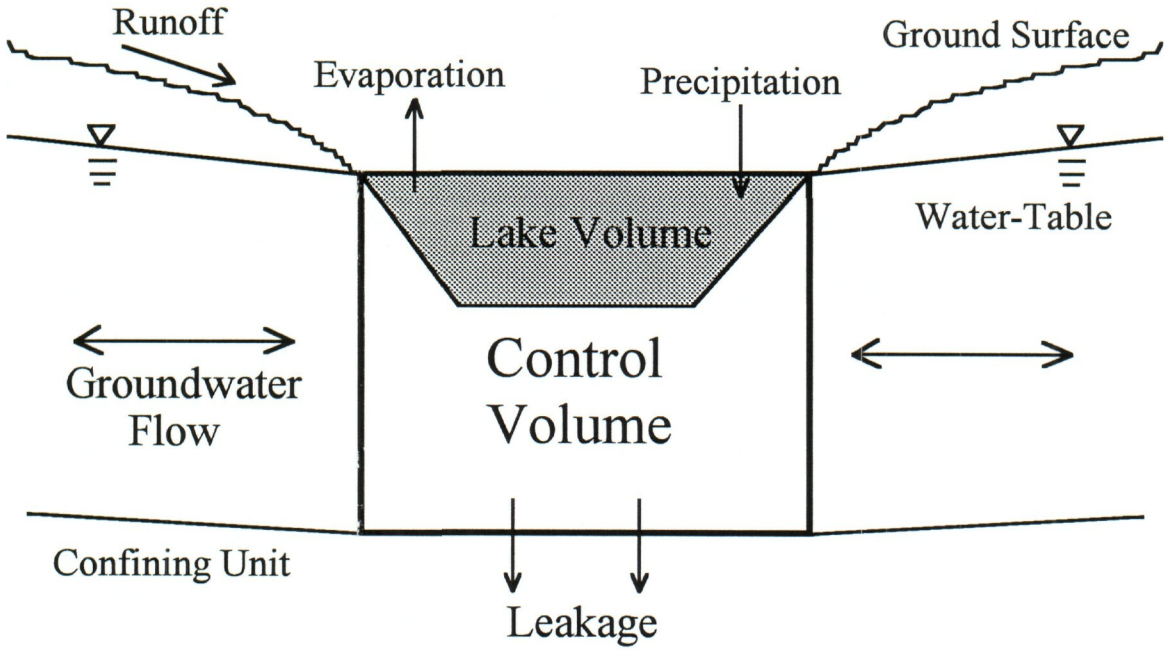


Figure 17. Schematic of Flow Net Control Volume

values was used for the Darcy flow calculations. The fact that the horizontal location of the lake boundary may shift was not considered here, although changes in lake water levels were included.

It was assumed that all water flowing through each flowtube enters or leaves the control volume that represents the lake. Without the use of multi-level piezometer clusters near the lake shore, the quantity and fraction of water actually entering the lake volume from the surficial aquifer could not be determined. Thus, the fraction of water flowing directly to the deeper formations could not be determined. This distinction was not required to determine the influence of the surficial aquifer on the lake water budget or to calculate a leakance value because all water was assumed to enter the control volume.

Monthly potentiometric maps of the surficial aquifer (Appendix E) were created using the surficial aquifer water level data collected from the wells surrounding the lakes (Fig. 14). *Surfer®* *for Windows* was used to set up a general data format into which monthly water table elevations and stage levels were entered. A *Surfer®* "blank" file was created using the coordinates of the lake boundaries. This file was used with *Surfer®* to ensure that no equipotential lines were drawn inside the lake boundaries.

The potentiometric maps were created for each month during the data collection period (August 1994 to July 1995). Lakes Lowry, Magnolia, and Brooklyn are hydraulically connected by Alligator Creek and exhibit surface water inflows and outflows. For this reason, the water table figures were configured to include neighboring lakes. Limited data for Alligator Creek were available and applied where possible. In order to ensure accurate potentiometric surfaces in this area, creek elevations were interpolated at regular intervals using lake-stage data.

Lake Geneva was not significantly influenced by surface water inflows. The stage levels of neighboring lakes affect the surficial-aquifer potentiometric elevations, and they were included in each analysis.

A flow net was constructed for each lake for each month from August 1994 through July 1995 based on the individual water table contours, the physiography of the lake, and the lake-stage data. The flowtubes for each lake for each month were distinctly different because of dissimilar physical features and varying water table characteristics.

AID OF ARC/INFO© AND GIS IN ANALYSES

Utilizing the consistent potentiometric maps created by *Surfer®*, ARC/INFO© was used to produce each flow net. By incorporating topology, ARC/INFO© provided for accurate determination of flowtube areas, average flowtube lengths, and average flowtube widths.

Each *Surfer®* potentiometric-surface figure was imported into ARC/INFO© and converted to a coverage. Using the CLEAN and BUILD commands, topology was created for each of the coverages. Topology enabled the coverages to produce data as polygon areas and arc (flowtube) lengths.

Separate coverages containing the boundaries of the four lakes were added to each potentiometric-surface coverage. Flowtubes were drawn manually using user-specific arc identifiers (this step was the *only* manual procedure in the entire flow net process). After splining the flowtube-arcs to add curvature, the coverage topology was rebuilt using the CLEAN command.

Once new topology had been established, the water table contours contained within each flowtube, along with their respective nodes, were deleted. This left open areas within each

individual flowtube, bounded on the exterior by the outer potentiometric line and on the interior by the lake surface.

Polygon labels correlating to the flow-tube identifiers were systematically placed within each flowtube, and the coverage was modified using the CLEAN command a final time. This enabled ARC/INFO© to use the newly added labels to create the final topology, containing each label number and its associated area.

Using TABLES, a subprogram of ARC/INFO©, the topological data were retrieved. The Polygon Attribute Table (PAT) of the coverage of interest was selected and listed. This data list contains each labeled polygon and its area. Next, the Arc Attribute Table (AAT) for the coverage was selected and its contents listed. This table contained the topological information representing the flowtube lengths.

Each of these files was exported to a text file and downloaded into a spreadsheet. After parsing and sorting the attribute data from the PAT and AAT, the information was available in a precise and easily accessible table format. These areas and lengths were used directly in the flow net calculations.

LAKE FLOW NET ANALYSES

Hydrologic flow net analyses were performed at monthly intervals from August 1994 through July 1995 (Appendix F). The results of these investigations are summarized in Table 6 and Fig. 18. Discussions of the results for each lake are presented below. Lake stages as recorded by SJRWMD and the USGS are summarized in Table 7 and Fig. 19.

Table 6. Surficial Aquifer Inflows and Outflows for Lakes Lowry, Magnolia, Brooklyn, and Geneva for August 1994 through July 1995

	Lowry Lake			Magnolia Lake			Lake Brooklyn			Lake Geneva		
Month	Inflow	Outflow	Net	Inflow	Outflow	Net	Inflow	Outflow	Net	Inflow	Outflow	Net
8/94	398,652	0	398,652	42,928	6,485	36,443	15,739	16,499	-760	89,707	0	89,707
9/94	414,392	0	414,392	41,308	5,522	35,786	14,030	15,261	-1,231	96,814	0	96,814
10/94	399,289	0	399,289	39,900	5,693	34,835	13,835	19,584	-5,749	99,662	0	99,662
11/94	385,527	0	385,527	40,892	4,402	36,490	14,161	17,005	-2,844	107,886	0	107,886
12/94	399,625	0	399,625	41,675	4,431	37,244	15,462	16,178	-716	108,179	0	108,179
1/95	374,096	0	374,096	38,782	4,712	34,070	18,530	17,777	753	116,580	0	116,580
2/95	373,991	0	373,991	38,256	4,737	33,519	15,175	16,228	-1,053	105,849	0	105,849
3/95	362,943	0	362,943	36,323	4,626	31,697	13,758	19,197	-5,439	101,203	0	101,203
4/95	347,556	0	347,556	34,785	5,801	28,984	13,622	16,449	-2,827	103,970	0	103,970
5/95	374,407	0	374,407	36,684	5,112	31,592	13,360	17,971	-4,611	96,243	0	96,243
6/95	373,632	0	373,632	38,009	4,824	33,185	14,511	18,094	-3,583	101,508	0	101,508
7/95	380,538	0	380,538	42,369	5,591	36,778	15,814	19,238	-3,424	96,625	0	96,625
Mean	382,054	0	382,054	39,326	5,161	34,165	14,833	17,457	-2,624	102,019	0	102,019
Std. Dev.	17,688	0	17,688	2,488	623	2,425	1,383	1,342	1,962	6,773	0	6,773
Maximum	414,392	0	414,392	42,928	6,485	37,244	18,530	19,584	753	116,580	0	116,580
Minimum	347,556	0	347,556	34,785	4,402	28,984	13,360	15,261	-5,749	89,707	0	89,707
Coeff. of Deviation	0.046	--	0.046	0.063	0.121	0.071	0.093	0.077	-0.748	0.066	--	0.066

Note: All values are in units of ft^3/day.

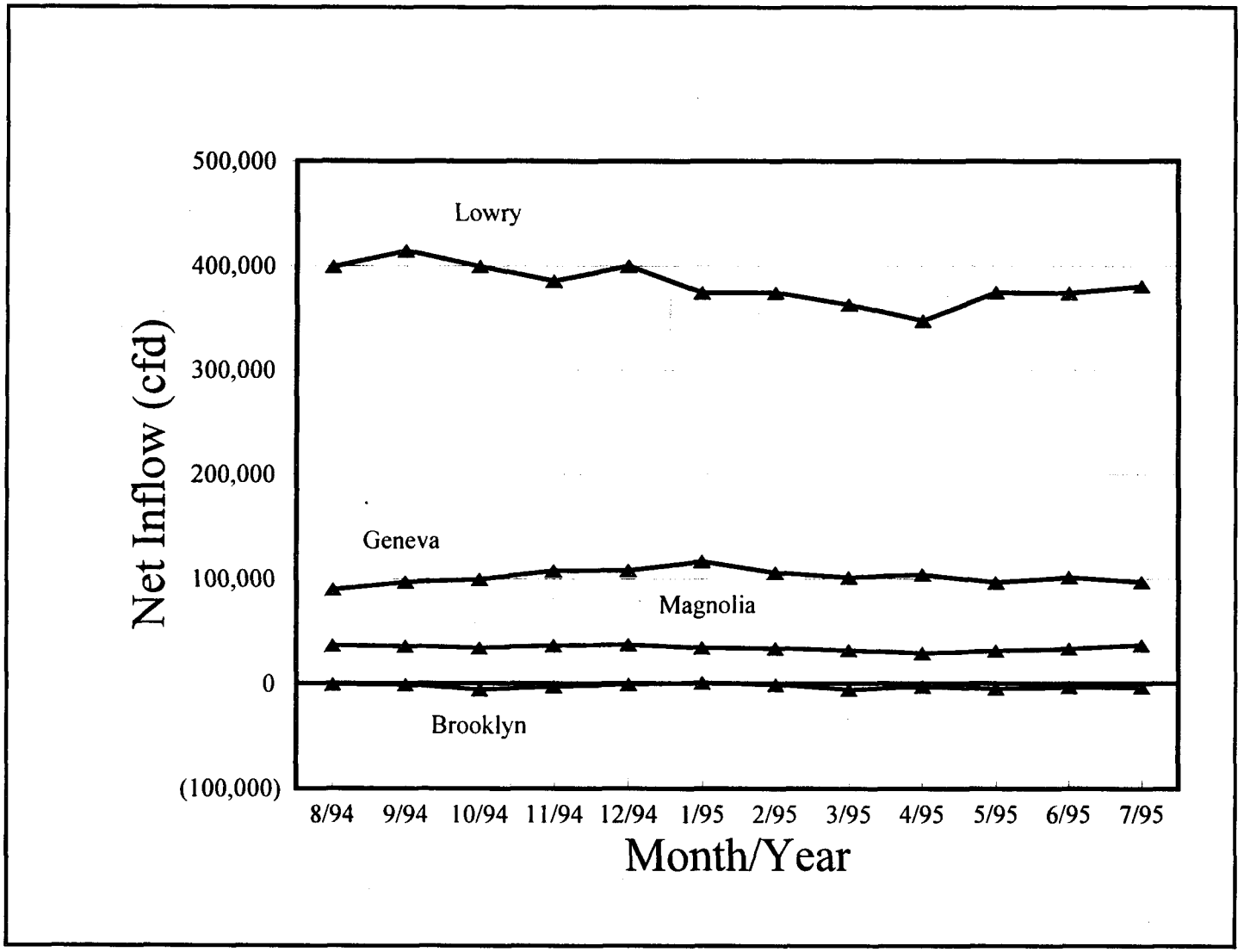


Figure 18. Net Surficial Aquifer Inflows for Lakes Lowry, Magnolia, Brooklyn, and Geneva from August 1994 Through July 1995

Table 7. Stage Levels for Lakes Lowry, Magnolia, Brooklyn, and Geneva from August 1994 To July 1995

Date	Lowry Lake	Magnolia	Lake Brooklyn	Geneva
8/2/94	131.64	124.83	98.76	90.50
9/2/94	131.63	124.62	100.66	90.70
10/3/94	131.41	124.39	101.25	90.76
11/2/94	131.48	124.47	102.42	91.55
11/28/94	131.45	124.33	102.74	91.55
12/29/95	131.33	124.15	102.90	91.59
1/30/95	131.36	124.17	103.05	91.68
2/27/95	131.24	124.03	102.89	91.60
3/31/95	131.19	124.01	102.60	91.54
4/28/95	131.34	124.16	102.94	91.84
5/31/95	131.22	124.11	102.82	91.57
7/4/95	131.61	124.54	103.97	91.78

Mean	131.41	124.32	102.24	91.39
Std. Dev.	0.15	0.25	1.32	0.44
Maximum	131.64	124.83	103.83	91.84
Minimum	131.19	124.01	98.76	90.5
Coeff. of Deviation	0.0012	0.0020	0.0129	0.0048

Note: All values are in units of feet, NGVD, except the coefficient of deviation, which is dimensionless.

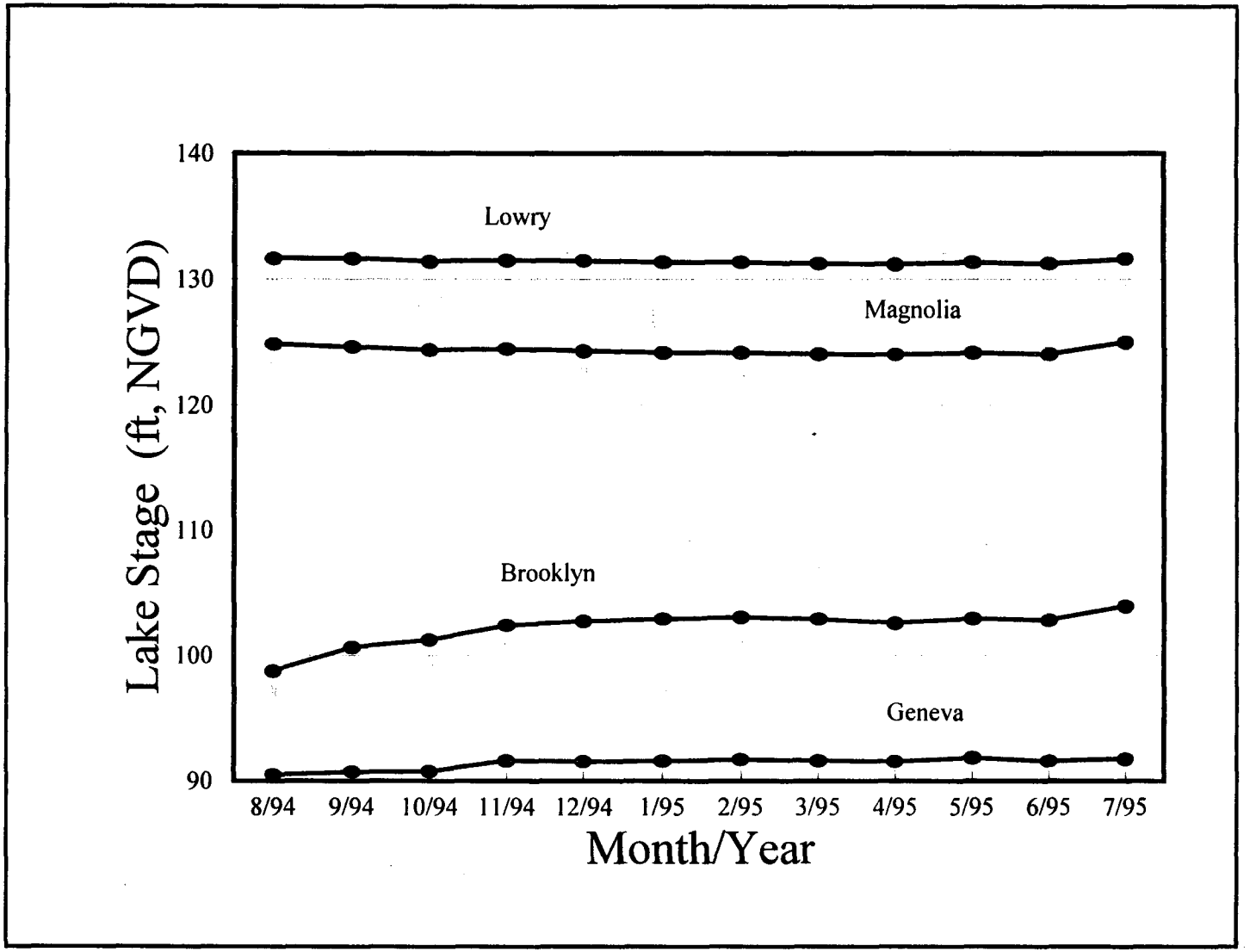


Figure 19. Stage Levels for Lakes Lowry, Magnolia, Brooklyn, and Geneva from August 1994 Through July 1995

Lowry Lake

Lowry Lake received the greatest amount of surficial aquifer inflow, and this inflow was the most constant for all the lakes. Lowry Lake received an average surficial aquifer inflow of 382,000 cubic feet per day (ft^3/day), while the standard deviation of the monthly inflows for 12 months was 17,688 ft^3/day. The standard deviation was 4.6% of the average flowrate (coefficient of deviation = 0.046), which was the lowest percentage computed for the four lakes (Table 6). This indicates a very stable supply of water from the surrounding surficial aquifer.

With ground water levels highest during the last five months of 1994, the surficial flux into Lowry Lake was accordingly the highest during this period (Fig. 20). As ground water levels dropped, the lake received its lowest surficial aquifer influx in April 1995. Although the inflows remain relatively constant, a seasonal fluctuation was present. Lowry Lake's stage levels remained relatively stable, varying less than 0.5 feet during the 12-month study period. Given a relatively stable lake stage, an increase in ground water inflow is driven primarily by the increase in surficial-aquifer water levels.

Lowry Lake's inflows were substantially higher than the other lakes in the investigation (Fig. 18). For example, its average inflow was nearly four times greater than the average inflow at Lake Geneva, which had the second largest average inflow. The highlands surrounding Lowry Lake enhance large surficial inputs as evident in the flow net and water table surface (Fig. 21). The land surface surrounding Lowry Lake exhibits a relatively high-sloping nature, in essence transforming the lake into a hydrologic feature similar to a topographic depression. As the water table tends to follow the upland topography, large hydraulic gradients are created. This characteristic is a primary contributor to the high magnitude of the surficial aquifer inflow.

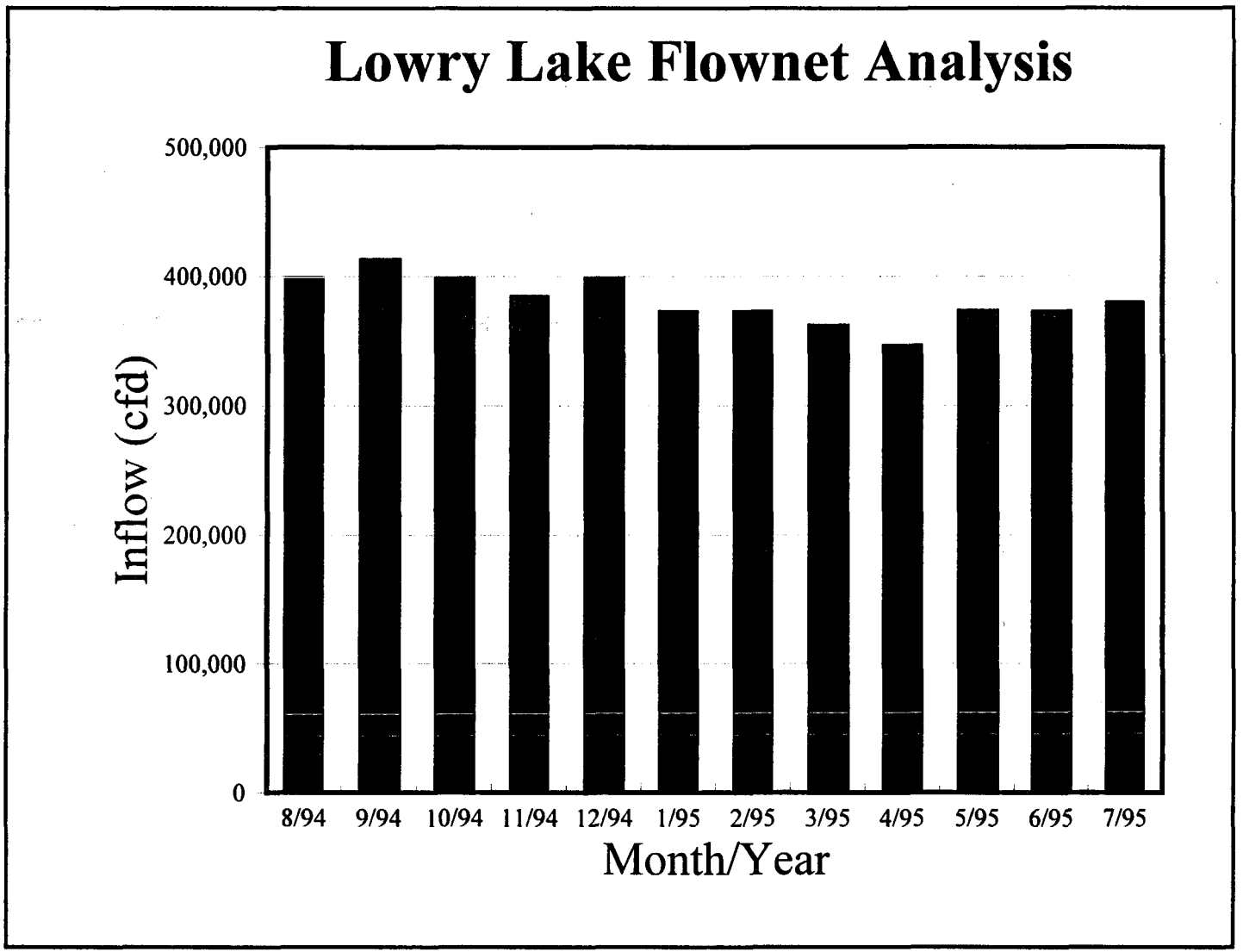


Figure 20. Surficial Aquifer Inflow for Lowry Lake from August 1994 Through July 1995

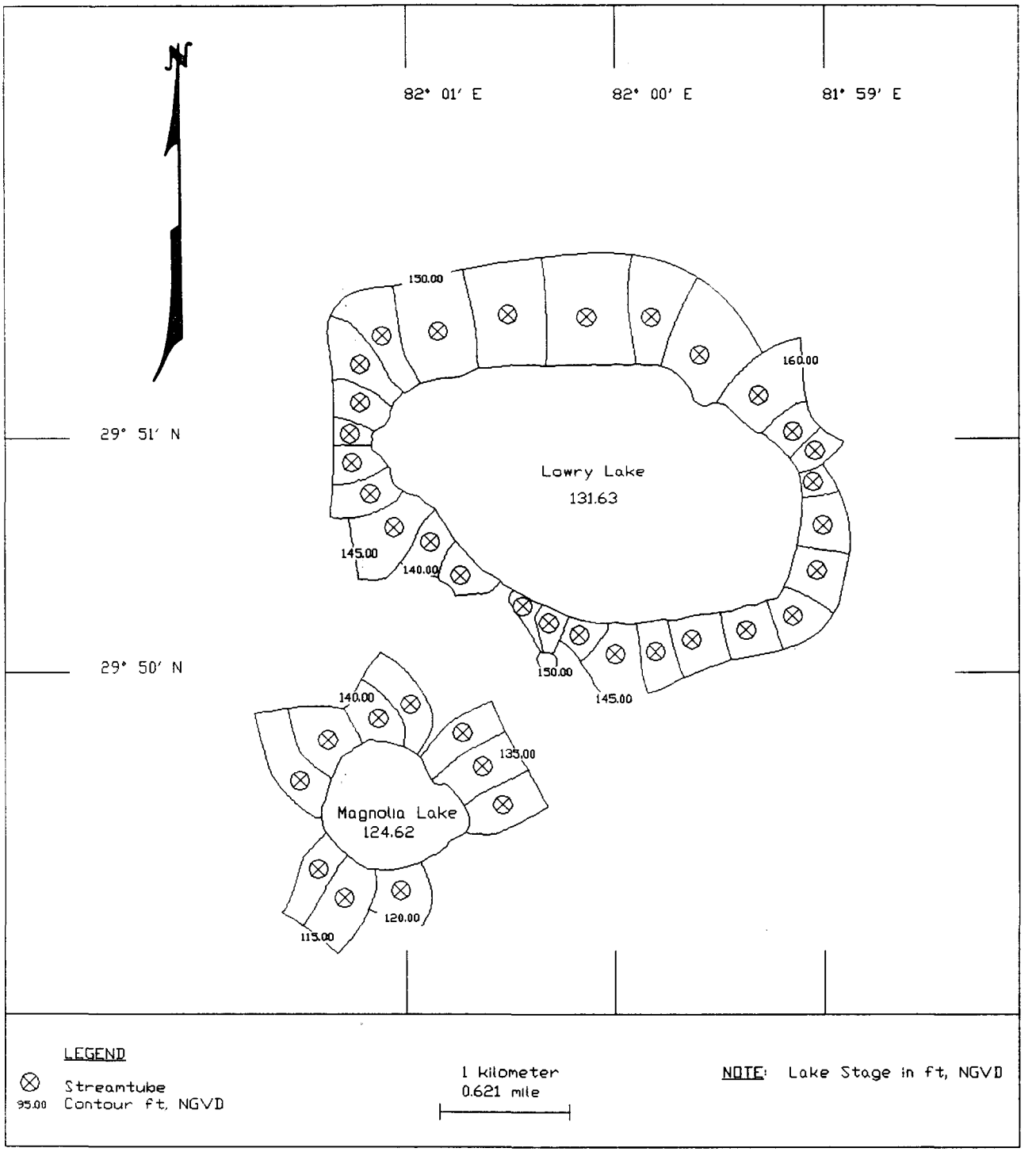


Figure 21. Flow Nets for Lakes Lowry and Magnolia for September 1994

The only area of discharge from Lowry Lake to the surficial aquifer occurs near the outflow to Alligator Creek, which is located on the southern boundary of the lake. The previously discussed large hydraulic gradients are apparent in the areas east, north, and west of the lake (Fig. 21). The data for well C-0524 indicate the presence of the largest gradient.

Magnolia Lake

Magnolia Lake can be described as a flow-through type lake with respect to the surficial aquifer system because it receives ground water inflow from the surficial aquifer on the northern perimeter of the lake and loses water to the surficial aquifer along the southern perimeter (Fig. 21). Magnolia Lake also experienced its highest levels of surficial aquifer flow in the latter months of 1994 and reached a minimum surficial aquifer flow in April 1995. Magnolia Lake's average net inflow was 34,165 ft^3/day (Fig. 22), and the standard deviation of monthly flows was 2,425 ft^3/day, which is 7.1% of the mean (Table 6).

Magnolia Lake exhibits stable lake-stage levels. Thus, as the water table drops in the spring (Fig. 15), the hydraulic gradients are reduced, and the inflow of water is diminished.

Lake Brooklyn's proximity and lower stage levels help depress the surficial-aquifer water table south of Magnolia Lake (Fig. 21 and Appendix E). Magnolia Lake loses water continuously to the surficial aquifer at the outflux of Alligator Creek (5,161 ft^3/day), which flows directly to Lake Brooklyn. However, inflows from the west, north, and east shorelines, coupled with inflows from Alligator Creek, contribute to Magnolia Lake's stable lake stages.

Lake Brooklyn

Lake Brooklyn exhibited highly variable surficial aquifer flowrates (Table 6 and Fig. 23). The mean flow was -2,624 ft^3/day (a net *outflow*), and the standard deviation was 1,962 ft^3/day,

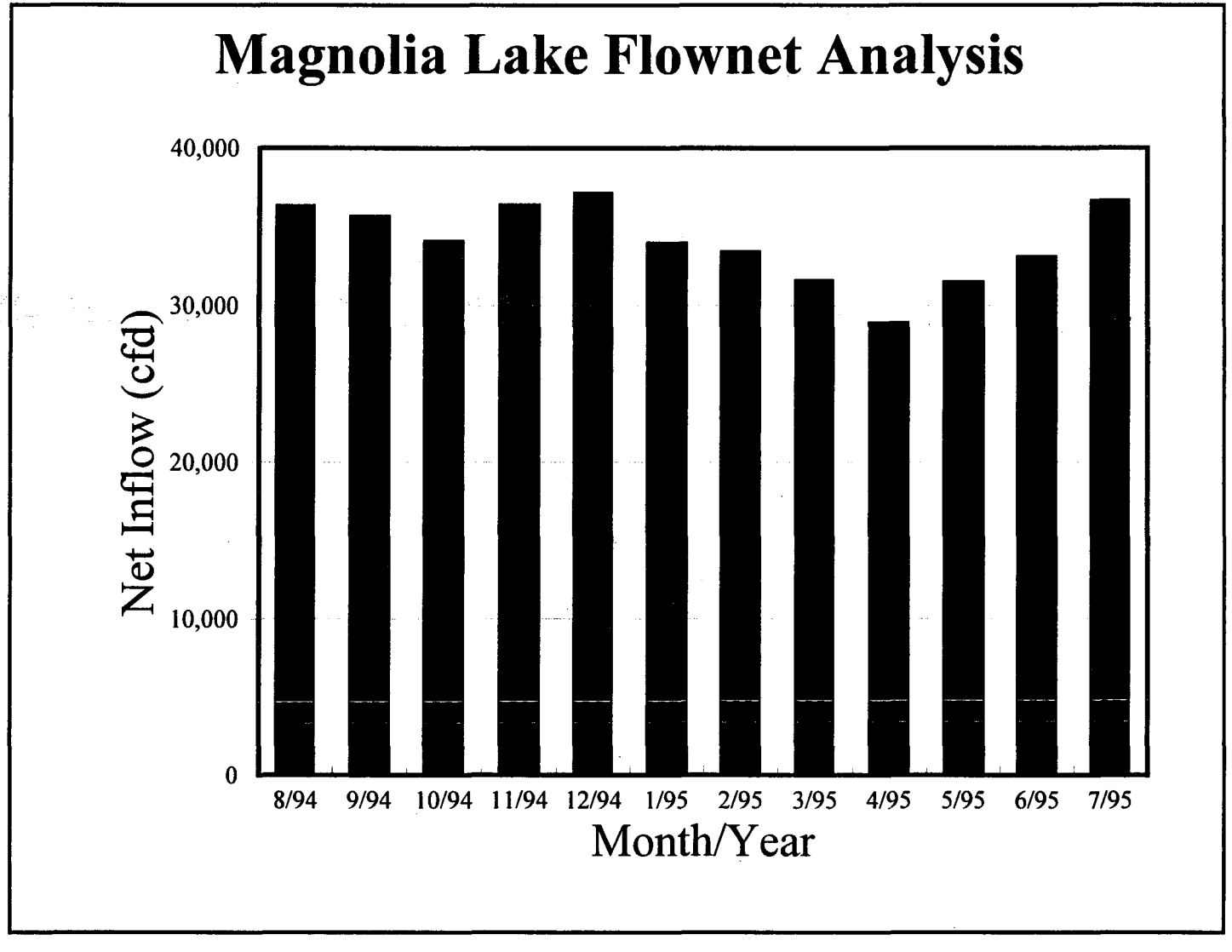


Figure 22. Net Surficial Aquifer Inflow for Magnolia Lake from August 1994 Through July 1995

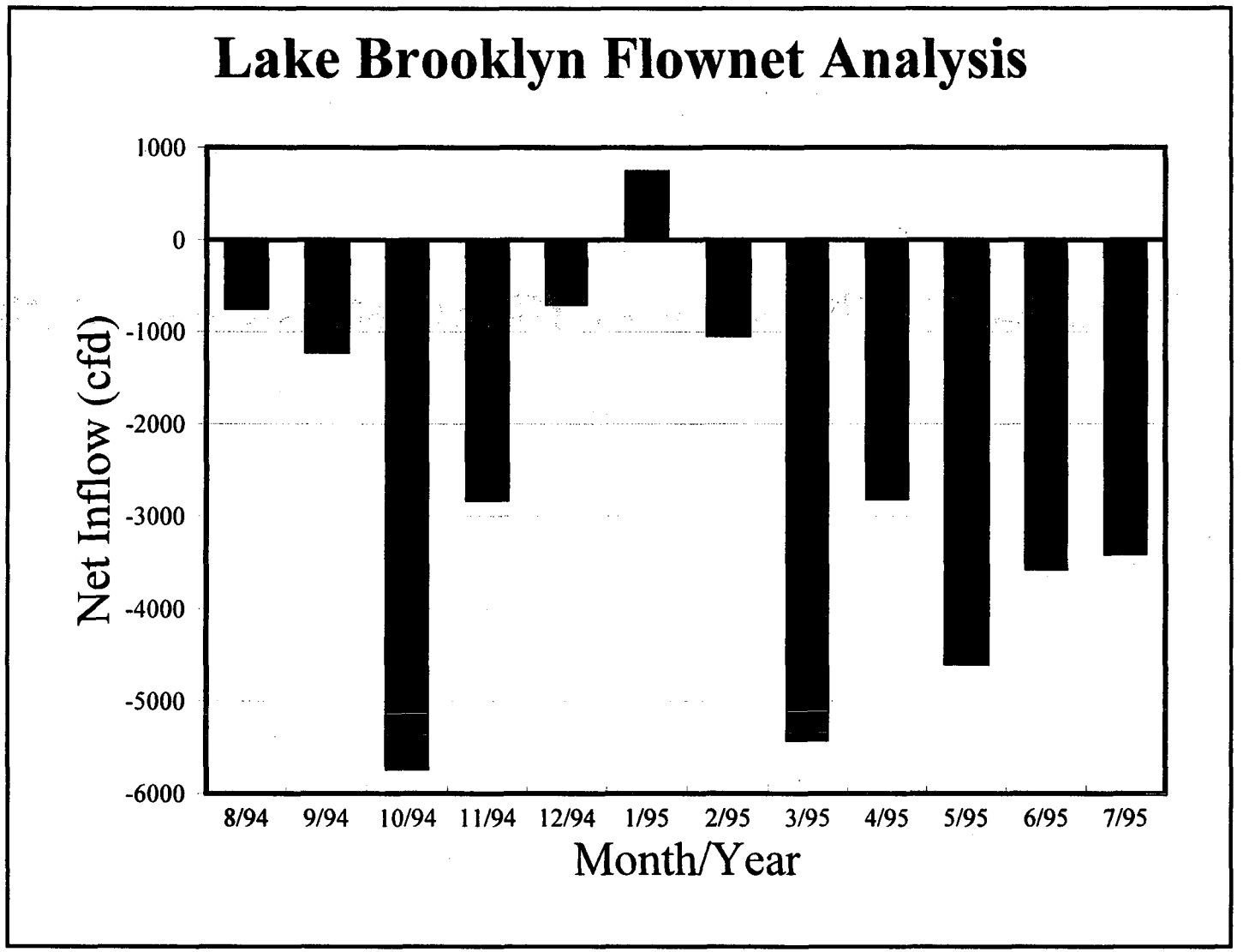


Figure 23. Net Surficial Aquifer Inflow for Lake Brooklyn from August 1994 Through July 1995

which is 75% of the mean. The largest net *inflow* (753 ft^3/day) occurred in January 1995 and the largest *outflow* (5,439 ft^3/day) occurred in October 1994. The coefficient of deviation was 0.748, an indication of the high variability of the system. At Lake Brooklyn, surficial aquifer outflow exceeded surficial aquifer inflow in 11 of the 12 months during the study.

As described in Section 6.3.2, Magnolia Lake loses water to the surficial aquifer and Alligator Creek, both of which flow south to Lake Brooklyn. The increased flow in Alligator Creek between lakes Magnolia and Brooklyn likely has contributed significantly to the continued recovery of Lake Brooklyn's stage levels. In addition, Santa Fe Lake's higher stage-levels create a positive hydraulic gradient that aids in recharging Lake Brooklyn on the west side (Appendix E and Fig. 24). Conversely, Lake Brooklyn loses water to Lake Geneva as water flows out of its entire south and southeast boundaries.

Lake Geneva

Although not as variable as lakes Brooklyn or Magnolia, the net inflows at Lake Geneva demonstrated some fluctuations (Table 6 and Fig. 25). The mean surficial aquifer inflow at Lake Geneva was 102,019 ft^3/day, with a standard deviation of 6,773 ft^3/day. The flowrates were relatively constant, with the coefficient of deviation equal to 0.066.

Although the initial months were relatively low, Lake Geneva's inflows were similar to inflows at Lowry and Magnolia lakes because the flowrates increased to a peak during January 1995 (Figs. 20, 22, 25). Lake Geneva benefits from the presence of two nearby surface water bodies, i.e., Lake Brooklyn and Santa Fe Lake. Both demonstrate consistently higher stage levels and directly increase the surficial aquifer ground water flowing into Lake Geneva. As indicated by the water table maps in Appendix E and the flow nets in Fig. 24, Lake Geneva apparently

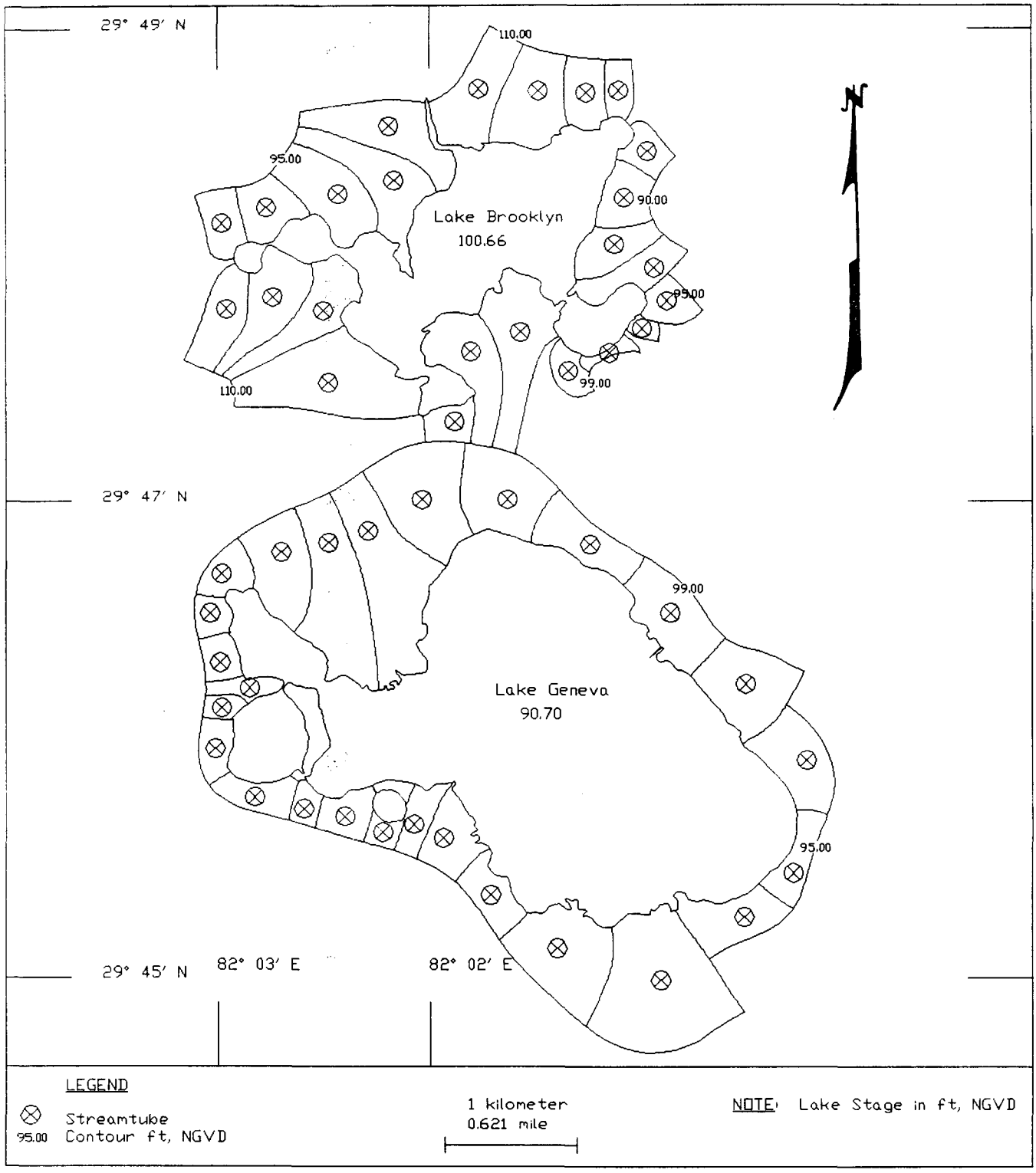


Figure 24. Flow Nets for Lakes Brooklyn and Geneva for September 1994

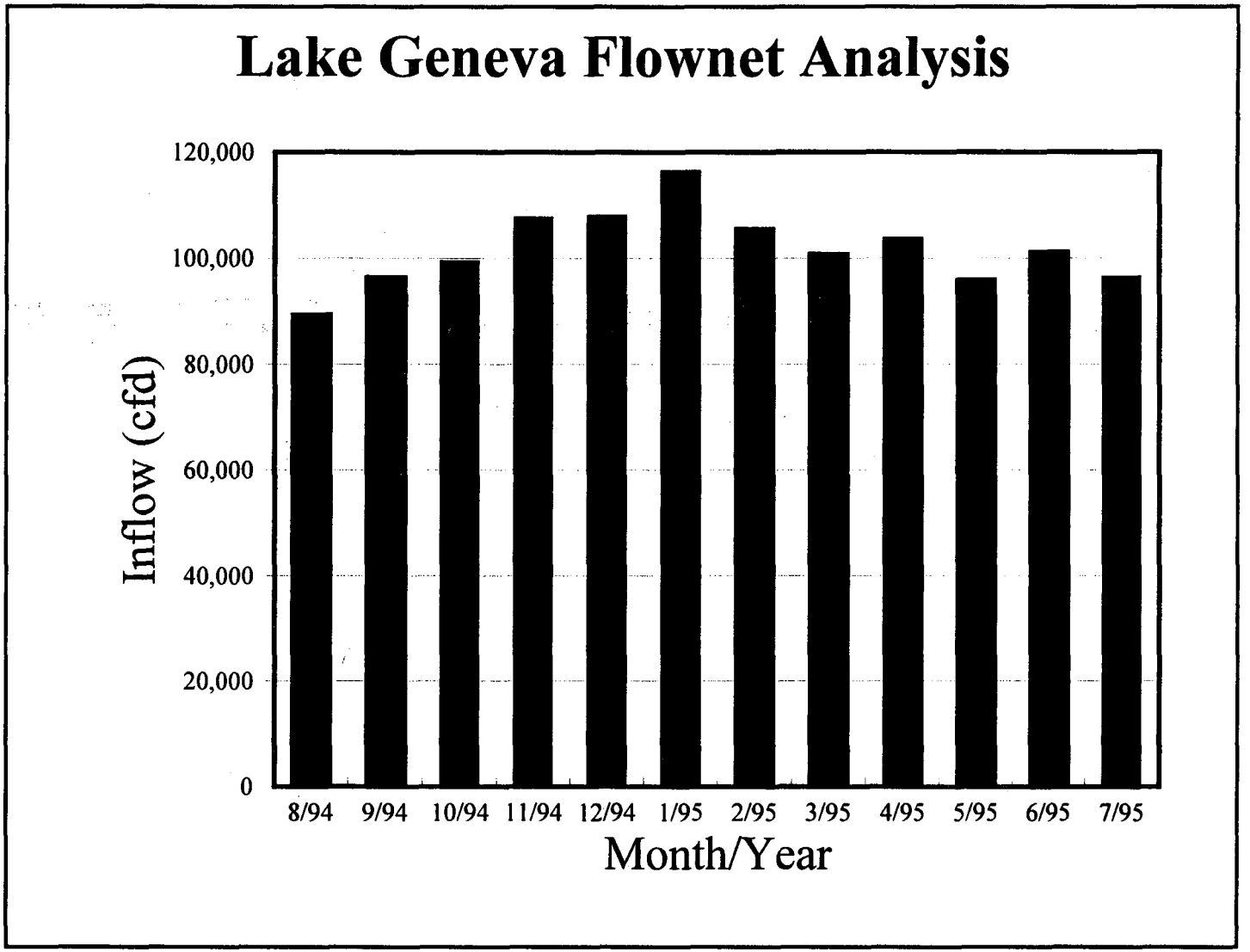


Figure 25. Surficial Aquifer Inflow for Lake Geneva from August 1994 Through July 1995

receives a significant amount of its surficial aquifer recharge from its northern and western boundaries. These are the areas of recharge directly influenced by Lake Brooklyn and Santa Fe Lake. In addition, a positive ground water gradient completely surrounds Lake Geneva, similar to Lowry Lake. However, Lake Geneva's surrounding topography is flat, and the surficial-aquifer thickness is thin when compared to Lowry Lake. These were two of the principal reasons that Lake Geneva's average net inflows were only approximately one-fourth of Lowry Lake's inflows.

Lake Geneva has not received significant surface water inflows in recent years due to the decline in Lake Brooklyn's stage levels (Fig. 6). It is reasonable to assume that surface water-inputs would be required for Lake Geneva to return to higher levels.

LAKE FLOW NET SENSITIVITY ANALYSIS

A sensitivity analysis was conducted to quantify the effectiveness of the flow net analyses and determine the susceptibility to error (see Tables 8-11). By changing the water table elevation by one foot, the hydraulic gradient and the cross-sectional inflow-area were altered. A significant error made in estimating the water table elevation could potentially alter the flowrate, depending on the magnitude of the deviation of the cross-sectional area. By changing the elevation of the top of the confining unit by five feet, the cross-sectional area was altered. If the depth from the water table to the top of the confining unit is small, the error will be significant. Conversely, a five-foot error in a situation with a large confining unit depth will be less significant because the relative change in depth is small.

Generally, Lowry Lake was the least sensitive to a one-foot water table perturbation, a five-foot confining-unit variation, and the total error incurred by combining the devations (see

Table 8. Lowry Lake Flow Net Sensitivity Analysis

Month	Original Flow (ft^3/day)	1-Foot Water Table Error (ft^3/day)	Percent Change (%)	5-Foot Confining-Unit Error (ft^3/day)	Percent Change (%)	Combined Error (ft^3/day)	Percent Change (%)
8/94	398,652	28,146	7.06	46,465	11.66	77,304	19.39
9/94	414,392	29,850	7.20	46,996	11.34	79,684	19.23
10/94	399,289	27,473	6.88	46,306	11.60	76,504	19.16
11/94	385,527	30,719	7.97	45,902	11.91	79,613	20.65
12/94	399,625	29,520	7.39	46,468	11.63	78,915	19.75
1/95	374,096	27,094	7.24	43,890	11.73	73,619	19.68
2/95	373,991	26,412	7.06	43,305	11.58	72,268	19.32
3/95	362,943	25,917	7.14	42,062	11.59	70,519	19.43
4/95	347,556	26,980	7.76	39,763	11.44	69,368	19.96
5/95	374,407	30,717	8.20	44,374	11.85	78,141	20.87
6/95	373,632	26,625	7.13	44,197	11.83	73,469	19.66
7/95	380,538	26,994	7.09	44,121	11.59	73,714	19.37
Maximum	414,392	30,719	8.20	46,996	11.91	79,684	20.87
Minimum	347,556	25,917	6.88	39,763	11.34	69,368	19.16
Average	382,054	28,037	7.34	44,487	11.65	75,260	19.71

Table 9. Magnolia Lake Flow Net Sensitivity Analysis

Month	Original Flow (ft^3/day)	1-Foot Water Table Error (ft^3/day)	Percent Change (%)	5-Foot Confining-Unit Error (ft^3/day)	Percent Change (%)	Combined Error (ft^3/day)	Percent Change (%)
8/94	36,443	5,094	13.98	5,324	14.61	11,302	31.01
9/94	35,786	4,912	13.73	5,466	15.27	11,224	31.36
10/94	34,207	4,890	14.30	5,296	15.48	11,039	32.27
11/94	36,490	6,114	16.76	5,909	16.19	13,122	35.96
12/94	37,244	4,899	13.15	6,005	16.12	11,737	31.51
1/95	34,070	4,282	12.57	5,319	15.61	10,334	30.33
2/95	33,519	3,645	10.87	4,871	14.53	9,125	27.22
3/95	31,697	4,019	12.68	4,873	15.37	9,582	30.23
4/95	28,984	4,097	14.14	4,238	14.62	9,079	31.32
5/95	46,773	7,786	16.65	7,791	16.66	16,995	36.34
6/95	33,185	4,221	12.72	5,086	15.33	10.035	30.24
7/95	36,778	4,317	11.74	5,381	14.63	10,412	28.31
Maximum	46,773	7,786	16.76	7,791	16.66	16,995	36.34
Minimum	28,984	3,645	10.87	4,238	14.53	9,079	27.22
Average	35,431	4,856	13.61	5,463	15.37	11,166	31.34

Table 10. Lake Brooklyn Flow Net Sensitivity Analysis

Month	Original Flow (cfd)	1-Foot Water Table Error (ft^3/day)	Percent Change (%)	5-Foot Confining-Unit Error (ft^3/day)	Percent Change (%)	Combined Error (ft^3/day)	Percent Change (%)
8/94	-760	9,768	1285	-1,513	199	12,140	1597
9/94	-1,231	4,451	362	-2,780	226	3,540	288
10/94	-5,749	8,281	144	-4,709	82	6,913	120
11/94	-2,844	5,190	182	-3,249	114	3,872	136
12/94	-716	4,724	660	-2,730	381	3,719	519
1/95	753	7,196	956	-2,538	337	7,209	957
2/95	-1,053	4,723	449	-2,610	248	3,784	359
3/95	-5,439	4,721	87	-4,741	87	1,807	33
4/95	-2,827	5,170	183	-3,127	111	3,990	141
5/95	-4,611	6,268	136	-3,828	83	4,813	104
6/95	-3,583	6,518	182	-3,547	99	5,445	152
7/95	-3,424	5,685	166	-3,737	109	3,945	115
Maximum	753	9,768	1285	-1,513	381	12,140	1597
Minimum	-5,749	4,451	87	4,741	82	1,807	33
Average	-2,624	6,058	399	-3,259	173	5,098	377

Table 11. Lake Geneva Flow Net Sensitivity Analysis

Month	Original Flow (cfd)	1-Foot Water Table Error (ft^3/day)	Percent Change (%)	5-Foot Confining-Unit Error (ft^3/day)	Percent Change (%)	Combined Error (ft^3/day)	Percent Change (%)
8/94	89,707	17,605	19.63	32,965	36.75	55,642	62.03
9/94	96,814	16,822	17.38	33,976	35.09	55,290	57.11
10/94	99,662	16,140	16.19	33,336	33.45	53,554	53.74
11/94	107,886	18,042	16.72	34,275	31.77	56,742	52.59
12/94	108,179	16,630	15.37	34,230	31.64	54,911	50.76
1/95	116,580	17,815	15.28	35,326	30.30	57,341	49.19
2/95	105,849	20,347	19.22	33,677	31.82	59,143	55.87
3/95	101,203	17,492	17.28	33,352	32.96	55,390	54.73
4/95	103,970	18,820	18.10	33,122	31.86	56,680	54.52
5/95	96,243	18,130	18.84	31,084	32.30	53,813	55.91
6/95	101,508	19,186	18.90	32,725	32.24	56,687	55.84
7/95	96,625	17,742	18.36	30,903	31.98	53,106	54.96
Maximum	116,580	20,347	19.63	35,326	36.75	59,143	62.03
Minimum	89,707	16,140	15.28	30,903	30.30	53,106	49.19
Average	102,019	17,898	17.61	33,248	32.68	55,692	54.77

Table 8). Lakes Magnolia and Geneva were of intermediate sensitivity (Tables 9 and 11), and Lake Brooklyn was most sensitive to changes in the water table elevation and the elevation of the top of the confining unit (Table 10).

CHAPTER 7
WATER BUDGET COMPONENTS AND LEAKANCE VALUES

WATER BUDGET EQUATION

A water budget for a lake generally consists of accounting for the principal inflows and outflows for the lake (Motz et al., 1993). For many lakes in Florida, the principal inflows are precipitation, surface water inflow, direct runoff (i.e., overland flow), and ground water inflow from the surficial aquifer, and the principal outflows are evaporation, surface water outflow, ground water outflow to the surficial aquifer, and vertical leakage to the underlying upper Floridan aquifer (Fig. 26). The water budget for such a lake can be described by:

$$dS/dt = P + I_s + R + I_g - E - O_s - O_g - L \qquad (7\text{-}1)$$

where:

dS/dt = change in lake storage with respect to time;

E = evaporation;

I_g = ground water inflow from surficial aquifer;

I_s = surface water inflow;

L = vertical leakage to the underlying aquifer;

O_g = ground water outflow to the surficial aquifer;

O_s = surface water outflow;

P = precipitation; and

R = direct runoff (i.e., overland flow).

The terms can be expressed in consistent units of $L^3 T^{-1}$ (e.g., ft^3/day), or LT^{-1} (e.g., ft/day) if they are divided by the surface area of the lake.

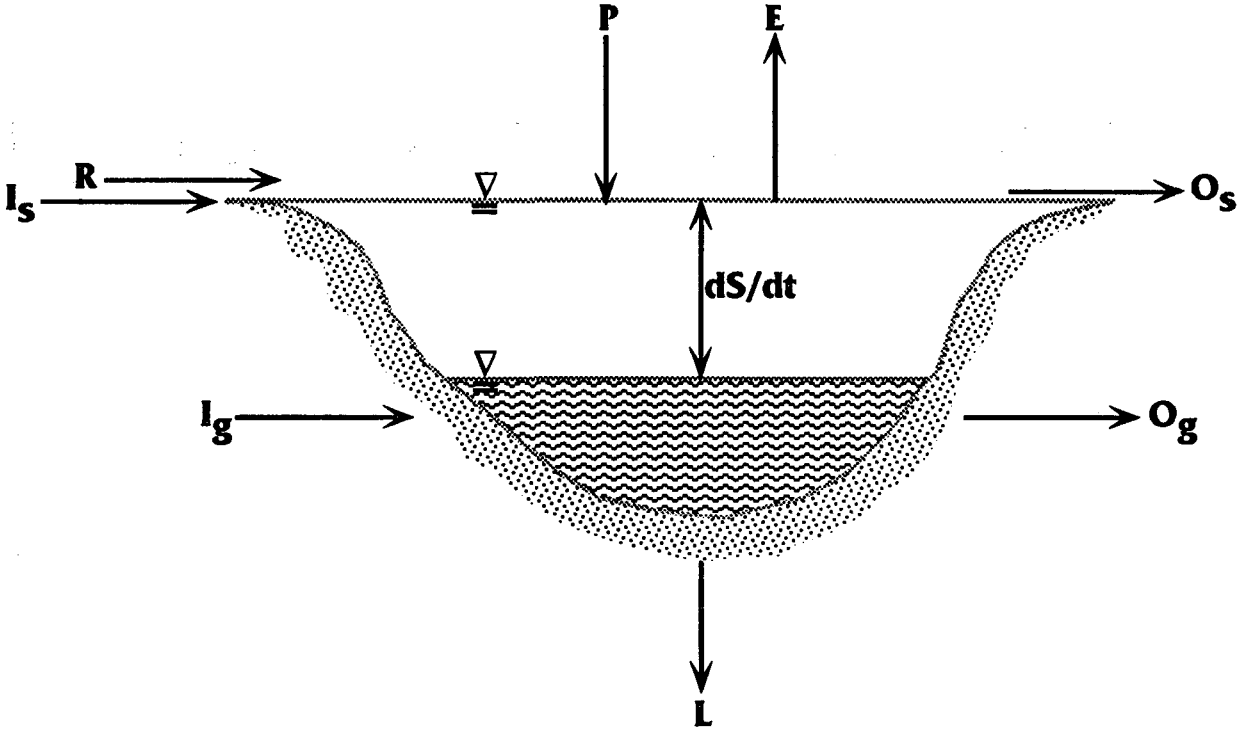


Figure 26. Schematic of Water Budget Components

Typically, lakes in the Highlands region of Florida gain water from the adjacent surficial aquifer and lose water to the underlying upper Floridan aquifer by vertical leakage through the confining beds that separate the surficial aquifer from the upper Floridan aquifer (Lichtler et al., 1976). Based on studies in central Florida (Lee et al., 1991), the lakes can serve as focal points for ground water discharge from the surficial aquifer and as focal points for recharge to the upper Floridan aquifer. This loss of water to the underlying upper Floridan aquifer, or vertical leakage, can be described in terms of Darcy's equation written for vertical flow (Hammett, 1981):

$$\mathbf{Q} = A\frac{K'}{b'}dh \qquad (7\text{-}2)$$

where:

A = surface area of the lake [L^2];

b' = thickness of the confining unit [L];

dh = head difference between lake stage and potentiometric surface of the upper Floridan aquifer [L];

K' = vertical hydraulic conductivity of the confining unit [LT^{-1}];

K'/b' = leakance [T^{-1}]; and

Q = vertical leakage [L^3T^{-1}]

Leakance (K'/b') is a measure of the conductance of the confining unit to vertical flow between the lake and surficial aquifer and the underlying upper Floridan aquifer.

WATER BUDGET COMPONENTS

Water budget components were calculated for lakes Lowry, Magnolia, Brooklyn, and Geneva on a daily basis from August 1, 1994 through July 31, 1995 (see Appendix G). The water budget component that represents vertical leakage to the underlying upper Floridan aquifer was

calculated as a residual in the water budget equation (Eqn. 7-1) after the other components had been determined.

Precipitation and Evaporation

Daily precipitation data collected by SJRWMD were available from stations adjacent to lakes Lowry, Brooklyn, and Geneva. Precipitation data were not available for Magnolia Lake, and the precipitation at this lake was represented by the precipitation data for Lowry Lake.

Estimates of evaporation for all four lakes were made using Class A pan evaporation data from the Gainesville weather station. Pan evaporation is greater than actual lake evaporation because of the smaller size of the pan, boundary effects induced by heat transfer through the pan material, and wind effects caused by the pan (Bras, 1990). Accordingly, a pan coefficient is applied to pan evaporation measurements to estimate lake evaporation. Monthly pan coefficients were developed for the UECB based on a study conducted at Lake Okeechobee (Kohler, 1954). These values range from 0.69 for February to 0.91 for July and August (Table 12).

Surface Water Inflow and Outflow

Lakes Lowry, Magnolia, and Brooklyn received various amounts of surface water inflow from Blue Pond, Lowry, and Magnolia lakes, respectively, during the period of study from August 1994 to July 1995. In addition, an unnamed spring discharges to Lowry Lake on its northeast perimeter. Lake Geneva did not receive surface water inflow from Lake Brooklyn during this period, and neither Lake Brooklyn nor Lake Geneva discharged during this period.

Runoff

Precipitation that falls over a drainage basin can be divided primarily into infiltration and runoff. Similar to Motz et al. (1993), the rational method was used to estimate the amount of

Table 12. Monthly Pan Coefficients Used for the UECB Study (Motz et al., 1993).

Month	Pan Coefficient
January	0.77
February	0.69
March	0.73
April	0.84
May	0.82
June	0.85
July	0.91
August	0.91
September	0.85
October	0.76
November	0.71
December	0.83

Source: Kohler, 1954

runoff that occurred due to precipitation. Using this method, the volume of rainfall that becomes runoff, or overland flow, is.

$$R = C*i*A*t \quad (7\text{-}3)$$

where: A = area of drainage basin [L^2];

C = runoff coefficient;

i = rainfall intensity [LT^{-1}];

t = duration of rainfall [T]; and

V = runoff volume [L^3]

The runoff coefficient in the rational method estimates the fraction of rainfall that becomes runoff. The value of the runoff coefficient is dependent on land use and conditions such as soil moisture and degree of vegetation. Since the drainage areas of the lakes have not undergone extensive urbanization and the surficial deposits in the UECB are highly conductive, relatively large infiltration rates are present. Thus, a low runoff coefficient of 0.01 was assumed for each UECB lake basin.

Ground Water Inflow and Outflow

The results of the flow net analyses described in Chapter 6 were used to represent surficial-aquifer inflows and outflows in the water budget calculations. Water levels measured monthly in the upper Floridan aquifer near each lake were compiled and used in the leakance calculations.

Lake Stage and Storage

Lake-stage elevations were compiled from continuous-stage recorders, telemetry stations, and published USGS data. Stage-area and stage-volume curves developed by Motz et al. (1993)

from bathymetric maps (Clark et al., 1963) were utilized to relate changes in lake surface area and volume to changes in lake stage (Fig. 27). Changes in lake storage for the daily water budget periods were determined from the computed lake volume differentials. The equations for these curves are:

Blue Pond:

$$\text{Area} = 3.96154*H - 486.32 \quad (7\text{-}4)$$

$$\text{Volume} = 1.9808*H^2 - 486.23*H + 28{,}906 \quad (7\text{-}5)$$

Lowry Lake:

$$\text{Area} = 31.2621*H - 2{,}826.02 \quad (7\text{-}6)$$

$$\text{Volume} = 15.6311*H^2 - 2{,}826.02*H + 120{,}747 \quad (7\text{-}7)$$

Magnolia Lake:

$$\text{Area} = 4.1846*H - 313.58 \quad (7\text{-}8)$$

$$\text{Volume} = 2.0923*H^2 - 313.58*H + 11{,}902 \quad (7\text{-}9)$$

Lake Brooklyn:

$$\text{Area} = 20.9395*H - 1{,}768.5 \quad (7\text{-}10)$$

$$\text{Volume} = 10.4698*H^2 - 1{,}768.5*H + 74{,}734 \quad (7\text{-}11)$$

Lake Geneva:

$$\text{Area} = 71.18*H - 5{,}429.6 \quad (7\text{-}12)$$

$$\text{Volume} = 35.59*H^2 - 5{,}429.6*H + 206{,}700 \quad (7\text{-}13)$$

where H = Lake Stage (feet, NGVD), and the area and volume are expressed in units of ft^2 and ft^3, respectively.

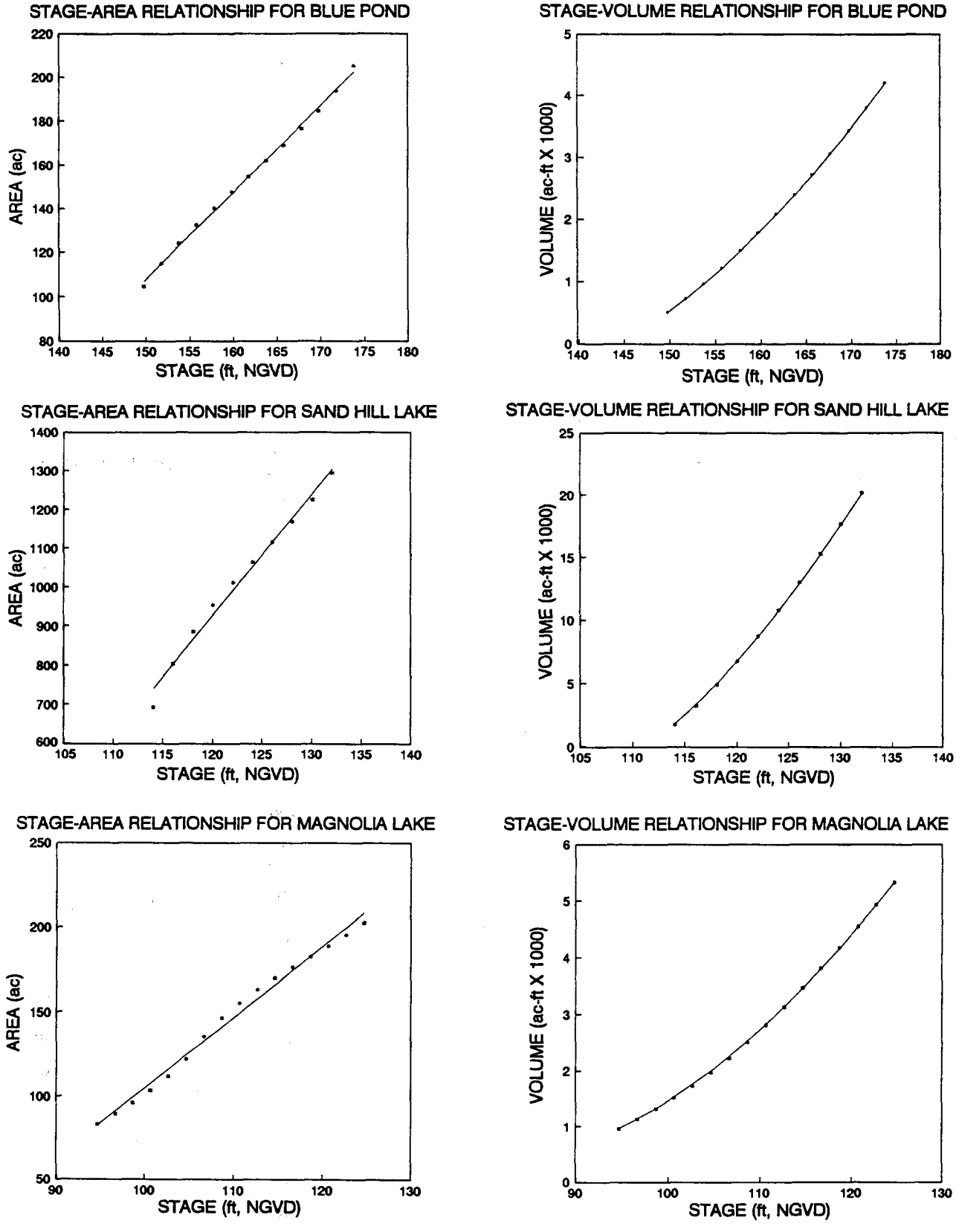
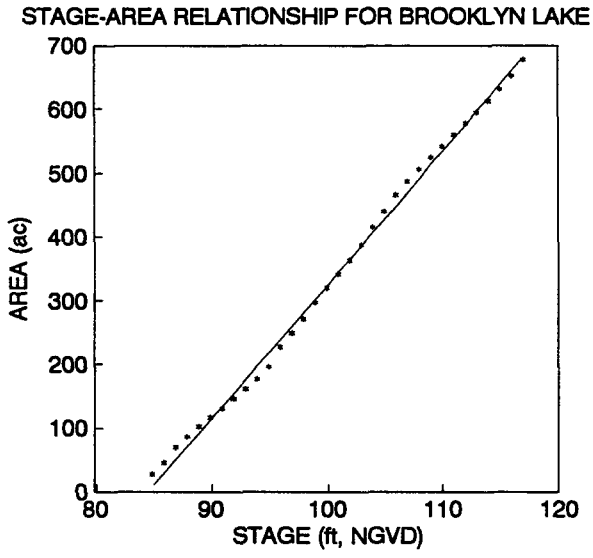
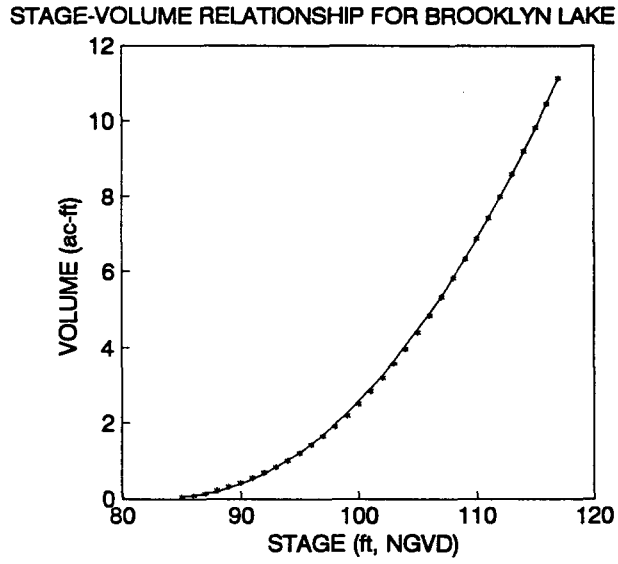
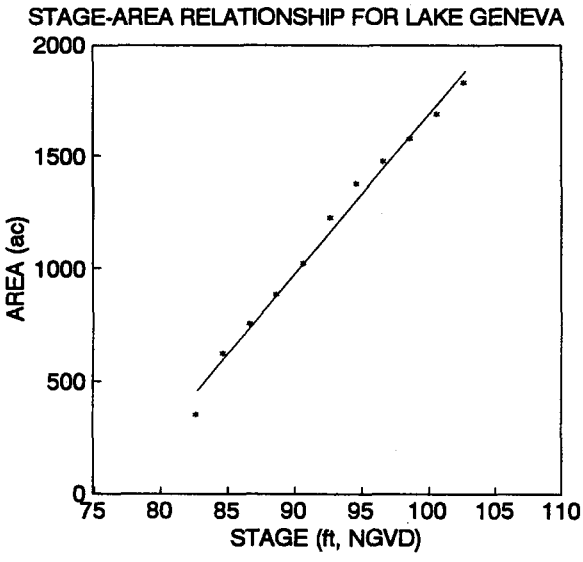


Figure 27. Stage-Area and Stage-Volume Relationships for Selected Lakes







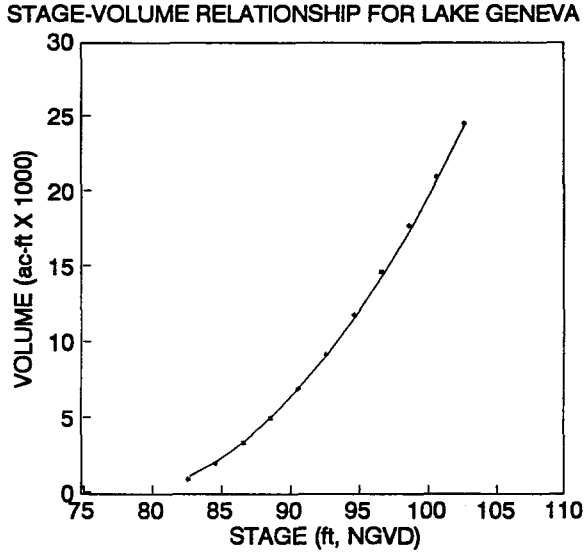


Figure 27. Continued

WATER BUDGETS FOR LAKES LOWRY, MAGNOLIA, BROOKLYN, AND GENEVA

Lowry Lake

Precipitation at Lowry Lake was 59.7 in/yr, and the calculated evaporation, which was the same for all the lakes, was 44.9 in/yr (Table 13 and Fig. 28). Surface water inflow from Alligator Creek and the unnamed spring was 68.6 in/yr, based on discharge measurements made in Alligator Creek between Blue Pond and Lowry Lake and in the spring run upstream from Lowry Lake. Surface water outflow was 45.5 in/yr, based on Motz et al.'s (1993) stage-discharge curve for Lowry Lake, which was confirmed by discharge measurements made in Alligator Creek between lakes Lowry and Magnolia in June, July, and August, 1994 (Fig. 29). Direct runoff from the surrounding basin to Lowry Lake was estimated to be 2.58 in/yr. Surficial aquifer inflow was 29.9 in/yr, and surficial aquifer outflow was 0.0, based on the flow net analyses described in Chapter 6. The lake stage at Lowry Lake was very stable, starting at 131.64 ft, NGVD, on August 2, 1994, and ending at 131.61 ft, NGVD, on July 4, 1995 (Table 7). Over the 12-month period from August 1, 1994, to July 31, 1995, over which the water budget was calculated, the value of $dS/dt = 1.9$ in/yr (Table 13), which is in close agreement. The residual leakage component was 68.5 in/yr, which was nearly the largest component in the water budget for Lowry Lake.

Magnolia Lake

Precipitation and evaporation at Magnolia Lake were similar to precipitation and evaporation at Lowry Lake, or 59.6 and 44.9 in/yr, respectively (see Table 13 and Fig. 30). Surface water inflow for Magnolia Lake was estimated from the discharge measurements made in Alligator Creek between lakes Lowry and Magnolia and the stage-discharge curve for Lowry Lake (Motz et al., 1993, and Fig. 29). The surface water outflow from Magnolia Lake was estimated

Table 13. Water Budget Components for August 1, 1994 to July 31, 1995

Component (inches/year)	Lowry Lake	Magnolia Lake	Lake Brooklyn	Lake Geneva
Inflow:				
Precipitation	59.7	59.6	50.2	50.0
Surface Water Inflow	68.6	282.6	141.4	0.0
Runoff (i.e., overland flow)	2.58	6.27	2.58	5.39
Surficial-Aquifer Inflow	29.9	19.1	3.95	9.50
Outflow:				
Evaporation	44.9	44.9	45.0	44.9
Surface Water Outflow	45.5	258.9	0.0	0.0
Surficial-Aquifer Outflow	0.0	2.50	4.67	0.0
Vertical Leakage	68.5	60.3	78.3	7.39
dS/dt:	1.9	1.0	70.3	12.6

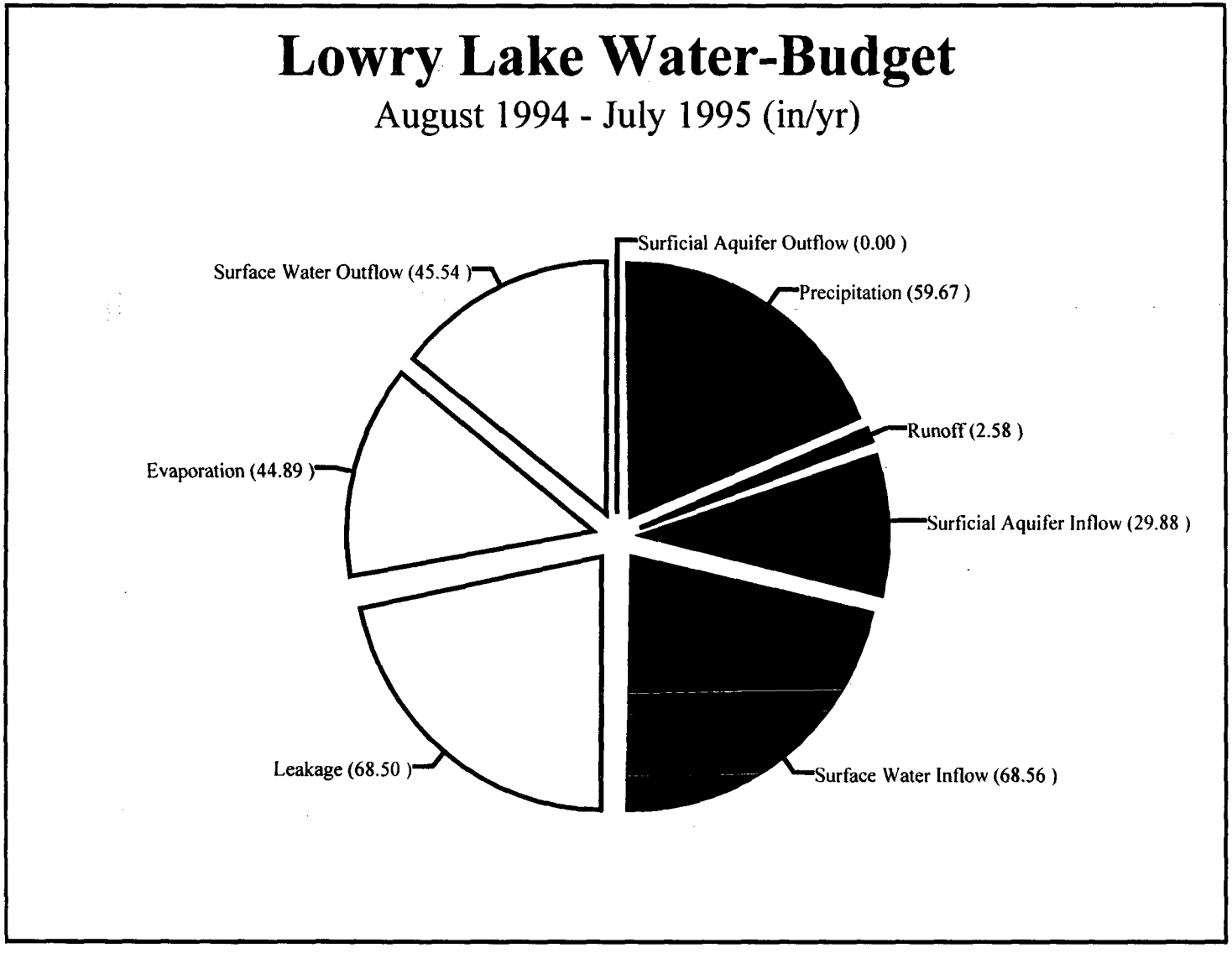


Figure 28. Water Budget for Lowry Lake from August 1994 to July 1995

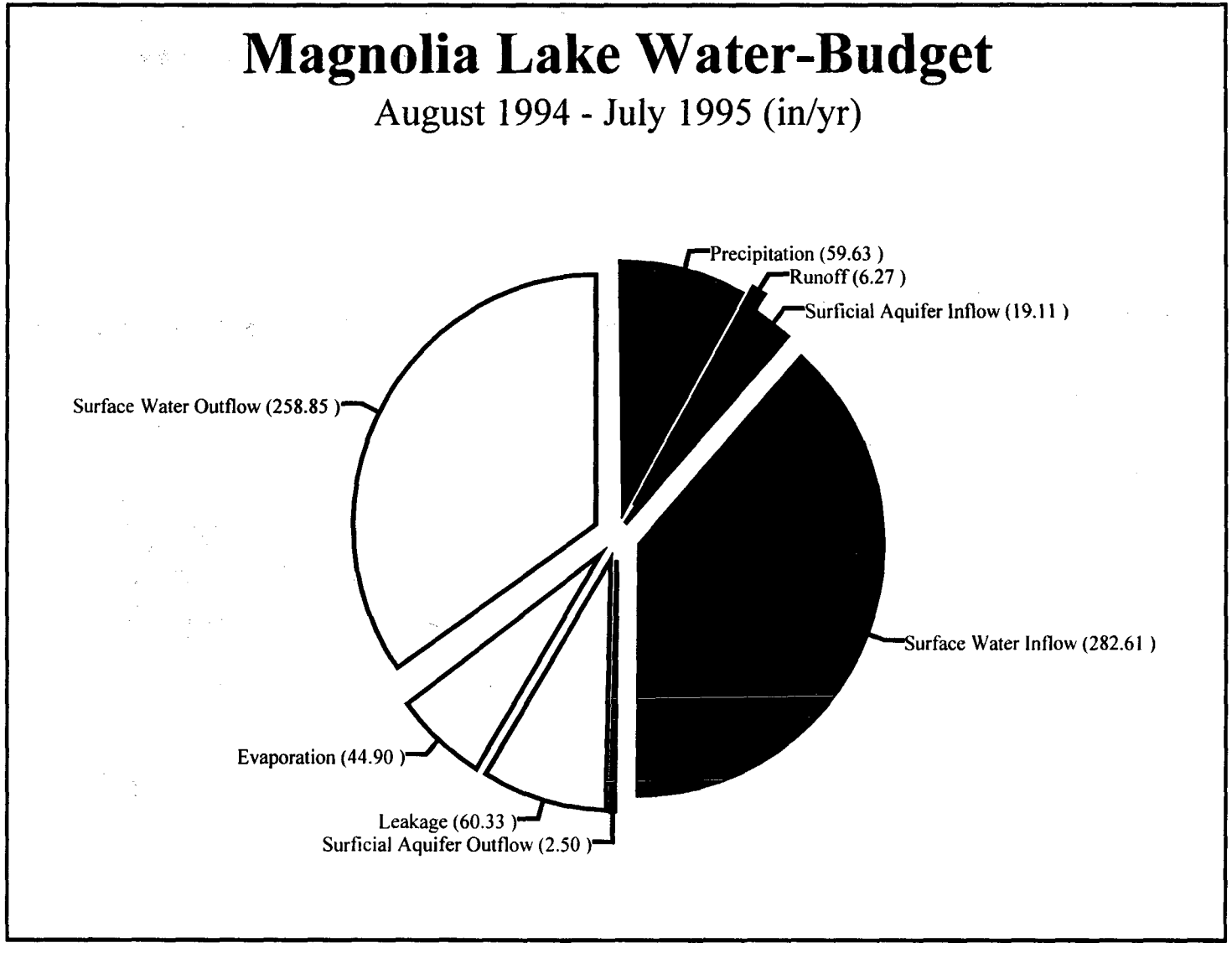


Figure 30. Water Budget for Magnolia Lake from August 1994 to July 1995

from discharge measurements made in Alligator Creek between lakes Magnolia and Brooklyn. When expressed in length per time units, these values are quite large, i.e., 282.6 and 258.9 in/yr, respectively, due to the relatively small surface area of Magnolia Lake compared to these inflows and outflows. Direct runoff was estimated to be 6.27 in/yr, and surficial aquifer inflow and outflow were 19.1 and 2.50 in/yr. The lake stage at Magnolia Lake was stable, starting at 124.83 ft, NGVD, on August 2, 1994, and ending at 124.54 ft, NGVD, on July 4, 1995 (Table 7). The calculated value for the change in storage for the 12-month computation period was dS/dt = 1.0 in/yr, and the residual leakage component was 60.3 in/yr.

Lake Brooklyn

Precipitation at Lake Brooklyn was less than the precipitation at Lowry Lake, or 50.2 in/yr (see Table 13 and Fig. 31). The surface water inflow to Lake Brooklyn from Magnolia Lake was 141.4 in/yr, based on the discharge measurements made in Alligator Creek between lakes Magnolia and Brooklyn. No surface water outflow occurred from Lake Brooklyn. Direct runoff into Lake Brooklyn was estimated to be 2.58 in/yr. Surficial aquifer inflow and outflow varied quite a bit during 1994-1995 (Table 6 and Fig. 23), and outflow (4.67 in/yr) was slightly greater than inflow (3.95 in/yr). Lake Brooklyn's stage increased more than 5 feet from 98.76 ft, NGVD, on August 2, 1994, to 103.97 ft, NGVD, on July 4, 1995. The calculated value for the change in storage was dS/dt = 70.3 in/yr and the residual leakage component was 78.3 in/yr.

Lake Geneva

Precipitation at Lake Geneva was similar to precipitation at Lake Brooklyn, or 50.0 in/yr (see Table 13 and Fig. 32). No surface water inflow or outflow occurred, and direct runoff into Lake Geneva was 5.39 in/yr. Surficial-aquifer inflow was 9.50 in/yr, and no surficial-aquifer

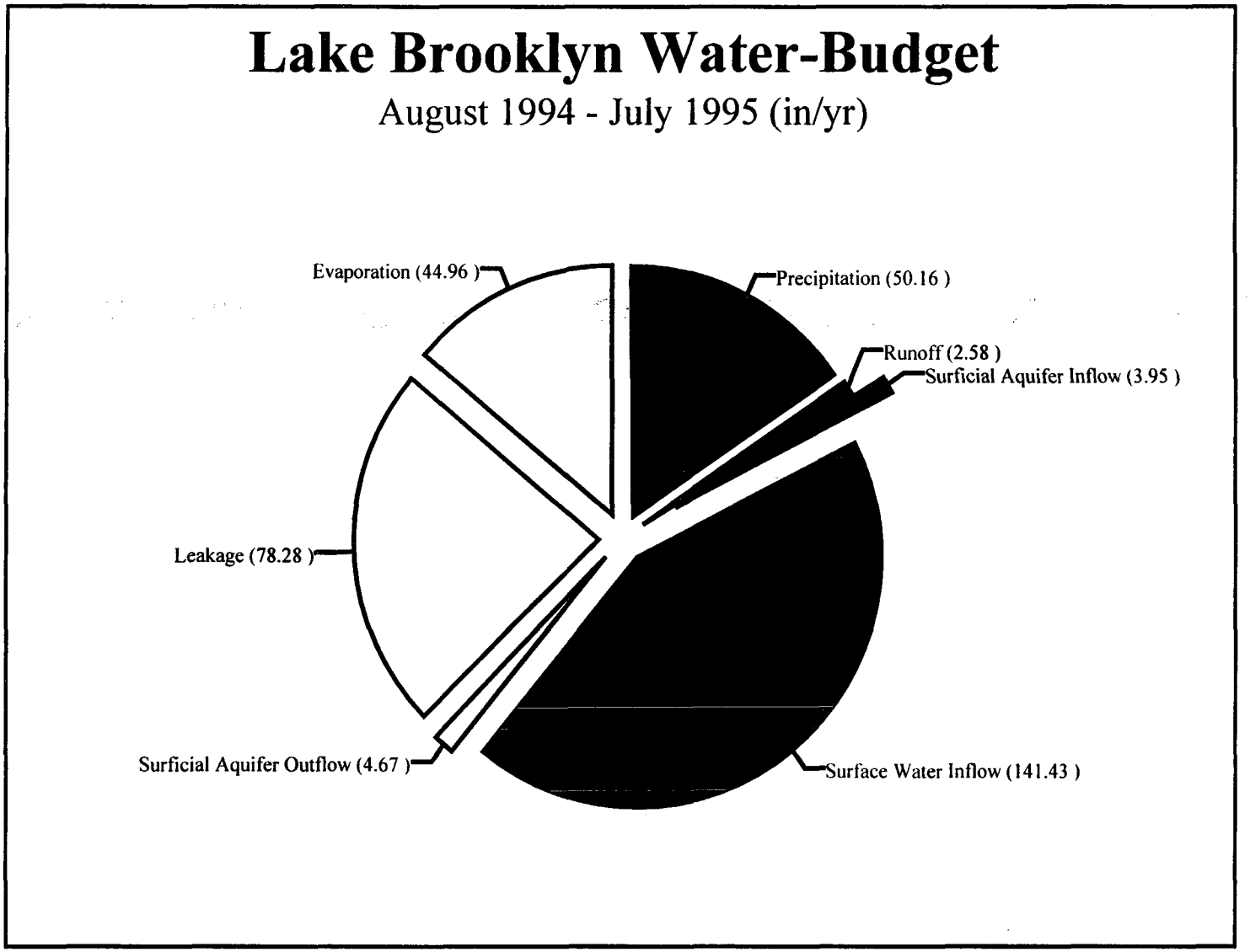


Figure 31. Water Budget for Lake Brooklyn from August 1994 to July 1995

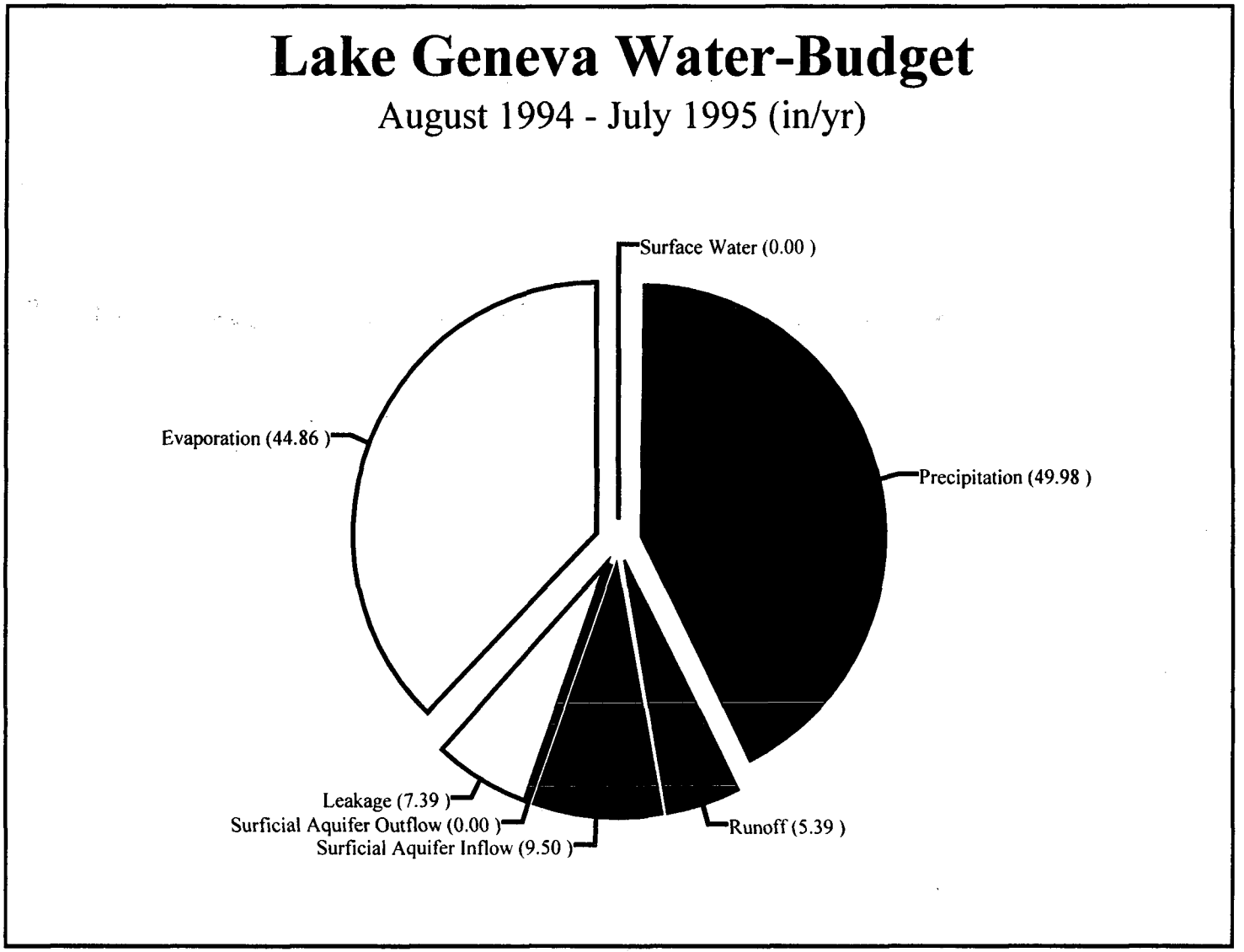


Figure 32. Water Budget for Lake Geneva from August 1994 to July 1995

outflow occurred. Lake Geneva's stage increased from 90.50 ft, NGVD, from August 2, 1994, to 91.78 ft, NGVD, on July 4, 1995, and the calculated value for the change in storage was dS/dt = 12.6 in/yr. The residual leakage component was 7.39 in/yr.

LEAKANCE VALUES

After the water budget components had been determined, including the vertical leakage component using Eqn. 7-1, values for leakance were calculated using the calculated vertical leakage components, the head differences between the lake stage and the upper Floridan aquifer, and Eqn. 7-2 (Appendix G and Table 14). The leakance value for Lake Brooklyn, 9.61×10^{-4} day^{-1}, is the largest of the four values. The leakance values for Lowry and Magnolia lakes are 2.95×10^{-4} and 3.10×10^{-4} day^{-1}, and the value for Lake Geneva is 1.76×10^{-4} day^{-1}.

IMPACTS OF 2010 PUMPING ON LAKE LEVELS

In the UECB, vertical leakage from the lakes/surficial aquifer system to the upper Floridan aquifer is a function of the lake-stage elevation and the head in the upper Floridan aquifer (Eqn. 7-2). As the head declines in the upper Floridan aquifer, leakage will increase, but also the lake stage elevation will decline in response to a decline in the head in the upper Floridan aquifer. Thus, impacts such as increased pumping from the upper Floridan aquifer, which would cause additional drawdowns and lower heads in the upper Floridan aquifer, could cause a lowering of lake stages.

Based on water budget calculations and a long-term simulation of Lake Brooklyn from 1965 to 1991, Motz et al. (1995) determined that a 1-foot decline in the upper Floridan aquifer would result in a decline of about 0.76 feet in the stage elevation of Lake Brooklyn. Also, predicted drawdowns in the upper Floridan aquifer in the north-central Florida region due to

Table 14. Calculated Values of Leakance for Lakes Lowry, Magnolia, Brooklyn, and Geneva

Lake	Leakance (K'/b', day^{-1})
Lowry	2.95×10^{-4}
Magnolia	3.10×10^{-4}
Brooklyn	9.61×10^{-4}
Geneva	1.76×10^{-4}

projected changes in pumping from May 1985 to May 2010 were computed by means of a regional ground water flow model. In the UECB, it was determined that ground water level changes will be negligible (± 1 ft). Specifically, in the vicinity of Lake Brooklyn and the other lakes in the UECB chain, a decrease on the order of 0.03 ft was predicted for the ground water level in the upper Floridan aquifer. Combining this result with the result from the lake stage simulation for Lake Brooklyn, which indicates that a 1-foot change in the head in the upper Floridan aquifer will change the lake stage elevation in Lake Brooklyn by 0.76 feet, indicates that the lake stage elevation in Lake Brooklyn will be decreased by a negligible amount on the order of 0.02 ft due to the predicted drawdown in the upper Floridan aquifer that will occur due to the projected changes in pumping from 1985 to 2010. The other lakes considered in this study, Lowry, Magnolia, ad Geneva, would respond similarly to changes in head in the upper Floridan aquifer and also would be decreased by negligible amounts.

The lake stage elevations of lakes Lowry, Magnolia, Brooklyn, and Geneva will increase and/or decrease by amounts significantly greater than 0.02 ft due to other factors in the water budget such as rainfall, evaporation, surface water inflow and outflow, and surficial aquifer inflow and outflow. Thus, these results indicate that the presently projected changes in pumping from 1985 to 2010 will not significantly affect the lake stage elevations of these lakes.

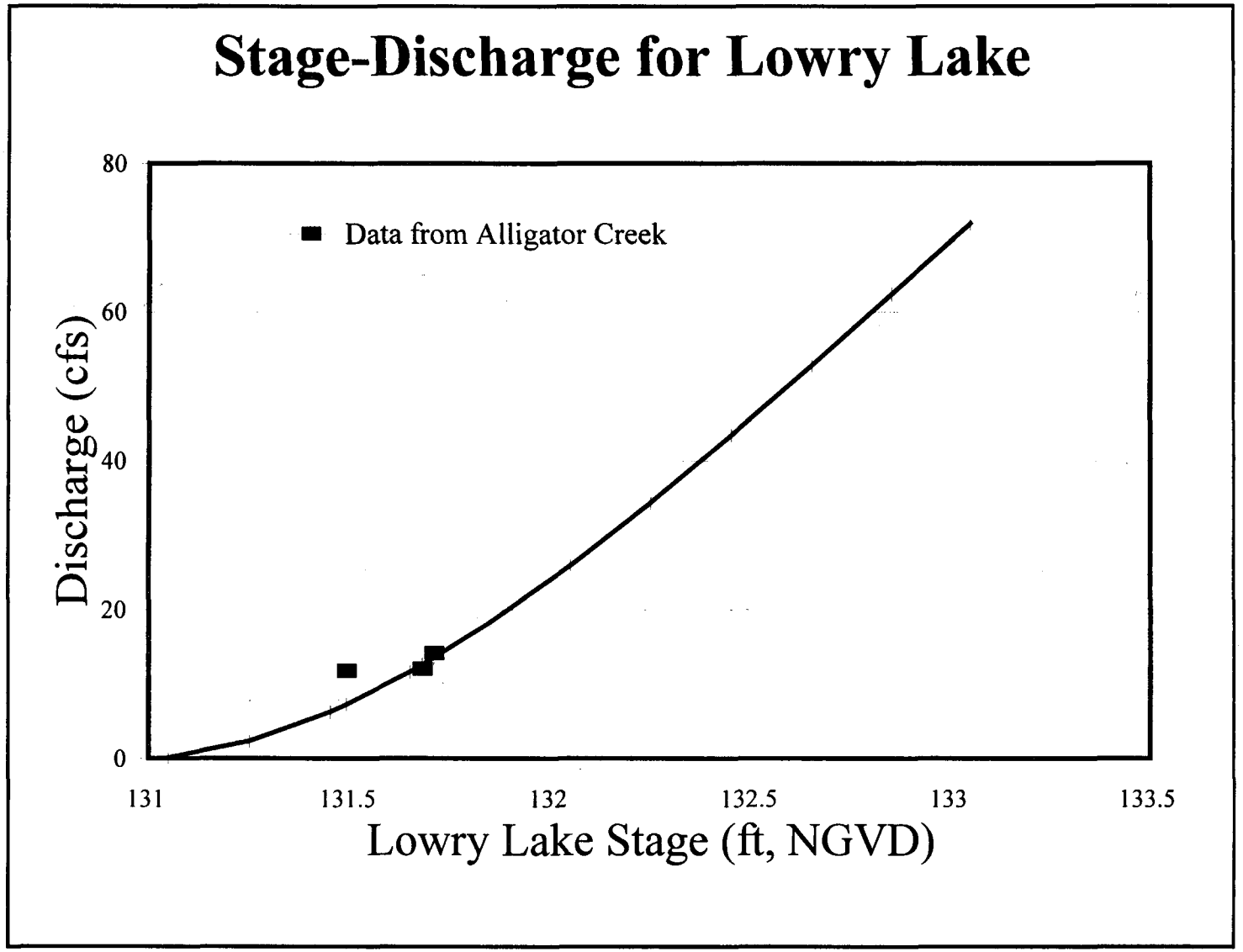


Figure 29. Stage Versus Discharge for Lowry Lake

CHAPTER 8
DISCUSSION AND CONCLUSIONS

NEGATIVE VALUES FOR LEAKAGE AND LEAKANCE

In some of the daily time steps in the water budget calculations, negative values for leakage and leakance resulted when leakage was calculated as the residual in the water budget equation (Appendix G). In the context of this investigation, conceptually this would be interpreted as ground water flow occurring from the upper Floridan aquifer to a lake. However, this could not occur physically because all of the lake stages were greater than the potentiometric heads in the underlying upper Floridan aquifer, and thus the vertical hydraulic gradient between the lake stages and the upper Floridan aquifer was always directed downward. Therefore, negative leakage values are indicative of a net negative error in computing the residual component in the water budget. This error is attributed to inaccuracies in the estimated water budget components. In other time steps, inaccuracies in estimated water budget components probably resulted in net positive errors. The positive and negative errors should be distributed approximately normally about a mean of zero, if errors in the estimated water budget components are distributed approximately normally and if the represented time period is long enough. Under these assumptions, the total error in the sum of all negative and positive leakage values will be approximately zero.

In accordance with this concept, the leakage component for each lake was obtained by summing all of the leakage values resulting from the daily water budget calculations, both positive and negative, to minimize the total error in the arithmetic mean. Also, the arithmetic means for

the values of leakance were obtained based on including the negative values as well as the positive values of leakance in computing the means.

HYDROLOGIC CHARACTERISTICS

Lakes Lowry, Magnolia, Brooklyn, and Geneva are in close proximity and interact hydraulically. They receive nearly the same rainfall and lose approximately the same amount of water per unit of surface area to evaporation, but each lake also has unique hydrologic characteristics (Table 13). Lowry Lake receives surface water inflow from Blue Pond via Alligator Creek and from the spring northeast of the lake, and it also receives inflow from the surrounding surficial aquifer. It loses water to surface water outflow and vertical leakage to the underlying upper Floridan aquifer. The stage of Lowry Lake is very stable. Magnolia Lake receives surface water inflow from Lowry Lake and surficial-aquifer inflow from the north, and it loses water via surficial-aquifer outflow to the south. Magnolia Lake also loses water by means of vertical leakage to the upper Floridan aquifer. Large losses by means of surface water outflow also have occurred since the resumption of surface water discharge from Magnolia Lake at the end of 1991. The volume and surface area of Magnolia Lake are smaller than the volumes and surface areas of the other lakes, and the surface water inflow and outflow components (when expressed in length per time units) for Magnolia Lake are much larger than the corresponding components for the other lakes.

Lake Brooklyn receives surficial-aquifer inflow from the north and southwest, and it discharges to the surficial aquifer to the northwest, south, and east. The surficial-aquifer inflow and outflow are variable from month to month, but generally the outflow exceeds the inflow. Relatively large amounts of water discharge via vertical leakage to the upper Floridan aquifer. The

stage of Lake Brooklyn responds quickly to changes in surface water inflow, and its fluctuations are greatest of the four lakes investigated. From August 2, 1994, to July 5, 1995, its stage increased more than 5 ft, mostly in response to the resumption of surface water inflow in Alligator Creek from Magnolia Lake. Surface water outflow has not occurred from Lake Brooklyn since 1973. Lake Geneva is a true seepage lake, i.e., it has not received surface water inflow since 1973, and surface water discharge has not occurred since before 1965. Inflow occurs via surficial aquifer inflow, and outflow occurs via vertical leakage to the upper Floridan aquifer. The stage at Lake Geneva has been relatively stable, but at a lower than normal level, in the period during which no surface water flow has been received from Lake Brooklyn. Until surface water flow resumes from Lake Brooklyn, the stage in Lake Geneva likely will remain below what is considered normal for this lake.

The values for leakance at lakes Lowry, Magnolia, and Geneva are similar in magnitude (1.76×10^{-4} to 3.10×10^{-4} day^{-1}), and the value for leakance at Lake Brooklyn is somewhat greater (9.61×10^{-4} day^{-1}). This difference in leakance values helps to explain the different response that Lake Brooklyn has to cessation of surface water inflow. At Lake Brooklyn, when surface water inflow decreases, vertical leakage to the upper Floridan aquifer continues at a greater rate than at the other lakes, and, thus, the stage at Lake Brooklyn decreases at a faster rate than the stages at the other lakes. This is consistent with long-term observations that Lake Brooklyn is more affected by drought periods, when surface water inflow decreases or ceases altogether, than many of the other lakes in the UECB.

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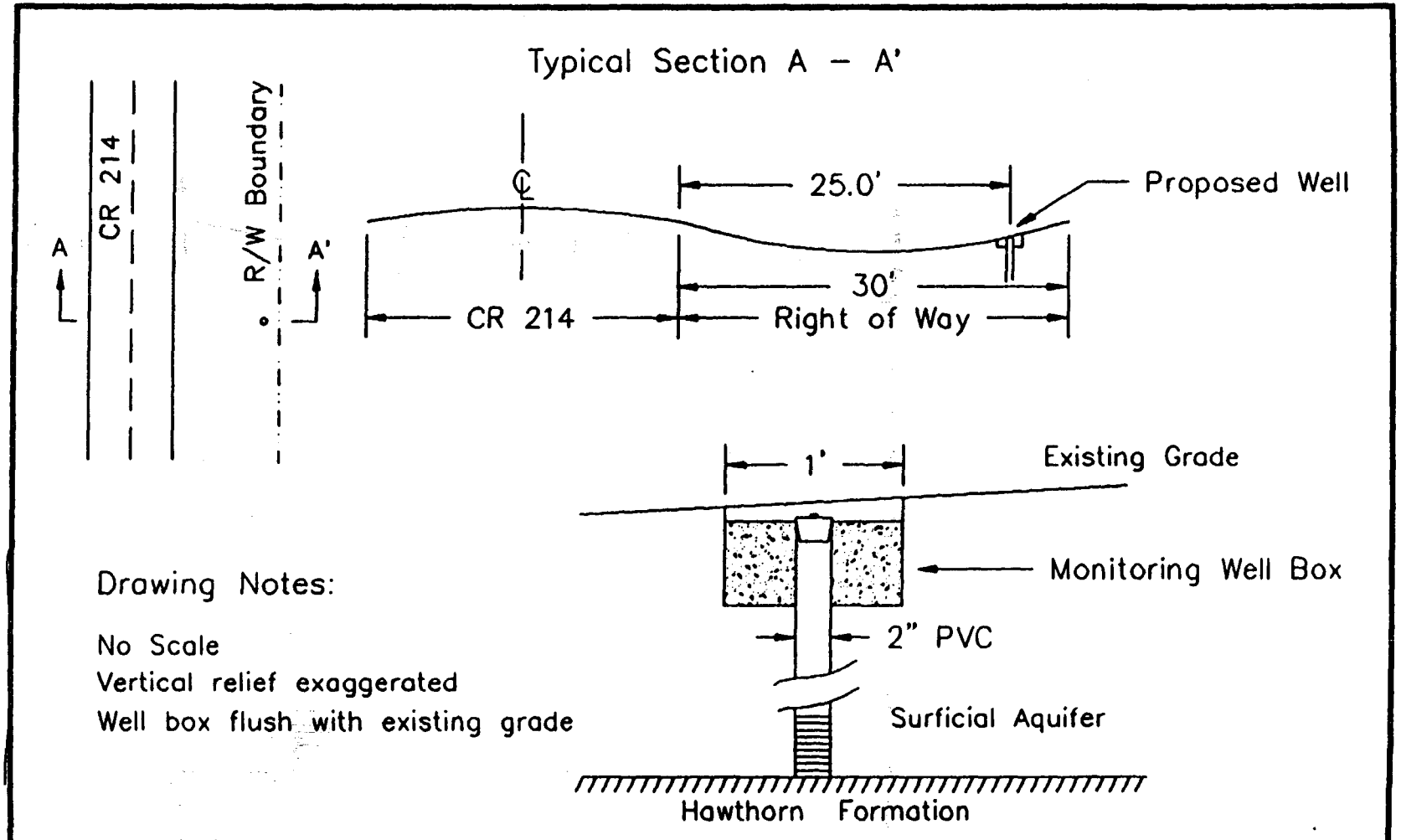
APPENDIX A

WELL LOCATOR MAPS



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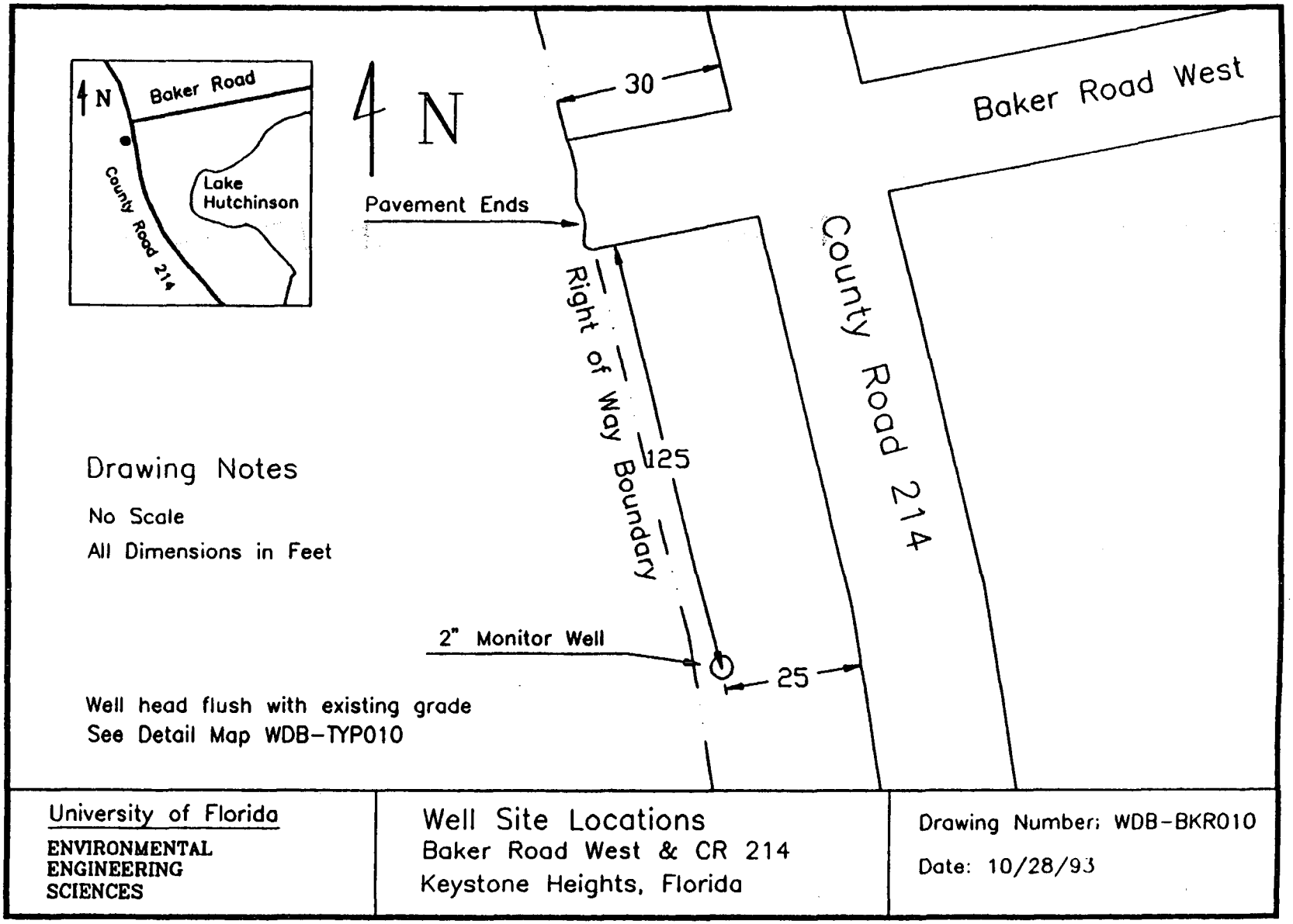
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County Road 214
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Drawing Notes
No Scale
All Dimensions in Feet
Well head flush with existing grade
See Detail Map WDB-TYP010
University of Florida
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Well Site Locations
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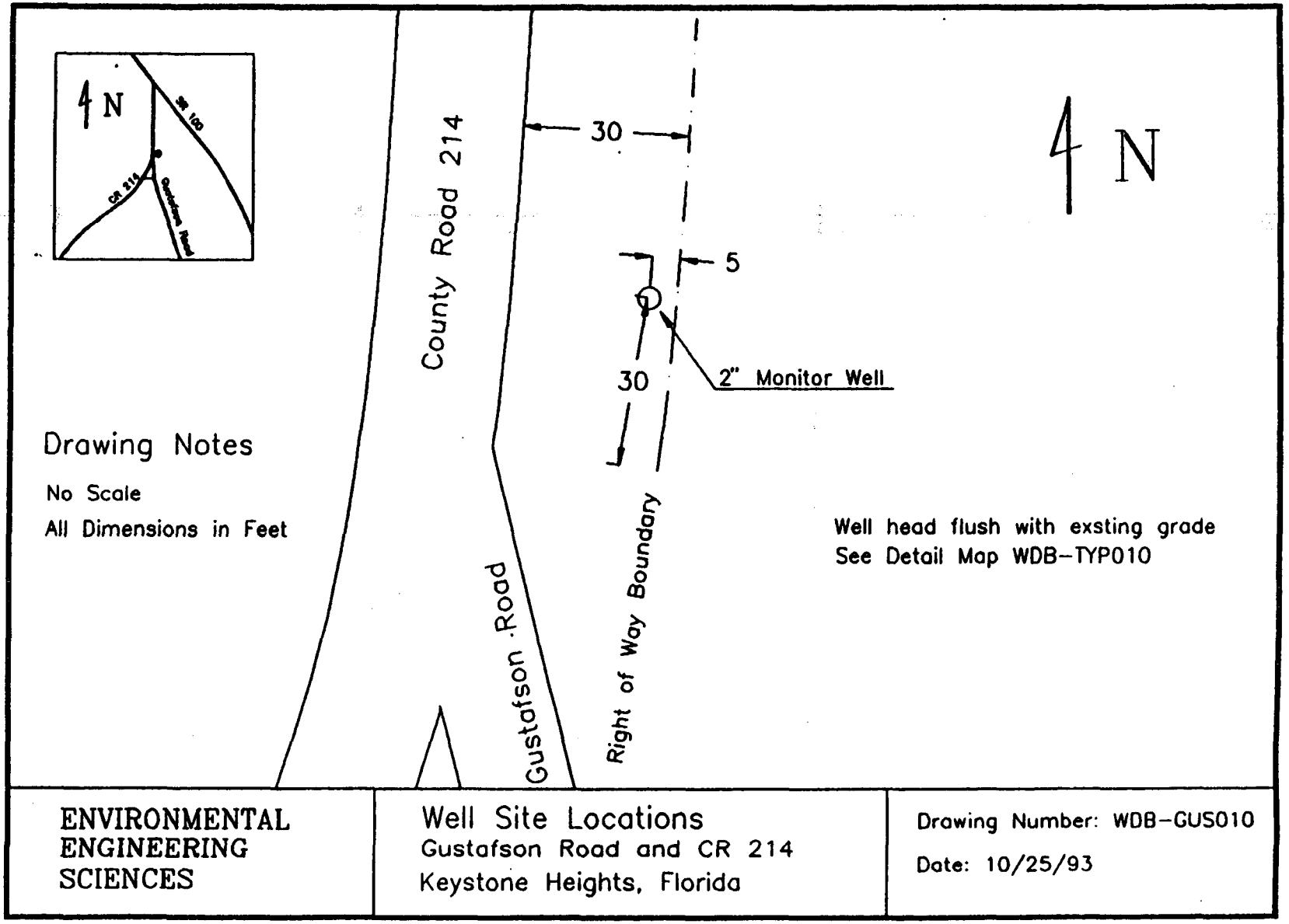
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Right of Way Boundary
Well head flush with exsting grade
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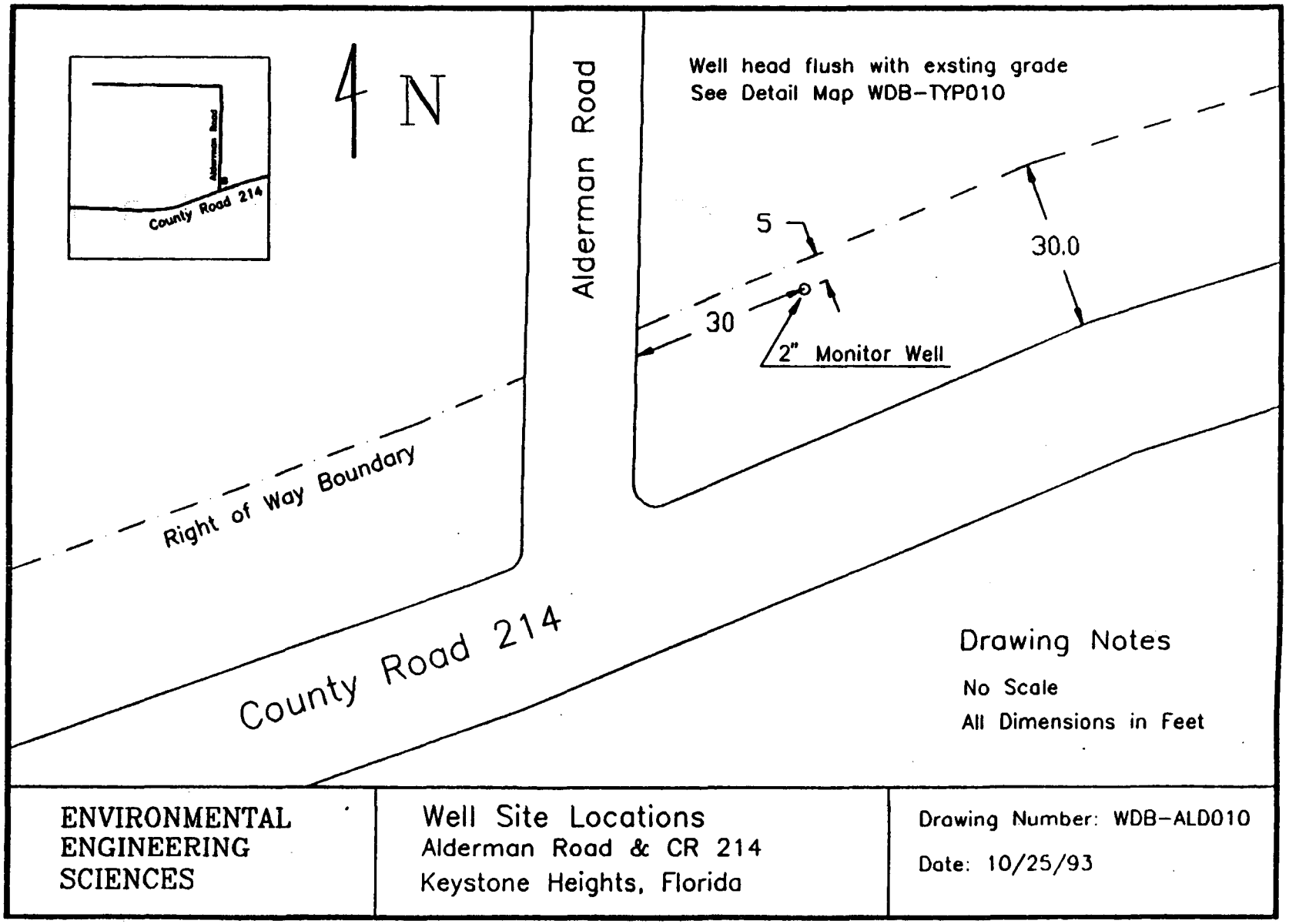

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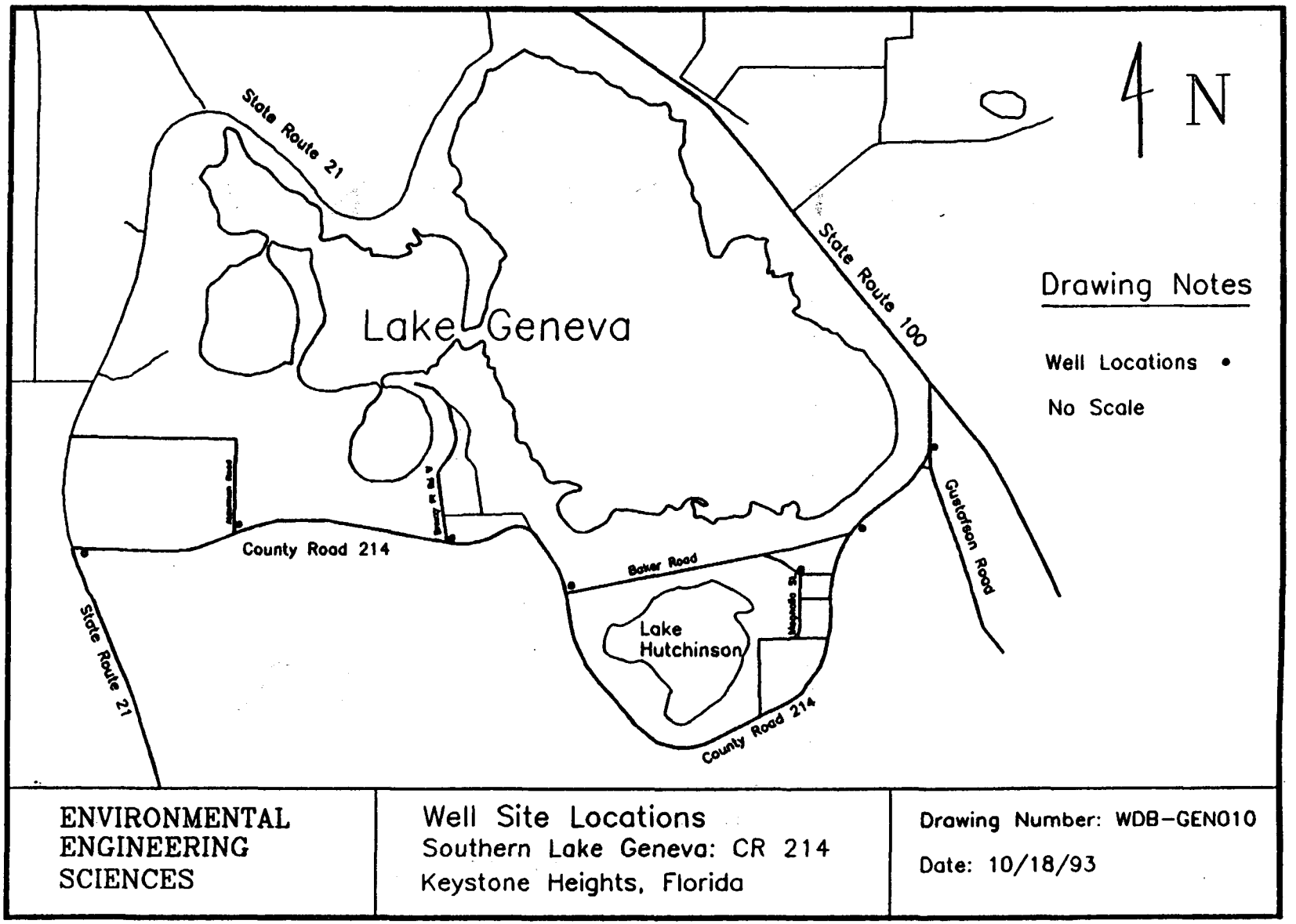
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Well Locations •
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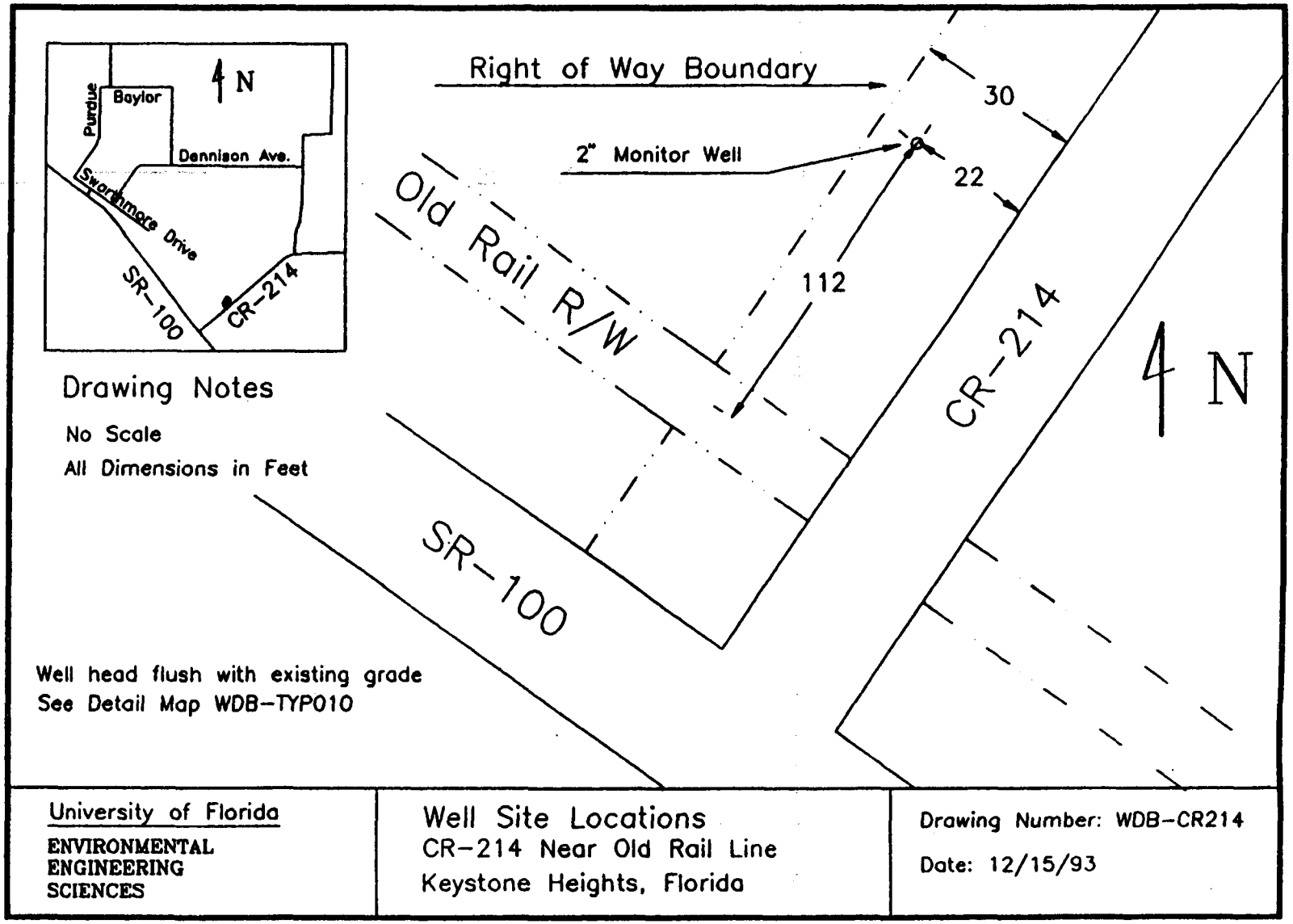
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SR-100
Drawing Notes
No Scale
All Dimensions in Feet
Well head flush with existing grade
See Detail Map WDB-TYP010
University of Florida
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Well Site Locations
CR-214 Near Old Rail Line
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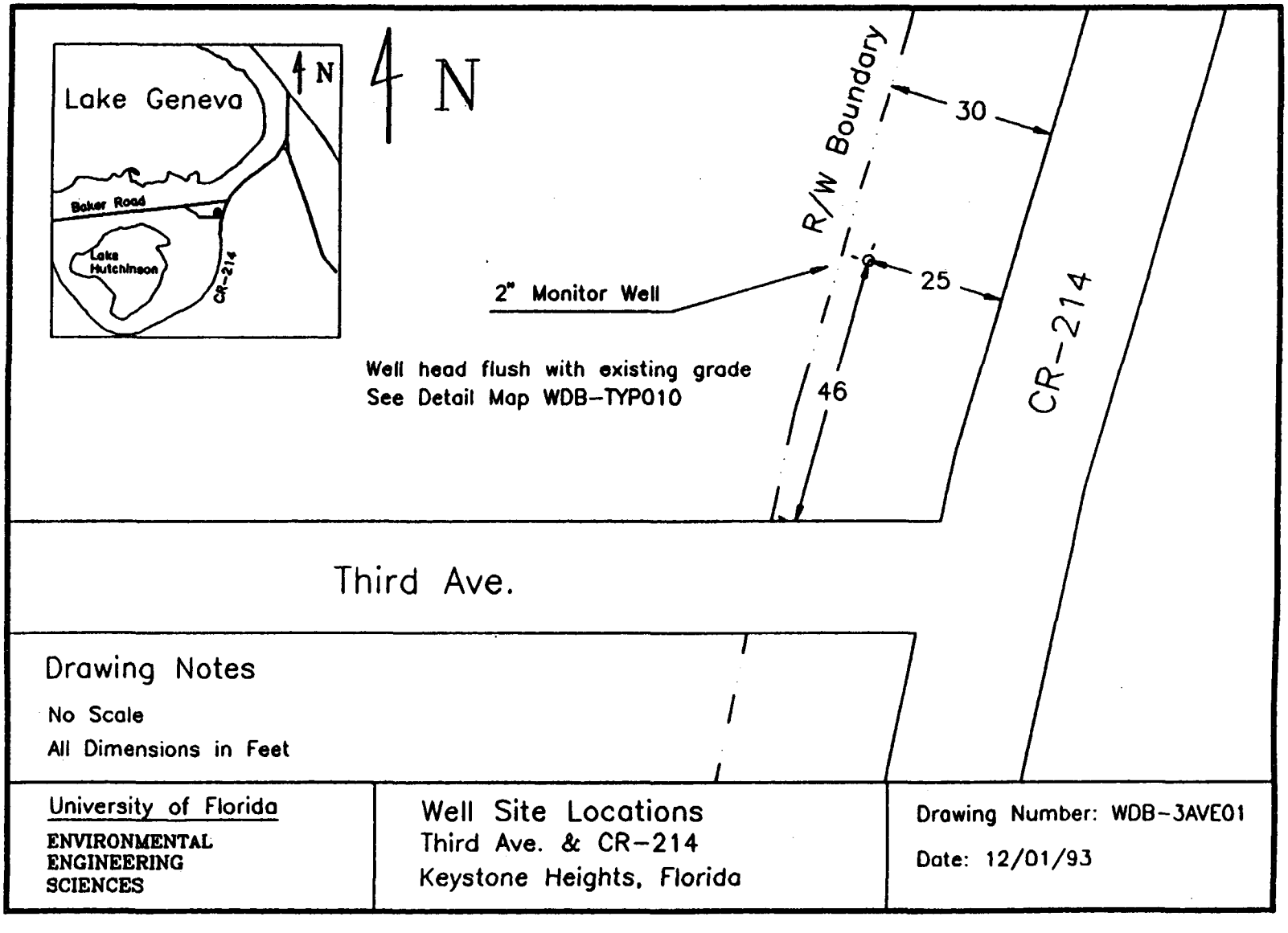
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Baker Road
Lake Hutchinson
CR-214
N
R/W Boundary
30
25
46
2" Monitor Well
Well head flush with existing grade
See Detail Map WDB-TYP010
CR-214
Third Ave.
Drawing Notes
No Scale
All Dimensions in Feet
University of Florida
ENVIRONMENTAL ENGINEERING SCIENCES
Well Site Locations
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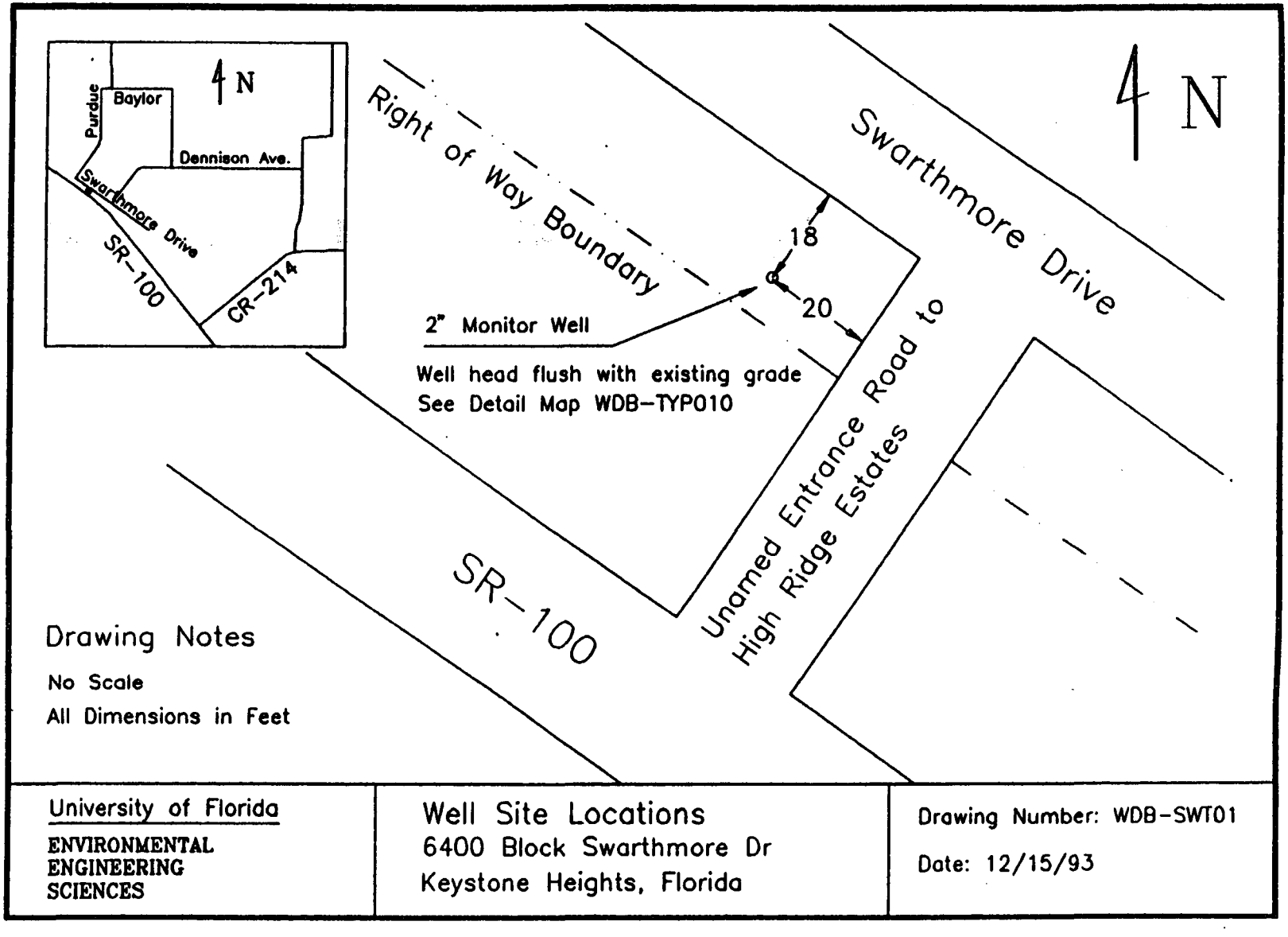
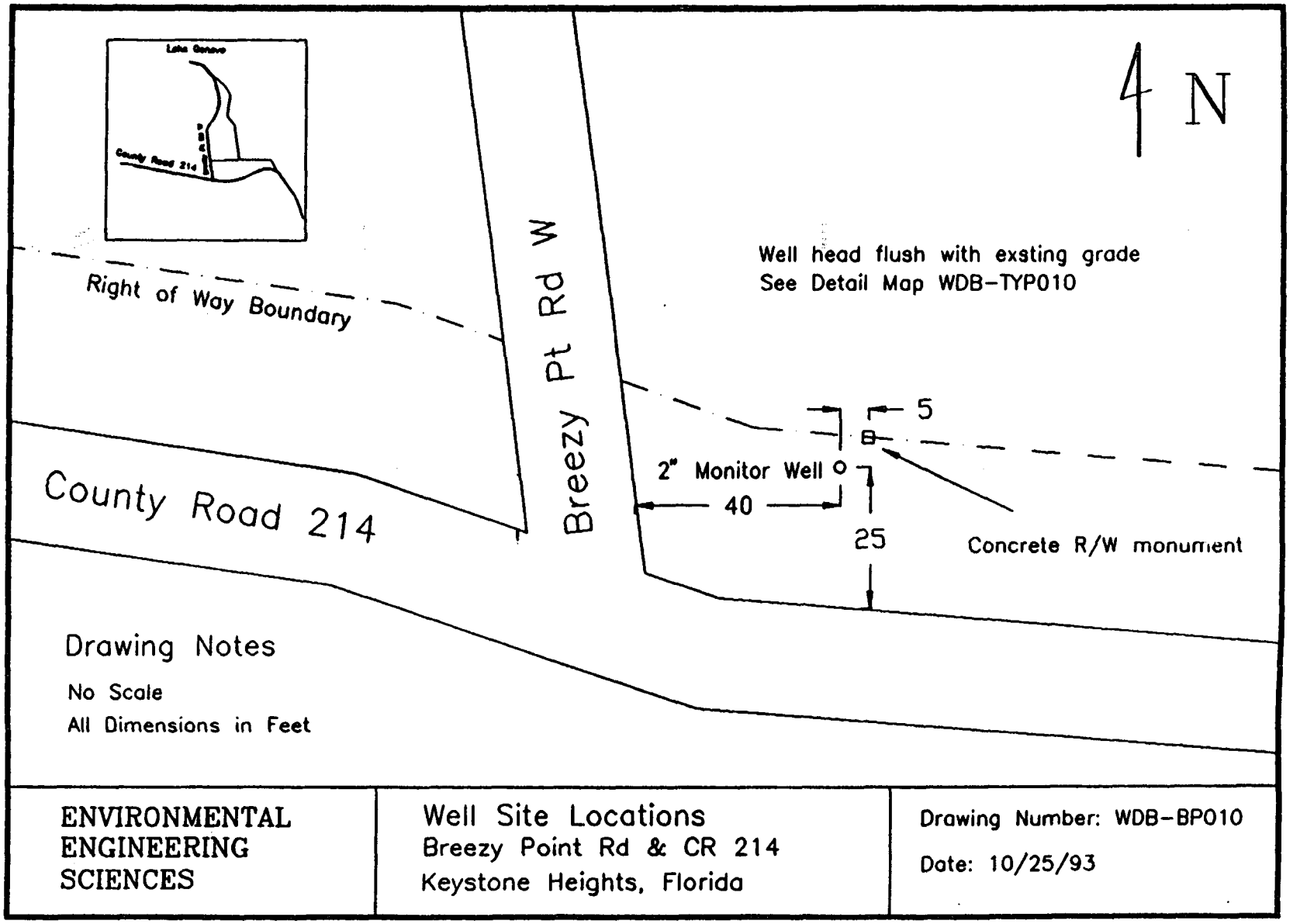
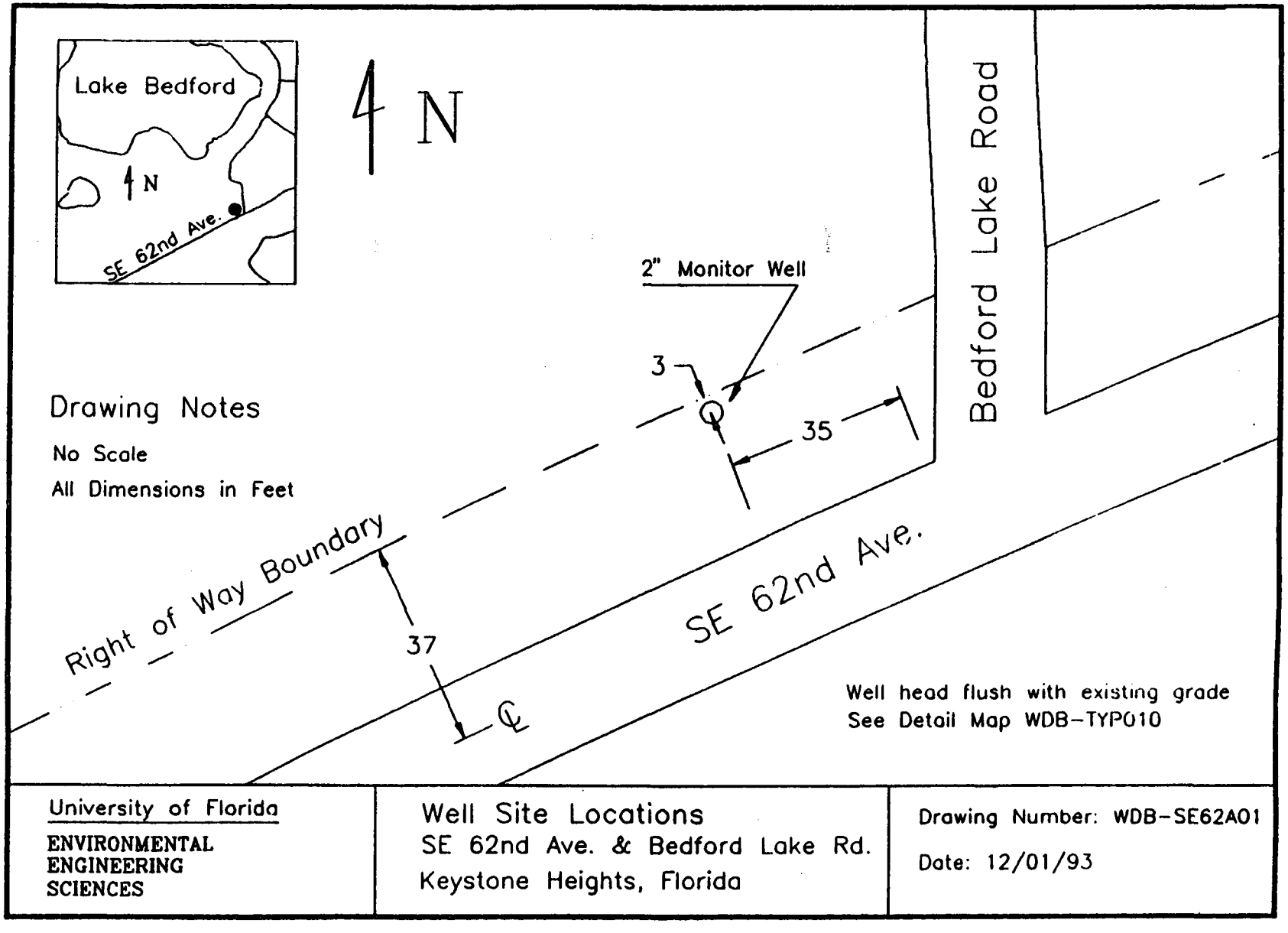
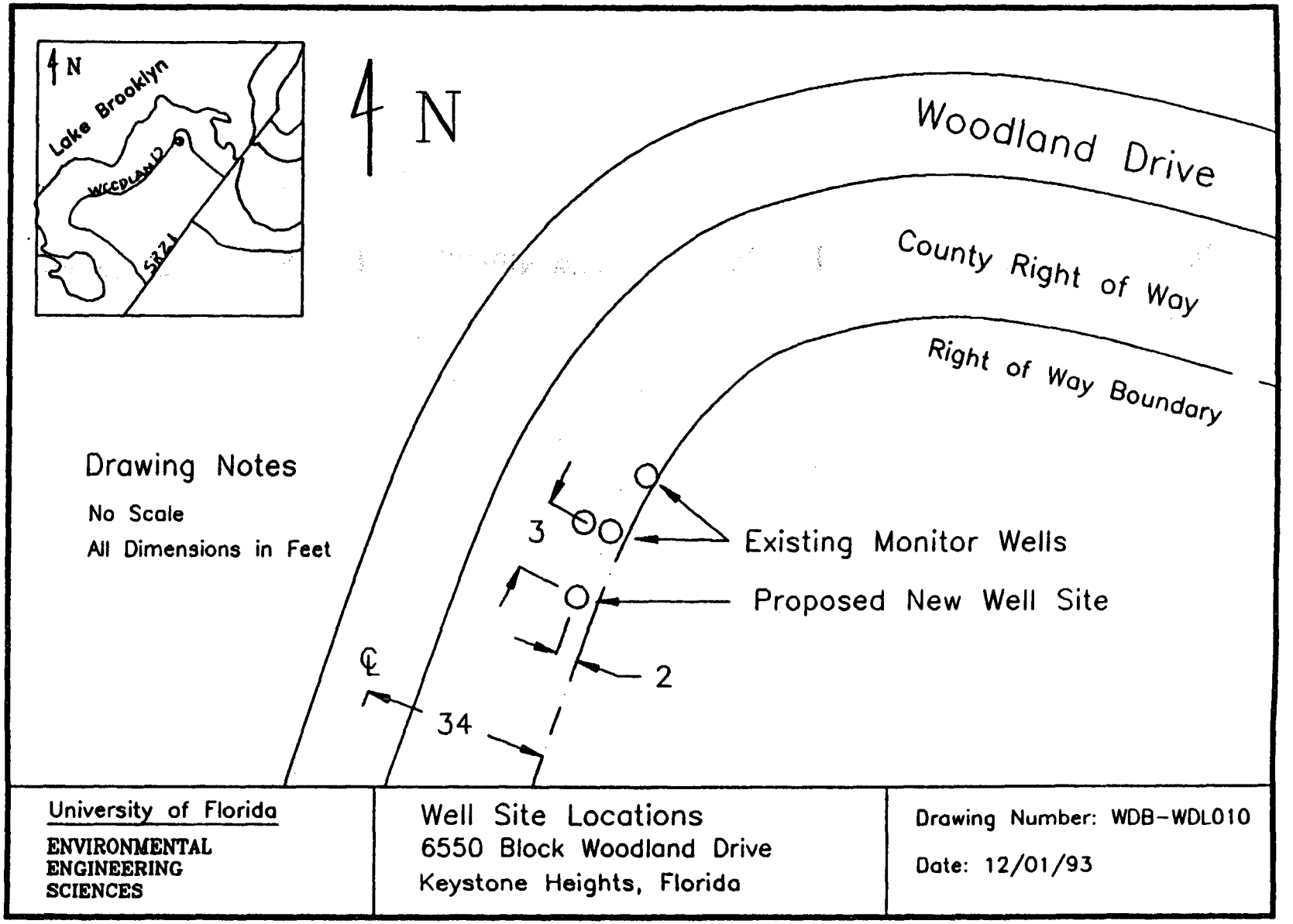
Date: 12/01/93

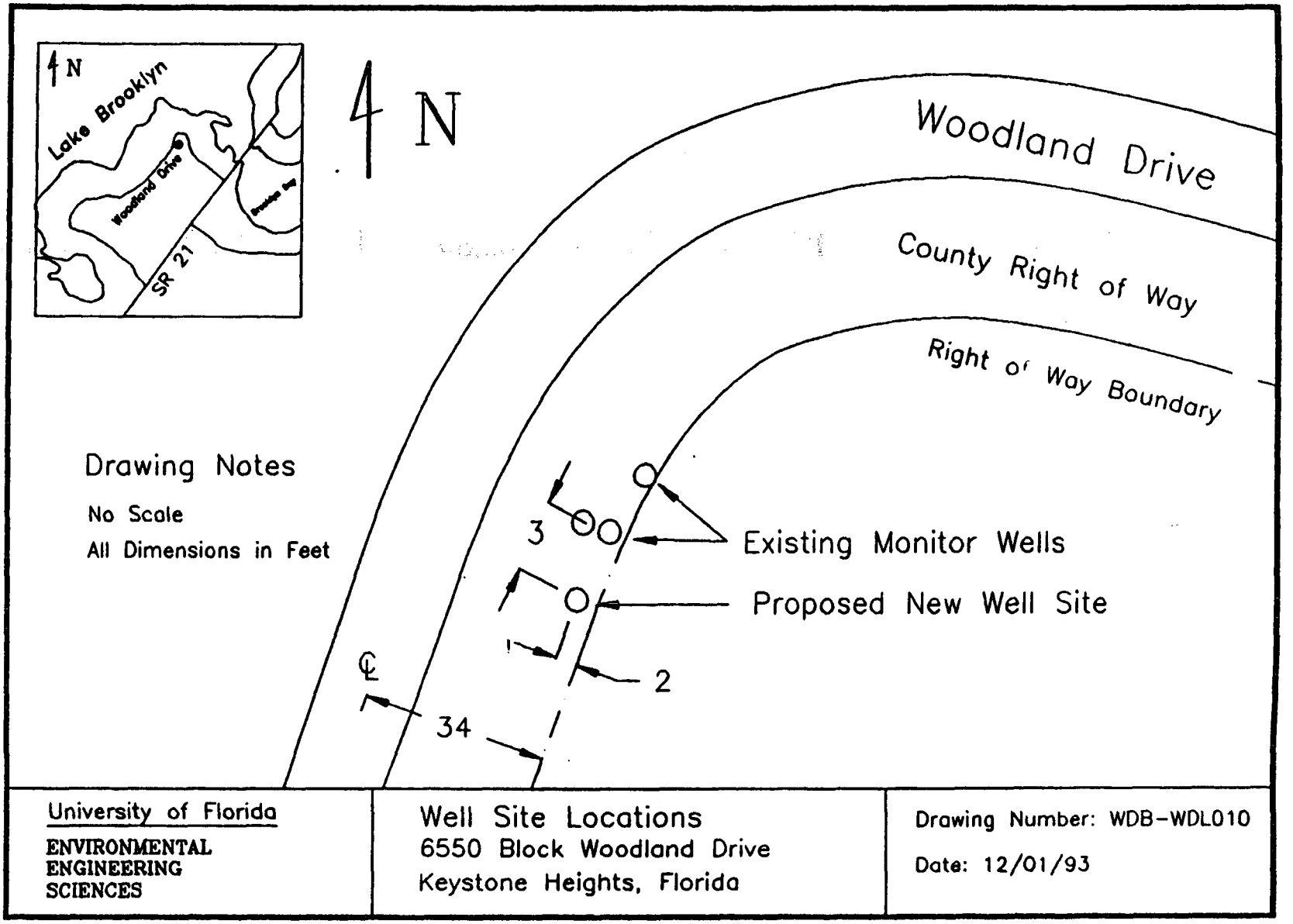

N
Purdue
Baylor
Dennison Ave.
Swarthmore Drive
SR-100
CR-214
Right of Way Boundary
Swarthmore Drive
18
20
2" Monitor Well
Well head flush with existing grade
See Detail Map WDB-TYP010
Unamed Entrance Road to
High Ridge Estates
SR-100
Drawing Notes
No Scale
All Dimensions in Feet
University of Florida
ENVIRONMENTAL
ENGINEERING
SCIENCES
Well Site Locations
6400 Block Swarthmore Dr
Keystone Heights, Florida
Drawing Number: WDB-SWT01
Date: 12/15/93

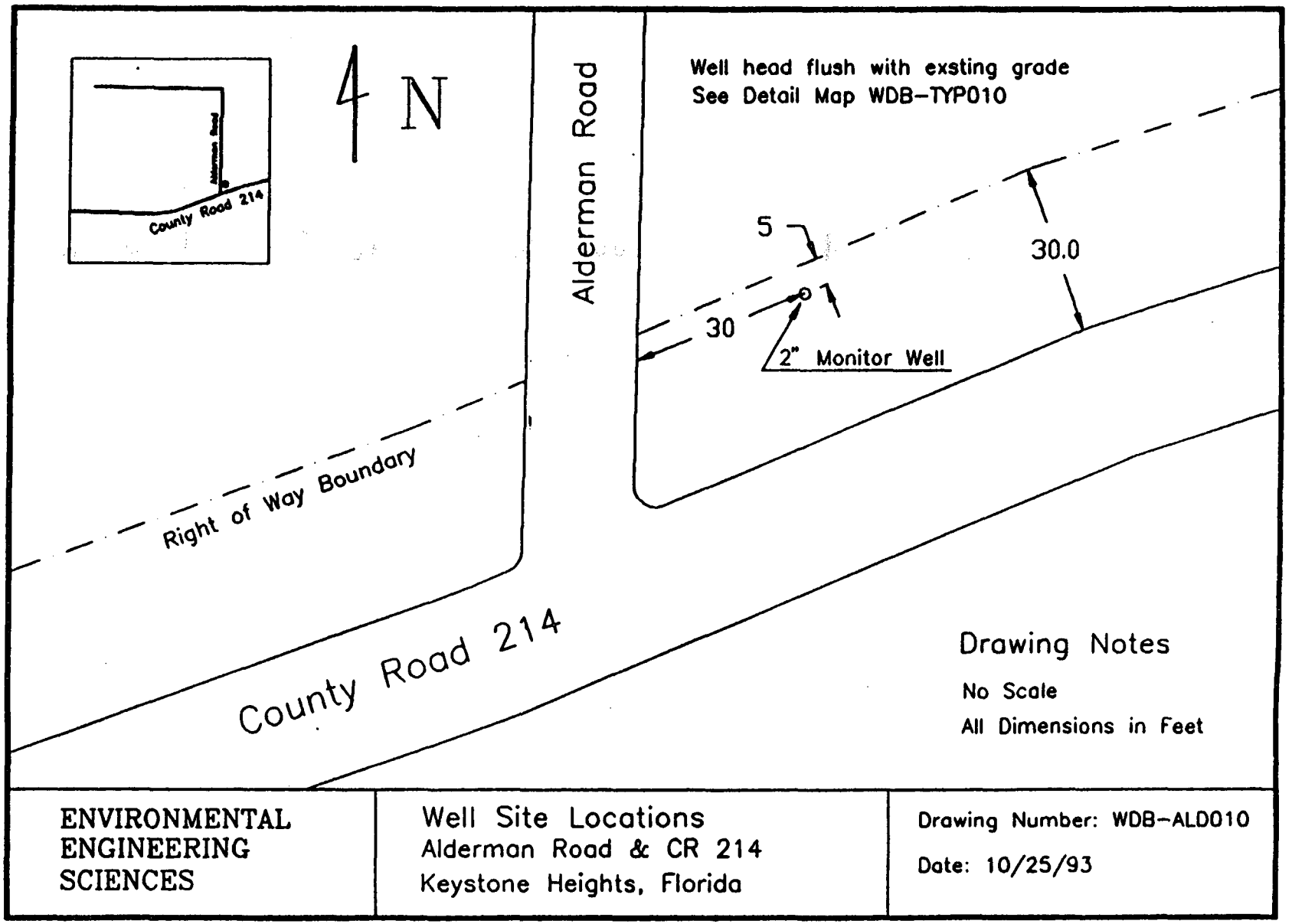


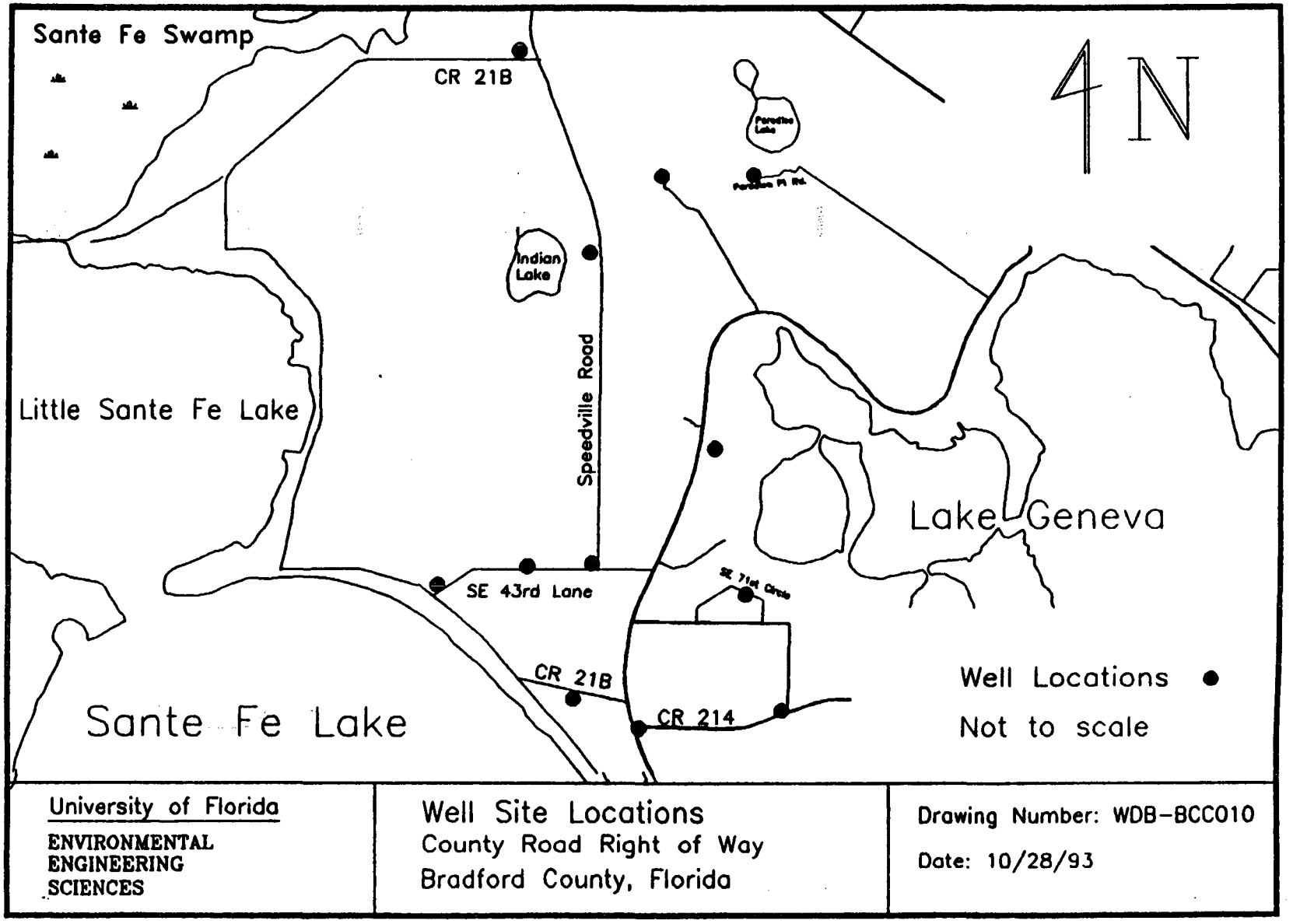
ENVIRONMENTAL ENGINEERING SCIENCES	Well Site Locations Breezy Point Rd & CR 214 Keystone Heights, Florida	Drawing Number: WDB-BP010 Date: 10/25/93

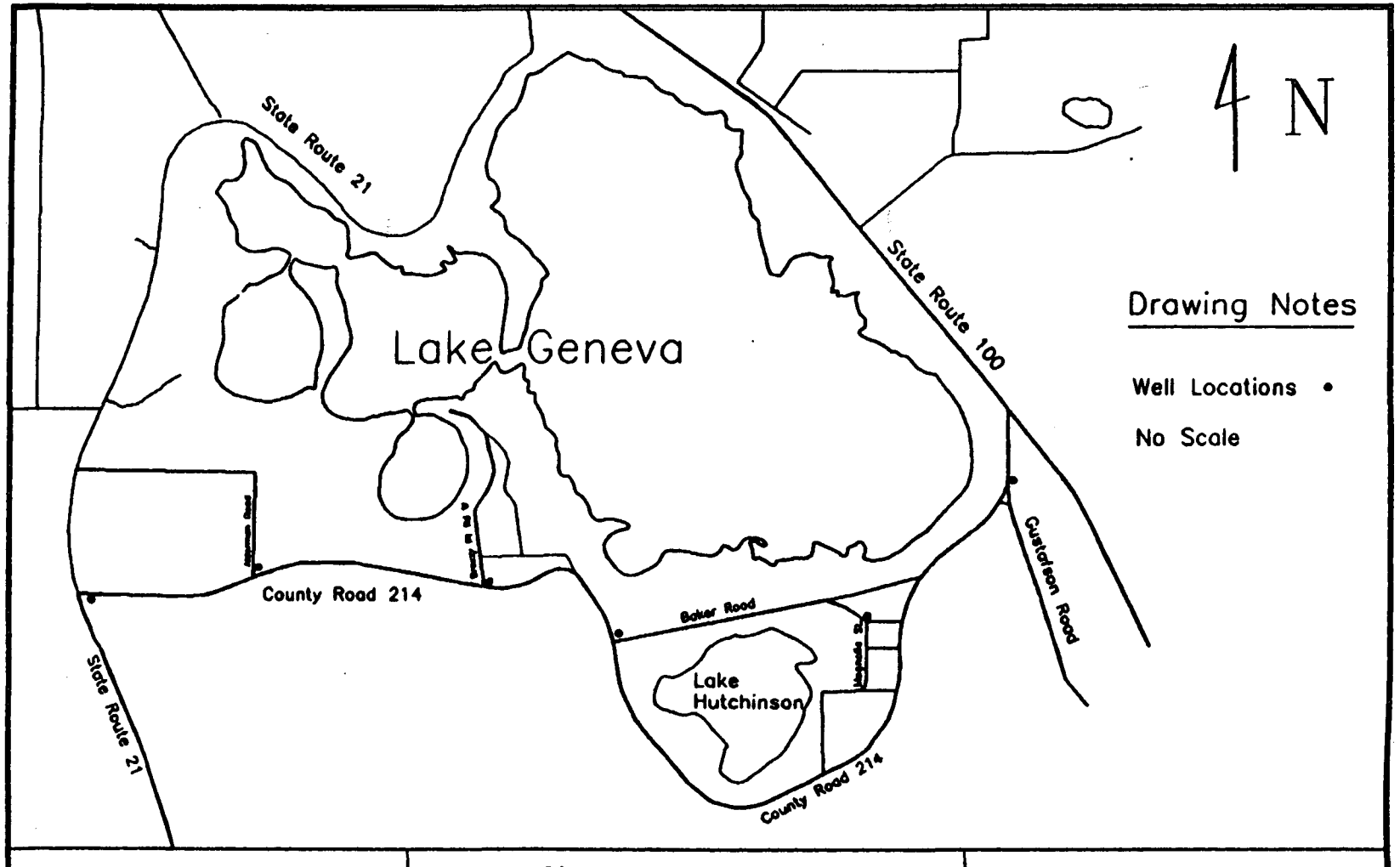

Lake Bedford
N
SE 62nd Ave.
N
2" Monitor Well
3
35
Bedford Lake Road
Drawing Notes
No Scale
All Dimensions in Feet
Right of Way Boundary
37
℄
SE 62nd Ave.
Well head flush with existing grade
See Detail Map WDB-TYP010
University of Florida
ENVIRONMENTAL
ENGINEERING
SCIENCES
Well Site Locations
SE 62nd Ave. & Bedford Lake Rd.
Keystone Heights, Florida
Drawing Number: WDB-SE62A01
Date: 12/01/93


N
Lake Brooklyn
WETLAND
SR21
N
Woodland Drive
County Right of Way
Right of Way Boundary
Drawing Notes
No Scale
All Dimensions in Feet
3
Existing Monitor Wells
Proposed New Well Site
2
34
University of Florida
ENVIRONMENTAL
ENGINEERING
SCIENCES
Well Site Locations
6550 Block Woodland Drive
Keystone Heights, Florida
Drawing Number: WDB-WDL010
Date: 12/01/93

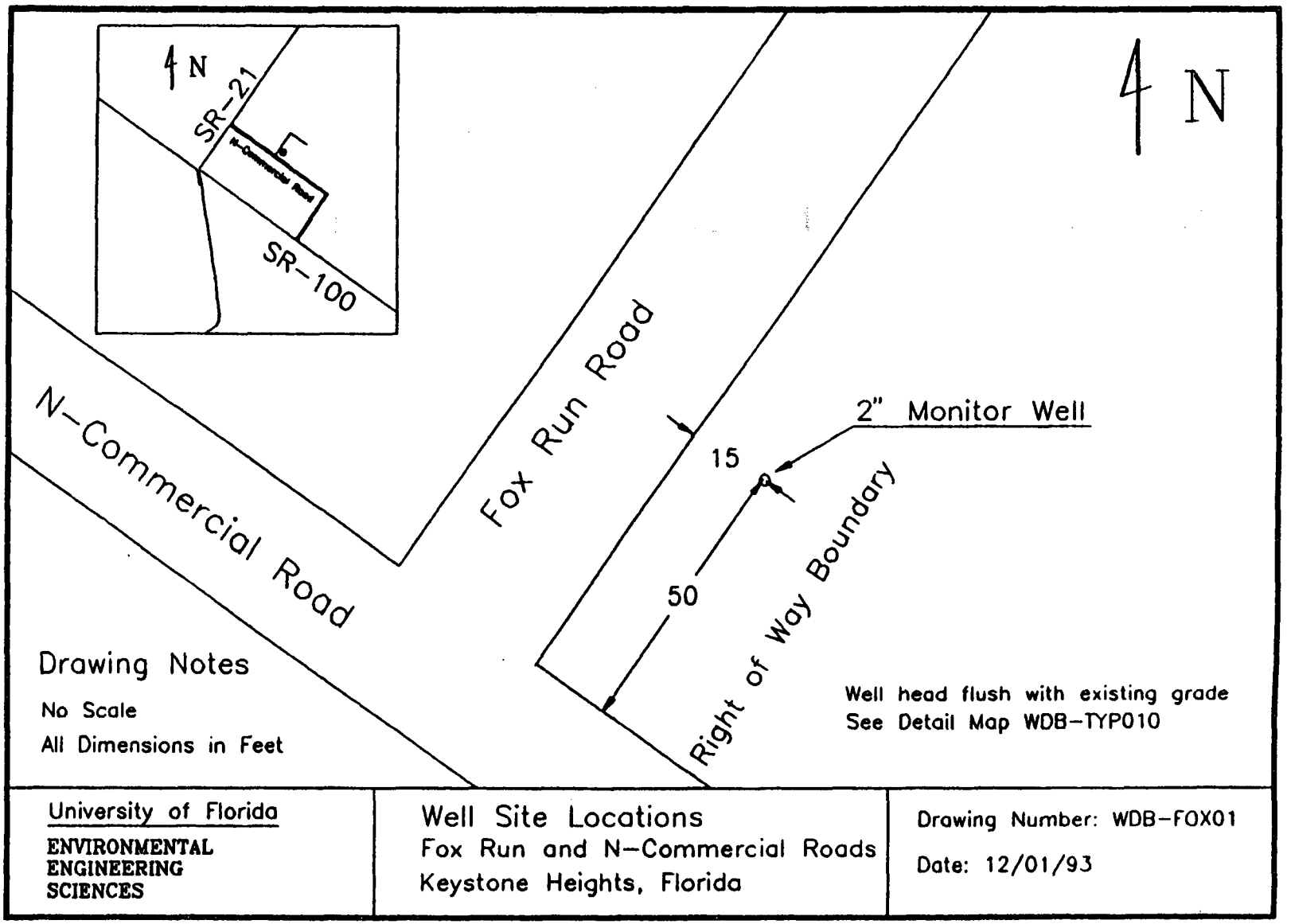

N
Lake Brooklyn
Woodland Drive
SR 21
N
Woodland Drive
County Right of Way
Right of Way Boundary
Drawing Notes
No Scale
All Dimensions in Feet
3
Existing Monitor Wells
Proposed New Well Site
2
℄
34
University of Florida
ENVIRONMENTAL
ENGINEERING
SCIENCES
Well Site Locations
6550 Block Woodland Drive
Keystone Heights, Florida
Drawing Number: WDB-WDL010
Date: 12/01/93


4 N
Alderman Road
County Road 214
Well head flush with exsting grade
See Detail Map WDB-TYP010
5
30.0
30
2" Monitor Well
Right of Way Boundary
County Road 214
Drawing Notes
No Scale
All Dimensions in Feet
ENVIRONMENTAL
ENGINEERING
SCIENCES
Well Site Locations
Alderman Road & CR 214
Keystone Heights, Florida
Drawing Number: WDB-ALD010
Date: 10/25/93


Sante Fe Swamp
CR 21B
4N
Paradise Lake
Indian Lake
Speedville Road
Little Sante Fe Lake
Lake Geneva
SE 43rd Lane
CR 21B
CR 214
Sante Fe Lake
Well Locations
Not to scale
University of Florida
ENVIRONMENTAL ENGINEERING SCIENCES
Well Site Locations
County Road Right of Way
Bradford County, Florida
Drawing Number: WDB-BCC010
Date: 10/28/93



ENVIRONMENTAL ENGINEERING SCIENCES	Well Site Locations Southern Lake Geneva: CR 214 Keystone Heights, Florida	Drawing Number: WDB-GEN010 Date: 10/18/93


N
SR-21
SR-100
N
N-Commercial Road
Fox Run Road
2" Monitor Well
15
50
Right of Way Boundary
Drawing Notes
No Scale
All Dimensions in Feet
Well head flush with existing grade
See Detail Map WDB-TYP010
University of Florida
ENVIRONMENTAL
ENGINEERING
SCIENCES
Well Site Locations
Fox Run and N-Commercial Roads
Keystone Heights, Florida
Drawing Number: WDB-FOX01
Date: 12/01/93

APPENDIX B

MONITORING WELL DATA

Old Name	New Name	8/2/94 Head Elevation NGVD (ft.)	9/2/94 Head Elevation NGVD (ft.)	10/3/94 Head Elevation NGVD (ft.)	11/2/94 Head Elevation NGVD (ft.)	11/28/94 Head Elevation NGVD (ft.)	12/29/94 Head Elevation NGVD (ft.)	1/30/95 Head Elevation NGVD (ft.)	2/27/95 Head Elevation NGVD (ft.)	3/31/95 Head Elevation NGVD (ft.)	4/28/95 Head Elevation NGVD (ft.)	5/31/95 Head Elevation NGVD (ft.)	7/4/95 Head Elevation NGVD (ft.)
CB01	C-0512	146.5	147.0	147.2	146.7	146.4	145.8	145.4	145.0	144.8	145.3	145.8	146.7
CB02	C-0513	140.8	141.4	141.6	141.0	140.7	140.2	139.8	139.4	139.3	139.5	139.8	140.4
CB03	C-0514	171.4	171.7	171.1	170.5	170.0	169.4	169.3	169.3	168.9	169.4	169.9	170.7
CB04	C-0515	149.3	149.3	149.2	148.8	148.6	148.3	147.9	147.5	147.2	147.4	147.7	148.5
CB05	C-0516	162.8	164.1	163.4	163.9	163.4	162.6	162.1	161.4	160.6	160.9	161.3	163.0
CB06	C-0517	153.1	154.1	153.7	154.2	153.5	153.2	152.4	152.2	151.8	152.2	152.9	154.0
CB07	C-0518	126.0	126.3	126.0	126.5	126.3	125.9	125.7	125.5	125.4	125.6	125.9	126.1
CB08	C-0519	120.1	120.5	120.4	121.3	121.2	120.8	120.5	120.4	120.2	120.5	120.8	120.9
CB09	C-0520	129.9	130.4	130.8	130.8	131.2	130.8	130.3	129.9	129.6	129.8	130.3	130.5
CB10	C-0521	140.0	140.5	140.0	140.8	140.3	139.6	139.0	138.8	138.5	138.9	139.4	140.5
CB11a	C-0522	143.1	143.8	143.3	143.6	143.3	142.9	142.5	142.4	142.1	142.4	142.8	144.2
CB11b	C-0523	143.9	144.5	144.1	144.4	144.1	143.6	143.3	143.2	142.9	143.2	143.5	145.0
CB12	C-0524	178.0	178.7	177.6	178.0	178.1	177.5	177.5	177.1	176.8	176.9	177.1	179.1
KH01	B-0098	127.90	130.21	130.93	132.22	132.70	132.10	131.59	131.07	130.59	130.75	130.67	130.72
KH02	B-0099	107.07	107.60	107.62	108.69	108.90	108.51	108.19	107.91	107.67	107.97	108.03	108.17
KH03	C-0500	91.07	92.03	92.52	93.57	94.44	94.30	93.97	93.62	93.29	93.21	93.40	93.66
KH04	C-0501	97.43	97.77	97.87	99.38	99.64	99.40	99.01	98.58	98.21	98.18	97.90	97.83
KH05	C-0502	98.09	98.74	98.82	100.53	100.55	99.99	99.50	99.16	98.86	98.98	98.88	98.90
KH06	C-0503	102.87	103.43	104.09	104.74	105.47	105.88	106.12	105.86	105.63	105.48	105.42	105.61
KH07	C-0504	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well
KH08	B-0100	122.85	123.58	124.24	124.86	125.46	125.46	125.24	124.99	124.76	124.79	124.84	124.83
KH09	B-0101	130.93	131.50	131.71	132.75	132.87	132.44	132.38	131.94	131.65	132.38	132.21	132.17
KH10	B-0102	128.71	129.36	129.43	130.66	130.80	130.33	130.06	129.68	129.39	129.86	129.77	129.70
KH11	C-0505	113.77	114.87	114.98	116.22	116.68	115.07	115.23	114.59	114.01	113.69	113.88	113.71
KH12	B-0103	127.38	128.10	128.40	129.59	129.79	129.40	129.18	128.79	128.60	128.92	128.69	128.64
KH13	C-0506	99.13	99.93	100.55	101.30	102.33	102.51	102.12	101.79	101.35	101.17	101.42	101.87
KH14	C-0507	100.16	100.57	100.55	102.54	102.66	102.12	101.13	101.15	100.70	100.81	100.49	100.40
KH15	C-0508	95.30	96.16	96.83	98.05	99.14	98.96	98.41	97.90	97.32	96.89	96.83	96.79
KH16	C-0509	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well
KH17	C-0510	No Well	No Well	No Well	No Well	No Well	No Well	94.57	94.66	94.63	94.65	94.59	95.16
KH18	C-0511	No Well	No Well	No Well	No Well	No Well	No Well	116.47	116.09	115.75	115.60	115.81	115.78
KH19	B-0104	117.64	118.09	118.51	119.10	119.82	120.11	119.97	119.58	119.25	118.97	118.95	119.26
KH20	B-0105	124.77	125.15	125.56	125.78	126.46	127.00	127.20	126.94	126.71	126.44	126.47	126.85
KH21	B-0106	119.97	120.32	120.38	121.02	121.41	121.30	120.98	120.74	120.45	120.58	120.72	121.06
KH22	(KH22)	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well
KH23	(KH23)	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well	No Well
KH24	B-0107	126.15	126.81	127.30	127.90	128.56	128.74	128.69	128.46	128.26	128.27	128.34	128.27
	C-0411	85.14	85.74	86.32	87.22	87.79	87.93	87.91	87.76	87.54	87.65	87.76	87.71
	C-0444	91.58	93.85	95.80	97.46	98.59	98.94	99.41	99.67	99.47	99.07	98.92	99.43
	C-0426	110.42	110.80	111.09	111.60	112.53	112.44	112.06	111.68	111.31	111.13	111.41	112.27
	C-0452	97.59	98.21	98.87	99.57	100.41	100.89	101.15	101.15	100.86	100.85	101.01	101.39

Well Name	Well Depth Below Top of Casing ft	Length of Casing ft	Screened Interval ft
C-0512	79	60	19
C-0513	48	30	18
C-0514	75	60	15
C-0515	78	60	18
C-0516	70	50	20
C-0517	71	55	16
C-0518	48	30	18
C-0519	46	30	16
C-0520	59	40	19
C-0521	49	30	19
C-0522	79	60	19
C-0523	74	60	14
C-0524	79	60	19
B-0098	44	28	16
B-0099	64	38	26
C-0500	76	38	38
C-0501	60	25	35
C-0502	47	25	22
C-0503	64	38	26
B-0100	45	26	19
B-0101	50	16	34
B-0102	49	26	23
C-0505	53	35	18
B-0103	51	19	32
C-0506	78	48	30
C-0507	53	33	20
C-0508	66	46	20
C-0510	84	54	30
C-0511	50	30	20
B-0104	56	43	13
B-0105	59	35	24
B-0106	56	37	19
B-0107	54	25	29
C-0411	69	–	–
C-0444	87	67	20
C-0426	42	–	–
C-0452	67	66	1

APPENDIX C

DATA AND ANALYSIS FOR PUMP TESTS AT HALF MOON LAKE AND CAMP BLANDING

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 9 Well A

Pump Data:
Average Pumping Rate: Q = 8.70 gpm

Well Data:
Distance from Pumping Well: r = 19.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.530 ft
Early drawdown slope: dSE = 0.492 ft

Time Data
Time at late slope intercept (tL) 13 min
Time at early slope intercept (tE) 0.8 min
Time at intersection Horiz and Late data (tBeta) 190 min

Convert Flow to consistent units: Calc: **Q = 1674.75 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 579 Ft^2/d**

Calculate Transmissivity w/early slope: **TE= 624 Ft^2/d**

Average Transmissivity: T = 601 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.009028 days

Specific Yeild: Sy = 0.0298 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0.131944 days **tyBeta = 6.758593 unitless**

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) **Beta = 0.023694 unitless**

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0.000556 days **S = 0.0020 unitless**

Calculate Specific Storage: Ss = S/b **Ss = 9.9E-05 unitless**

Calculate Horiz. Permeability: Kr = T/b **Kr = 30 Ft/d**

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 **KD = 0.0240**

Calculate Vertical Permeability: KZ = KD*Kr **KZ = 0.72 Ft/d**

Calculate Sigma: Sigma = S/Sy **Sigma = 0.066**

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 9 Well A

Pump Data:
Average Pumping Rate: Q = 8.70 gpm

Well Data:
Distance from Pumping Well: r = 19.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.530 ft
Early drawdown slope: dSE = 0.492 ft

Time Data
Time at late slope intercept (tL) 13 min
Time at early slope intercept (tE) 0.8 min
Time at intersection Horiz and Late data (tBeta) 190 min

Convert Flow to consistent units: Calc: **Q = 1674.75 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 579 Ft^2/d**

Calculate Transmissivity w/early slope: **TE= 624 Ft^2/d**

Average Transmissivity: T = 601 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.009028 days

Specific Yeild: Sy = 0.0298 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0.131944 days **tyBeta = 6.758593 unitless**

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) **Beta = 0.023694 unitless**

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0.000556 days **S = 0.0020 unitless**

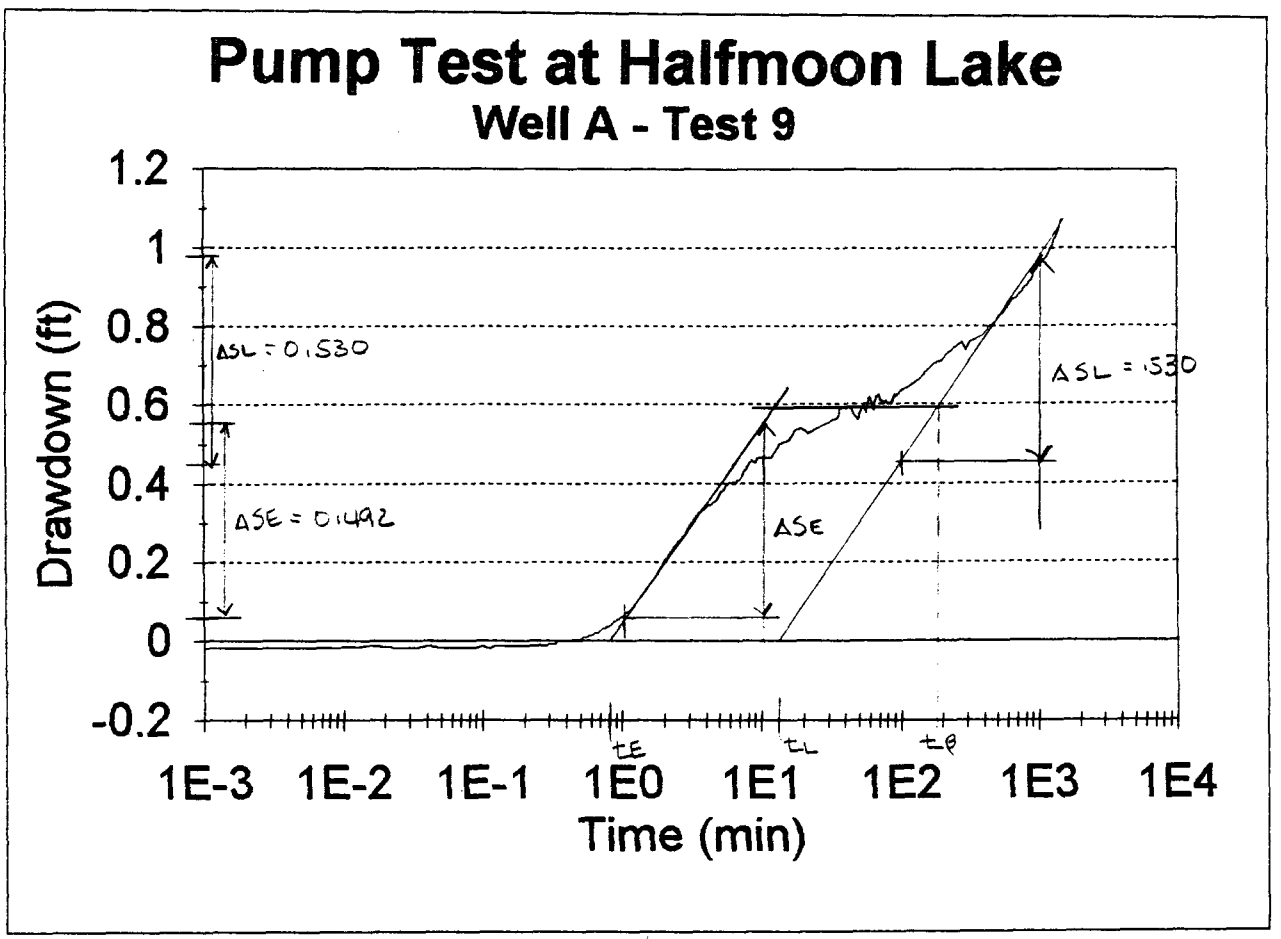
Calculate Specific Storage: Ss = S/b **Ss = 9.9E-05 unitless**

Calculate Horiz. Permeability: Kr = T/b **Kr = 30 Ft/d**

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 **KD = 0.0240**

Calculate Vertical Permeability: KZ = KD*Kr **KZ = 0.72 Ft/d**

Calculate Sigma: Sigma = S/Sy **Sigma = 0.066**


Pump Test at Halfmoon Lake
Well A - Test 9
Drawdown (ft)
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
ΔSL = 0.1530
ΔSE = 0.1492
ΔSE
ΔSL = .1530
tE
tL
tθ
1E-3
1E-2
1E-1
1E0
1E1
1E2
1E3
1E4
Time (min)

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 9 Well B

Pump Data:
Average Pumping Rate: Q = 8.70 gpm

Well Data:
Distance from Pumping Well: r = 58.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.476 ft
Early drawdown slope: dSE = 0 ft

Time Data
Time at late slope intercept (tL) 110 min
Time at early slope intercept (tE) 0 min
Time at intersection Horiz and Late data (tBeta) 0 min

Convert Flow to consistent units: Calc: **Q = 1674.75 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 645 Ft^2/d**

Calculate Transmissivity w/early slope: **TE= Ft^2/d**

Average Transmissivity: T = 645 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.076389 days

Specific Yeild: Sy = 0.0319 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0 days **tyBeta = 0 unitless**

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) **Beta = unitless**

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0 days **S = unitless**

Calculate Specific Storage: Ss = S/b **Ss = unitless**

Calculate Horiz. Permeability: Kr = T/b **Kr = 32 Ft/d**

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 **KD =**

Calculate Vertical Permeability: KZ = KD*Kr **KZ = Ft/d**

Calculate Sigma: Sigma = S/Sy **Sigma =**

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 9 Well B

Pump Data:
Average Pumping Rate: Q = 8.70 gpm

Well Data:
Distance from Pumping Well: r = 58.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.476 ft
Early drawdown slope: dSE = 0 ft

Time Data
Time at late slope intercept (tL) 110 min
Time at early slope intercept (tE) 0 min
Time at intersection Horiz and Late data (tBeta) 0 min

Convert Flow to consistent units: Calc: **Q = 1674.75 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 645 Ft^2/d**

Calculate Transmissivity w/early slope: **TE= Ft^2/d**

Average Transmissivity: T = 645 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.076389 days

Specific Yeild: Sy = 0.0319 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0 days **tyBeta = 0 unitless**

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) **Beta = unitless**

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0 days **S = unitless**

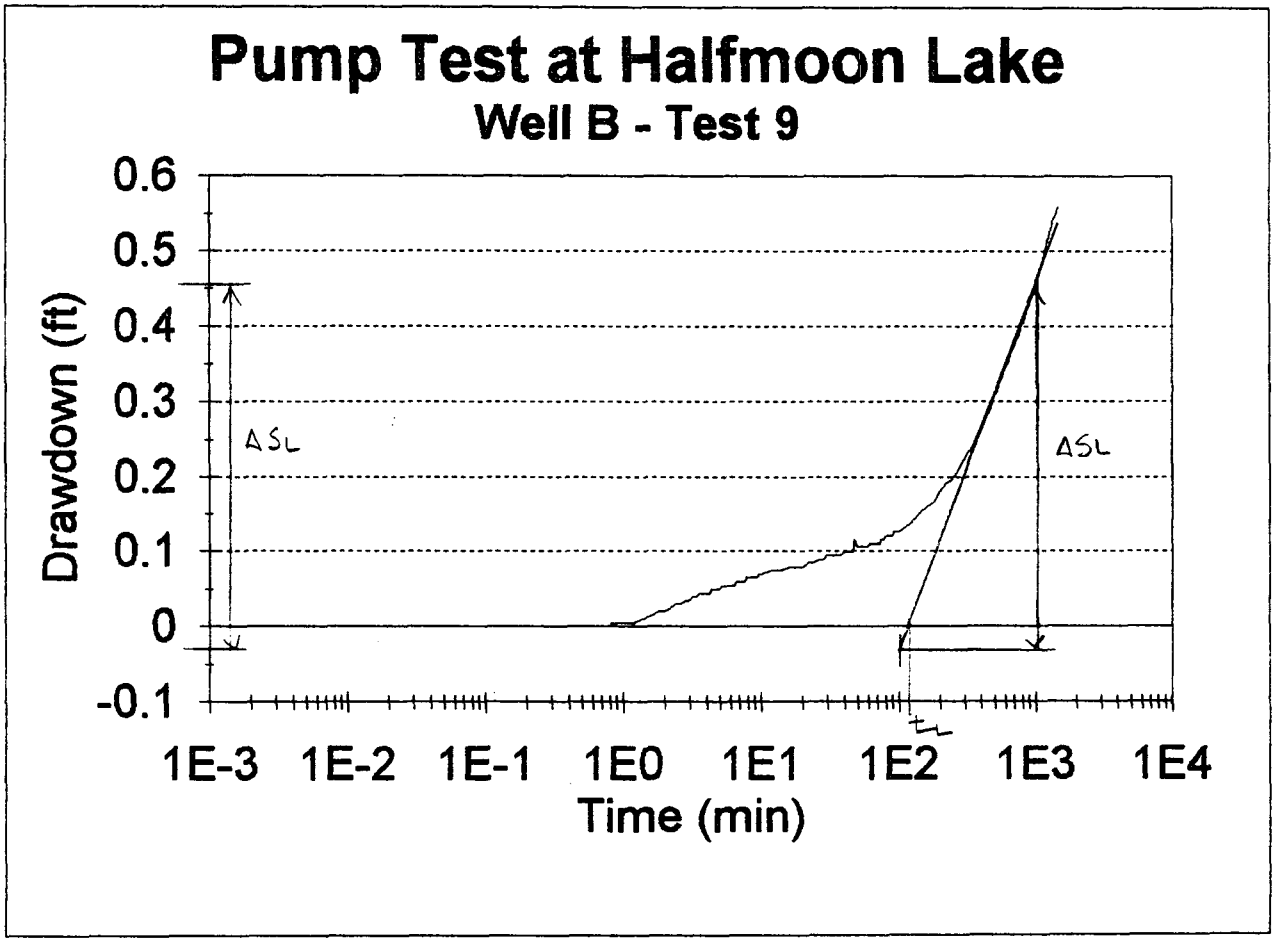
Calculate Specific Storage: Ss = S/b **Ss = unitless**

Calculate Horiz. Permeability: Kr = T/b **Kr = 32 Ft/d**

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 **KD =**

Calculate Vertical Permeability: KZ = KD*Kr **KZ = Ft/d**

Calculate Sigma: Sigma = S/Sy **Sigma =**


Pump Test at Halfmoon Lake
Well B - Test 9
Drawdown (ft)
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
ΔSL
ΔSL
1E-3
1E-2
1E-1
1E0
1E1
1E2
1E3
1E4
Time (min)

Recovery Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 10 Well A

Pump Data:
Average Pumping Rate: Q = 8.70 gpm

Well Data:
Distance from Pumping Well: r = 19.85 ft
Total Aquifer Thickness: b = 20 ft

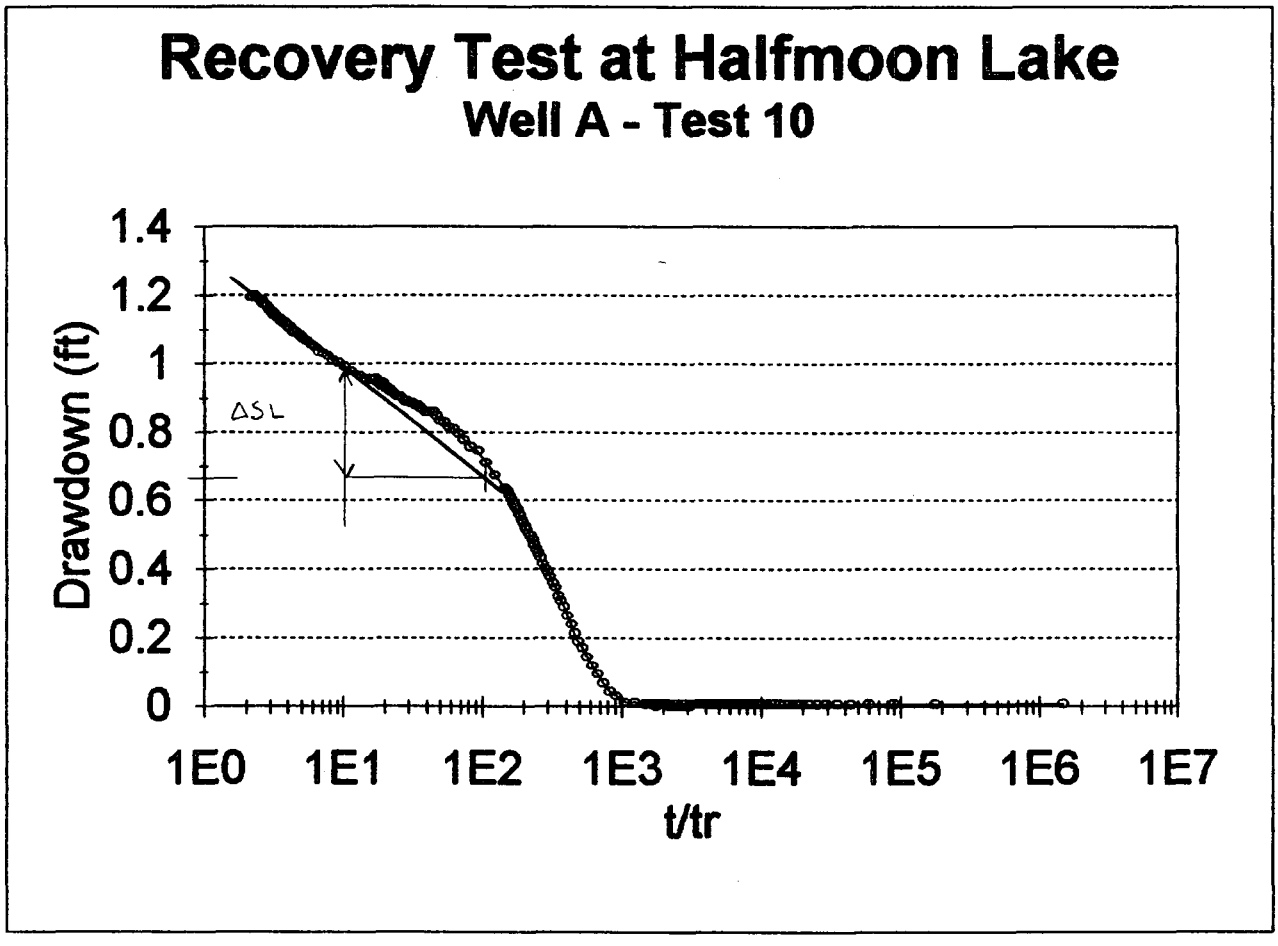
Slope Data:
Late drawdown slope: dSL = 0.316 ft

Convert Flow to consistent units: Calc: **Q = 1674.75 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 971 Ft^2/d**

Calculate Horiz. Permeability: Kr = T/b **Kr = 49 Ft/d**


Recovery Test at Halfmoon Lake
Well A - Test 10
Drawdown (ft)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
ΔSL
1E0
1E1
1E2
1E3
1E4
1E5
1E6
1E7
t/tr

Recovery Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 10 Well B

Pump Data:
Average Pumping Rate: Q = 8.70 gpm

Well Data:
Distance from Pumping Well: r = 58.85 ft
Total Aquifer Thickness: b = 20 ft

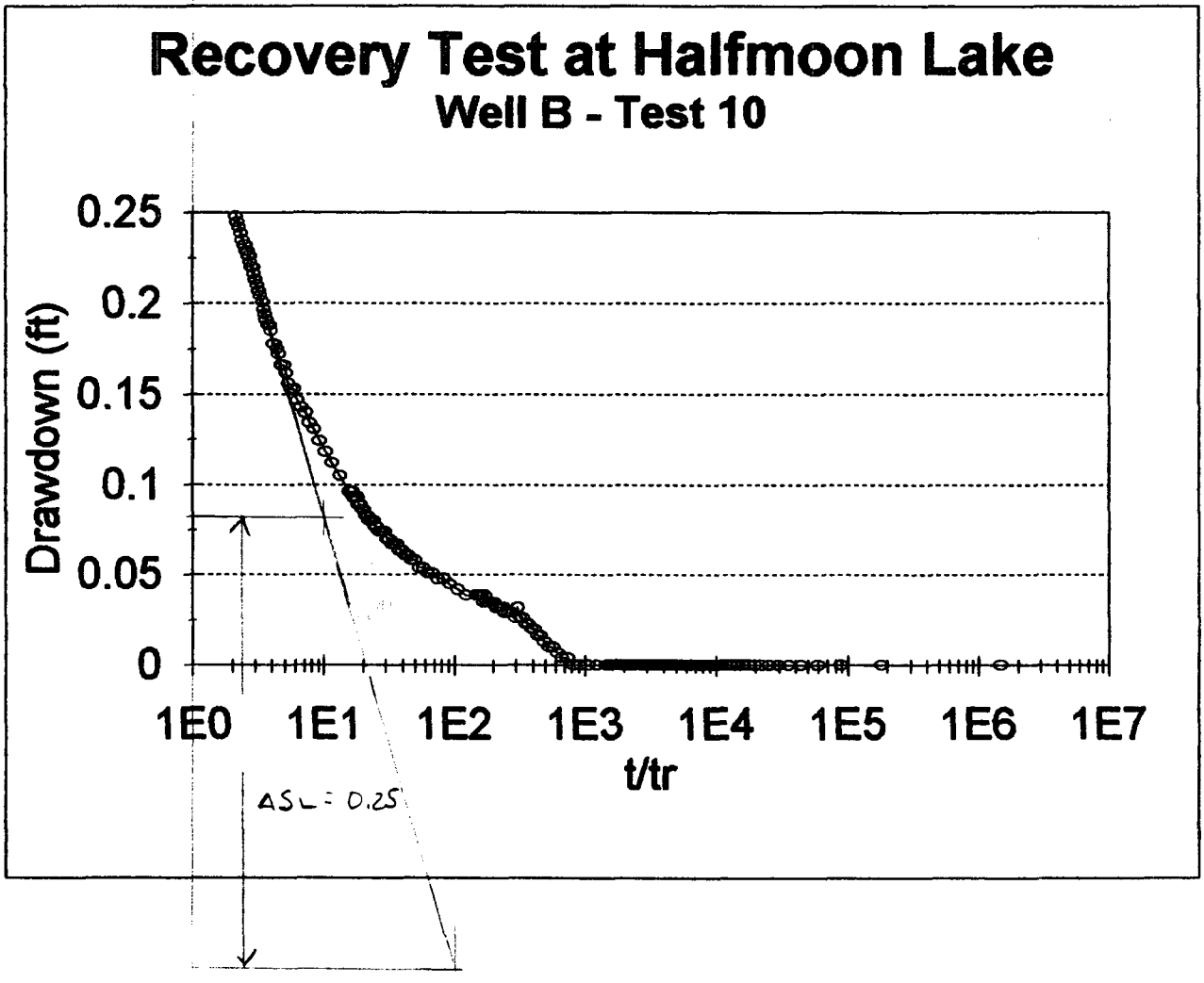
Slope Data:
Late drawdown slope: dSL = 0.249 ft

Convert Flow to consistent units: Calc: **Q = 1674.75 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 1233 Ft^2/d**

Calculate Horiz. Permeability: Kr = T/b **Kr = 62 Ft/d**


Recovery Test at Halfmoon Lake
Well B - Test 10
Drawdown (ft)
0.25
0.2
0.15
0.1
0.05
0
1E0
1E1
1E2
1E3
1E4
1E5
1E6
1E7
t/tr
ΔSL = 0.25

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 11 Well A

Pump Data:
Average Pumping Rate: Q = 5.00 gpm

Well Data:
Distance from Pumping Well: r = 19.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.221 ft
Early drawdown slope: dSE = 0 ft

Time Data
Time at late slope intercept (tL) 0.81 min
Time at early slope intercept (tE) 0 min
Time at intersection Horiz and Late data (tBeta) 0 min

Convert Flow to consistent units: Calc: **Q = 962.50 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 798 Ft^2/d**

Calculate Transmissivity w/early slope: **TE= Ft^2/d**

Average Transmissivity: T = 798 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.000563 days

Specific Yeild: Sy = 0.0026 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0 days **tyBeta = 0 unitless**

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) **Beta = unitless**

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0 days **S = unitless**

Calculate Specific Storage: Ss = S/b **Ss = unitless**

Calculate Horiz. Permeability: Kr = T/b **Kr = 40 Ft/d**

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 **KD =**

Calculate Vertical Permeability: KZ = KD*Kr **KZ = Ft/d**

Calculate Sigma: Sigma = S/Sy **Sigma =**

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 11 Well A

Pump Data:
Average Pumping Rate: Q = 5.00 *gpm*

Well Data:
Distance from Pumping Well: r = 19.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.221 ft
Early drawdown slope: dSE = 0 ft

Time Data
Time at late slope intercept (tL) 0.81 min
Time at early slope intercept (tE) 0 min
Time at intersection Horiz and Late data (tBeta) 0 min

Convert Flow to consistent units: Calc: Q = 962.50 Ft^3/d

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: TL = 798 Ft^2/d

Calculate Transmissivity w/early slope: TE= Ft^2/d

Average Transmissivity: T = 798 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.000563 days

Specific Yeild: Sy = 0.0026 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0 days tyBeta = 0 unitless

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) Beta = unitless

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0 days S = unitless

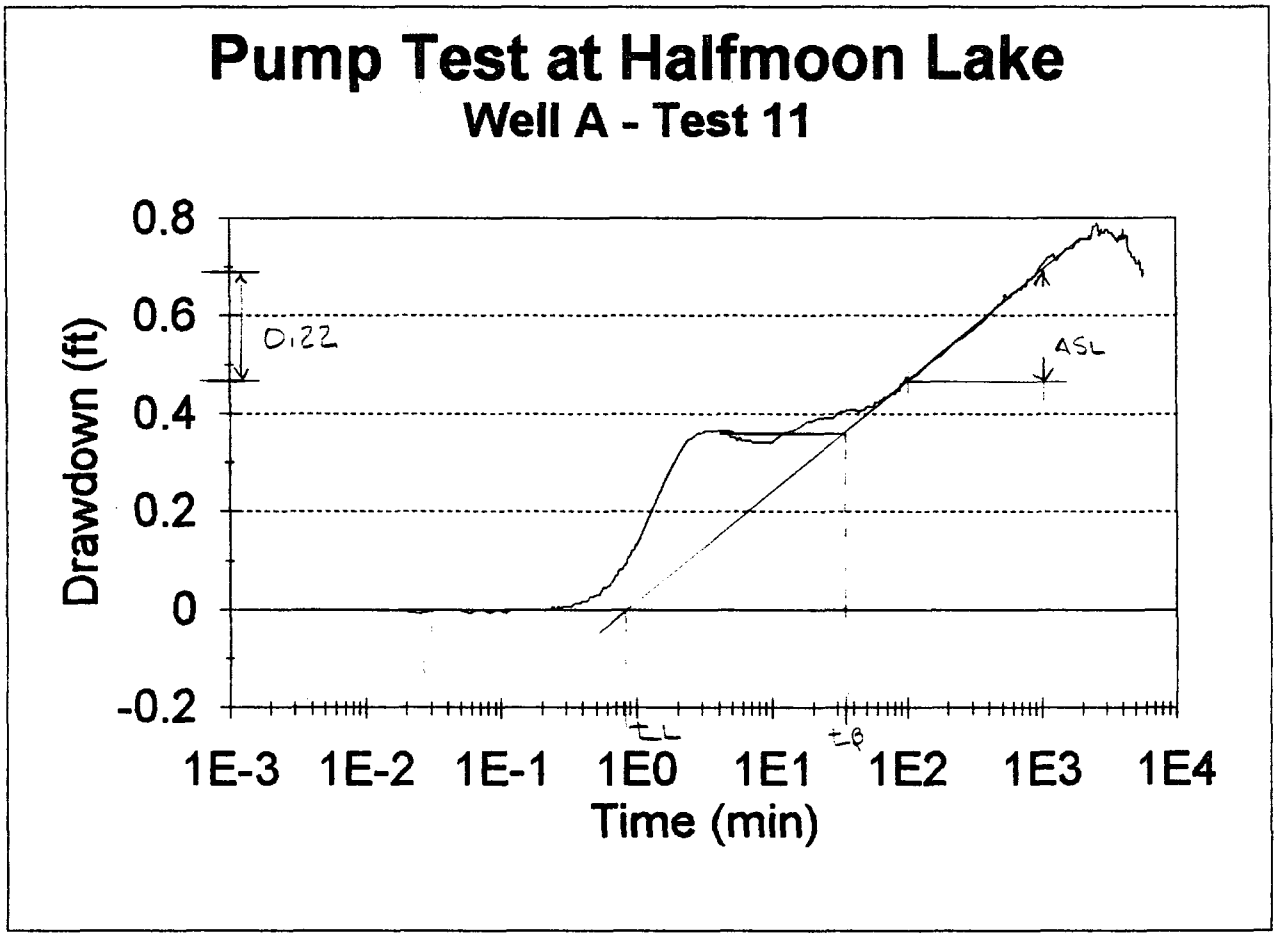
Calculate Specific Storage: Ss = S/b Ss = unitless

Calculate Horiz. Permeability: Kr = T/b Kr = 40 Ft/d

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 KD =

Calculate Vertical Permeability: KZ = KD*Kr KZ = Ft/d

Calculate Sigma: Sigma = S/Sy Sigma =


Pump Test at Halfmoon Lake
Well A - Test 11
Drawdown (ft)
0.8
0.6
0.4
0.2
0
-0.2
D122
ASL
tL
tθ
1E-3
1E-2
1E-1
1E0
1E1
1E2
1E3
1E4
Time (min)

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 11 Well B

Pump Data:
Average Pumping Rate: Q = 5.00 gpm

Well Data:
Distance from Pumping Well: r = 58.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.162 ft
Early drawdown slope: dSE = 0 ft

Time Data
Time at late slope intercept (tL) 20 min
Time at early slope intercept (tE) 0 min
Time at intersection Horiz and Late data (tBeta) 63 min

Convert Flow to consistent units: Calc: **Q = 962.50 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 1089 Ft^2/d**

Calculate Transmissivity w/early slope: **TE= Ft^2/d**

Average Transmissivity: **T = 1089 Ft^2/d**

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.013889 days

Specific Yeild: **Sy = 0.0098 unitless**

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0.04375 days **tyBeta = 1.402681 unitless**

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) **Beta = unitless**

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0 days **S = unitless**

Calculate Specific Storage: Ss = S/b **Ss = unitless**

Calculate Horiz. Permeability: Kr = T/b **Kr = 54 Ft/d**

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 **KD =**

Calculate Vertical Permeability: KZ = KD*Kr **KZ = Ft/d**

Calculate Sigma: Sigma = S/Sy **Sigma =**

Pump Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 11 Well B

Pump Data:
Average Pumping Rate: Q = 5.00 gpm

Well Data:
Distance from Pumping Well: r = 58.85 ft
Total Aquifer Thickness: b = 20 ft

Slope Data:
Late drawdown slope: dSL = 0.162 ft
Early drawdown slope: dSE = 0 ft

Time Data
Time at late slope intercept (tL) 20 min
Time at early slope intercept (tE) 0 min
Time at intersection Horiz and Late data (tBeta) 63 min

Convert Flow to consistent units: Calc: Q = 962.50 Ft^3/d

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: TL = 1089 Ft^2/d

Calculate Transmissivity w/early slope: TE= Ft^2/d

Average Transmissivity: T = 1089 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.013889 days

Specific Yeild: Sy = 0.0098 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0.04375 days tyBeta = 1.402681 unitless

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) Beta = unitless

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0 days S = unitless

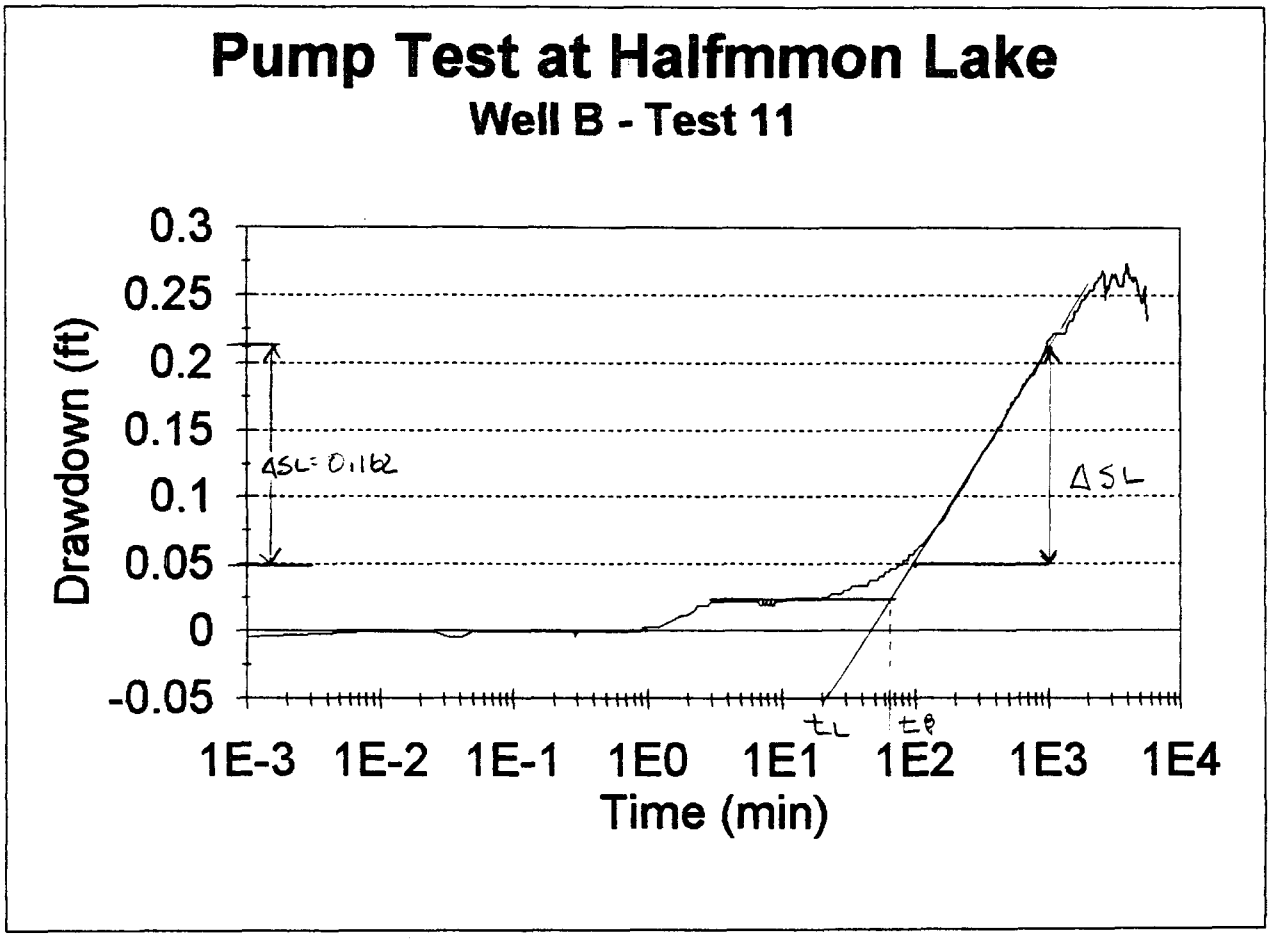
Calculate Specific Storage: Ss = S/b Ss = unitless

Calculate Horiz. Permeability: Kr = T/b Kr = 54 Ft/d

Calculate Degree of Anisotropy: KD = Beta*b^2/r^2 KD =

Calculate Vertical Permeability: KZ = KD*Kr KZ = Ft/d

Calculate Sigma: Sigma = S/Sy Sigma =


Pump Test at Halfmmon Lake
Well B - Test 11
Drawdown (ft)
0.3
0.25
0.2
0.15
0.1
0.05
0
-0.05
ΔSL= 0.162
ΔSL
tL
tθ
1E-3
1E-2
1E-1
1E0
1E1
1E2
1E3
1E4
Time (min)

Recovery Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 12 Well A

Pump Data:
Average Pumping Rate: Q = 5.00 gpm

Well Data:
Distance from Pumping Well: r = 19.85 ft
Total Aquifer Thickness: b = 20 ft

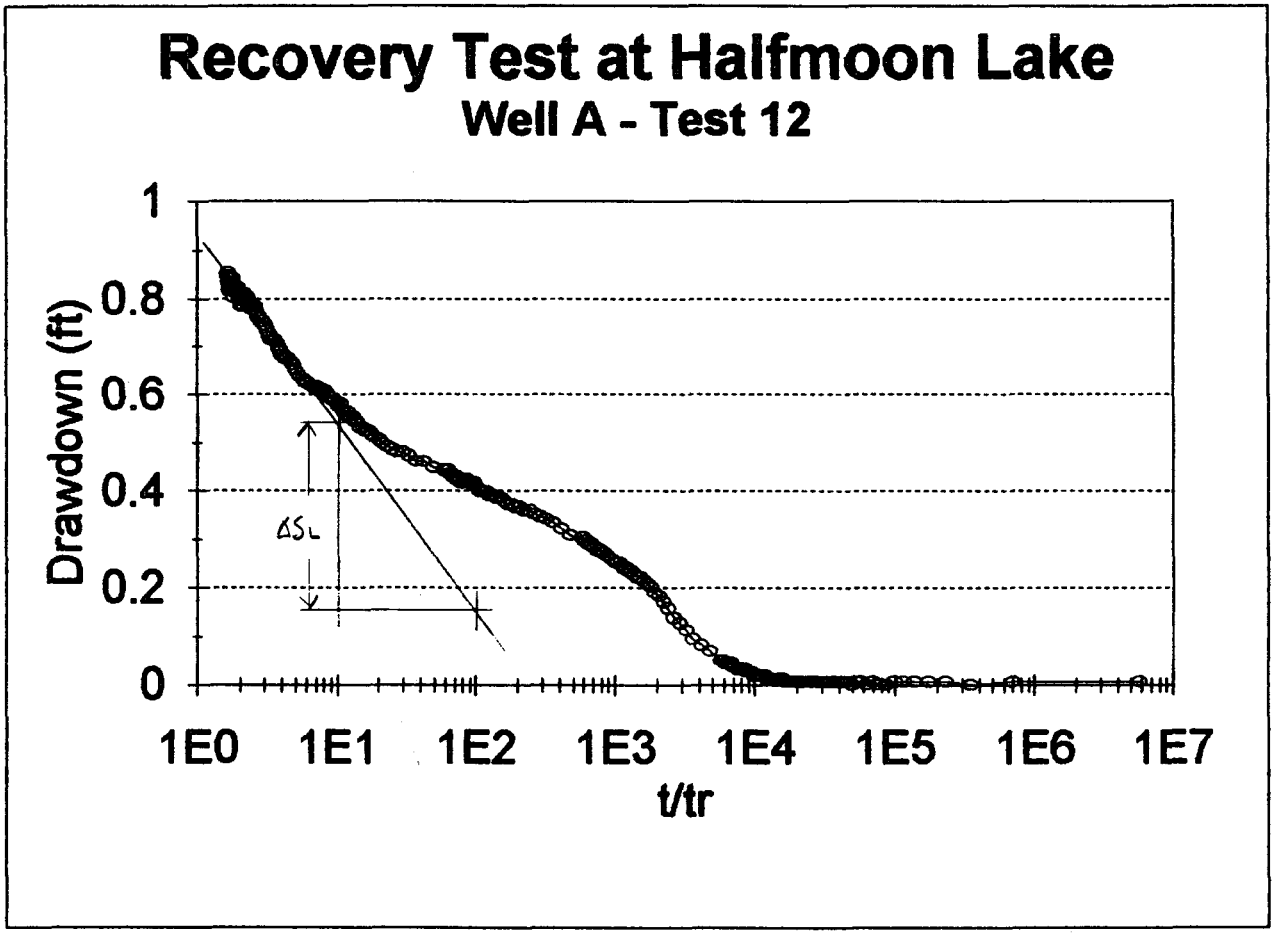
Slope Data:
Late drawdown slope: dSL = 0.385 ft

Convert Flow to consistent units: Calc: **Q = 962.50 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 458 Ft^2/d**

Calculate Horiz. Permeability: Kr = T/b **Kr = 23 Ft/d**


Recovery Test at Halfmoon Lake
Well A - Test 12
Drawdown (ft)
1
0.8
0.6
0.4
0.2
0
ΔSL
1E0
1E1
1E2
1E3
1E4
1E5
1E6
1E7
t/tr

Recovery Test Analysis Calculations, Neuman 1975 Method
Halfmoon Lake, Test # 12 Well B

Pump Data:
Average Pumping Rate: Q = 5.00 gpm

Well Data:
Distance from Pumping Well: r = 58.85 ft
Total Aquifer Thickness: b = 20 ft

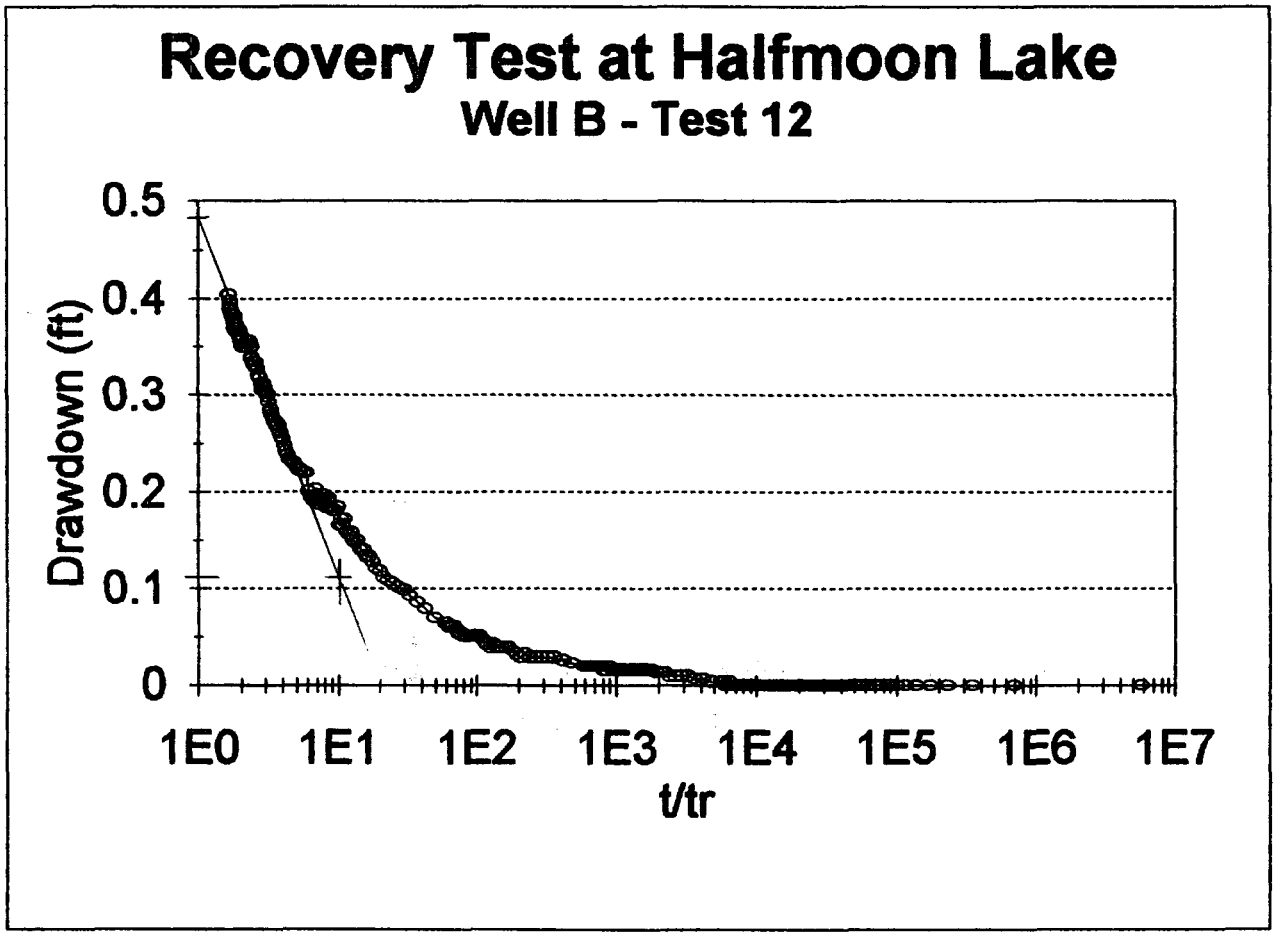
Slope Data:
Late drawdown slope: dSL = 0.369 ft

Convert Flow to consistent units: Calc: **Q = 962.50 Ft^3/d**

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: **TL = 478 Ft^2/d**

Calculate Horiz. Permeability: Kr = T/b **Kr = 24 Ft/d**


Recovery Test at Halfmoon Lake
Well B - Test 12
Drawdown (ft)
0.5
0.4
0.3
0.2
0.1
0
1E0
1E1
1E2
1E3
1E4
1E5
1E6
1E7
t/tr

Pump Test Analysis Calculations, Neuman 1975 Method
Camp Blanding , Test # 0 Well A

Pump Data:
Average Pumping Rate: Q = 9.12 gpm

Well Data:
Distance from Pumping Well: r = 82.5 ft
Total Aquifer Thickness: b = 58.01 ft

Slope Data:
Late drawdown slope: dSL = 0.530 ft
Early drawdown slope: dSE = 0.64 ft

Time Data
Time at late slope intercept (tL) 11 min
Time at early slope intercept (tE) 2.5 min
Time at intersection Horiz and Late data (tBeta) 190 min

Convert Flow to consistent units: Calc: Q = 1755.60 Ft^3/d

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: TL = 607 Ft^2/d

Calculate Transmissivity w/early slope: TE= 503 Ft^2/d

Average Transmissivity: T = 555 Ft^2/d

Calculate Specific Yeild:

Sy = C4*(T*tL/r^2) C4 = 2.246
Change tL to days: tL = 0.007639 days

Specific Yeild: Sy = 0.0015 unitless

Calculate Dimensionless time parameter, tyBeta
change tBeta days: tBeta = 0.131944 days tyBeta = 7.029542 unitless

For : 4.0 < tyBeta <100.0 ;
Beta = 0.195/(tyBeta^1.1053) Beta = 0.022591 unitless

Calculate Storage from early data: S = C4*(T*tE/r^2)

Change tE to days: tL = 0.001736 days S = 0.0003 unitless

Calculate Specific Storage: Ss = S/b Ss = 5E-06 unitless

Calculate Horiz. Permeability: Kr = T/b Kr = 10 Ft/d

Calculate Degree of Anisotropy KD = Beta*b^2/r^2 KD = 0.0112

Calculate Vertical Permeability: KZ = KD*Kr KZ = 0.11 Ft/d

Calculate Sigma: Sigma = S/Sy Sigma = 0.188

Recovery Test Analysis Calculations, Neuman 1975 Method
Camp Blanding, Test # 1

Pump Data:
Average Pumping Rate: Q = 9.12 gpm

Well Data:
Distance from Pumping Well: r = 82.5 ft
Total Aquifer Thickness: b = 58.01 ft

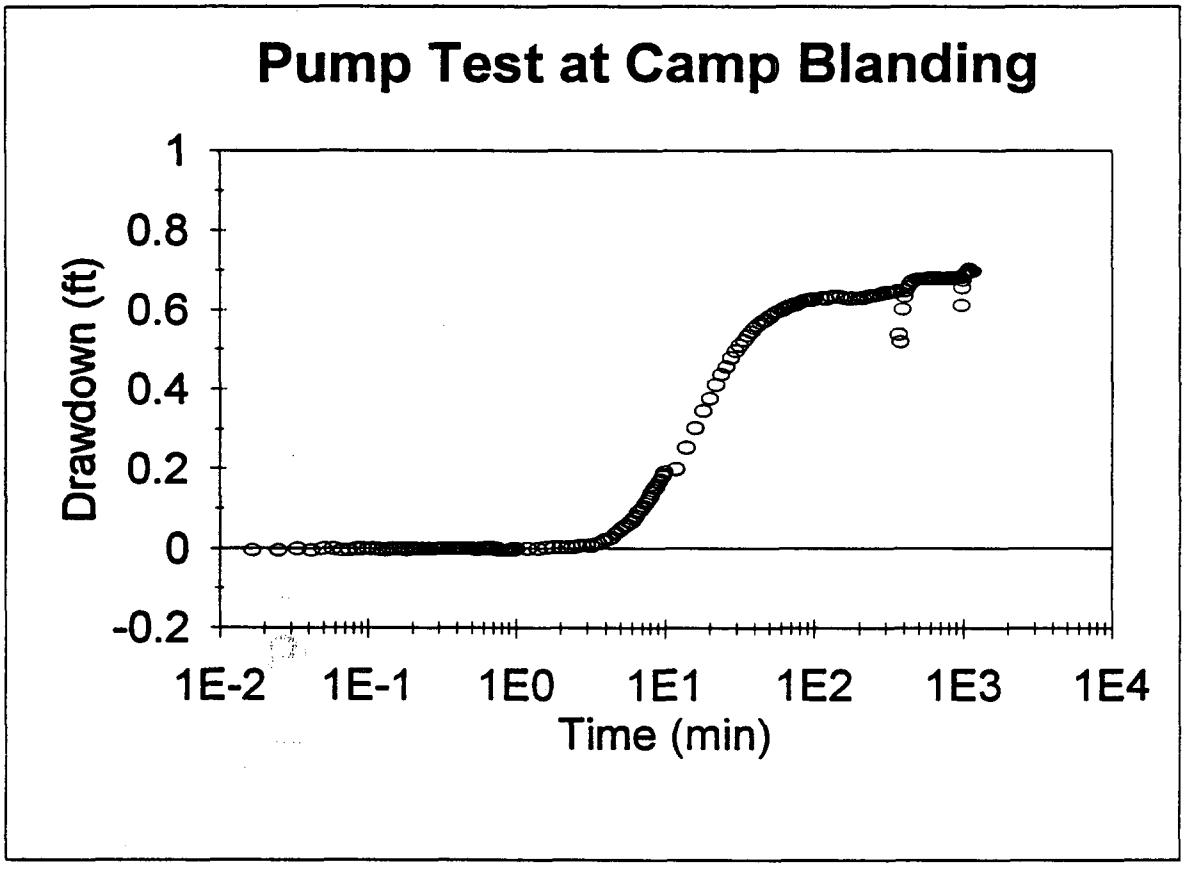
Slope Data:
Late drawdown slope: dSL = 0.660 ft

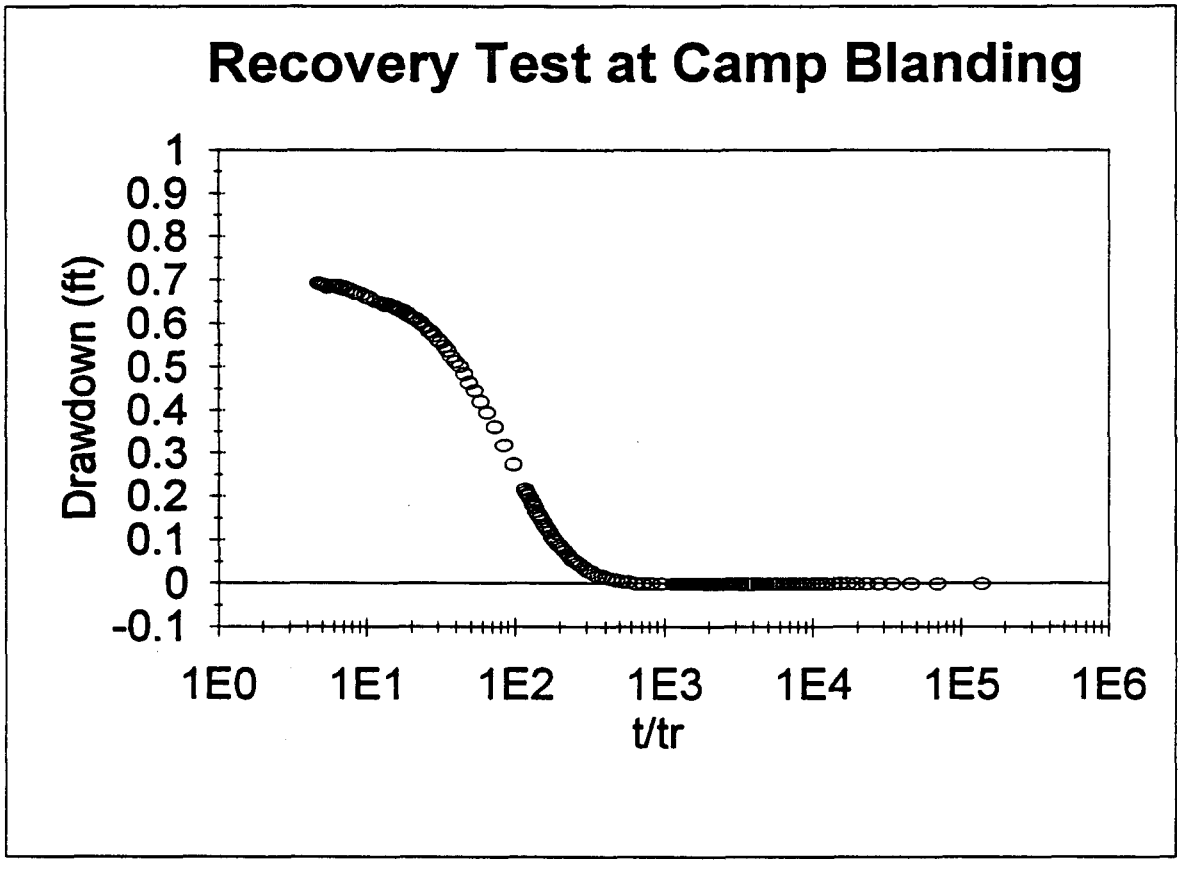
Convert Flow to consistent units: Calc: Q = 1755.60 Ft^3/d

Calculate Transmissivity:
T = C3*(Q/dSL) C3 = 2.303/(4*@PI) C3 = 0.183267

Calculate Transmissivity w/late slope: TL = 487 Ft^2/d

Calculate Horiz. Permeability: Kr = T/b Kr = 8 Ft/d


Pump Test at Camp Blanding
Drawdown (ft)
1
0.8
0.6
0.4
0.2
0
-0.2
1E-2
1E-1
1E0
1E1
1E2
1E3
1E4
Time (min)


Recovery Test at Camp Blanding
Drawdown (ft)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
1E0
1E1
1E2
1E3
1E4
1E5
1E6
t/tr

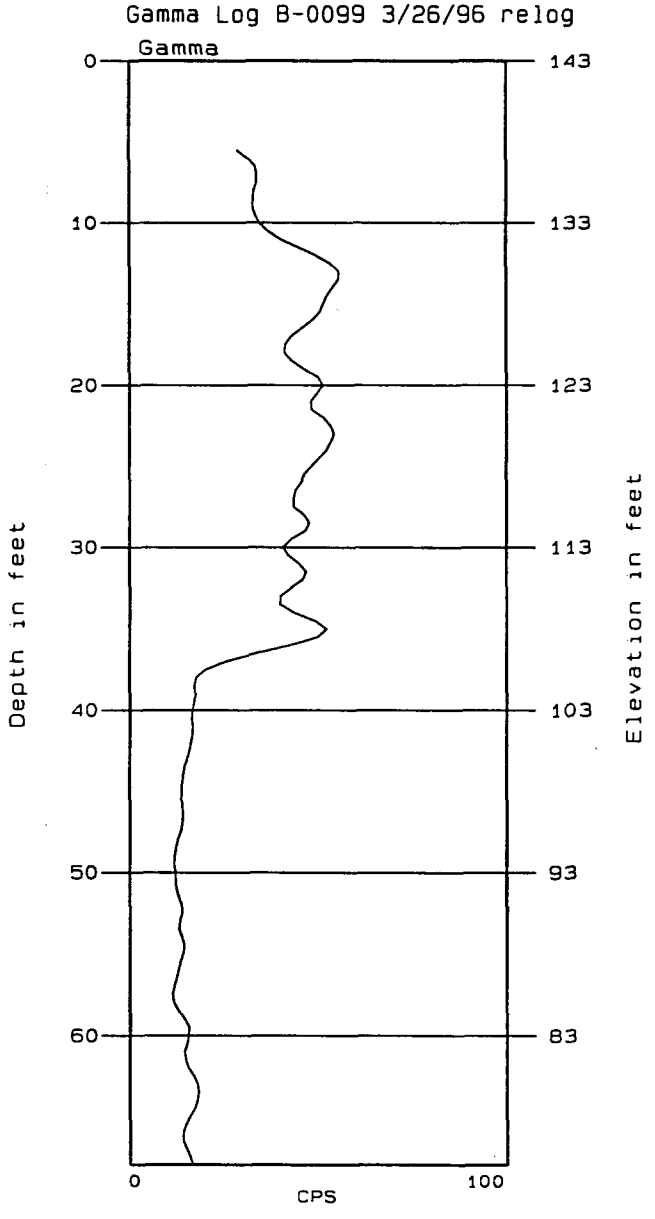
APPENDIX D

GAMMA LOGS

GEOPHYSICAL LOGS FOR WELL B-0099

Log Source:

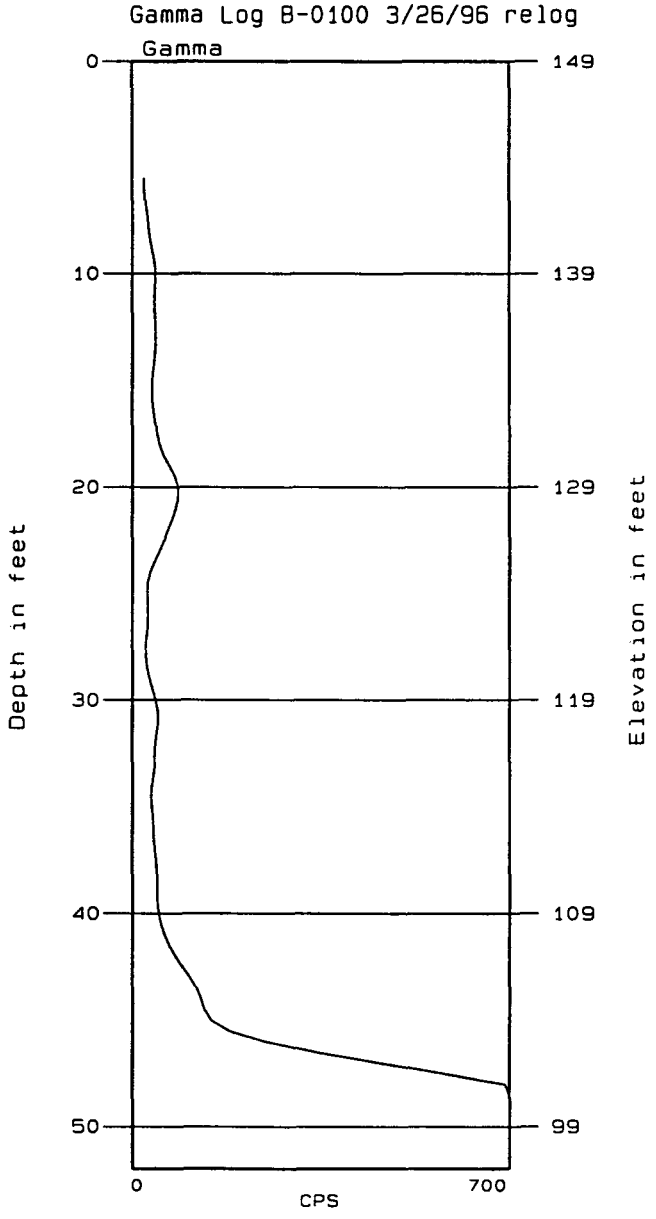
Station Name:	County: BRADFORD	Date Logged:
Well ID: B-0099	Latitude: 29D 46M 09S	Depth Logged: 68 ft.
FGS ID:	Longitude: 82D 03M 08S	Cased Depth:
Other ID:	Elevation: 143 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



GEOPHYSICAL LOGS FOR WELL B-0100

Log Source:

Station Name:	County: BRADFORD	Date Logged:
Well ID: B-0100	Latitude: 29D 45M 43S	Depth Logged: 52 ft.
FGS ID:	Longitude: 82D 03M 33S	Cased Depth:
Other ID:	Elevation: 149 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		

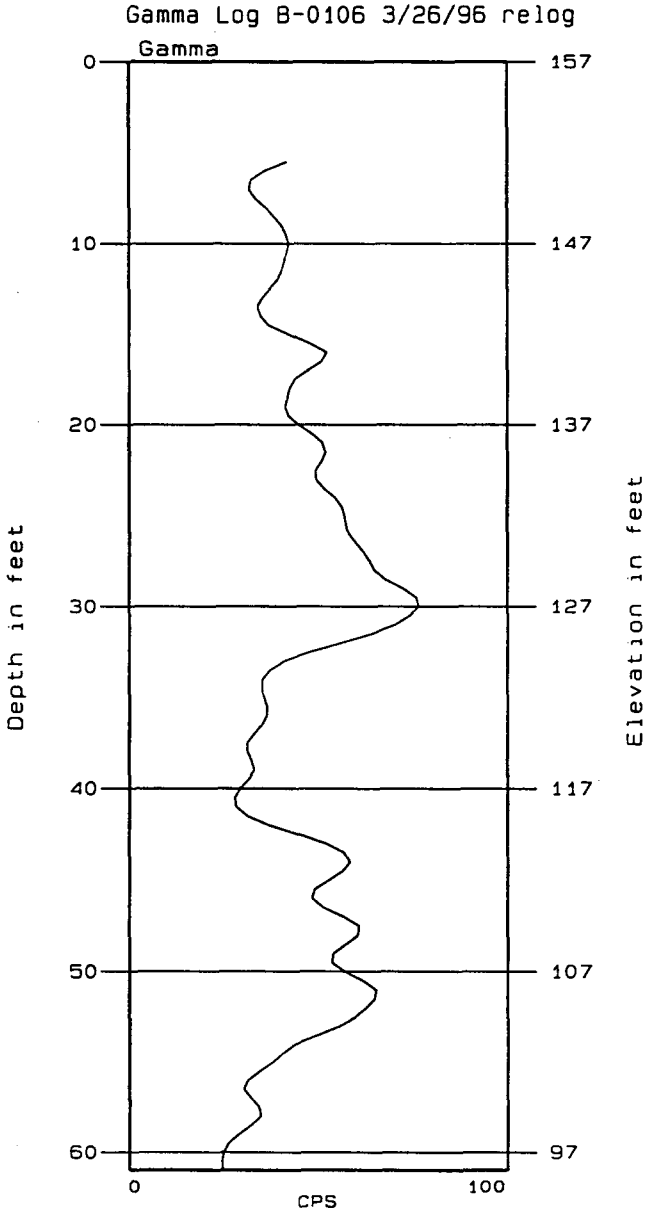


GEOPHYSICAL LOGS FOR WELL B-0106

Log Source:

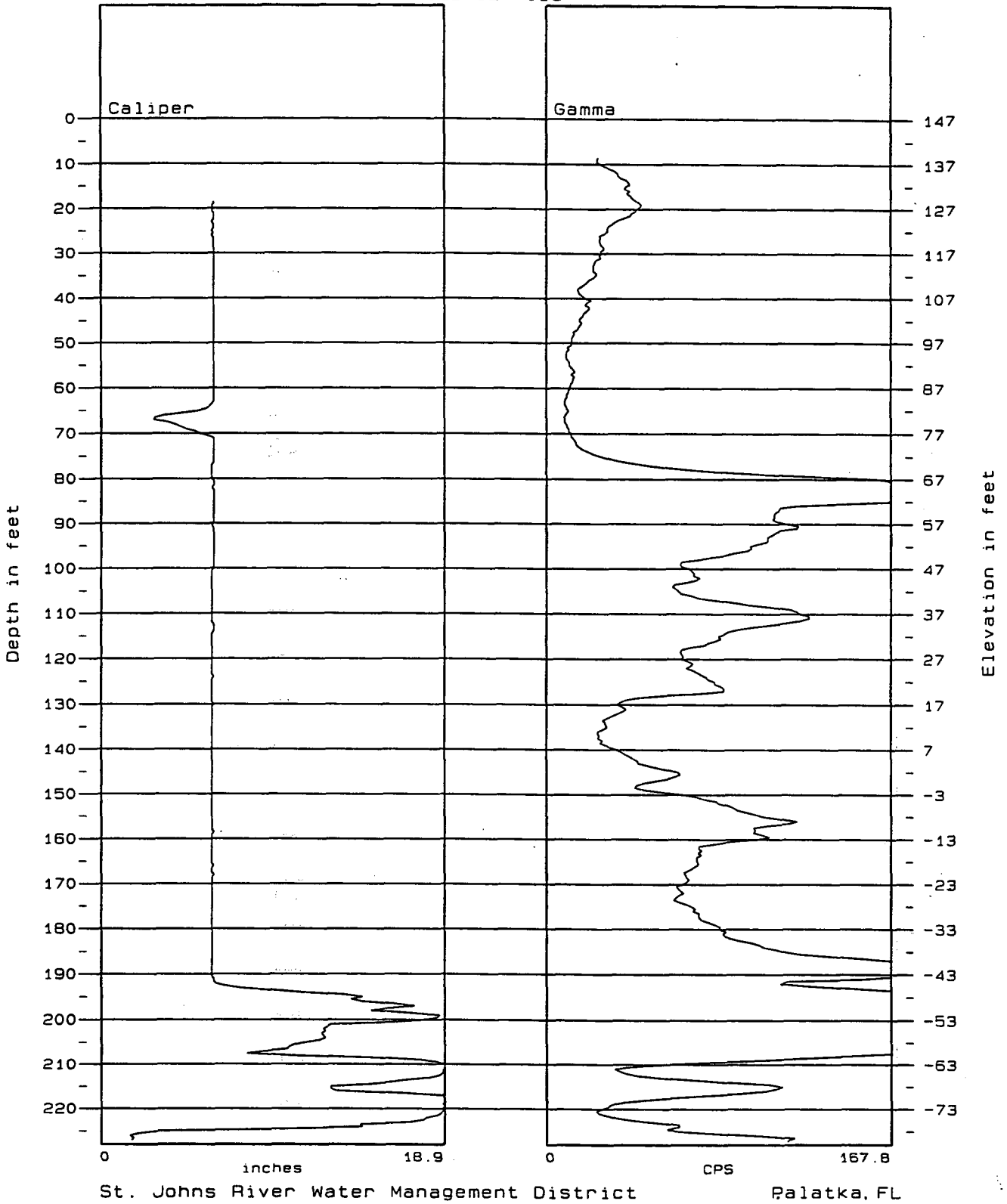
Station Name:	County: BRADFORD	Date Logged:
Well ID: B-0106	Latitude: 29D 47M 28S	Depth Logged: 61 ft.
FGS ID:	Longitude: 82D 03M 50S	Cased Depth:
Other ID:	Elevation: 157 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

Logs Available: GAM



GEOPHYSICAL LOGS C-0120

C-0120 06/05/1990 Elev = 147ft. Depth = 228ft.
Lat = 29D 48M 07S Lon = 82D 02M 09S

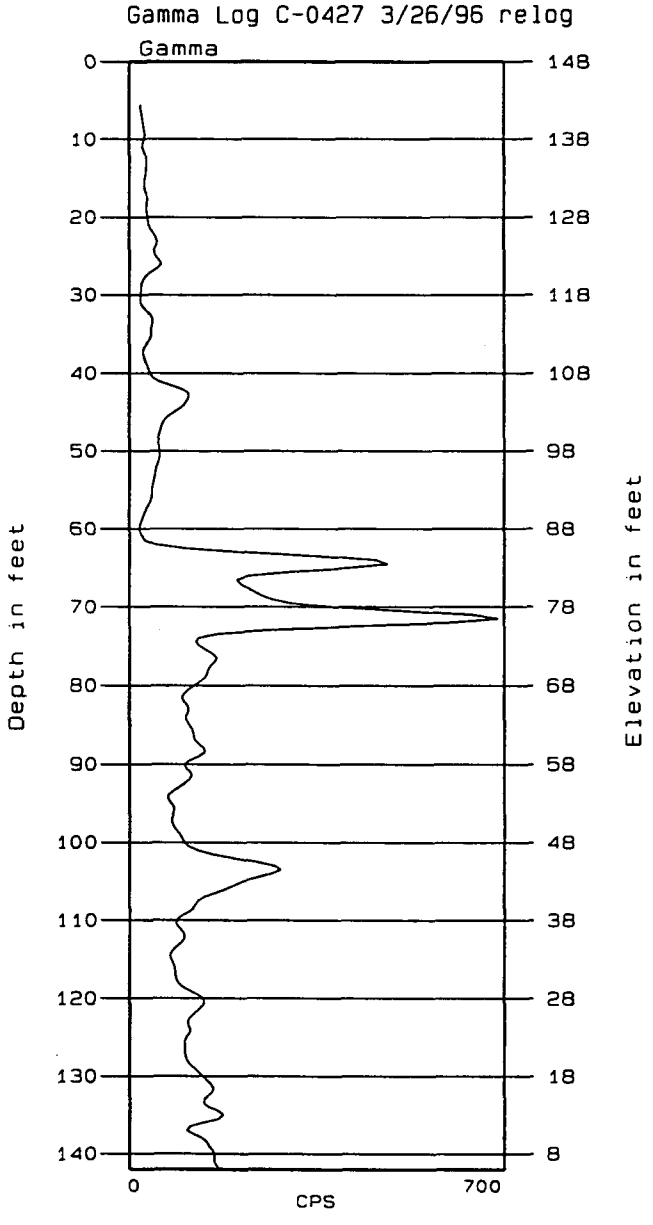


St. Johns River Water Management District Palatka, FL

GEOPHYSICAL LOGS FOR WELL C-0427

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0427	Latitude: 29D 47M 36S	Depth Logged: 142 ft.
FGS ID:	Longitude: 82D 02M 35S	Cased Depth:
Other ID:	Elevation: 148 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		

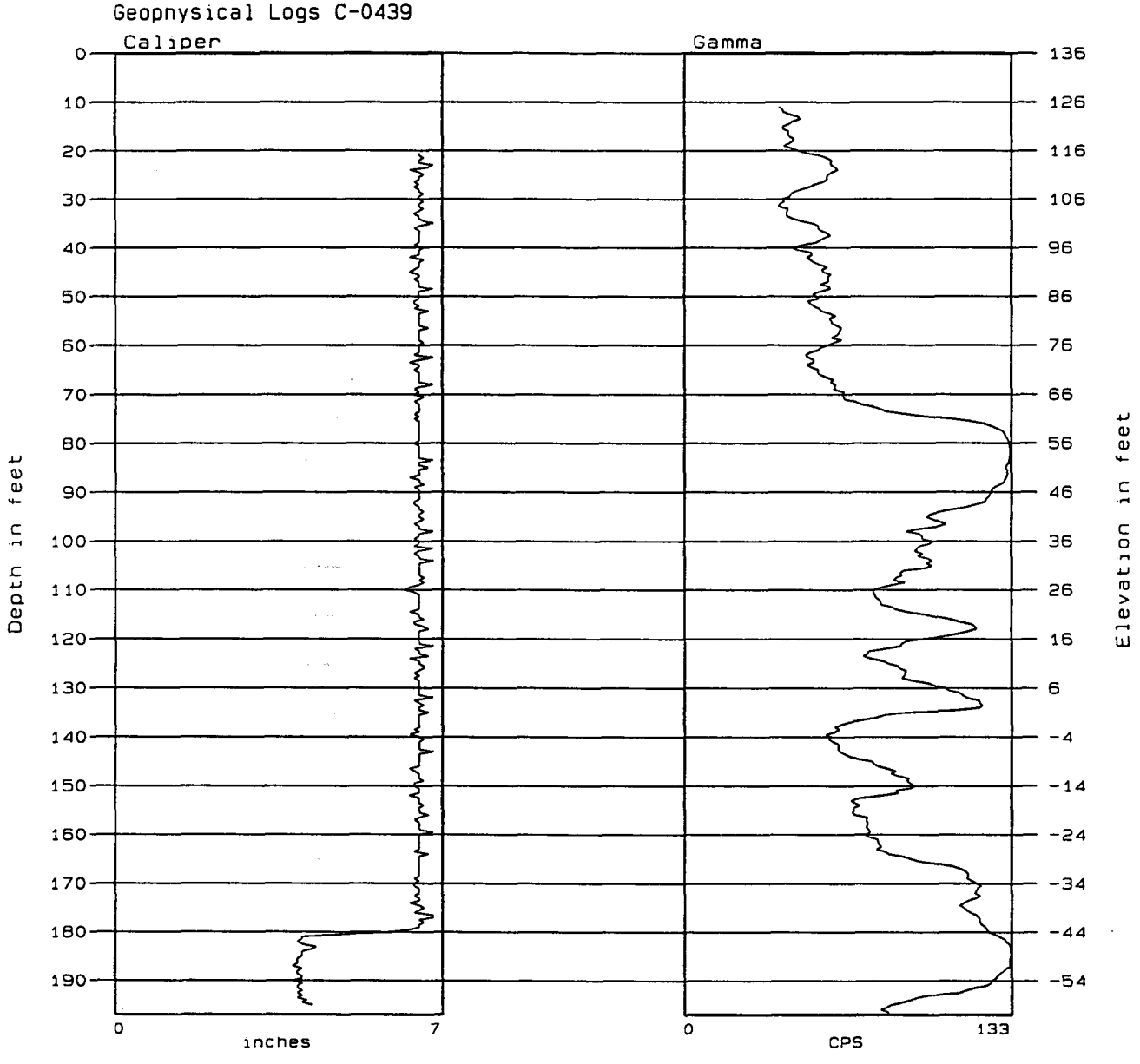


GEOPHYSICAL LOGS FOR WELL C-0439

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0439	Latitude: 29D 51M 16S	Depth Logged: 197 ft.
FGS ID:	Longitude: 82D 00M 58S	Cased Depth:
Other ID:	Elevation: 136 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

Logs Available: CAL, GAM

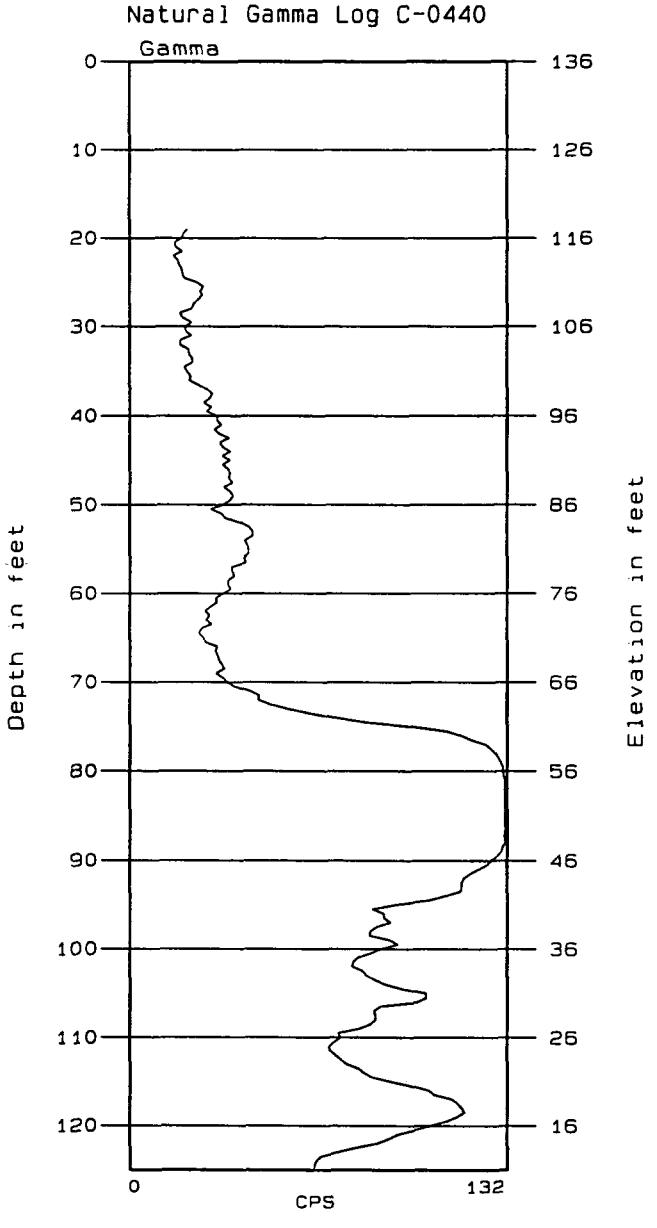


GEOPHYSICAL LOGS FOR WELL C-0440

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0440	Latitude: 29D 51M 15S	Depth Logged: 125 ft.
FGS ID:	Longitude: 82D 00M 58S	Cased Depth:
Other ID:	Elevation: 136 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

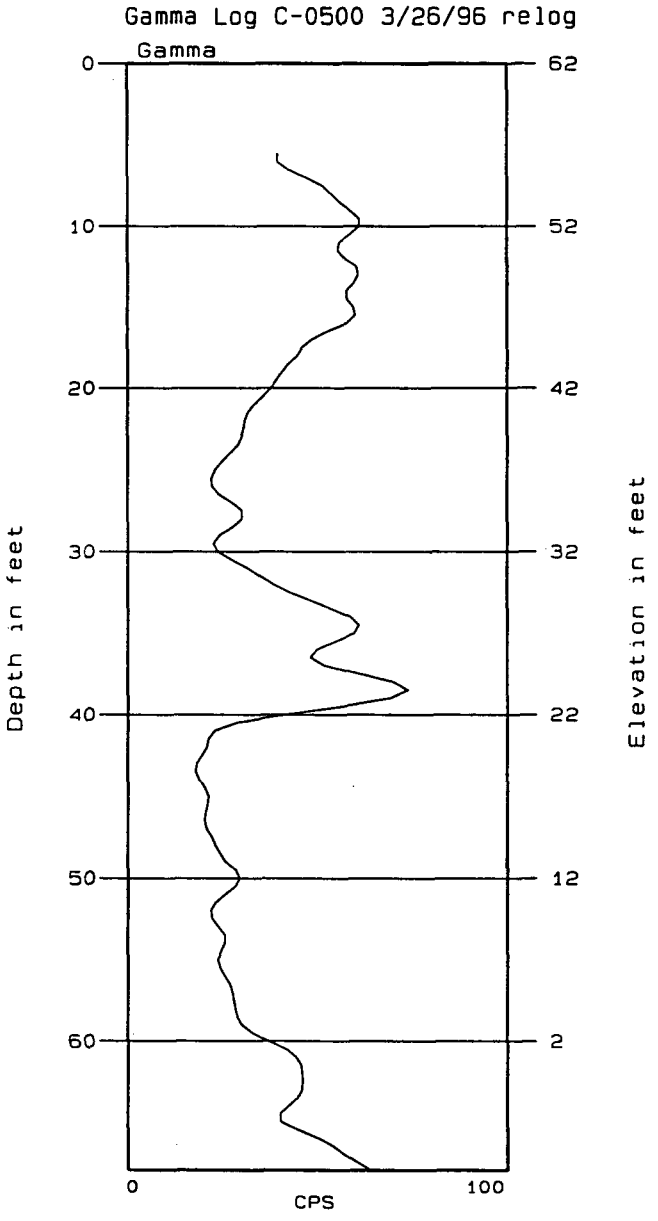
Logs Available: GAM



GEOPHYSICAL LOGS FOR WELL C-0500

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0500	Latitude: 29D 46M 36S	Depth Logged: 68 ft.
FGS ID:	Longitude: 82D 02M 40S	Cased Depth:
Other ID:	Elevation: 62 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		

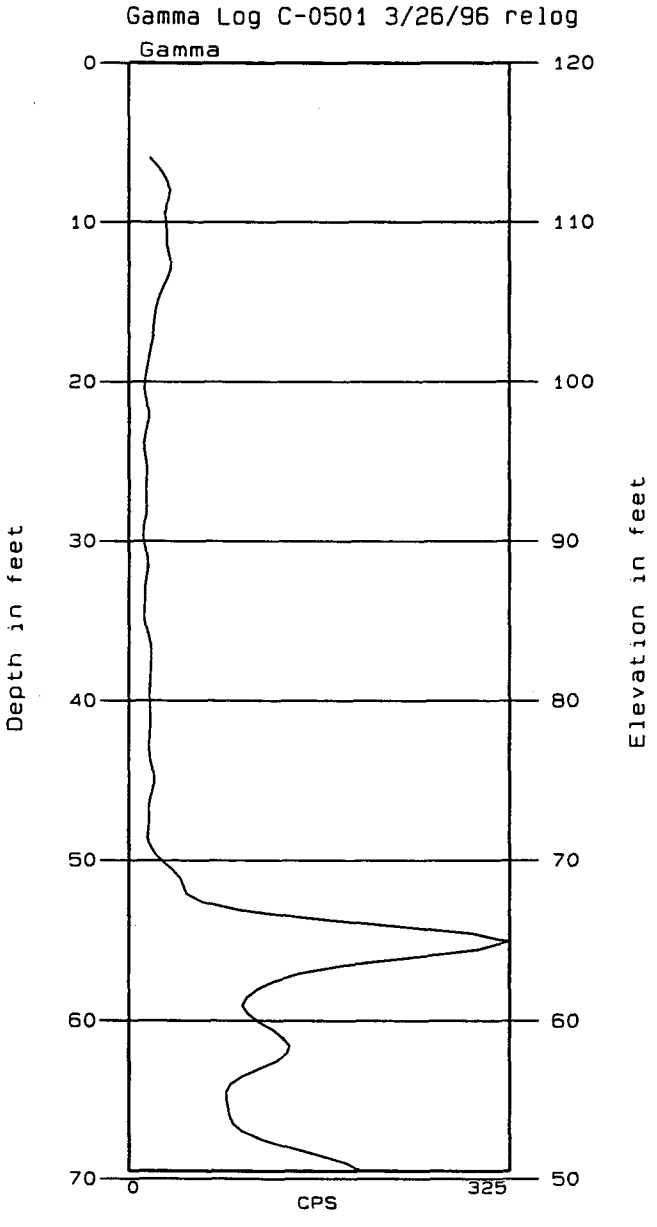


GEOPHYSICAL LOGS FOR WELL C-0501

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0501	Latitude: 29D 45M 28S	Depth Logged: 69.5 ft.
FGS ID:	Longitude: 82D 00M 09S	Cased Depth:
Other ID:	Elevation: 120 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

Logs Available: GAM

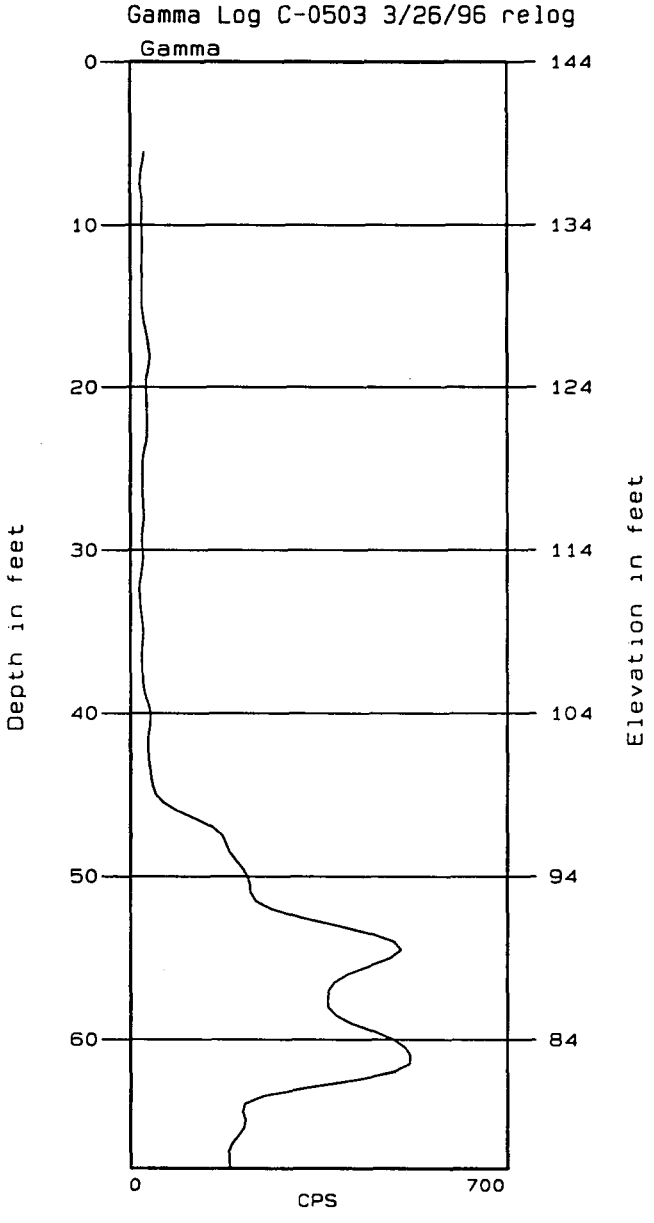


GEOPHYSICAL LOGS FOR WELL C-0503

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0503	Latitude: 29D 48M 34S	Depth Logged: 68 ft.
FGS ID:	Longitude: 82D 01M 30S	Cased Depth:
Other ID:	Elevation: 144 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

Logs Available: GAM

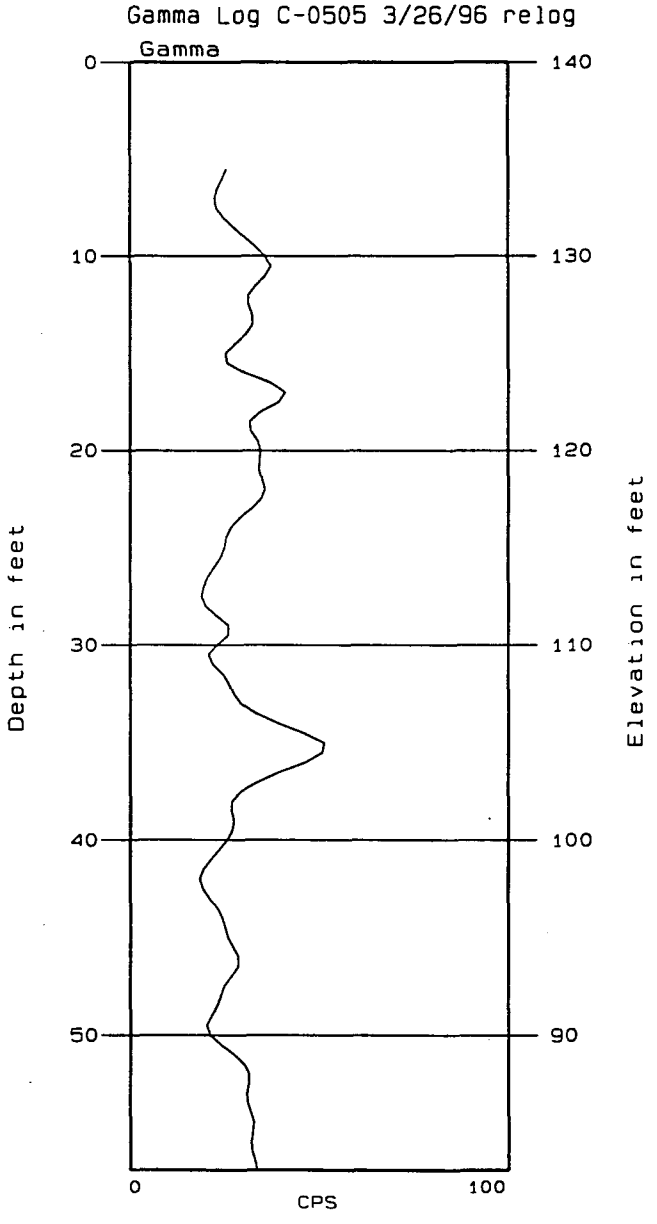


GEOPHYSICAL LOGS FOR WELL C-0505

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0505	Latitude: 29D 45M 11S	Depth Logged: 57 ft.
FGS ID:	Longitude: 82D 01M 59S	Cased Depth:
Other ID:	Elevation: 140 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

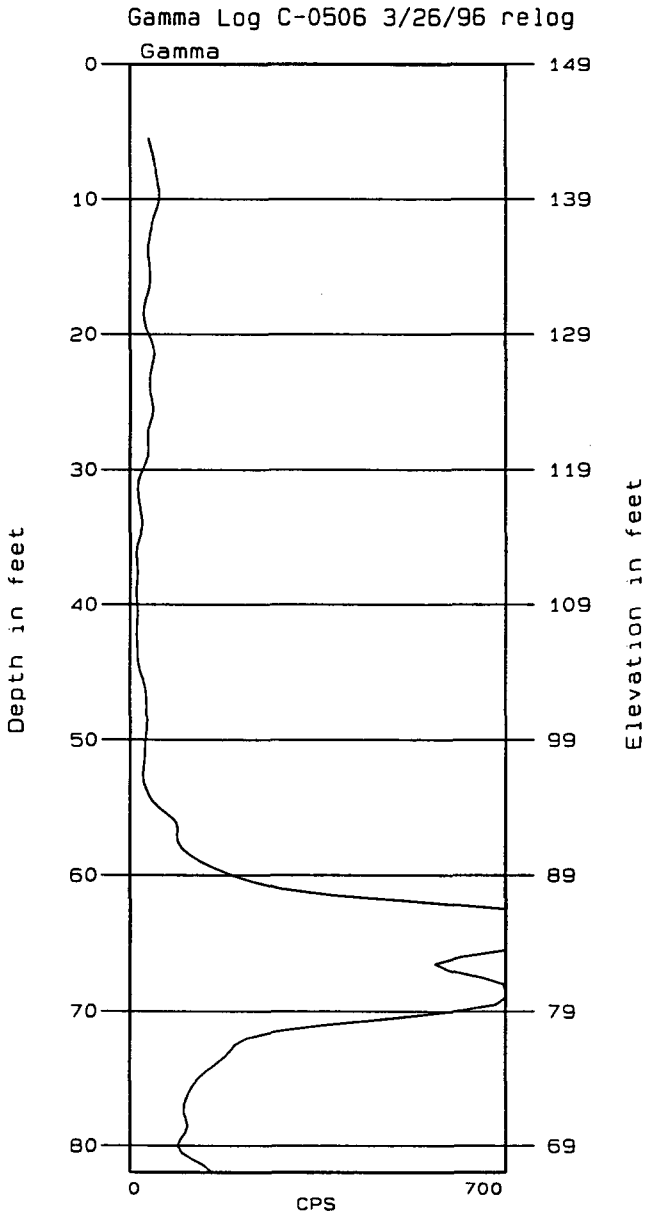
Logs Available: GAM



GEOPHYSICAL LOGS FOR WELL C-0506

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0506	Latitude: 29D 47M 09S	Depth Logged: 82 ft.
FGS ID:	Longitude: 82D 03M 23S	Cased Depth:
Other ID:	Elevation: 149 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		

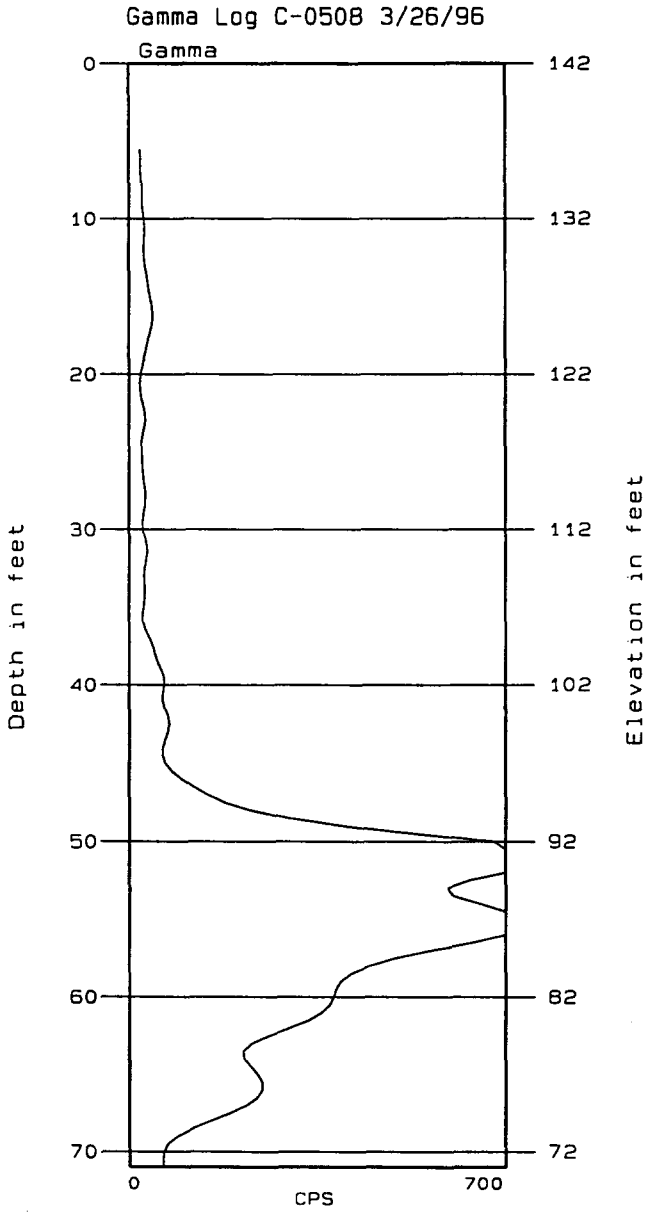


GEOPHYSICAL LOGS FOR WELL C-0508

Log Source:

Station Name:	County: CLAY	Date Logged:
Well ID: C-0508	Latitude: 29D 45M 02S	Depth Logged: 71 ft.
FGS ID:	Longitude: 82D 00M 32S	Cased Depth:
Other ID:	Elevation: 142 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

Logs Available: GAM

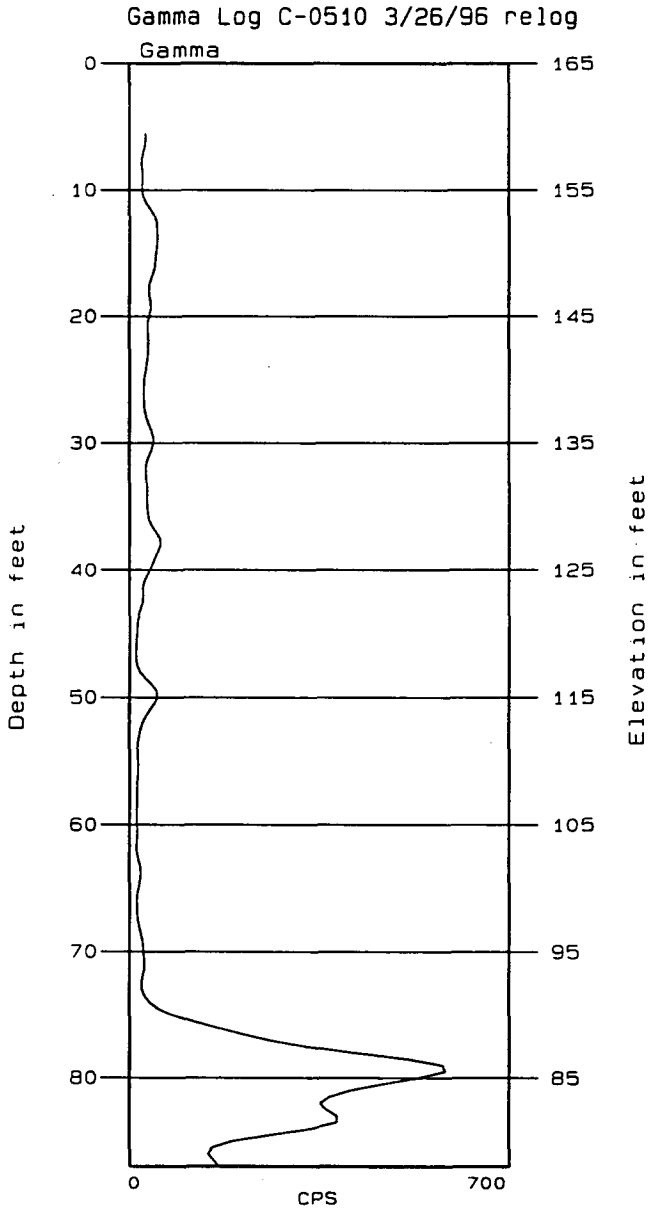


GEOPHYSICAL LOGS FOR WELL C-0510

Log Source:

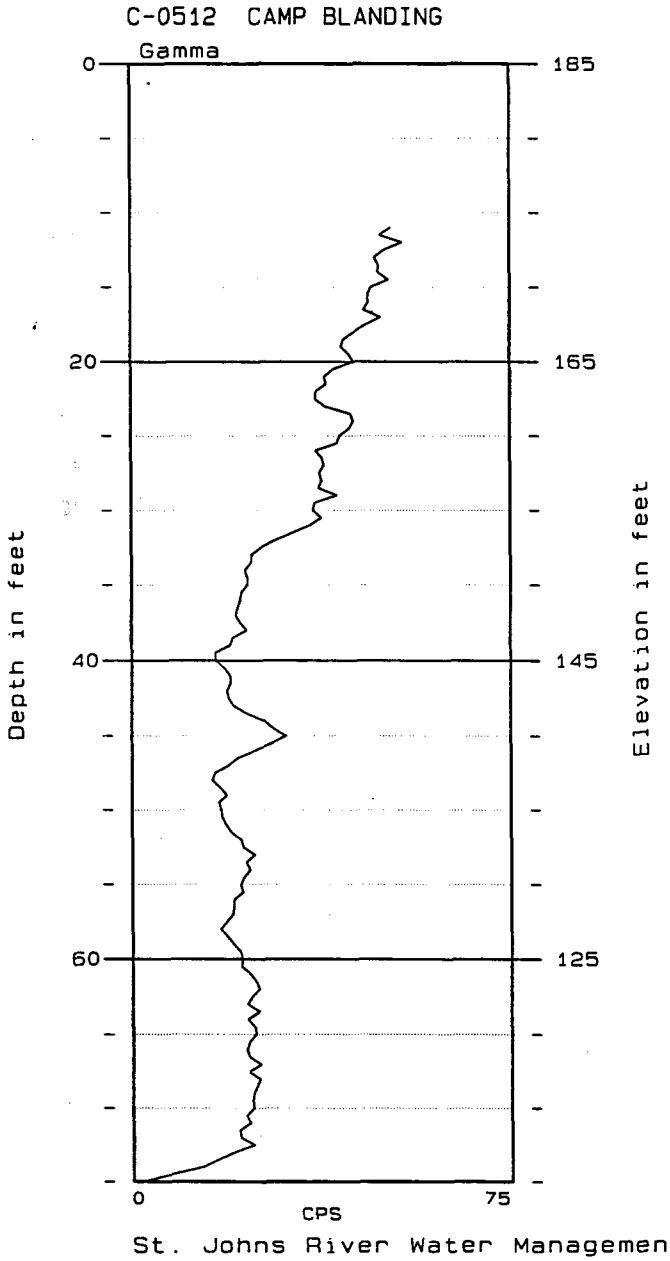
Station Name:	County: CLAY	Date Logged:
Well ID: C-0510	Latitude: 29D 48M 09S	Depth Logged: 87 ft.
FGS ID:	Longitude: 82D 02M 44S	Cased Depth:
Other ID:	Elevation: 165 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:

Logs Available: GAM



Log Source: St. Johns River Water Management District

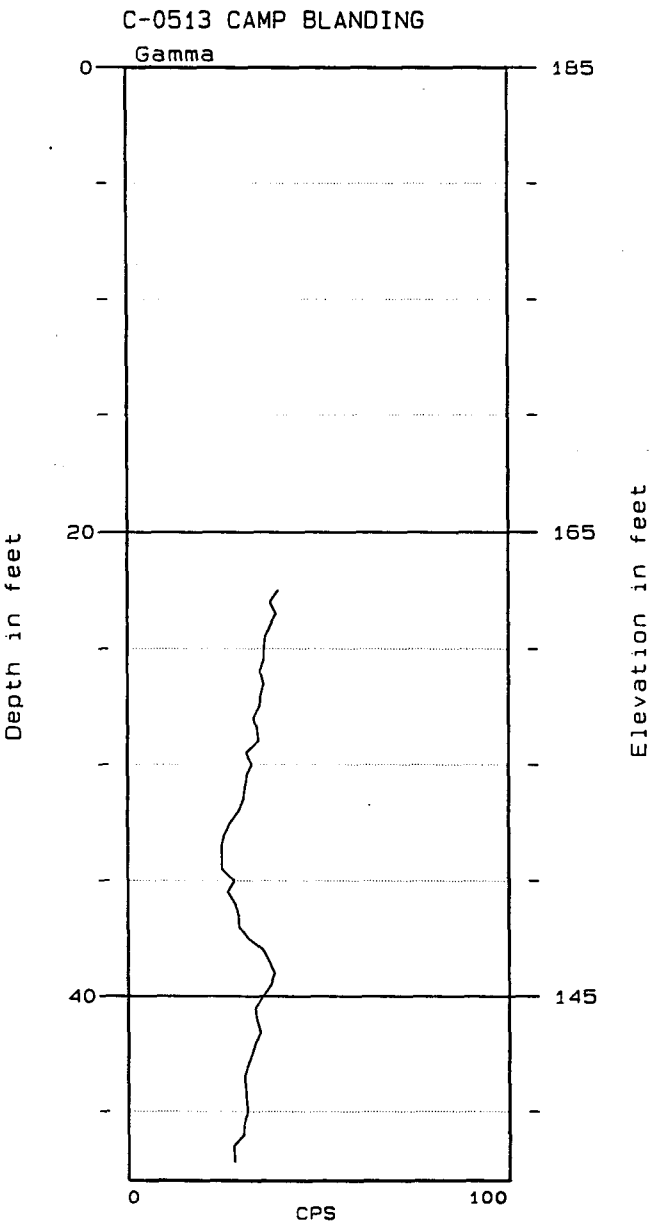
Station Name:	County: CLAY	Date Logged:
Well ID: C-0512	Latitude: 29D 51M 24S	Depth Logged: 75 ft.
FGS ID:	Longitude: 82D 01M 01S	Cased Depth:
Other ID:	Elevation: 185 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District

Log Source: St. Johns River Water Management District

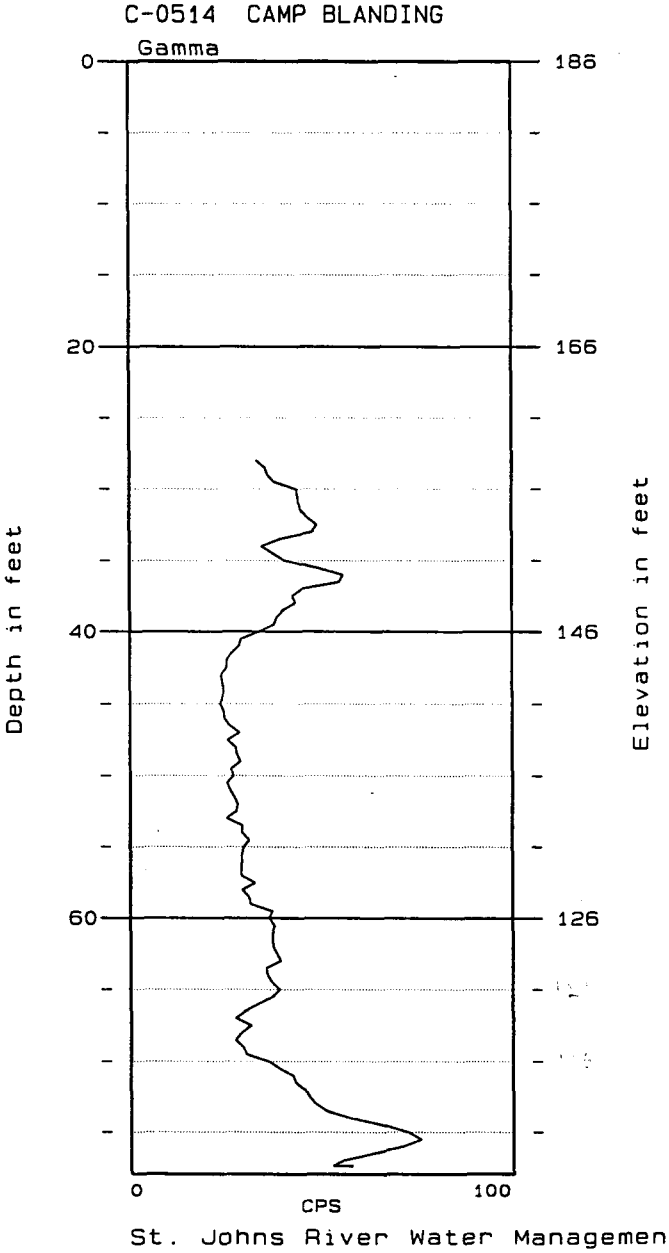
Station Name:	County: CLAY	Date Logged:
Well ID: C-0513	Latitude: 29D 51M 22S	Depth Logged: 48 ft.
FGS ID:	Longitude: 82D 00M 20S	Cased Depth:
Other ID:	Elevation: 185 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District Pala

Log Source: St. Johns River Water Management District

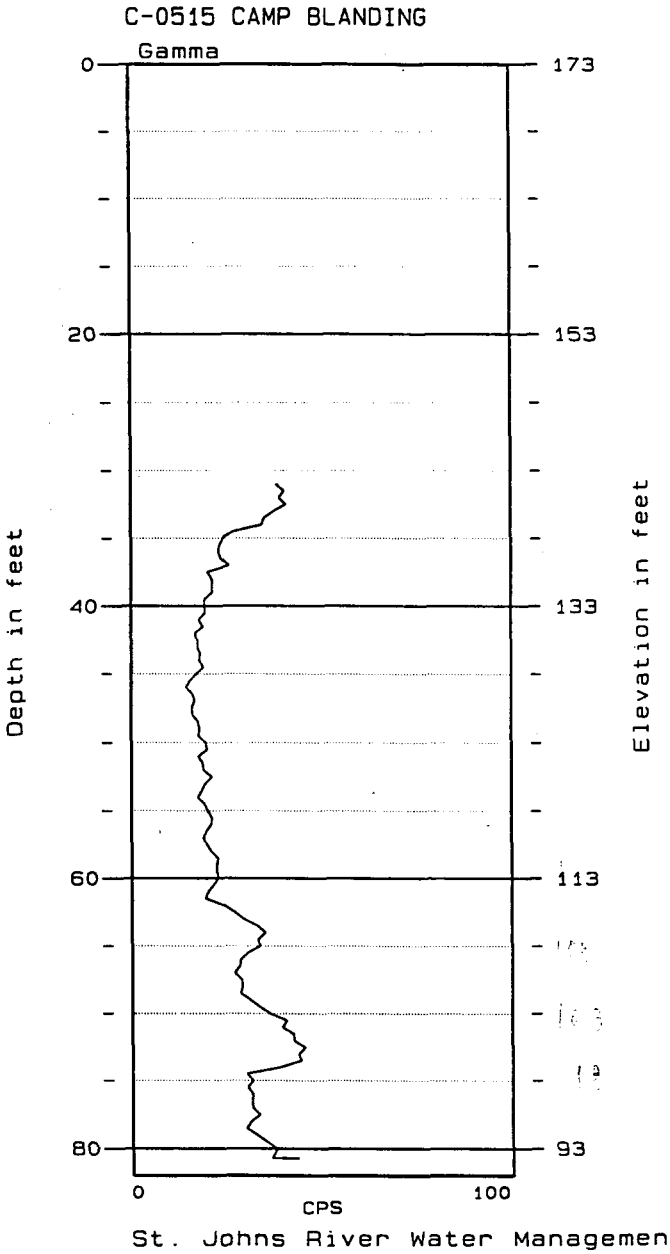
Station Name:	County: CLAY	Date Logged:
Well ID: C-0514	Latitude: 29D 51M 07S	Depth Logged: 78 ft.
FGS ID:	Longitude: 81D 58M 59S	Cased Depth:
Other ID:	Elevation: 186 ft.	Water Level: ft.
Owner:	Topo Quad: GOLD HEAD BRANCH	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District Pala

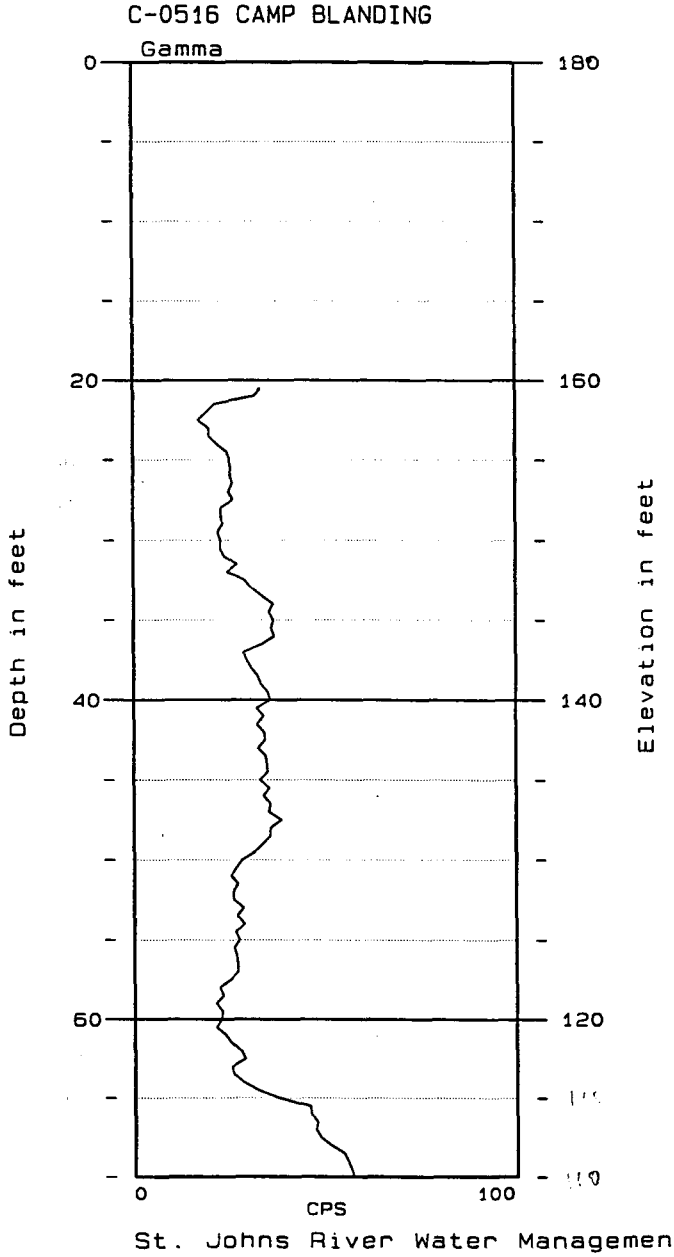
Log Source: St. Johns River Water Management District

Station Name:	County: CLAY	Date Logged:
Well ID: C-0515	Latitude: 29D 50M 25S	Depth Logged: 82 ft.
FGS ID:	Longitude: 81D 58M 51S	Cased Depth:
Other ID:	Elevation: 173 ft.	Water Level: ft.
Owner:	Topo Quad: GOLD HEAD BRANCH	Date Measured:
Logs Available: GAM		



Log Source: St. Johns River Water Management District

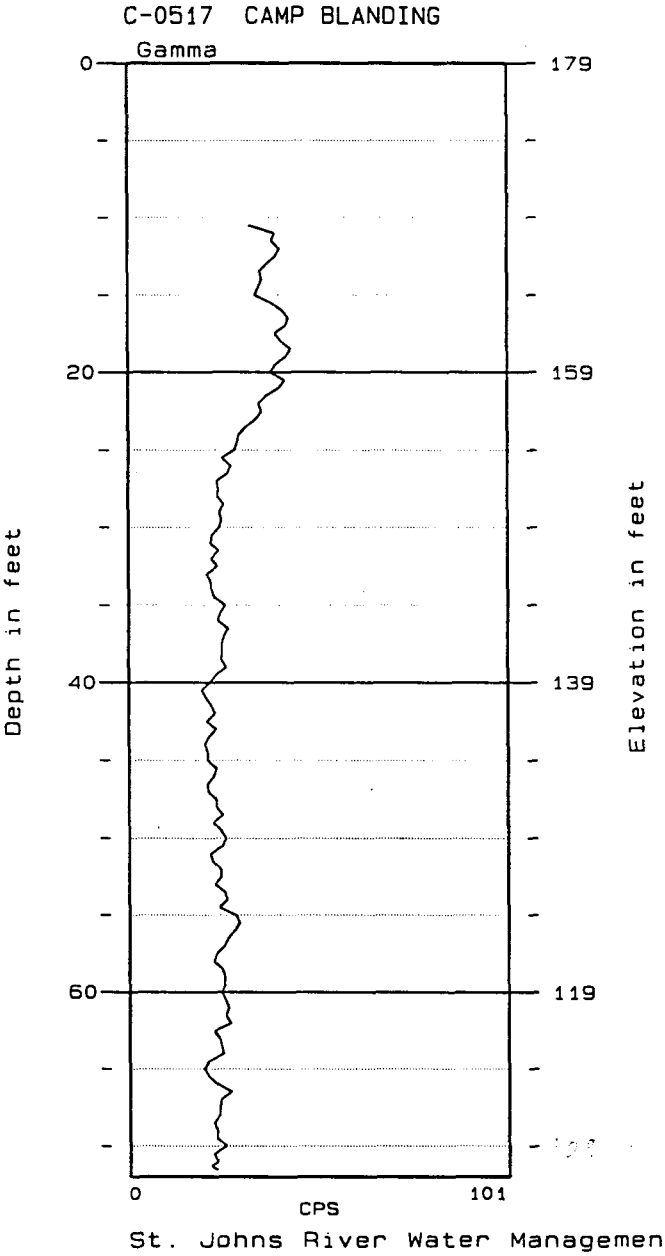
Station Name:	County: CLAY	Date Logged:
Well ID: C-0516	Latitude: 29D 49M 49S	Depth Logged: 70 ft.
FGS ID:	Longitude: 81D 59M 20S	Cased Depth:
Other ID:	Elevation: 180 ft.	Water Level: ft.
Owner:	Topo Quad: GOLD HEAD BRANCH	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District Pala

Log Source: St. Johns River Water Management District

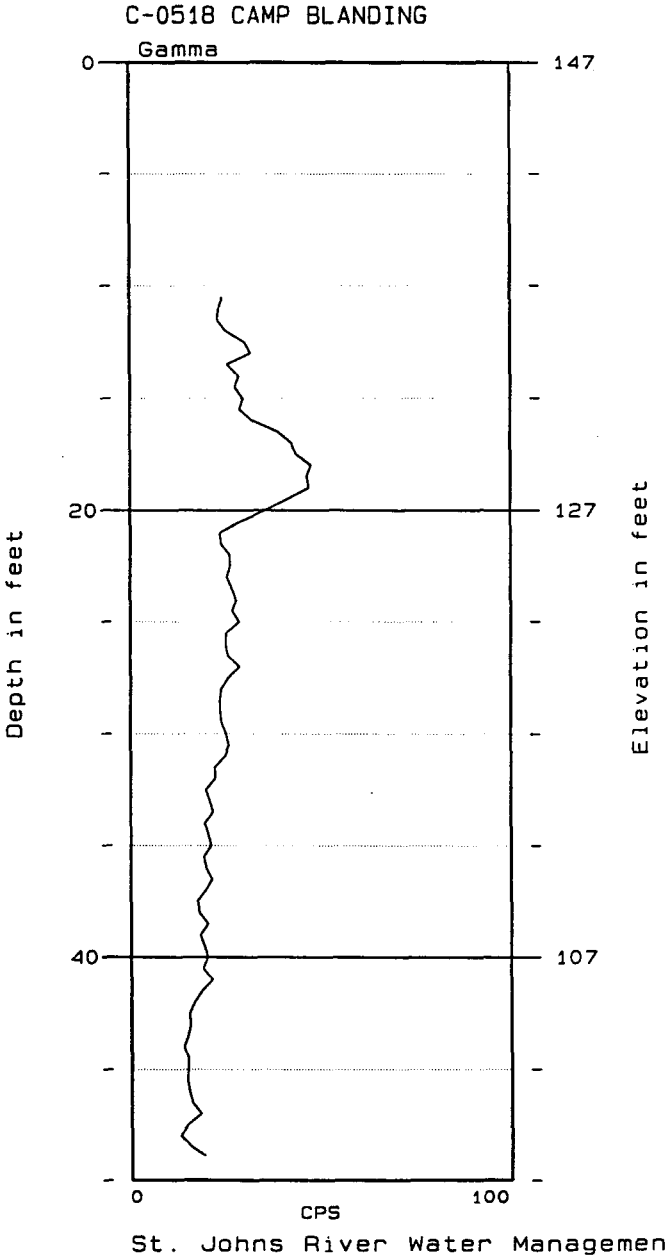
Station Name:	County: CLAY	Date Logged:
Well ID: C-0517	Latitude: 29D 50M 04S	Depth Logged: 72 ft.
FGS ID:	Longitude: 82D 00M 20S	Cased Depth:
Other ID:	Elevation: 179 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District

Log Source: St. Johns River Water Management District

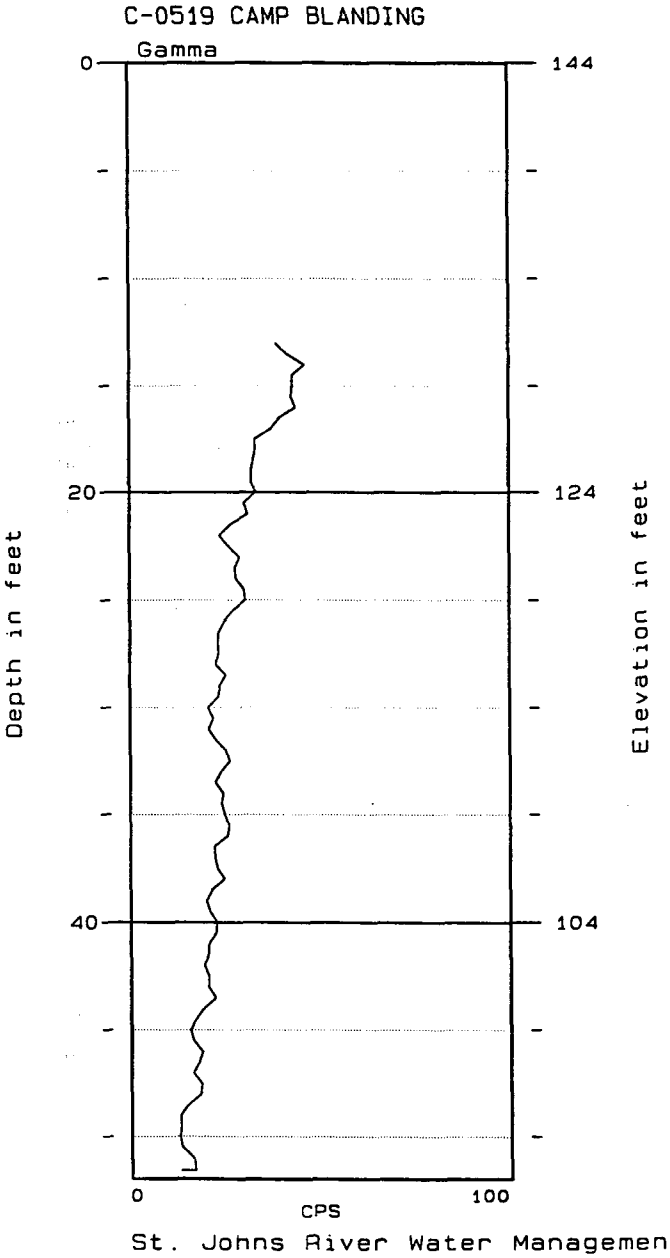
Station Name:	County: CLAY	Date Logged:
Well ID: C-0518	Latitude: 29D 49M 21S	Depth Logged: 50 ft.
FGS ID:	Longitude: 82D 00M 37S	Cased Depth:
Other ID:	Elevation: 147 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District

Log Source: St. Johns River Water Management District

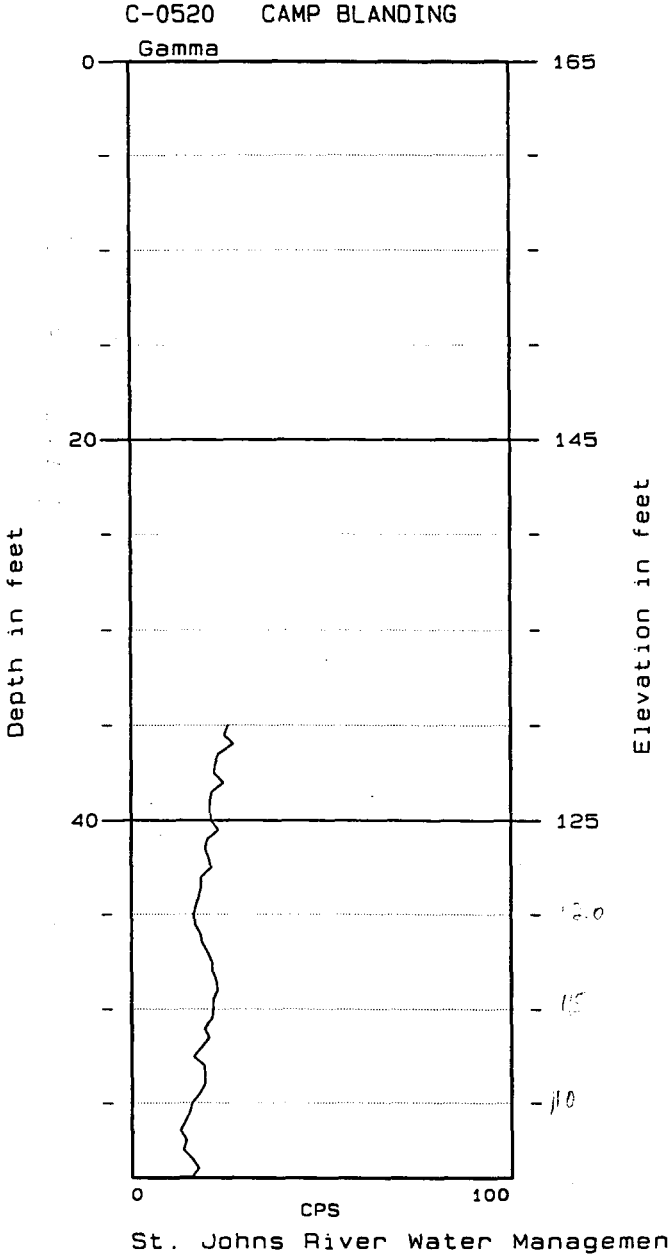
Station Name:	County: CLAY	Date Logged:
Well ID: C-0519	Latitude: 29D 49M 02S	Depth Logged: 52 ft.
FGS ID:	Longitude: 82D 00M 51S	Cased Depth:
Other ID:	Elevation: 144 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District Pala

Log Source: St. Johns River Water Management District

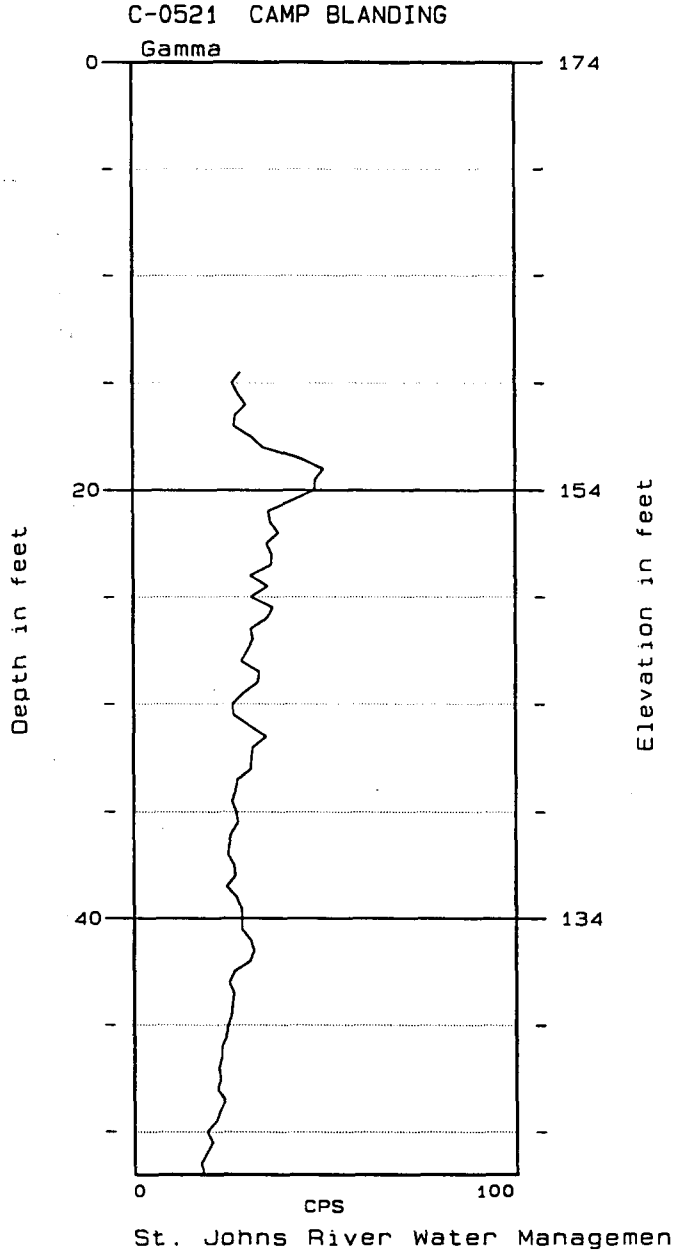
Station Name:	County: CLAY	Date Logged:
Well ID: C-0520	Latitude: 29D 49M 29S	Depth Logged: 59 ft.
FGS ID:	Longitude: 82D 01M 36S	Cased Depth:
Other ID:	Elevation: 165 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



St. Johns River Water Management District

Log Source: St. Johns River Water Management District

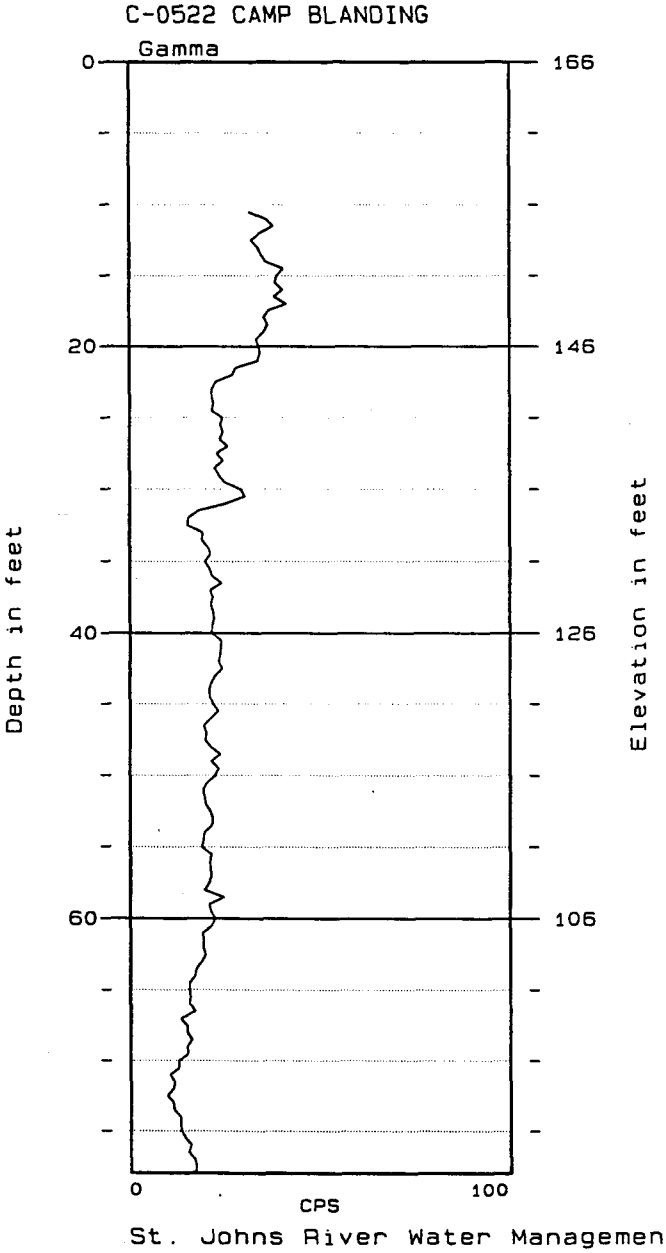
Station Name:	County: CLAY	Date Logged:
Well ID: C-0521	Latitude: 29D 49M 48S	Depth Logged: 52 ft.
FGS ID:	Longitude: 82D 01M 15S	Cased Depth:
Other ID:	Elevation: 174 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



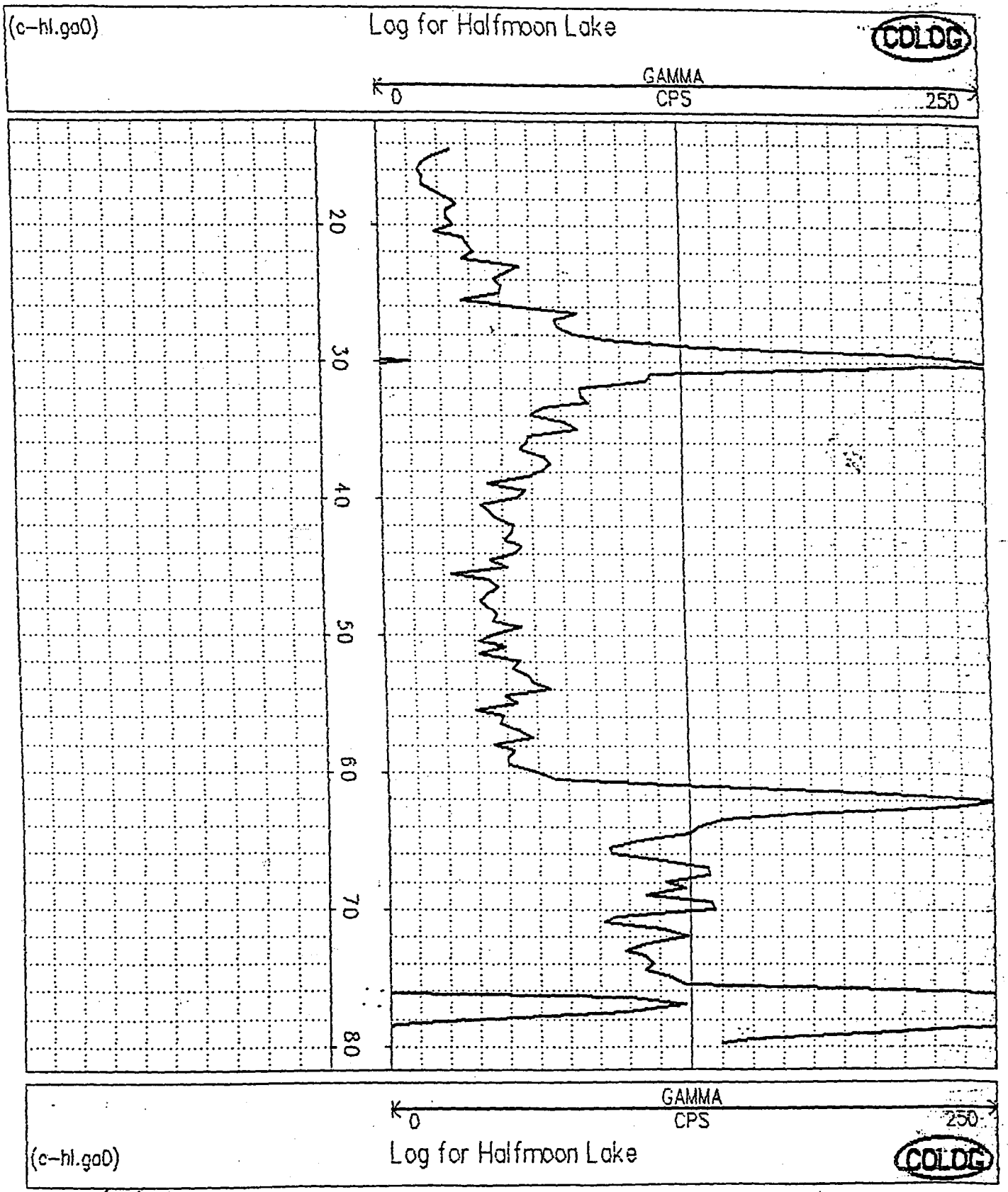
St. Johns River Water Management District Pala

Log Source: St. Johns River Water Management District

Station Name:	County: CLAY	Date Logged:
Well ID: C-0522	Latitude: 29D 50M 18S	Depth Logged: 78 ft.
FGS ID:	Longitude: 82D 00M 48S	Cased Depth:
Other ID:	Elevation: 166 ft.	Water Level: ft.
Owner:	Topo Quad: KEYSTONE HEIGHTS	Date Measured:
Logs Available: GAM		



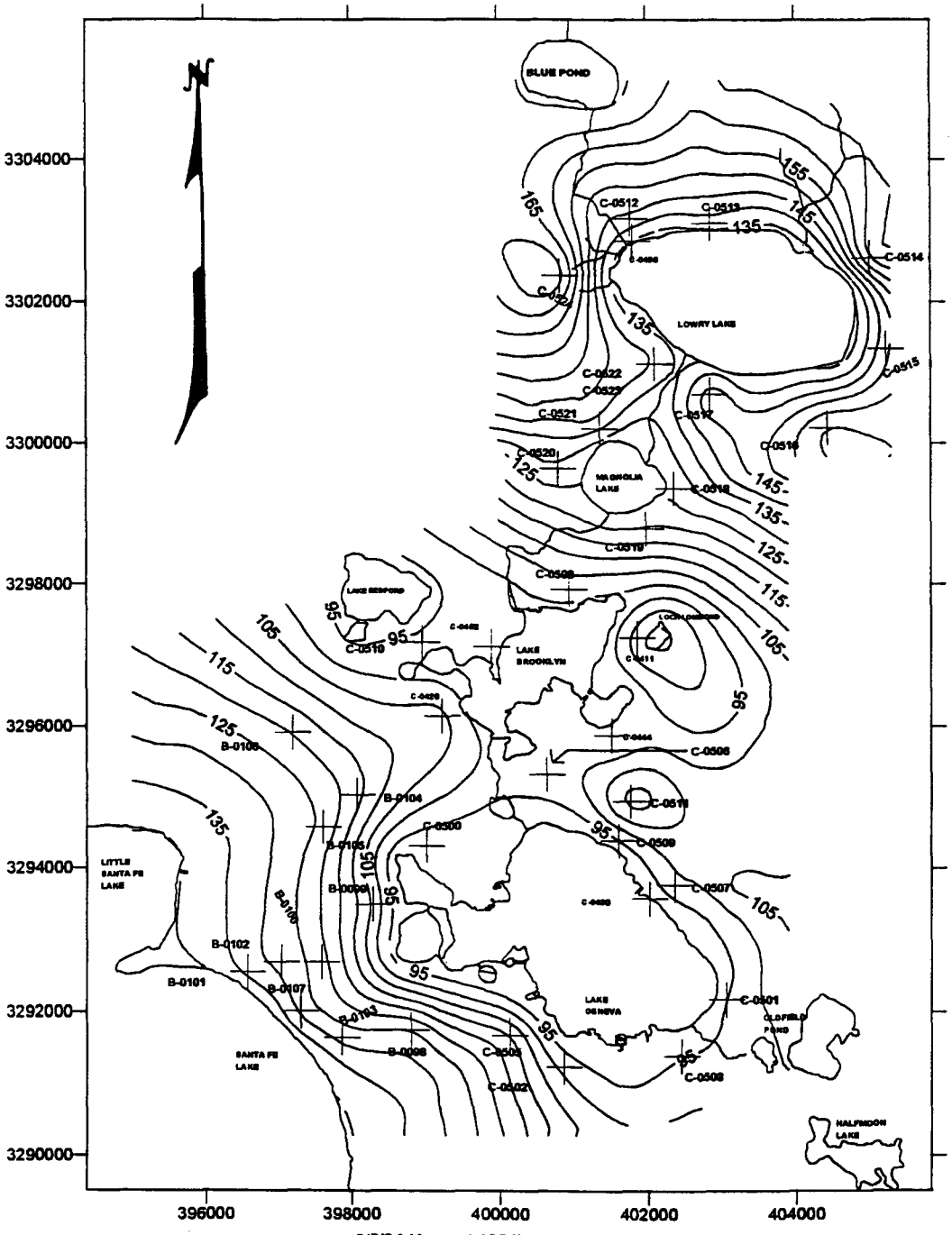
St. Johns River Water Management District Pala



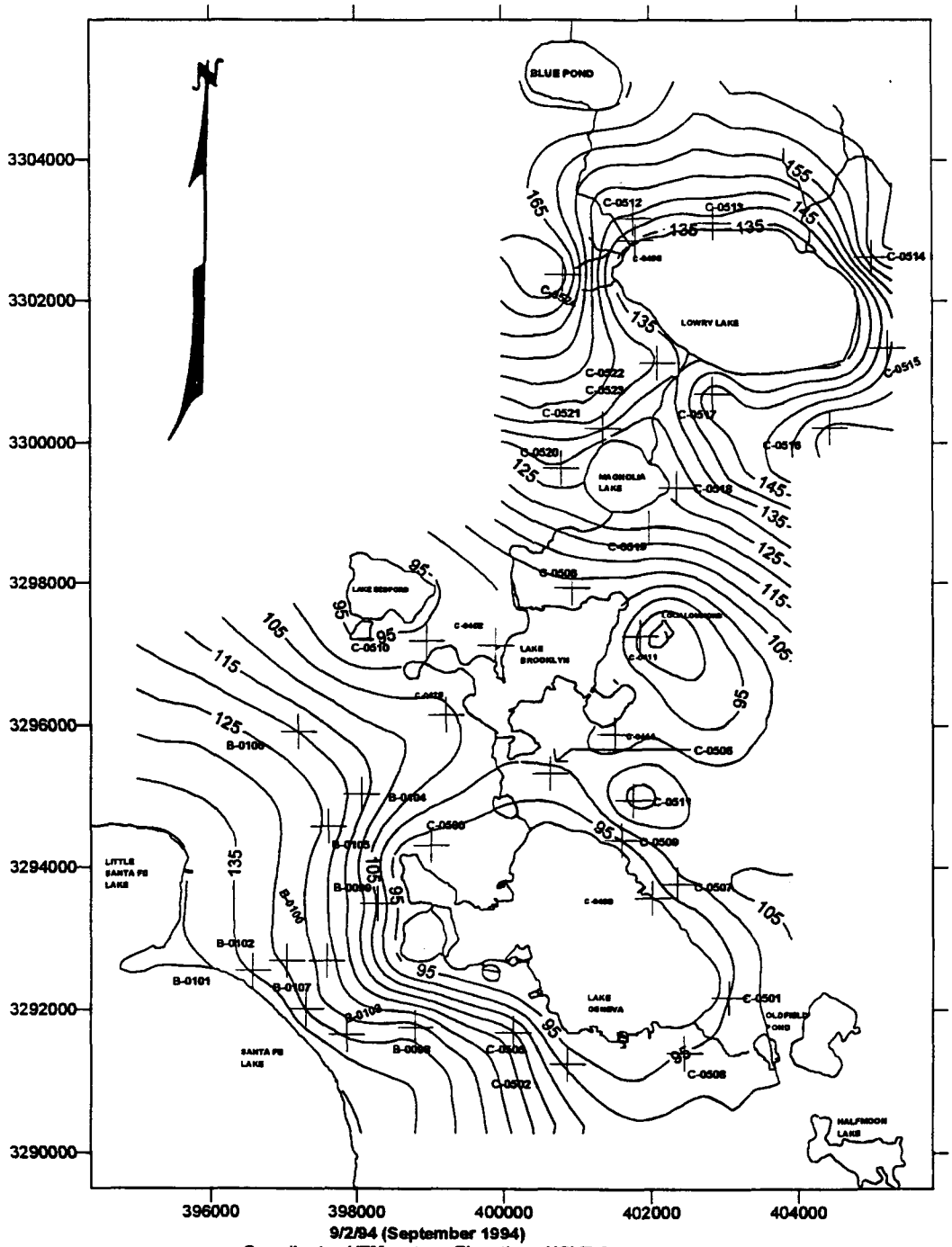
2/6/95
No well - auger site est. Hamm fm.

APPENDIX E

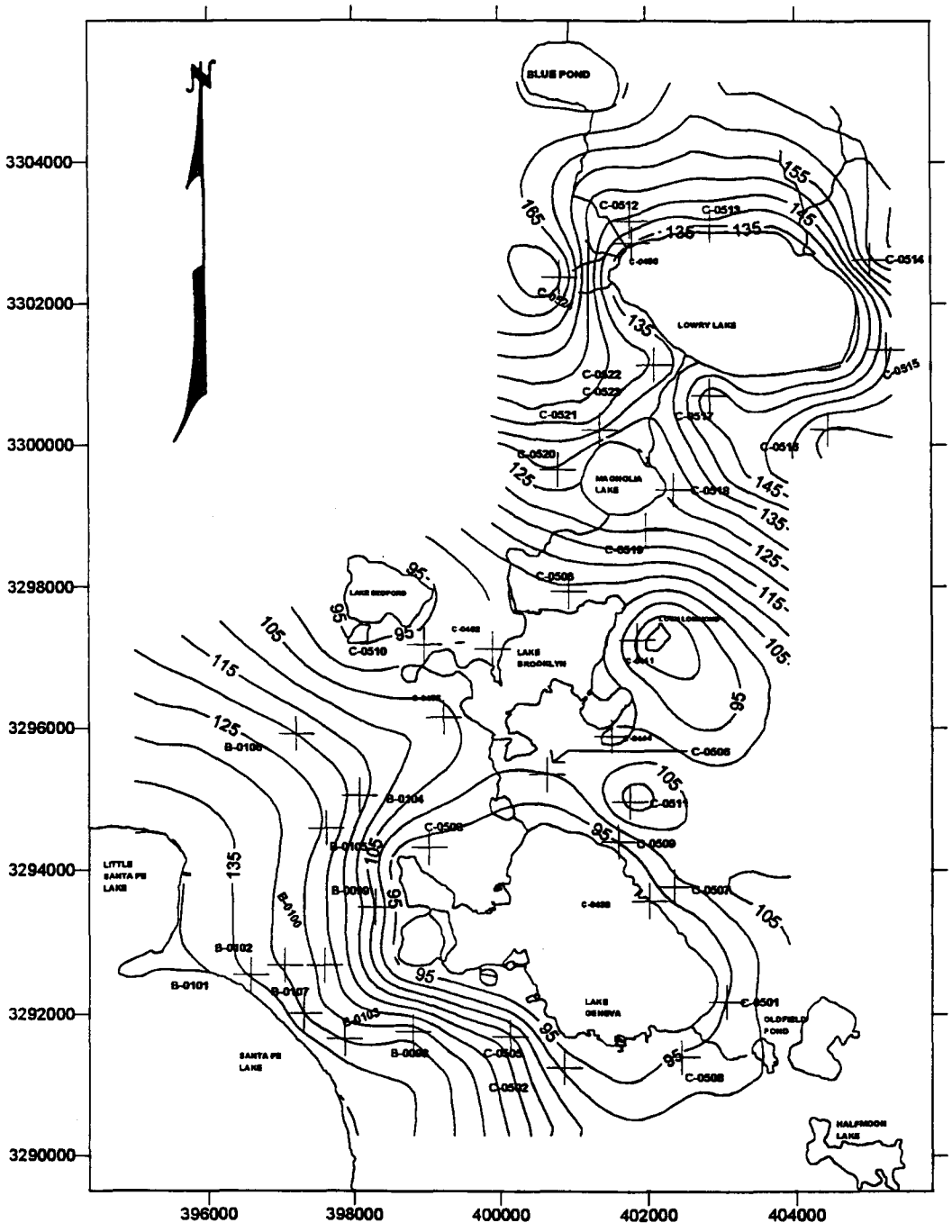
WATER TABLE MAPS



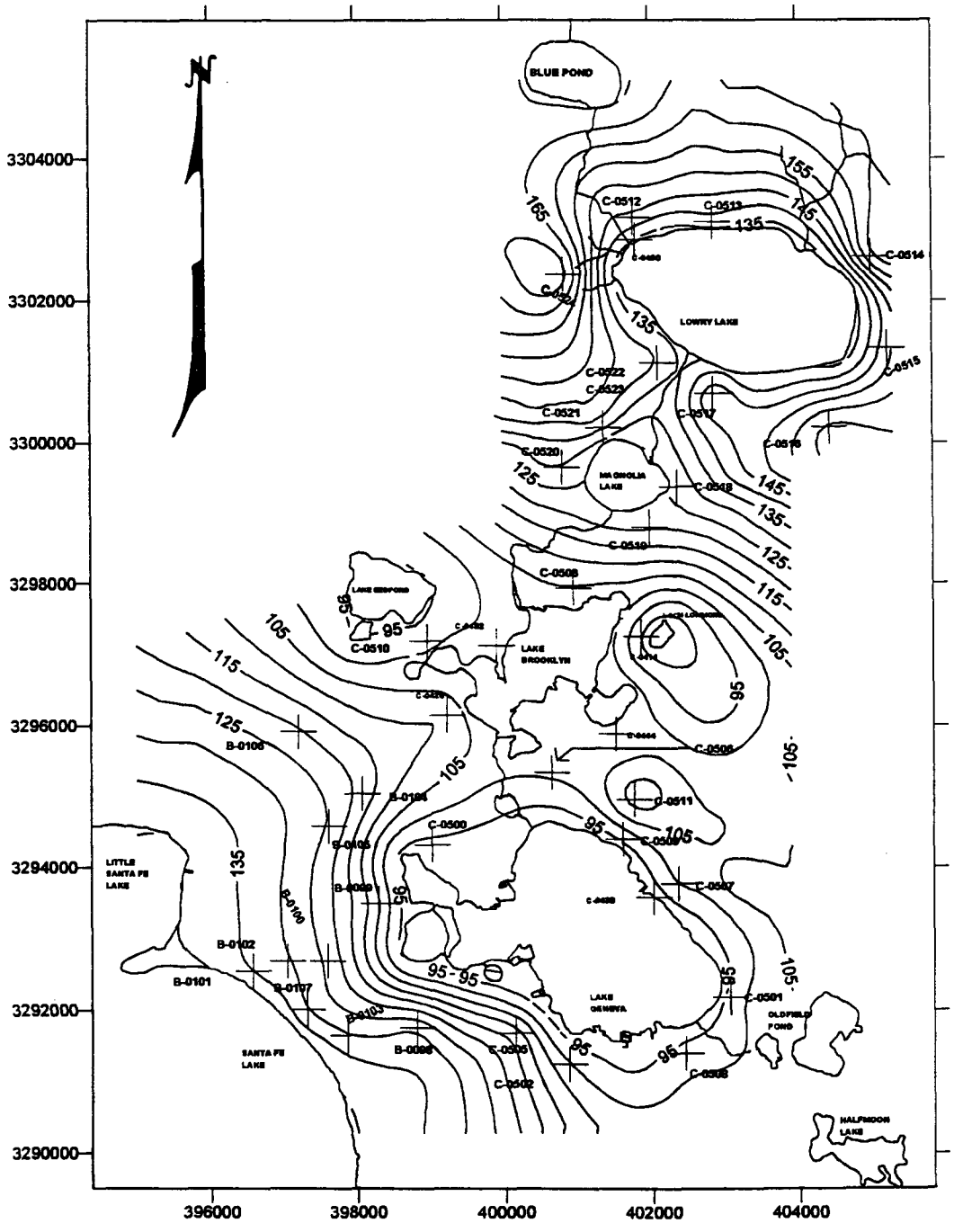
8/2/94 (August 1994)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.64
Magnolia Lake 124.83
Lake Brooklyn 98.76
Lake Geneva 90.50
Blue Pond 171.00
Lake Bedford 93.71
Loch Lommond 83.49
Santa Fe Lake 140.51



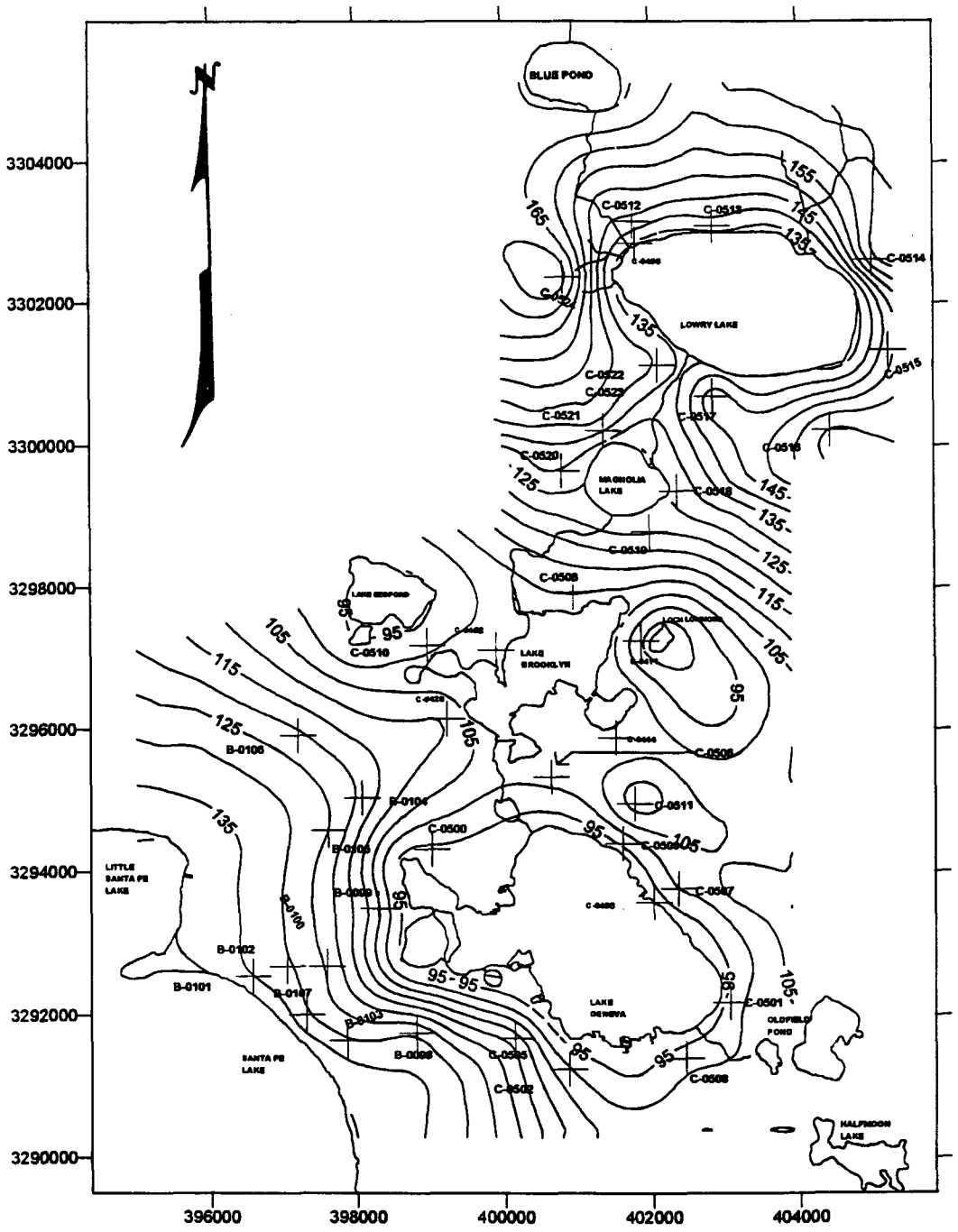
9/2/94 (September 1994)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.63
Magnolia Lake 124.62
Lake Brooklyn 100.66
Lake Geneva 90.70
Blue Pond 171.00
Lake Bedford 93.98
Loch Lommond 84.09
Santa Fe Lake 140.64



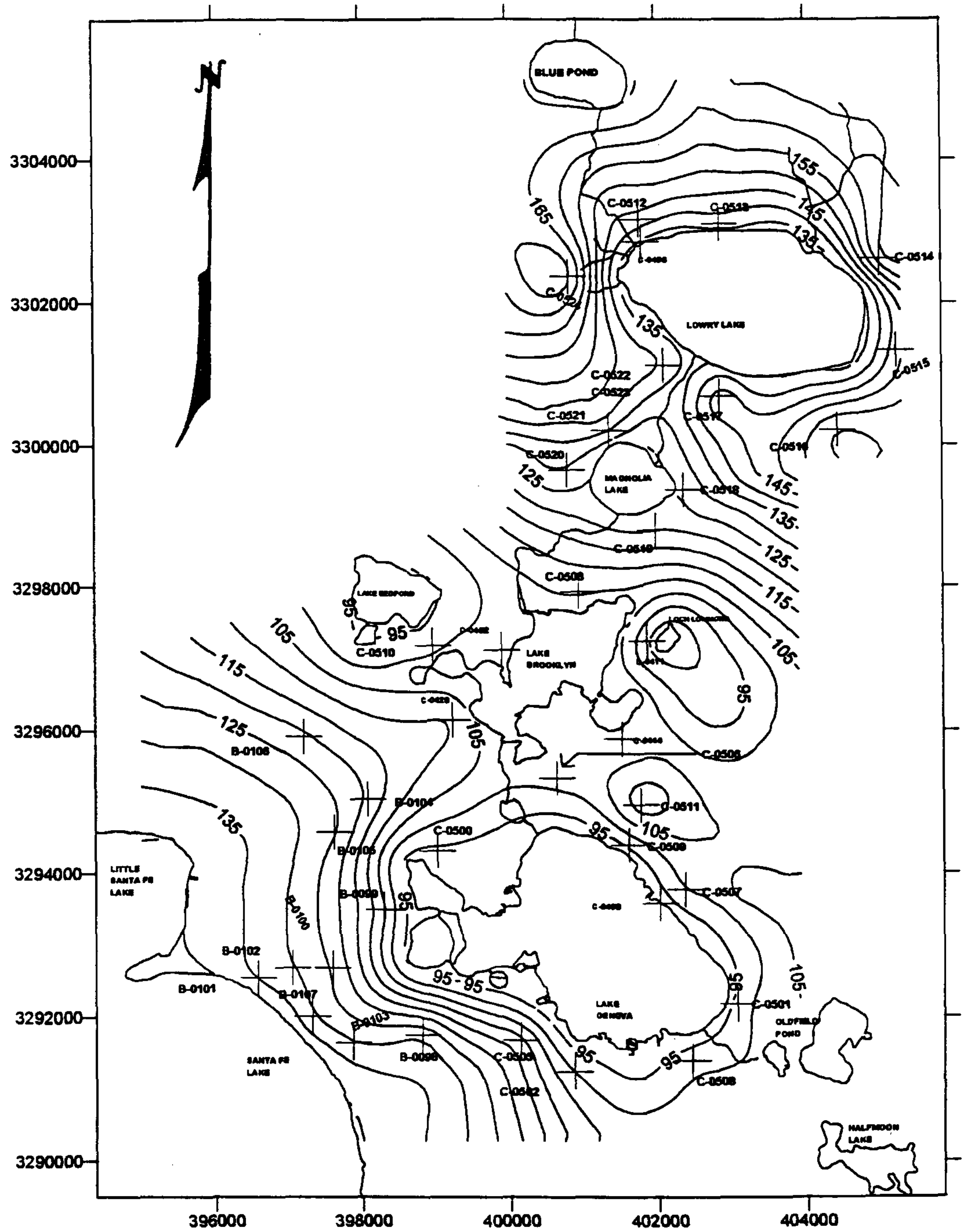
10/3/94 (October 1994)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.41
Magnolia Lake 124.39
Lake Brooklyn 101.25
Lake Geneva 90.76
Blue Pond 171.00
Lake Bedford 93.98
Loch Lommond 84.67
Santa Fe Lake 140.51



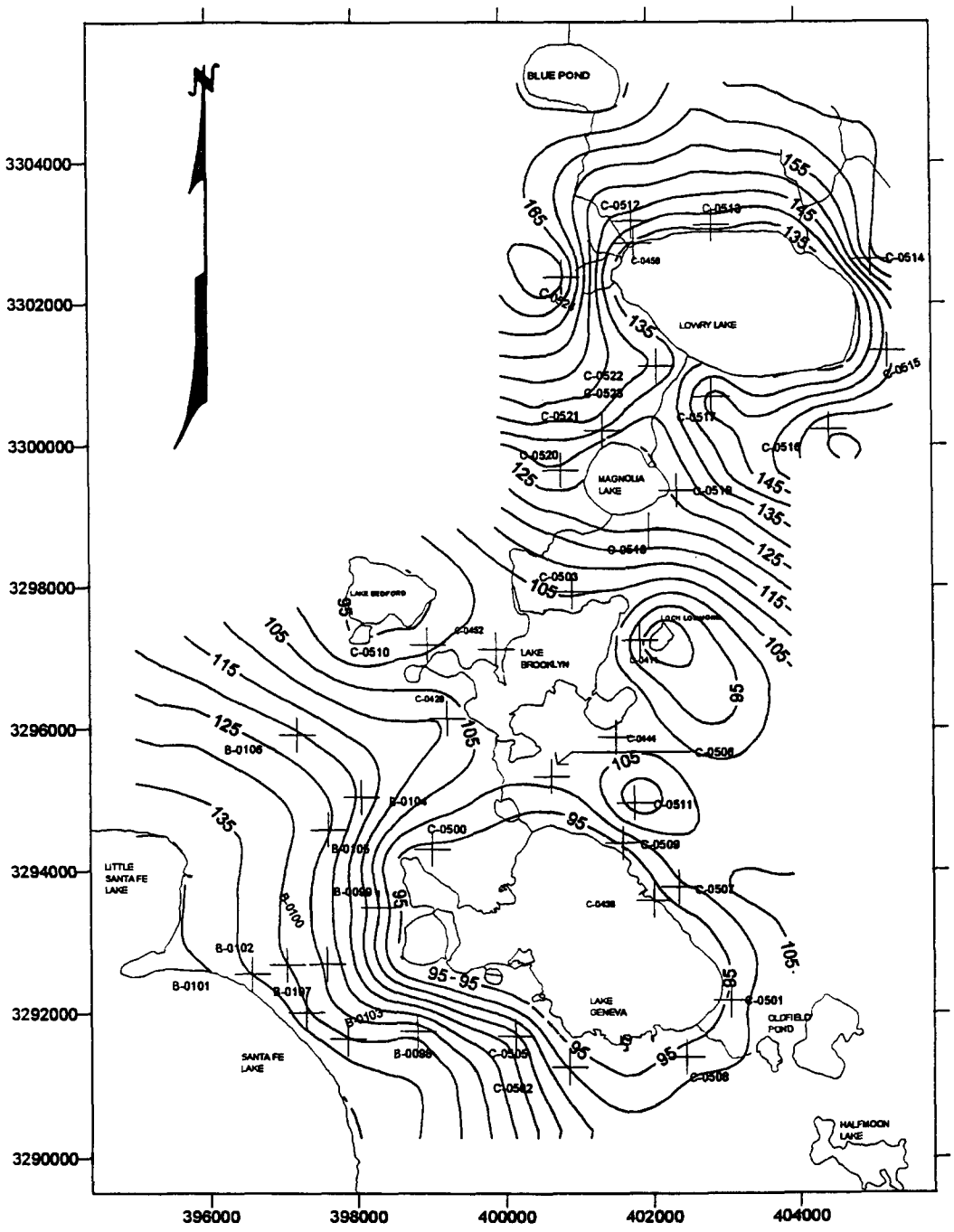
11/2/94 (November 1994)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.48
Magnolia Lake 124.47
Lake Brooklyn 102.42
Lake Geneva 91.55
Blue Pond 171.00
Lake Bedford 94.52
Loch Lommond 86.14
Santa Fe Lake 140.19



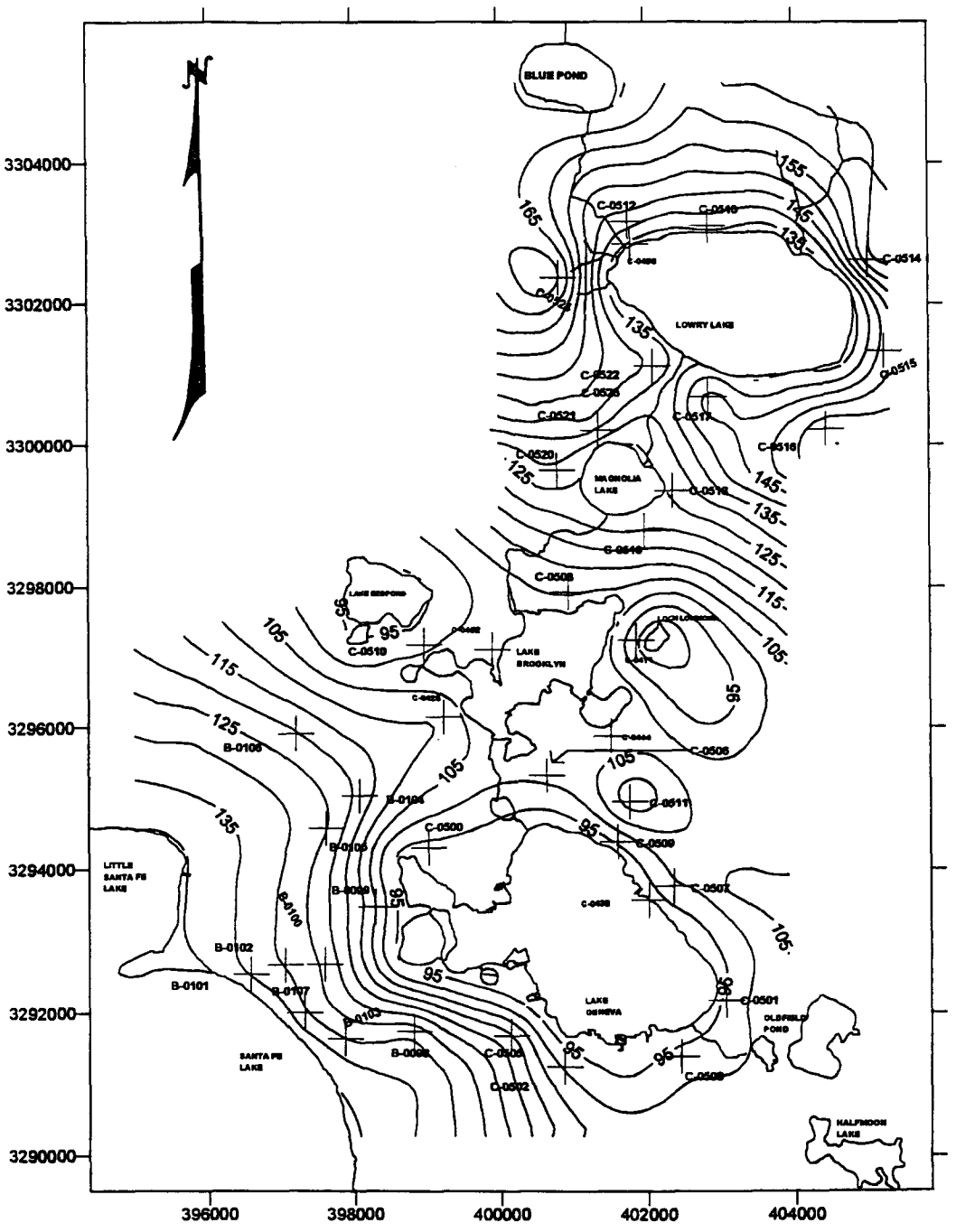
11/28/94 (December 1994)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.45
Magnolia Lake 124.33
Lake Brooklyn 102.74
Lake Geneva 91.55
Blue Pond 171.00
Lake Bedford 94.52
Loch Lommond 86.14
Santa Fe Lake 140.19



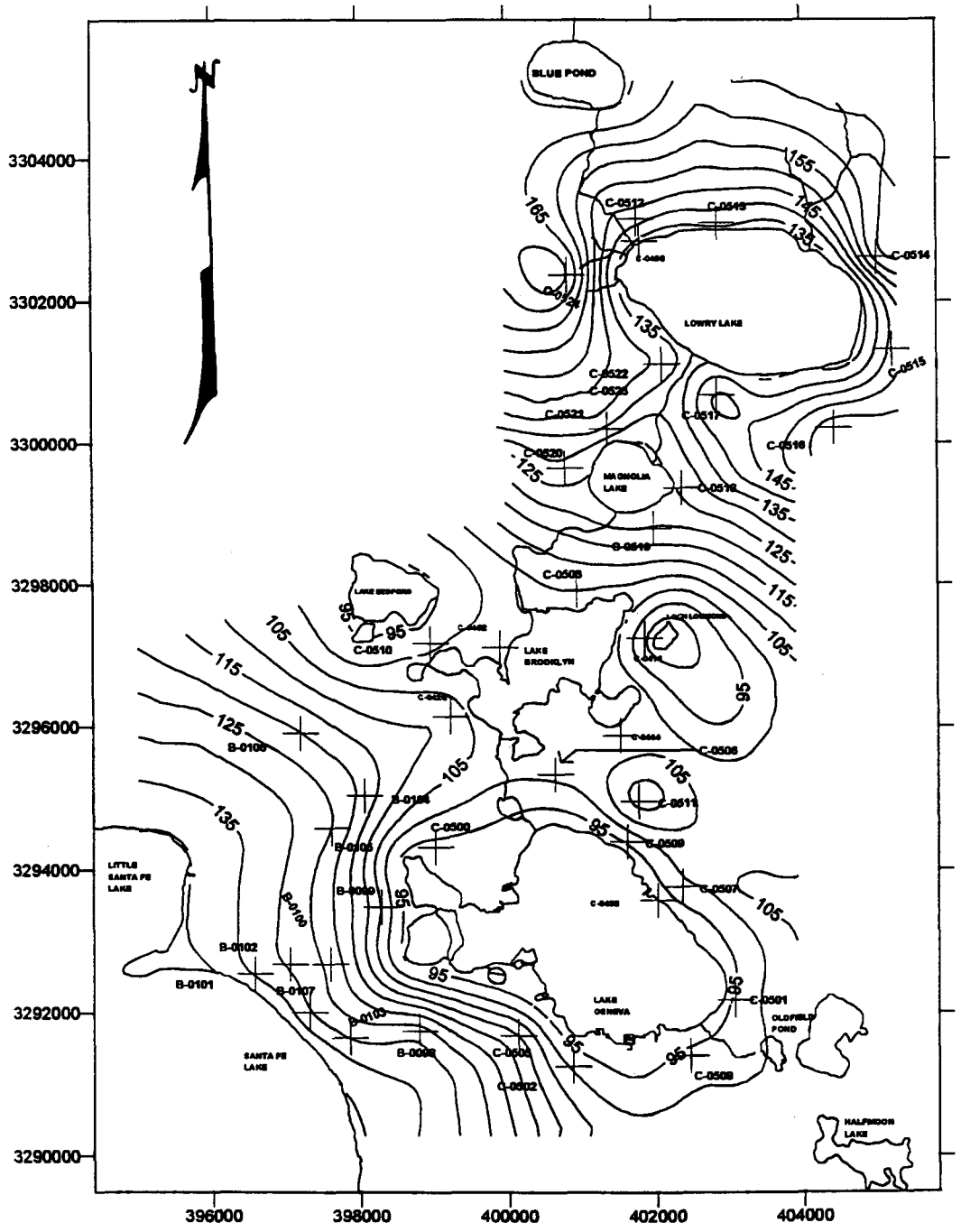
12/29/94 (January 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.33
Magnolia Lake 124.15
Lake Brooklyn 102.90
Lake Geneva 91.59
Blue Pond 171.00
Lake Bedford 94.50
Loch Lommond 86.28
Santa Fe Lake 140.29



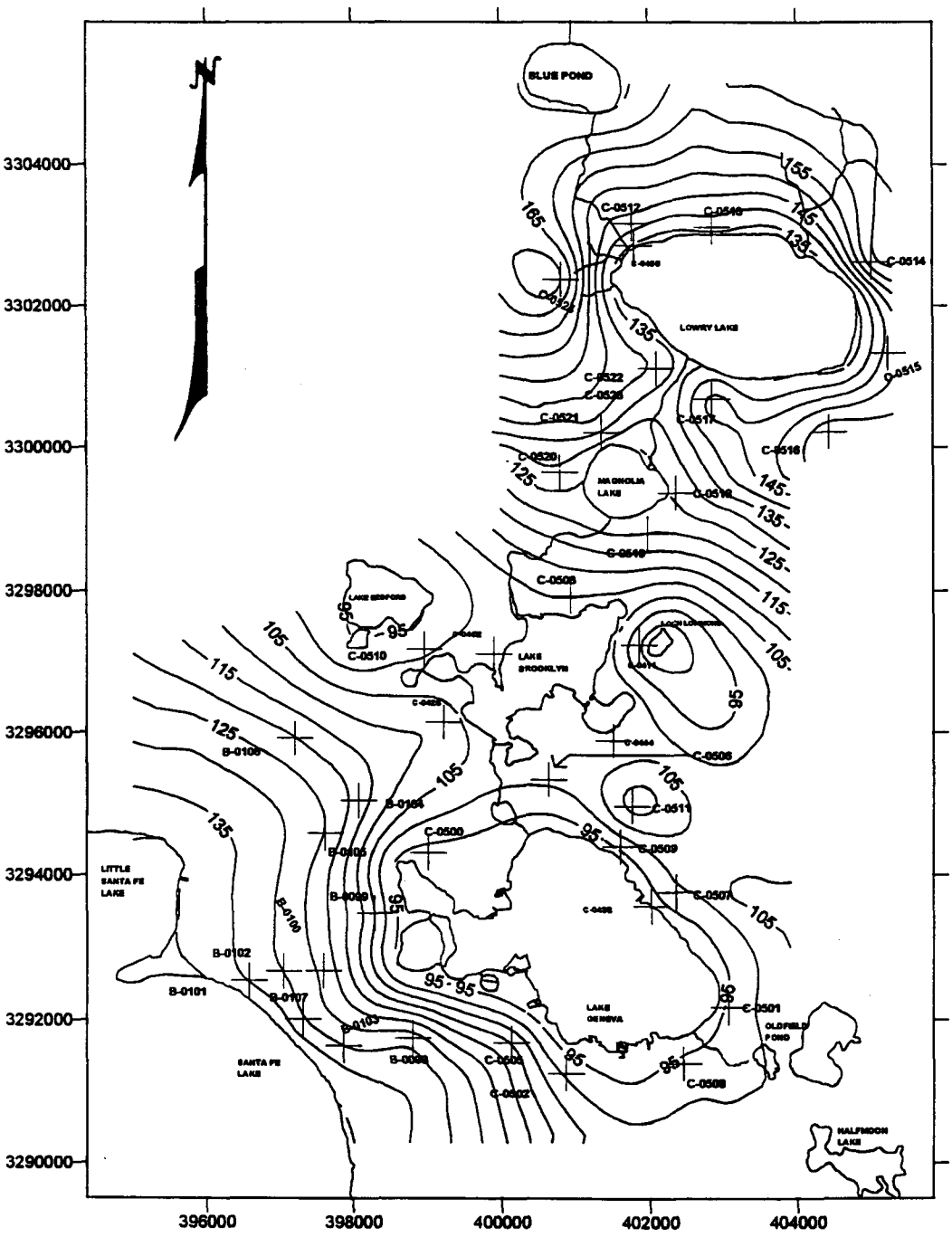
1/30/95 (February 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.36
Magnolia Lake 124.17
Lake Brooklyn 103.05
Lake Geneva 91.68
Blue Pond 171.00
Lake Bedford 94.59
Loch Lommond 86.26
Santa Fe Lake 140.47



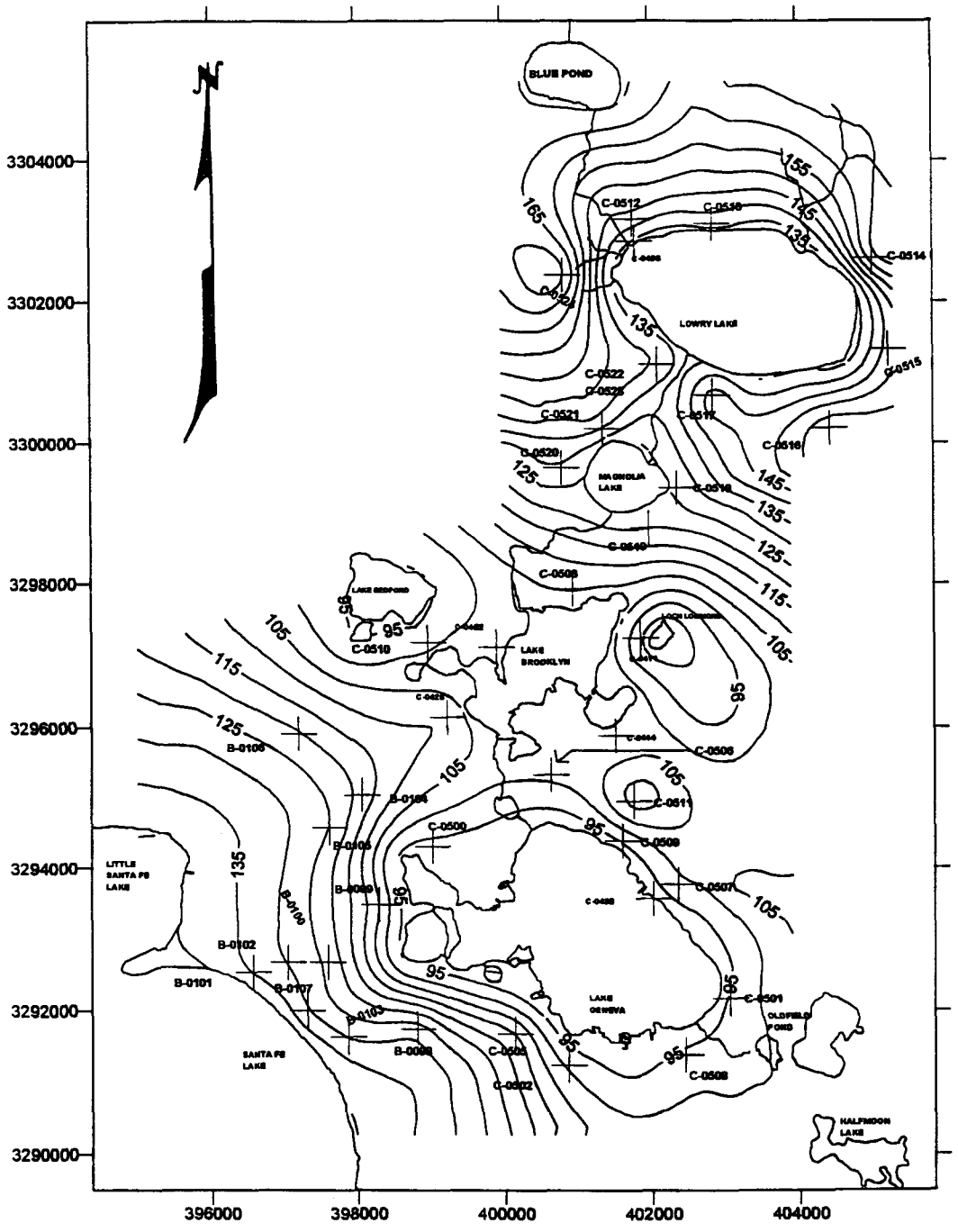
2/27/95 (March 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.24
Magnolia Lake 124.03
Lake Brooklyn 102.89
Lake Geneva 91.60
Blue Pond 171.00
Lake Bedford 94.50
Loch Lommond 86.11
Santa Fe Lake 140.72



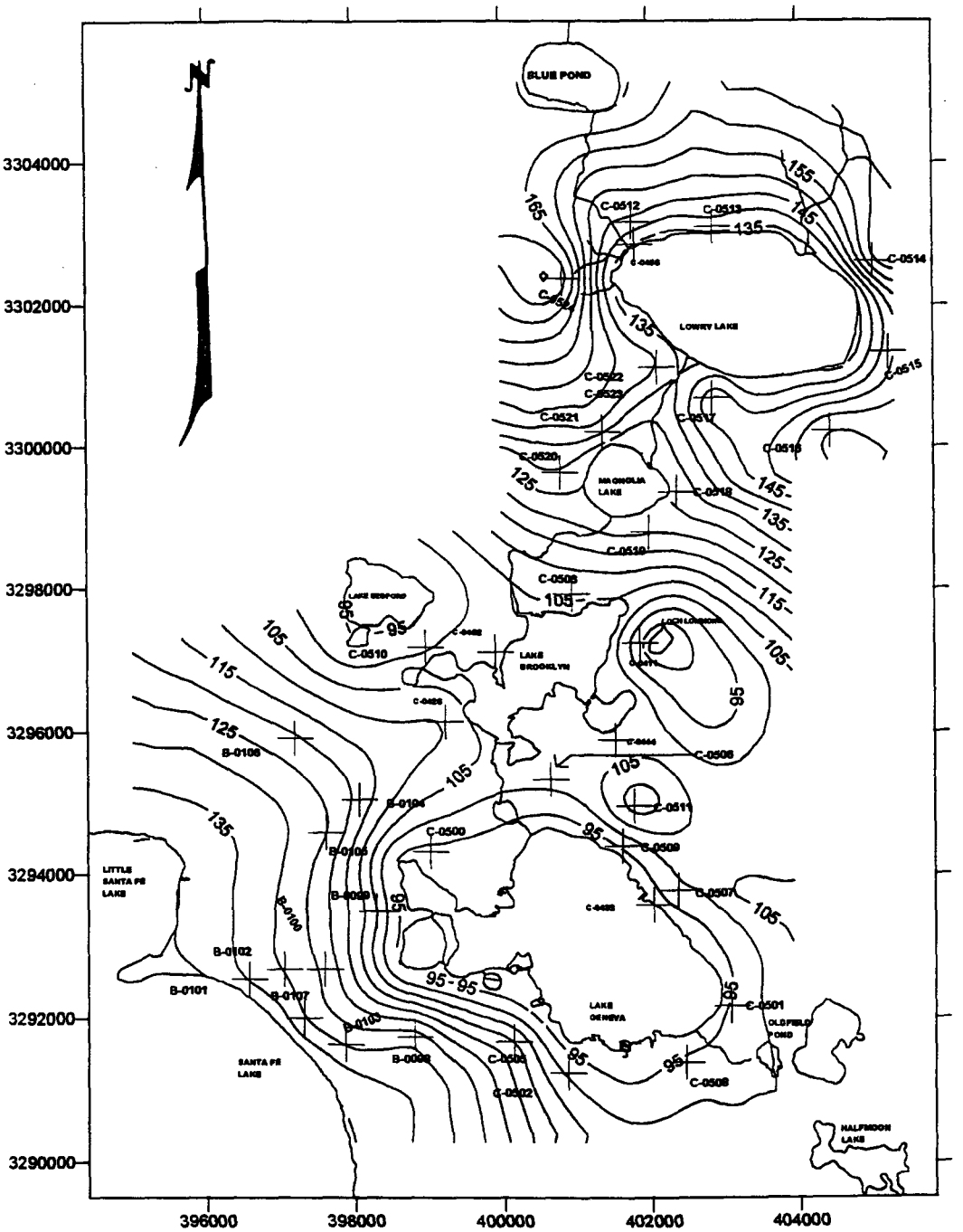
3/31/95 (April 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.19
Magnolia Lake 124.01
Lake Brooklyn 102.60
Lake Geneva 91.54
Blue Pond 171.00
Lake Bedford 94.35
Loch Lommond 85.89
Santa Fe Lake 140.66



4/28/95 (May 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.34
Magnolia Lake 124.16
Lake Brooklyn 102.94
Lake Geneva 91.84
Blue Pond 171.00
Lake Bedford 94.76
Loch Lommond 86.00
Santa Fe Lake 140.37



5/31/95 (June 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.22
Magnolia Lake 124.11
Lake Brooklyn 102.82
Lake Geneva 91.57
Blue Pond 171.00
Lake Bedford 94.50
Loch Lommond 86.11
Santa Fe Lake 140.23



7/4/95 (July 1995)
Coordinates UTM meters, Elevations NGVD ft
Lowry Lake 131.61
Magnolia Lake 124.54
Lake Brooklyn 103.97
Lake Geneva 91.78
Blue Pond 171.00
Lake Bedford 94.77
Loch Lommond 86.06
Santa Fe Lake 140.31

APPENDIX F

FLOW NET CALCULATIONS

Lowry Lake Flownet Analysis - 8/2/94 (August 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	579,898	1216	477	155.0	77	74	131.64	32,350	0.01921	16,780
1002	1,789,060	1678	1066	155.0	74	73	131.64	74,428	0.01392	27,976
1003	1,388,421	1155	1202	145.0	70	68	131.64	83,323	0.01157	26,023
1004	1,589,559	1378	1154	145.0	70	70	131.64	78,841	0.00970	20,638
1005	3,487,465	2582	1351	150.0	75	75	131.64	88,923	0.00711	17,072
1006	3,408,684	2622	1300	150.0	80	80	131.64	79,066	0.00700	14,948
1007	6,127,114	2691	2277	150.0	90	90	131.64	115,717	0.00682	21,317
1008	3,609,055	2488	1451	150.0	98	98	131.64	62,132	0.00738	12,379
1009	5,779,421	2412	2396	155.0	110	103	131.64	88,221	0.00968	23,069
1010	1,843,700	1383	1333	155.0	114	109	131.64	42,416	0.01689	19,344
1011	929,591	979	950	155.0	115	113	131.64	27,854	0.02386	17,945
1012	1,746,121	1209	1444	155.0	118	113	131.64	40,172	0.01932	20,957
1013	1,379,266	1094	1261	145.0	115	113	131.64	30,668	0.01221	10,112
1014	1,767,212	1265	1397	145.0	113	112	131.64	36,071	0.01056	10,286
1015	2,970,454	1826	1627	150.0	110	111	131.64	49,331	0.01005	13,392
1016	3,113,374	1555	2002	150.0	110	110	131.64	61,702	0.01181	19,670
1017	2,359,042	1924	1226	145.0	108	106	131.64	38,398	0.00694	7,199
1018	1,981,035	1288	1538	145.0	103	103	131.64	54,322	0.01037	15,214
1019	680,948	1199	568	150.0	101	100	131.64	22,902	0.01531	9,469
1020	766,395	1563	490	150.0	101	97	131.64	20,492	0.01175	6,499
1022	1,485,889	1242	1196	140.0	92	91	131.64	53,007	0.00673	9,633
1023	1,602,521	1317	1217	140.0	88	85	131.64	60,022	0.00635	10,287
1024	2,095,649	1764	1188	145.0	85	81	131.64	65,720	0.00757	13,439
1025	1,350,364	1768	764	155.0	82	78	131.64	48,376	0.01321	17,258
1026	776,905	1353	574	155.0	78	76	131.64	38,068	0.01727	17,746
									TOTAL:	398,652

k= 27 ft/day

Magnolia Lake Flownet Analysis - 8/2/94 (August 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,855,193	2220	1286	140.0	103	105	124.83	36,542	0.00683	6,742
2002	814,563	1221	667	140.0	102	103	124.83	19,953	0.01242	6,693
2003	763,525	943	810	140.0	101	103	124.83	24,636	0.01609	10,701
2004	1,351,755	1775	762	135.0	100	102	124.83	22,033	0.00573	3,409
2005	744,915	1513	492	130.0	99	102	124.83	13,242	0.00342	1,222
2006	1,550,852	1455	1066	130.0	100	102	124.83	28,158	0.00355	2,701
2007	3,685,134	2708	1361	140.0	101	102	124.83	42,075	0.00560	6,364
2008	3,875,366	3425	1131	140.0	101	101	124.83	35,530	0.00443	4,249
2010	1,160,589	1094	1061	120.0	102	103	124.83	21,130	-0.00441	(2,519)
2011	2,334,968	2087	1119	115.0	105	105	124.83	16,690	-0.00471	(2,123)
2012	1,840,171	1988	926	115.0	105	105	124.83	13,811	-0.00494	(1,844)
2014	384,752	1193	323	130.0	105	105	124.83	7,240	0.00433	847
									TOTAL:	36,443

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 8/2/94 (August 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	1,139,231	1577	722	97.0	83	85	98.76	10,021	-0.00112	(302)
3003	2,078,802	1462	1422	105.0	83	81	98.76	28,269	0.00427	3,258
3004	1,157,001	1330	870	105.0	84	81	98.76	16,861	0.00469	2,136
3005	1,851,909	1736	1067	105.0	84	82	98.76	20,145	0.00359	1,955
3006	1,058,032	1379	767	105.0	85	85	98.76	12,947	0.00453	1,582
3007	1,233,568	1381	893	105.0	86	87	98.76	13,734	0.00452	1,676
3009	594,554	853	697	97.0	88	87	98.76	7,235	-0.00206	(403)
3010	593,453	370	1604	97.0	83	81	98.76	25,472	-0.00476	(3,271)
3011	2,252,999	1068	2110	97.0	85	82	98.76	30,342	-0.00165	(1,350)
3012	3,561,286	2176	1637	97.0	85	78	98.76	26,814	-0.00081	(586)
3013	2,788,512	2031	1373	97.0	90	90	98.76	10,819	-0.00087	(253)
3015	2,977,763	2166	1375	105.0	102	90	98.76	8,085	0.00288	629
3016	2,510,785	1371	1831	105.0	100	90	98.76	12,597	0.00455	1,548
3017	1,758,485	1114	1579	105.0	92	87	98.76	19,548	0.00560	2,956
3019	696,007	668	1042	95.0	84	85	98.76	12,900	-0.00563	(1,960)
3020	639,148	465	1375	95.0	85	86	98.76	15,648	-0.00809	(3,416)
3021	1,272,755	1122	1134	95.0	87	92	98.76	8,369	-0.00335	(757)
3022	1,338,767	1094	1224	95.0	87	93	98.76	8,421	-0.00344	(781)
3023	1,193,806	1115	1071	95.0	87	88	98.76	10,046	-0.00337	(915)
3025	392,180	505	777	97.0	88	90	98.76	6,900	-0.00349	(649)
3026	479,303	505	949	97.0	89	90	98.76	7,953	-0.00349	(748)
3028	5,435,102	3817	1424	97.0	86	88	98.76	15,493	-0.00046	(193)
3029	4,434,497	2905	1527	97.0	85	85	98.76	19,668	-0.00061	(322)
3030	1,762,196	1323	1332	97.0	86	85	98.76	16,490	-0.00133	(592)
									TOTAL:	(760)

k= 27 ft/day

Lake Geneva Flownet Analysis - 8/2/94 (August 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,278,476	770	1660	97.0	67	70	90.50	41,915	0.00844	9,553
4002	2,168,772	1339	1620	97.0	73	75	90.50	31,995	0.00485	4,194
4003	1,368,124	1678	815	97.0	76	77	90.50	14,059	0.00387	1,470
4004	528,332	697	758	97.0	78	77	90.50	12,318	0.00933	3,101
4005	1,268,728	757	1676	97.0	82	82	90.50	19,693	0.00859	4,566
4006	574,076	918	625	97.0	85	84	90.50	5,781	0.00708	1,105
4007	1,252,489	831	1507	97.0	89	87	90.50	8,665	0.00782	1,830
4009	928,845	534	1739	97.0	90	87	90.50	9,130	0.01217	3,001
4010	625,635	926	676	97.0	85	82	90.50	6,929	0.00702	1,313
4011	532,046	1079	493	97.0	84	80	90.50	5,793	0.00602	942
4012	863,659	740	1167	97.0	83	79	90.50	14,879	0.00878	3,529
4013	1,275,016	824	1547	97.0	79	75	90.50	25,912	0.00789	5,519
4014	3,722,346	2082	1788	97.0	73	73	90.50	37,101	0.00312	3,127
4015	5,880,917	4029	1460	97.0	75	76	90.50	26,645	0.00161	1,161
4016	7,361,861	3938	1869	97.0	78	78	90.50	29,437	0.00165	1,312
4017	5,358,939	2300	2330	97.0	84	83	90.50	23,883	0.00283	1,822
4018	2,997,895	1210	2478	97.0	86	85	90.50	20,444	0.00537	2,965
4019	1,350,429	752	1796	97.0	86	86	90.50	13,919	0.00864	3,248
4020	2,891,189	853	3389	97.0	86	86	90.50	26,265	0.00762	5,404
4021	5,810,783	1772	3279	97.0	80	81	90.50	43,447	0.00367	4,303
4022	5,503,231	1870	2943	97.0	69	71	90.50	69,896	0.00348	6,560
4023	7,422,926	1695	4379	97.0	77	77	90.50	73,348	0.00383	7,594
4024	7,462,007	2495	2991	97.0	75	79	90.50	50,099	0.00261	3,524
4025	5,455,834	1793	3043	97.0	60	70	90.50	87,486	0.00363	8,563
									TOTAL:	89,707

k= 27 ft/day

Lowry Lake Flownet Analysis - 9/2/94 (September 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	894,495	1235	724	160.0	76	74	131.63	51,270	0.02297	31,799
1002	1,256,778	1647	763	150.0	73	73	131.63	51,743	0.01115	15,582
1003	1,567,153	1056	1484	145.0	70	70	131.63	101,379	0.01266	34,656
1004	2,616,778	1280	2044	145.0	70	72	131.63	137,592	0.01045	38,804
1005	4,313,008	2526	1707	150.0	80	80	131.63	103,811	0.00727	20,384
1006	7,288,360	2577	2828	150.0	90	90	131.63	143,705	0.00713	27,659
1007	3,546,624	2338	1517	150.0	100	100	131.63	61,916	0.00786	13,135
1008	3,485,788	1645	2119	150.0	110	105	131.63	70,594	0.01117	21,285
1009	1,609,382	1189	1354	155.0	114	111	131.63	41,724	0.01966	22,142
1010	657,698	1004	655	155.0	116	113	131.63	18,874	0.02328	11,862
1011	1,147,943	1145	1003	150.0	117	113	131.63	25,892	0.01604	11,216
1012	2,043,285	1124	1818	145.0	115	113	131.63	44,205	0.01190	14,197
1013	1,575,220	1230	1281	145.0	111	112	131.63	34,350	0.01087	10,081
1014	3,315,366	1688	1964	150.0	110	110	131.63	60,521	0.01088	17,783
1015	3,492,361	2033	1718	150.0	110	107	131.63	55,517	0.00904	13,544
1016	1,808,468	1463	1236	145.0	105	104	131.63	41,795	0.00914	10,313
1017	1,129,512	983	1149	145.0	102	102	131.63	41,726	0.01360	15,323
1018	1,270,299	1496	849	150.0	101	98	131.63	35,076	0.01228	11,629
1020	1,157,725	1119	1035	140.0	92	92	131.63	45,349	0.00748	9,158
1021	1,302,845	1234	1056	140.0	89	86	131.63	51,021	0.00678	9,344
1022	3,050,107	1923	1586	145.0	86	81	131.63	86,937	0.00695	16,320
1023	2,648,256	1891	1400	160.0	80	77	131.63	94,241	0.01500	38,174
									TOTAL:	414,392

k= 27 ft/day

Magnolia Lake Flownet Analysis - 9/2/94 (September 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	1,792,971	1590	1128	140.0	103	105	124.62	31,934	0.00967	8,340
2002	743,362	1120	664	140.0	102	103	124.62	19,794	0.01373	7,339
2003	1,042,843	1624	642	140.0	100	102	124.62	20,101	0.00947	5,140
2004	1,673,565	1230	1361	130.0	99	103	124.62	35,808	0.00437	4,229
2005	2,852,595	2024	1409	135.0	100	103	124.62	39,889	0.00513	5,523
2006	1,988,075	1826	1089	135.0	100	102	124.62	31,374	0.00568	4,815
2007	1,569,179	2266	692	135.0	100	101	124.62	20,283	0.00458	2,509
2009	3,112,508	3302	943	115.0	101	103	124.62	16,795	-0.00291	(1,321)
2010	3,408,201	2359	1445	115.0	105	105	124.62	21,400	-0.00408	(2,356)
2011	2,276,229	2179	1045	115.0	105	105	124.62	15,476	-0.00441	(1,845)
2013	1,716,352	1870	918	135.0	105	105	124.62	22,776	0.00555	3,413
									TOTAL:	35,786

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 9/2/94 (September 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	7,041,126	3910	1801	110.0	83	82	100.66	41,117	0.00239	2,652
3002	3,263,669	3529	925	110.0	84	80	100.66	21,580	0.00265	1,542
3003	3,303,566	3343	988	110.0	85	85	100.66	20,086	0.00279	1,515
3004	2,466,174	2855	864	110.0	86	87	100.66	16,269	0.00327	1,437
3006	1,638,107	1815	903	95.0	92	87	100.66	7,522	-0.00312	(633)
3007	2,015,794	1483	1359	95.0	90	86	100.66	13,359	-0.00382	(1,377)
3008	3,762,154	2465	1526	95.0	90	80	100.66	19,579	-0.00230	(1,214)
3009	4,080,207	3716	1098	95.0	91	78	100.66	14,636	-0.00152	(602)
3010	4,044,129	3587	1127	95.0	92	90	100.66	7,697	-0.00158	(328)
3012	3,672,262	2617	1403	110.0	103	91	100.66	11,687	0.00357	1,126
3013	3,746,008	2249	1666	110.0	100	90	100.66	17,210	0.00415	1,930
3014	1,800,696	1662	1083	110.0	95	89	100.66	14,436	0.00562	2,190
3015	1,002,484	1563	641	110.0	92	87	100.66	10,147	0.00598	1,637
3017	1,145,623	1341	854	90.0	83	86	100.66	9,249	-0.00795	(1,985)
3018	1,864,968	1312	1421	90.0	83	86	100.66	15,389	-0.00812	(3,376)
3019	1,956,190	2012	972	90.0	84	91	100.66	7,611	-0.00530	(1,089)
3020	2,005,323	2049	979	90.0	84	91	100.66	7,666	-0.00520	(1,077)
3021	1,256,877	1261	997	95.0	86	88	100.66	10,798	-0.00449	(1,309)
3022	374,001	1059	353	99.0	88	89	100.66	3,999	-0.00157	(169)
3024	399,970	627	638	99.0	89	90	100.66	6,591	-0.00265	(471)
3025	978,768	1486	659	99.0	89	90	100.66	6,807	-0.00112	(205)
3027	4,725,104	3437	1375	99.0	89	86	100.66	16,954	-0.00048	(221)
3028	3,746,285	2406	1557	99.0	86	85	100.66	22,312	-0.00069	(416)
3029	1,105,701	948	1166	99.0	85	86	100.66	16,709	-0.00175	(790)
									TOTAL:	(1,231)

k= 27 ft/day

Lake Geneva Flownet Analysis - 9/2/94 (September 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,805,684	1104	1636	99.0	69	70	90.70	41,473	0.00752	8,418
4002	2,232,728	1693	1319	99.0	74	75	90.70	26,842	0.00490	3,553
4003	1,285,817	1814	709	99.0	76	77	90.70	13,010	0.00458	1,607
4004	600,910	889	676	99.0	78	77	90.70	11,729	0.00934	2,957
4005	1,430,352	871	1642	99.0	83	82	90.70	20,279	0.00953	5,218
4006	688,621	1053	654	99.0	90	88	90.70	3,826	0.00788	814
4007	1,565,151	977	1602	99.0	89	88	90.70	10,173	0.00850	2,333
4009	1,192,317	711	1677	99.0	90	87	90.70	10,649	0.01167	3,356
4010	552,729	958	577	99.0	86	84	90.70	5,683	0.00866	1,330
4011	834,333	1058	789	99.0	85	80	90.70	9,744	0.00784	2,064
4012	1,017,770	892	1141	99.0	83	79	90.70	15,803	0.00930	3,970
4013	862,856	789	1094	99.0	80	76	90.70	18,434	0.01052	5,236
4014	1,375,471	1085	1268	99.0	77	74	90.70	24,536	0.00765	5,068
4015	3,640,301	2389	1524	99.0	74	74	90.70	31,775	0.00347	2,981
4016	6,166,079	4295	1436	99.0	75	76	90.70	27,787	0.00193	1,450
4017	6,960,362	4244	1640	99.0	78	77	90.70	28,454	0.00196	1,502
4018	5,469,738	2849	1920	99.0	83	82	90.70	23,712	0.00291	1,865
4019	4,220,694	1994	2117	99.0	86	84	90.70	20,852	0.00416	2,344
4020	2,816,492	1229	2292	99.0	87	86	90.70	19,138	0.00675	3,490
4021	3,853,689	1095	3519	99.0	86	86	90.70	31,143	0.00758	6,374
4022	4,122,059	1882	2190	99.0	82	83	90.70	27,047	0.00441	3,221
4023	3,400,152	1158	2936	95.0	73	75	90.70	55,344	0.00371	5,549
4024	1,739,094	936	1858	95.0	72	74	90.70	36,881	0.00459	4,575
4025	2,864,962	1331	2152	95.0	84	85	90.70	17,969	0.00323	1,567
4026	9,173,064	2863	3204	99.0	70	77	90.70	68,405	0.00290	5,354
4027	5,178,600	1806	2867	99.0	60	70	90.70	85,580	0.00460	10,619
									TOTAL:	96,814

k= 27 ft/day

Lowry Lake Flownet Analysis - 10/3/94 (October 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	681,682	1337	510	160.0	77	75	131.41	35,550	0.02138	20,525
1002	2,099,741	1862	1128	155.0	74	72	131.41	79,191	0.01267	27,089
1003	4,365,915	2134	2046	150.0	70	70	131.41	144,662	0.00871	34,025
1004	4,785,377	2497	1916	150.0	70	71	131.41	134,513	0.00744	27,039
1005	4,387,870	2539	1728	150.0	80	80	131.41	104,898	0.00732	20,737
1006	5,989,693	2646	2264	150.0	90	90	131.41	114,796	0.00703	21,776
1007	3,682,624	2484	1483	150.0	98	97	131.41	64,073	0.00748	12,947
1008	4,352,400	1800	2418	150.0	108	103	131.41	85,126	0.01033	23,737
1009	2,005,921	1298	1545	155.0	114	110	131.41	48,212	0.01817	23,658
1010	949,918	1045	909	155.0	116	113	131.41	26,093	0.02257	15,904
1011	979,744	1166	840	150.0	117	113	131.41	21,592	0.01594	9,295
1012	1,897,470	1120	1694	145.0	115	113	131.41	41,003	0.01213	13,433
1013	1,989,665	1235	1611	145.0	112	112	131.41	42,216	0.01100	12,543
1014	3,373,895	1273	2650	145.0	112	110	131.41	72,093	0.01068	20,780
1015	2,128,469	1540	1382	145.0	108	106	131.41	43,125	0.00882	10,275
1016	1,914,963	1276	1501	145.0	104	103	131.41	52,092	0.01065	14,980
1017	650,260	1148	566	150.0	102	101	131.41	22,190	0.01619	9,702
1018	1,154,152	1501	769	150.0	102	97	131.41	31,687	0.01239	10,596
1020	1,301,508	1189	1095	140.0	92	91	131.41	48,404	0.00722	9,442
1021	1,815,275	1266	1434	140.0	89	85	131.41	69,843	0.00679	12,795
1022	3,002,774	2252	1333	150.0	85	81	131.41	76,921	0.00825	17,144
1023	2,007,726	1837	1093	160.0	80	77	131.41	73,455	0.01556	30,867
									TOTAL:	399,289

k= 27 ft/day

Magnolia Lake Flownet Analysis - 10/3/94 (October 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,182,106	1831	1192	135.0	105	105	124.39	29,436	0.00579	4,605
2002	1,638,629	1419	1155	140.0	103	104	124.39	33,143	0.01100	9,844
2003	1,426,255	1508	946	140.0	101	102	124.39	29,037	0.01035	8,116
2004	856,389	1754	488	135.0	99	102	124.39	14,247	0.00605	2,327
2005	1,319,980	1529	863	130.0	99	102	124.39	23,038	0.00367	2,282
2006	2,805,677	2079	1350	135.0	100	103	124.39	38,063	0.00510	5,245
2007	2,304,277	1921	1200	135.0	100	102	124.39	34,434	0.00552	5,135
2008	1,658,289	2431	682	135.0	100	101	124.39	19,911	0.00436	2,346
2010	1,821,348	1447	1259	120.0	101	102	124.39	26,055	-0.00303	(2,134)
2011	2,975,859	2313	1287	115.0	105	105	124.39	18,912	-0.00406	(2,073)
2012	1,810,835	2131	850	115.0	105	105	124.39	12,491	-0.00441	(1,486)
									TOTAL:	34,207

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 10/3/94 (October 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	5,192,122	3663	1417	110.0	83	84	101.25	31,351	0.00239	2,022
3002	3,704,442	3166	1170	110.0	84	81	101.25	27,056	0.00276	2,019
3003	5,127,635	3090	1659	110.0	85	85	101.25	34,217	0.00283	2,616
3005	1,875,251	1839	1020	95.0	91	87	101.25	9,308	-0.00340	(854)
3006	2,229,245	1650	1351	95.0	90	85	101.25	14,354	-0.00379	(1,468)
3007	3,552,472	2661	1335	95.0	90	80	101.25	17,522	-0.00235	(1,111)
3008	3,975,540	3859	1030	95.0	92	79	101.25	13,004	-0.00162	(569)
3009	3,664,970	3677	997	95.0	93	90	101.25	6,605	-0.00170	(303)
3011	3,507,938	2542	1380	110.0	103	90	101.25	12,593	0.00344	1,170
3012	3,331,360	2170	1535	110.0	100	90	101.25	16,309	0.00403	1,776
3013	1,914,708	1612	1188	110.0	95	88	101.25	16,781	0.00543	2,459
3014	1,154,155	1575	733	110.0	92	87	101.25	11,820	0.00556	1,773
3016	1,886,155	1417	1331	90.0	84	85	101.25	14,807	-0.00794	(3,174)
3017	2,687,519	1823	1474	90.0	84	89	101.25	13,450	-0.00617	(2,241)
3018	1,920,342	1991	965	90.0	84	93	101.25	6,876	-0.00565	(1,049)
3019	1,431,452	1727	829	90.0	84	89	101.25	7,565	-0.00651	(1,330)
3020	798,671	1343	595	95.0	86	88	101.25	6,619	-0.00465	(832)
3021	654,171	238	2749	100.0	87	89	101.25	34,706	-0.00525	(4,922)
3022	163,673	388	422	100.0	89	90	101.25	4,695	-0.00322	(408)
3023	404,238	1053	384	100.0	89	90	101.25	4,272	-0.00119	(137)
3025	3,519,574	3715	947	100.0	87	90	101.25	11,482	-0.00034	(104)
3026	2,861,164	4089	700	100.0	87	86	101.25	9,888	-0.00031	(82)
3027	2,145,961	2391	898	100.0	87	83	101.25	14,031	-0.00052	(198)
3028	950,819	765	1243	100.0	86	86	101.25	18,179	-0.00163	(802)
									TOTAL:	(5,749)

k= 27 ft/day

Lake Geneva Flownet Analysis - 10/3/94 (October 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	2,091,177	1218	1717	100.0	69	70	90.76	44,436	0.00759	9,102
4002	2,023,467	1737	1165	100.0	73	75	90.76	24,908	0.00532	3,577
4003	1,551,646	1962	791	100.0	77	78	90.76	14,143	0.00471	1,798
4004	691,969	1040	665	100.0	78	78	90.76	11,558	0.00888	2,773
4005	1,589,555	955	1664	100.0	82	82	90.76	22,264	0.00968	5,816
4006	764,392	1126	679	100.0	85	83	90.76	7,727	0.00821	1,712
4007	1,704,094	1015	1679	100.0	89	87	90.76	12,391	0.00910	3,046
4009	1,271,077	777	1636	100.0	90	87	90.76	11,256	0.01189	3,614
4010	617,934	1054	586	100.0	87	84	90.76	5,790	0.00877	1,370
4011	854,096	1164	734	100.0	85	81	90.76	9,087	0.00794	1,948
4012	1,144,757	973	1177	100.0	83	79	90.76	16,925	0.00950	4,340
4013	1,273,347	856	1488	100.0	80	76	90.76	25,861	0.01079	7,537
4014	4,726,408	2094	2257	100.0	75	72	90.76	49,383	0.00441	5,884
4015	6,639,017	4314	1539	100.0	76	77	90.76	29,056	0.00214	1,680
4016	8,666,058	4290	2020	100.0	80	78	90.76	33,088	0.00215	1,924
4017	6,099,160	2792	2185	100.0	85	83	90.76	24,865	0.00331	2,222
4018	4,428,671	1675	2644	100.0	86	85	90.76	26,123	0.00552	3,891
4019	3,790,088	1344	2820	100.0	87	86	90.76	25,042	0.00687	4,648
4020	3,546,317	1786	1986	100.0	85	86	90.76	19,622	0.00517	2,741
4021	3,407,338	2327	1464	100.0	80	81	90.76	21,784	0.00397	2,336
4022	2,776,666	1312	2116	95.0	75	75	90.76	37,834	0.00323	3,301
4023	1,467,284	891	1647	95.0	69	70	90.76	38,507	0.00476	4,948
4024	1,975,851	815	2424	95.0	80	80	90.76	31,221	0.00520	4,386
4025	9,660,258	3378	2860	100.0	75	81	90.76	49,707	0.00274	3,671
4026	8,782,837	2456	3576	100.0	58	70	90.76	112,215	0.00376	11,399
									TOTAL:	99,662

k= 27 ft/day

Lowry Lake Flownet Analysis - 11/2/94 (November 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	1,837,642	1319	1393	145.0	60	66	131.48	104,809	0.01025	29,007
1002	1,968,614	1455	1353	145.0	73	73	131.48	88,270	0.00929	22,146
1003	1,419,367	1626	873	145.0	77	77	131.48	53,463	0.00831	12,002
1004	1,321,913	1585	834	145.0	83	83	131.48	46,070	0.00853	10,610
1005	1,360,195	1659	820	145.0	85	87	131.48	42,837	0.00815	9,426
1006	2,240,899	1805	1241	145.0	90	95	131.48	56,763	0.00749	11,480
1007	1,763,968	1787	987	145.0	95	97	131.48	41,691	0.00757	8,516
1008	1,778,165	1636	1087	145.0	103	100	131.48	39,936	0.00826	8,911
1009	2,761,921	1772	1559	150.0	108	103	131.48	54,939	0.01045	15,503
1010	1,729,676	1398	1237	155.0	113	108	131.48	40,499	0.01682	18,397
1011	807,236	947	852	155.0	115	112	131.48	25,338	0.02484	16,991
1012	779,543	1063	733	155.0	117	113	131.48	20,700	0.02213	12,366
1013	951,620	1193	798	150.0	117	113	131.48	20,541	0.01552	8,609
1014	1,263,774	1125	1123	145.0	116	113	131.48	26,660	0.01202	8,651
1015	1,631,380	1301	1254	145.0	113	112	131.48	32,278	0.01039	9,057
1016	1,892,384	1248	1516	145.0	110	110	131.48	42,812	0.01083	12,522
1017	2,423,311	1680	1442	150.0	110	110	131.48	44,327	0.01102	13,194
1018	2,277,383	1993	1143	150.0	110	107	131.48	36,850	0.00929	9,246
1019	2,167,226	1452	1493	145.0	106	105	131.48	48,881	0.00931	12,289
1020	830,545	1047	793	145.0	102	102	131.48	28,738	0.01291	10,020
1021	528,564	1075	492	150.0	101	101	131.48	19,552	0.01723	9,095
1022	417,004	1111	375	150.0	101	99	131.48	15,277	0.01667	6,876
1023	484,139	1450	334	150.0	100	97	131.48	14,108	0.01277	4,865
1024	787,770	1024	769	140.0	92	92	131.48	33,636	0.00832	7,556
1025	1,132,298	1160	976	140.0	90	87	131.48	46,106	0.00734	9,143
1026	1,457,023	1368	1065	140.0	87	83	131.48	54,038	0.00623	9,087
1027	1,637,997	1516	1080	145.0	83	80	131.48	61,279	0.00892	14,756
1028	1,068,207	1219	876	150.0	79	77	131.48	54,960	0.01519	22,545
1029	1,072,273	1186	904	150.0	75	73	131.48	60,333	0.01562	25,438
1030	1,084,733	1234	879	145.0	72	72	131.48	58,225	0.01096	17,224
									TOTAL:	385,527

k= 27 ft/day

Magnolia Lake Flownet Analysis - 11/2/94 (November 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	802,256	1004	799	130.0	105	105	124.47	17,766	0.00551	2,642
2002	990,991	1224	810	135.0	105	105	124.47	20,035	0.00860	4,654
2003	885,563	1143	775	140.0	102	103	124.47	23,045	0.01359	8,454
2004	563,670	1034	545	140.0	102	103	124.47	16,206	0.01502	6,572
2005	896,928	1286	697	135.0	101	102	124.47	19,680	0.00819	4,351
2006	1,301,431	2179	597	135.0	100	100	124.47	17,752	0.00483	2,316
2007	1,429,649	1983	721	135.0	100	100	124.47	21,439	0.00531	3,074
2008	1,686,573	1782	946	135.0	100	100	124.47	28,129	0.00591	4,488
2009	936,356	1946	481	135.0	100	101	124.47	14,062	0.00541	2,054
2010	1,241,931	2487	499	135.0	99	102	124.47	14,588	0.00423	1,668
2011	1,590,766	1540	1033	120.0	102	103	124.47	20,386	-0.00290	(1,598)
2012	2,652,444	2372	1118	115.0	105	105	124.47	16,474	-0.00399	(1,776)
2013	1,327,686	2205	602	115.0	105	105	124.47	8,870	-0.00429	(1,029)
2014	107,714	238	453	125.0	102	102	124.47	10,299	0.00223	619
									TOTAL:	36,490

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 11/2/94 (November 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	3,738,450	3099	1206	110.0	82	85	102.42	27,388	0.00245	1,809
3002	2,870,860	2600	1104	110.0	83	83	102.42	25,624	0.00292	2,017
3003	2,432,283	2667	912	110.0	84	82	102.42	21,168	0.00284	1,624
3004	3,190,513	2435	1310	110.0	85	84	102.42	28,440	0.00311	2,390
3006	2,804,831	2263	1239	95.0	92	86	102.42	12,031	-0.00328	(1,065)
3007	2,236,357	1924	1162	95.0	91	85	102.42	12,445	-0.00386	(1,296)
3008	3,423,325	2886	1186	95.0	91	80	102.42	15,667	-0.00257	(1,088)
3009	3,675,499	3968	926	95.0	92	75	102.42	14,084	-0.00187	(711)
3010	4,504,410	3845	1171	95.0	94	88	102.42	9,028	-0.00193	(470)
3012	4,441,859	2303	1929	110.0	102	90	102.42	19,695	0.00329	1,750
3013	3,500,151	1993	1756	110.0	97	90	102.42	22,319	0.00380	2,292
3014	1,694,323	1546	1096	110.0	93	88	102.42	17,218	0.00490	2,279
3016	1,478,790	1543	958	90.0	83	85	102.42	11,697	-0.00805	(2,542)
3017	1,945,610	1497	1300	90.0	83	86	102.42	15,223	-0.00830	(3,410)
3018	2,255,716	2293	984	90.0	84	91	102.42	8,571	-0.00542	(1,253)
3019	1,674,536	2298	729	90.0	84	92	102.42	5,985	-0.00540	(873)
3020	1,235,456	1425	867	95.0	85	88	102.42	10,586	-0.00521	(1,488)
3021	600,442	746	805	101.0	88	90	102.42	10,232	-0.00190	(526)
3023	282,933	565	501	101.0	89	90	102.42	6,117	-0.00251	(415)
3024	467,045	914	511	101.0	89	90	102.42	6,239	-0.00155	(262)
3026	4,190,966	3494	1199	101.0	87	90	102.42	15,839	-0.00041	(174)
3027	2,630,968	3744	703	101.0	87	88	102.42	9,990	-0.00038	(102)
3028	3,045,821	2144	1421	101.0	86	85	102.42	23,034	-0.00066	(412)
3029	929,691	781	1190	101.0	86	86	102.42	18,695	-0.00182	(918)
									TOTAL:	(2,844)

k= 27 ft/day

Lake Geneva Flownet Analysis - 11/2/94 (November 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	3,172,803	1414	2244	101.0	65	66	91.60	69,115	0.00665	12,406
4002	2,473,966	1700	1455	101.0	76	77	91.60	28,809	0.00553	4,301
4003	706,184	1021	692	101.0	87	87	91.60	6,436	0.00921	1,600
4004	1,294,779	970	1335	101.0	82	82	91.60	19,090	0.00969	4,995
4005	1,031,067	1170	881	101.0	84	83	91.60	11,277	0.00803	2,446
4006	1,797,381	1088	1652	101.0	89	87	91.60	13,712	0.00864	3,199
4008	1,239,820	814	1523	101.0	90	87	91.60	11,879	0.01155	3,704
4009	749,078	1119	669	101.0	86	84	91.60	7,560	0.00840	1,715
4010	877,208	1182	742	101.0	85	80	91.60	10,240	0.00795	2,199
4011	1,138,477	965	1180	101.0	83	79	91.60	18,054	0.00974	4,748
4012	1,235,782	890	1389	101.0	80	77	91.60	24,724	0.01056	7,051
4013	4,671,991	2119	2205	101.0	75	73	91.60	49,171	0.00444	5,889
4014	6,806,387	4373	1556	101.0	76	76	91.60	31,587	0.00215	1,833
4015	9,711,230	4247	2287	101.0	80	83	91.60	33,848	0.00221	2,023
4016	6,714,291	2636	2547	101.0	86	83	91.60	30,055	0.00357	2,894
4017	4,421,223	1585	2789	101.0	87	86	91.60	27,332	0.00593	4,377
4018	4,189,458	1216	3445	101.0	86	86	91.60	35,483	0.00773	7,406
4019	2,850,681	1633	1746	101.0	83	85	91.60	21,476	0.00576	3,338
4020	1,803,096	917	1966	95.0	77	78	91.60	31,063	0.00371	3,110
4021	1,256,072	692	1815	95.0	71	73	91.60	38,659	0.00491	5,129
4022	784,471	555	1413	95.0	73	74	91.60	27,977	0.00613	4,628
4023	891,665	716	1245	95.0	84	84	91.60	11,578	0.00475	1,485
4024	9,045,726	3260	2775	101.0	72	82	91.60	53,557	0.00288	4,170
4025	5,442,632	2988	1821	101.0	61	73	91.60	53,355	0.00315	4,532
4026	3,025,298	1687	1793	101.0	59	69	91.60	57,914	0.00557	8,713
									TOTAL:	107,886

k= 27 ft/day

Lowry Lake Flownet Analysis - 11/28/94 (December 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	904,957	1476	613	166.0	78	75	131.45	44,274	0.02341	27,982
1002	1,159,998	1872	620	155.0	75	73	131.45	42,920	0.01258	14,578
1003	1,922,587	1145	1679	145.0	70	70	131.45	114,550	0.01183	36,601
1004	2,711,831	1389	1952	145.0	71	71	131.45	131,223	0.00976	34,563
1005	2,998,438	1663	1803	145.0	80	80	131.45	104,980	0.00815	23,095
1006	4,104,329	1760	2332	145.0	90	90	131.45	112,461	0.00770	23,377
1007	2,525,578	1749	1444	145.0	107	108	131.45	44,367	0.00775	9,281
1008	2,927,677	1287	2275	145.0	108	103	131.45	74,449	0.01053	21,163
1009	1,739,336	1298	1340	155.0	114	110	131.45	41,841	0.01814	20,497
1010	1,130,885	1112	1017	155.0	117	113	131.45	28,705	0.02118	16,414
1011	745,419	1170	637	150.0	117	113	131.45	16,387	0.01585	7,015
1012	1,082,665	1107	978	145.0	116	113	131.45	23,203	0.01224	7,668
1013	2,835,828	1247	2274	145.0	113	112	131.45	58,499	0.01087	17,163
1014	3,357,082	1723	1948	150.0	110	111	131.45	58,878	0.01077	17,115
1015	2,324,169	1347	1725	145.0	110	108	131.45	50,413	0.01006	13,692
1016	2,070,030	1565	1323	145.0	106	105	131.45	43,295	0.00866	10,121
1017	1,155,594	1155	1001	145.0	103	103	131.45	35,260	0.01173	11,169
1018	525,858	1101	478	150.0	102	101	131.45	18,750	0.01685	8,529
1019	993,309	1458	681	150.0	102	97	131.45	28,074	0.01272	9,644
1021	1,677,992	1281	1310	140.0	92	90	131.45	58,590	0.00667	10,559
1022	1,585,627	1321	1200	140.0	88	90	131.45	56,070	0.00647	9,798
1023	4,333,109	3206	1352	160.0	90	81	131.45	81,424	0.00891	19,578
1024	2,115,354	2110	1003	165.0	80	77	131.45	69,934	0.01590	30,024
									TOTAL:	399,625

k= 27 ft/day

Magnolia Lake Flownet Analysis - 11/28/94 (December 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,157,859	1898	1137	135.0	105	105	124.33	28,044	0.00562	4,257
2002	1,865,261	1391	1341	140.0	102	104	124.33	39,110	0.01127	11,896
2003	1,607,695	1522	1056	140.0	101	103	124.33	31,854	0.01030	8,855
2004	1,308,227	1352	968	130.0	99	103	124.33	25,328	0.00419	2,868
2005	3,162,322	2133	1483	135.0	101	103	124.33	41,027	0.00500	5,541
2006	1,882,598	1834	1026	135.0	101	102	124.33	28,897	0.00582	4,539
2007	2,337,477	2298	1017	135.0	100	101	124.33	29,661	0.00464	3,718
2009	2,395,254	1764	1358	120.0	102	103	124.33	26,705	-0.00245	(1,770)
2010	4,472,754	2492	1795	115.0	105	105	124.33	26,324	-0.00374	(2,661)
									TOTAL:	37,244

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 11/28/94 (December 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	3,310,224	2638	1255	110.0	83	84	102.74	28,702	0.00275	2,133
3002	2,914,026	2196	1327	110.0	83	83	102.74	31,012	0.00331	2,768
3003	1,733,724	2283	759	110.0	84	83	102.74	17,358	0.00318	1,490
3004	2,761,975	2067	1336	110.0	85	86	102.74	27,882	0.00351	2,644
3006	3,168,010	2220	1427	95.0	93	87	102.74	12,657	-0.00349	(1,192)
3007	1,852,415	1855	999	95.0	91	85	102.74	10,859	-0.00417	(1,223)
3008	3,523,666	2844	1239	95.0	92	80	102.74	15,946	-0.00272	(1,172)
3009	3,070,012	3986	770	95.0	93	76	102.74	11,065	-0.00194	(580)
3010	5,102,340	3893	1311	95.0	94	87	102.74	10,973	-0.00199	(589)
3012	4,025,588	2262	1780	110.0	102	90	102.74	18,459	0.00321	1,600
3013	2,886,022	1910	1511	110.0	99	90	102.74	17,936	0.00380	1,841
3014	2,185,478	1485	1472	110.0	94	88	102.74	22,625	0.00489	2,986
3016	2,618,692	1759	1489	90.0	83	86	102.74	17,674	-0.00724	(3,456)
3017	2,603,926	2045	1273	90.0	84	89	102.74	12,565	-0.00623	(2,113)
3018	2,717,943	2216	1227	90.0	84	92	102.74	10,270	-0.00575	(1,594)
3019	2,351,547	1850	1271	95.0	85	88	102.74	15,722	-0.00418	(1,776)
3021	1,233,666	922	1338	102.0	88	90	102.74	17,889	-0.00080	(388)
3023	3,953,021	3856	1025	100.0	86	90	102.74	13,704	-0.00071	(263)
3024	4,657,382	4102	1135	100.0	86	87	102.74	16,877	-0.00067	(304)
3025	2,750,427	2714	1013	100.0	86	85	102.74	16,076	-0.00101	(438)
3026	1,623,240	1323	1227	100.0	85	86	102.74	19,472	-0.00207	(1,089)
									TOTAL:	(716)

k= 27 ft/day

Lake Geneva Flownet Analysis - 11/28/94 (December 1994)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,695,461	1088	1558	100.0	68	70	91.55	41,715	0.00777	8,748
4002	2,072,072	1629	1272	100.0	74	76	91.55	26,426	0.00519	3,701
4003	1,464,005	1755	834	100.0	77	78	91.55	15,241	0.00481	1,981
4004	579,473	880	658	100.0	79	78	91.55	11,367	0.00960	2,947
4005	1,388,035	851	1631	100.0	83	82	91.55	21,652	0.00993	5,805
4006	698,366	1050	665	100.0	85	83	91.55	7,830	0.00805	1,701
4007	1,551,253	974	1593	100.0	89	87	91.55	12,386	0.00868	2,901
4009	1,099,742	716	1536	100.0	90	87	91.55	11,174	0.01180	3,561
4010	675,623	997	678	100.0	87	84	91.55	6,966	0.00848	1,594
4011	802,120	1087	738	100.0	84	80	91.55	10,166	0.00777	2,134
4012	986,051	893	1104	100.0	83	79	91.55	16,312	0.00946	4,167
4013	1,123,224	778	1444	100.0	80	77	91.55	24,945	0.01086	7,315
4014	4,189,177	1921	2181	100.0	73	73	91.55	49,672	0.00440	5,899
4015	6,020,800	4043	1489	100.0	75	76	91.55	30,189	0.00209	1,704
4016	7,475,935	4013	1863	100.0	78	78	91.55	33,115	0.00211	1,883
4017	5,562,375	2392	2325	100.0	84	83	91.55	28,539	0.00353	2,722
4018	3,918,377	1397	2805	100.0	87	85	91.55	27,419	0.00605	4,478
4019	3,316,697	1176	2820	100.0	87	87	91.55	24,745	0.00719	4,801
4020	3,862,905	1625	2377	100.0	85	86	91.55	24,424	0.00520	3,429
4021	8,623,941	2191	3936	100.0	74	76	91.55	81,770	0.00386	8,515
4022	5,622,462	2350	2393	100.0	69	71	91.55	61,680	0.00360	5,988
4023	5,629,533	2246	2506	100.0	82	82	91.55	34,520	0.00376	3,507
4024	7,926,601	2360	3359	100.0	72	77	91.55	71,463	0.00358	6,909
4025	4,754,828	1710	2781	100.0	58	70	91.55	88,366	0.00494	11,790
									TOTAL:	108,179

k= 27 ft/day

Lowry Lake Flownet Analysis - 12/29/94 (January 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	989,445	1180	839	150.0	75	74	131.33	55,512	0.01582	23,715
1002	1,602,461	1683	952	150.0	73	71	131.33	65,369	0.01109	19,579
1003	3,993,921	2318	1723	150.0	70	70	131.33	121,756	0.00805	26,478
1004	4,628,292	2604	1777	150.0	70	70	131.33	125,572	0.00717	24,309
1005	4,956,809	2684	1847	150.0	80	80	131.33	112,048	0.00696	21,044
1006	6,793,437	2809	2418	150.0	90	90	131.33	122,508	0.00665	21,985
1007	4,289,359	2567	1671	150.0	100	98	131.33	69,622	0.00727	13,672
1008	4,159,910	1878	2215	150.0	109	103	131.33	76,783	0.00994	20,610
1009	1,926,709	1404	1372	155.0	114	110	131.33	42,758	0.01686	19,463
1010	860,043	1027	837	155.0	116	113	131.33	23,993	0.02305	14,930
1011	846,252	1306	648	155.0	117	114	131.33	17,927	0.01812	8,773
1012	1,273,604	1050	1213	145.0	116	113	131.33	28,706	0.01302	10,090
1013	1,973,730	1312	1504	145.0	114	112	131.33	37,848	0.01042	10,647
1014	1,959,015	1312	1493	145.0	112	112	131.33	39,064	0.01042	10,990
1015	3,410,203	2300	1483	155.0	111	110	131.33	48,442	0.01029	13,460
1016	2,847,313	2666	1068	155.0	111	107	131.33	36,488	0.00888	8,747
1017	2,621,848	1573	1667	145.0	106	105	131.33	54,453	0.00869	12,777
1018	935,061	1184	790	145.0	103	103	131.33	27,780	0.01155	8,660
1019	620,569	1193	520	150.0	102	101	131.33	20,366	0.01565	8,605
1020	1,055,803	1524	693	150.0	102	98	131.33	28,181	0.01225	9,321
1022	1,073,827	1171	917	140.0	93	93	131.33	39,124	0.00740	7,821
1023	1,566,531	1266	1237	140.0	90	87	131.33	58,343	0.00685	10,788
1024	1,917,151	1232	1556	140.0	85	82	131.33	81,169	0.00704	15,423
1025	1,818,620	1330	1367	150.0	80	77	131.33	84,980	0.01404	32,209
									TOTAL:	374,096

k= 27 ft/day

Magnolia Lake Flownet Analysis - 12/29/94 (January 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,767,628	2800	988	140.0	105	105	124.15	26,750	0.00566	4,088
2002	2,156,864	1570	1374	140.0	103	104	124.15	39,262	0.01010	10,702
2003	1,948,804	1704	1144	140.0	100	103	124.15	34,978	0.00930	8,784
2004	1,944,196	2889	673	140.0	97	103	124.15	21,586	0.00549	3,198
2006	1,760,203	2346	750	135.0	101	103	124.15	20,681	0.00462	2,583
2007	2,031,586	2062	985	135.0	100	103	124.15	27,654	0.00526	3,929
2008	1,659,178	1911	868	135.0	101	103	124.15	23,935	0.00568	3,669
2009	930,169	2082	447	135.0	100	101	124.15	12,997	0.00521	1,829
2011	2,149,284	1286	1671	120.0	103	103	124.15	31,874	-0.00323	(2,777)
2012	2,661,818	2226	1196	115.0	105	105	124.15	17,432	-0.00411	(1,935)
									TOTAL:	34,070

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 12/29/95 (January 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	3,232,503	2756	1173	110.0	83	84	102.90	26,920	0.00258	1,873
3002	1,778,713	1733	1026	110.0	84	83	102.90	23,547	0.00410	2,605
3003	2,319,069	1680	1380	110.0	84	80	102.90	33,741	0.00423	3,850
3004	1,874,951	1922	976	110.0	84	85	102.90	21,423	0.00369	2,137
3005	1,918,341	1998	960	110.0	86	87	102.90	19,152	0.00355	1,838
3007	3,152,111	2143	1471	95.0	92	87	102.90	13,901	-0.00369	(1,384)
3008	4,012,817	2570	1561	95.0	91	82	102.90	19,434	-0.00307	(1,613)
3009	4,053,712	3708	1093	95.0	92	76	102.90	16,340	-0.00213	(940)
3010	5,445,094	3802	1432	95.0	93	88	102.90	12,100	-0.00208	(679)
3012	3,796,820	2234	1700	110.0	102	91	102.90	16,915	0.00318	1,451
3013	2,810,362	1886	1490	110.0	100	90	102.90	17,061	0.00376	1,734
3014	2,323,503	1504	1545	110.0	94	88	102.90	23,870	0.00472	3,043
3016	2,470,532	1722	1435	90.0	83	86	102.90	17,148	-0.00749	(3,468)
3017	2,953,391	2127	1389	90.0	84	89	102.90	13,821	-0.00606	(2,263)
3018	2,320,677	2323	999	90.0	84	92	102.90	8,442	-0.00555	(1,266)
3019	1,616,346	1548	1044	95.0	85	88	102.90	12,998	-0.00510	(1,791)
3020	651,877	302	2159	102.0	89	90	102.90	27,959	-0.00298	(2,250)
3022	5,182,198	3894	1331	100.0	87	90	102.90	17,236	-0.00074	(347)
3023	3,855,261	4133	933	100.0	86	88	102.90	13,482	-0.00070	(255)
3024	2,957,670	2750	1076	100.0	86	85	102.90	17,162	-0.00105	(489)
3025	1,528,379	1360	1124	100.0	85	86	102.90	17,928	-0.00213	(1,032)
									TOTAL:	753

k= 27 ft/day

Lake Geneva Flownet Analysis - 12/29/95 (January 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,892,656	1130	1675	100.0	68	70	91.59	44,882	0.00744	9,019
4002	3,498,247	1398	2502	100.0	75	77	91.59	49,527	0.00602	8,044
4003	629,043	874	720	100.0	79	78	91.59	12,452	0.00962	3,235
4004	1,330,272	869	1531	100.0	82	82	91.59	21,120	0.00968	5,519
4005	741,981	1066	696	100.0	84	83	91.59	8,557	0.00789	1,823
4006	1,598,575	1001	1597	100.0	88	86	91.59	14,046	0.00840	3,186
4008	1,136,788	722	1574	100.0	90	87	91.59	11,482	0.01165	3,611
4009	668,652	1016	658	100.0	87	84	91.59	6,774	0.00828	1,514
4010	821,743	1099	748	100.0	84	80	91.59	10,319	0.00765	2,132
4011	979,848	904	1084	100.0	83	79	91.59	16,038	0.00930	4,028
4012	1,101,032	765	1439	100.0	80	76	91.59	25,607	0.01099	7,601
4013	3,982,330	1834	2171	100.0	74	74	91.59	47,317	0.00459	5,858
4014	5,898,481	3975	1484	100.0	74	76	91.59	30,860	0.00212	1,763
4015	7,581,073	4007	1892	100.0	78	78	91.59	33,668	0.00210	1,908
4016	5,221,992	2410	2167	100.0	83	82	91.59	28,810	0.00349	2,715
4017	4,029,395	1382	2916	100.0	86	85	91.59	30,020	0.00609	4,932
4018	3,259,829	1274	2559	100.0	87	86	91.59	23,786	0.00660	4,239
4019	7,487,000	2117	3537	100.0	82	84	91.59	45,256	0.00397	4,854
4020	9,445,344	2123	4449	100.0	68	73	91.59	112,537	0.00396	12,037
4021	7,006,621	1743	4020	100.0	77	77	91.59	75,556	0.00483	9,843
4022	3,810,182	2302	1655	100.0	85	82	91.59	20,348	0.00365	2,007
4023	7,069,260	2551	2771	100.0	70	75	91.59	64,550	0.00330	5,746
4024	4,301,812	1696	2536	100.0	58	69	91.59	81,900	0.00496	10,965
									TOTAL:	116,580

k= 27 ft/day

Lowry Lake Flownet Analysis - 1/30/95 (February 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	713,908	1056	676	150.0	76	74	131.36	44,400	0.01765	21,160
1002	1,763,164	1536	1148	150.0	73	72	131.36	78,271	0.01214	25,646
1003	4,137,305	2318	1785	150.0	70	70	131.36	126,164	0.00804	27,392
1004	5,218,421	2677	1949	150.0	70	72	131.36	135,806	0.00696	25,532
1005	4,548,271	2747	1656	150.0	80	80	131.36	100,486	0.00679	18,410
1006	6,241,145	2854	2187	150.0	90	90	131.36	110,837	0.00653	19,545
1007	4,954,874	2607	1901	150.0	98	97	131.36	82,085	0.00715	15,847
1008	4,241,337	1877	2260	150.0	110	103	131.36	77,247	0.00993	20,712
1009	2,401,411	1682	1428	160.0	115	111	131.36	46,667	0.01703	21,455
1010	1,408,364	1408	1000	160.0	117	113	131.36	30,680	0.02034	16,850
1011	1,345,165	984	1367	145.0	116	113	131.36	32,371	0.01386	12,115
1012	2,190,640	1324	1655	145.0	114	112	131.36	41,673	0.01030	11,592
1013	1,724,396	1347	1280	145.0	111	112	131.36	34,150	0.01013	9,337
1014	2,691,101	1790	1503	150.0	110	111	131.36	45,361	0.01041	12,754
1015	3,709,756	2151	1725	150.0	110	108	131.36	54,648	0.00867	12,786
1016	2,411,433	1649	1462	145.0	105	104	131.36	49,240	0.00827	10,997
1017	1,158,900	1153	1005	145.0	102	102	131.36	36,361	0.01183	11,614
1018	474,658	1188	400	150.0	101	100	131.36	16,072	0.01569	6,809
1019	944,866	1583	597	150.0	101	97	131.36	24,883	0.01178	7,911
1021	1,396,947	1242	1125	140.0	92	91	131.36	49,703	0.00696	9,335
1022	1,982,455	1324	1497	140.0	88	85	131.36	73,622	0.00653	12,972
1023	2,419,058	2313	1046	150.0	85	81	131.36	60,333	0.00806	13,128
1024	1,047,472	1521	689	150.0	82	78	131.36	41,809	0.01226	13,834
1025	685,882	1163	590	150.0	78	76	131.36	37,571	0.01603	16,259
									TOTAL:	373,991

k= 27 ft/day

Magnolia Lake Flownet Analysis - 1/30/95 (February 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	3,252,938	2761	1178	140.0	104	105	124.17	32,495	0.00573	5,030
2002	1,775,995	1595	1113	140.0	102	104	124.17	32,372	0.00992	8,675
2003	1,751,809	1768	991	140.0	100	103	124.17	30,310	0.00895	7,327
2004	1,189,580	2692	442	140.0	98	102	124.17	14,182	0.00588	2,252
2006	4,121,833	2877	1433	140.0	101	102	124.17	43,828	0.00550	6,511
2007	3,376,747	2805	1204	140.0	101	101	124.17	37,426	0.00564	5,703
2008	2,054,906	3146	653	140.0	101	101	124.17	20,299	0.00503	2,758
2010	1,607,761	1700	946	120.0	101	103	124.17	19,000	-0.00245	(1,258)
2011	2,908,588	2490	1168	115.0	105	105	124.17	17,035	-0.00368	(1,694)
2012	2,703,424	2339	1156	115.0	105	105	124.17	16,860	-0.00392	(1,785)
									TOTAL:	33,519

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 1/30/95 (February 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	3,816,084	2658	1436	110.0	83	84	103.05	33,064	0.00261	2,334
3002	2,029,138	2122	956	110.0	83	81	103.05	23,446	0.00328	2,073
3003	2,325,960	2314	1005	110.0	84	82	103.05	23,643	0.00300	1,917
3004	3,141,698	2208	1423	110.0	85	86	103.05	29,919	0.00315	2,543
3006	3,556,268	2018	1762	95.0	92	87	103.05	16,783	-0.00399	(1,808)
3007	3,793,233	2475	1533	95.0	91	82	103.05	19,201	-0.00325	(1,686)
3008	5,657,915	4014	1410	95.0	92	76	103.05	21,185	-0.00201	(1,147)
3009	3,679,257	4084	901	95.0	93	89	103.05	7,231	-0.00197	(385)
3011	4,245,855	2142	1982	110.0	102	90	103.05	20,861	0.00324	1,827
3012	2,856,531	1853	1542	110.0	98	90	103.05	19,314	0.00375	1,956
3013	1,883,085	1498	1257	110.0	93	88	103.05	20,143	0.00464	2,523
3015	2,373,906	1664	1427	90.0	84	85	103.05	17,160	-0.00784	(3,634)
3016	2,008,394	2008	1000	90.0	84	88	103.05	10,525	-0.00650	(1,847)
3017	1,719,474	2744	627	90.0	84	92	103.05	5,345	-0.00476	(686)
3018	1,410,700	2379	593	90.0	84	90	103.05	5,648	-0.00549	(837)
3019	2,314,985	1825	1268	95.0	85	89	103.05	15,248	-0.00441	(1,816)
3021	2,544,272	1401	1816	103.0	89	90	103.05	24,561	-0.00004	(24)
3023	3,993,513	4079	979	100.0	86	90	103.05	13,241	-0.00075	(267)
3024	3,383,246	4288	789	100.0	86	87	103.05	11,855	-0.00071	(228)
3025	2,853,933	2689	1061	100.0	86	84	103.05	17,533	-0.00113	(537)
3026	1,797,236	1337	1344	100.0	85	86	103.05	21,538	-0.00228	(1,327)
									TOTAL:	(1,053)

k= 27 ft/day

Lake Geneva Flownet Analysis - 1/30/95 (February 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,863,708	1142	1632	100.0	68	70	91.68	43,803	0.00729	8,616
4002	3,560,960	1444	2466	100.0	75	77	91.68	48,925	0.00576	7,611
4003	589,311	913	645	100.0	79	78	91.68	11,184	0.00911	2,752
4004	1,406,028	871	1614	100.0	82	82	91.68	22,338	0.00955	5,761
4005	662,990	1079	614	100.0	85	83	91.68	7,270	0.00771	1,514
4006	1,637,257	1008	1624	100.0	88	87	91.68	13,544	0.00825	3,018
4008	1,205,437	689	1750	100.0	90	87	91.68	12,845	0.01208	4,188
4009	684,619	1019	672	100.0	86	83	91.68	7,620	0.00816	1,680
4010	781,952	1123	696	100.0	84	79	91.68	9,981	0.00741	1,996
4011	1,334,287	957	1394	100.0	82	78	91.68	22,081	0.00869	5,183
4012	1,805,209	1152	1567	100.0	77	80	91.68	27,172	0.00722	5,298
4013	3,734,107	2343	1594	100.0	72	72	91.68	38,001	0.00355	3,643
4014	5,943,882	4201	1415	100.0	75	77	91.68	28,074	0.00198	1,501
4015	6,769,387	4075	1661	100.0	78	78	91.68	29,632	0.00204	1,634
4016	6,036,658	2424	2490	100.0	79	77	91.68	44,422	0.00343	4,117
4017	3,596,563	1382	2602	100.0	87	86	91.68	24,303	0.00602	3,950
4018	3,413,593	1250	2731	100.0	88	87	91.68	22,777	0.00666	4,093
4019	3,979,101	1801	2209	100.0	85	86	91.68	22,841	0.00462	2,849
4020	3,353,148	695	4825	95.0	75	74	91.68	90,903	0.00478	11,725
4021	1,292,708	563	2296	95.0	73	73	91.68	46,701	0.00590	7,436
4022	2,122,018	987	2150	95.0	88	83	91.68	16,856	0.00336	1,531
4023	7,306,195	2765	2642	100.0	70	75	91.68	61,664	0.00301	5,010
4024	5,002,789	1825	2741	100.0	58	70	91.68	87,273	0.00456	10,743
									TOTAL:	105,849

k= 27 ft/day

Lowry Lake Flownet Analysis - 2/27/95 (March 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	600,742	1028	584	150.0	76	74	131.24	38,322	0.01825	18,882
1002	1,509,297	1403	1076	150.0	73	72	131.24	73,297	0.01337	26,462
1003	4,509,277	2242	2011	150.0	70	70	131.24	142,017	0.00837	32,085
1004	4,988,776	2710	1841	150.0	70	70	131.24	130,011	0.00692	24,300
1005	5,139,346	2787	1844	150.0	80	80	131.24	111,783	0.00673	20,316
1006	5,560,283	2965	1875	150.0	90	90	131.24	94,913	0.00633	16,214
1007	4,181,336	2800	1493	150.0	95	97	131.24	66,618	0.00670	12,051
1008	3,249,992	2395	1357	150.0	105	101	131.24	51,050	0.00783	10,797
1009	4,220,455	2172	1943	155.0	113	106	131.24	65,324	0.01094	19,294
1010	1,186,329	1232	963	155.0	114	112	131.24	29,006	0.01929	15,104
1011	1,478,102	1234	1198	155.0	116	114	131.24	33,688	0.01925	17,513
1012	1,673,549	1109	1509	145.0	116	113	131.24	35,643	0.01241	11,940
1013	2,060,925	1412	1460	145.0	114	112	131.24	36,675	0.00975	9,650
1014	2,127,558	1380	1542	145.0	111	112	131.24	41,048	0.00997	11,051
1015	2,477,906	1836	1350	150.0	110	110	131.24	41,337	0.01022	11,404
1016	3,301,591	2307	1431	150.0	110	107	131.24	45,964	0.00813	10,092
1017	783,000	991	790	140.0	105	105	131.24	24,190	0.00884	5,773
1018	631,983	723	874	140.0	103	102	131.24	28,947	0.01212	9,470
1019	683,594	1281	534	150.0	101	100	131.24	21,424	0.01464	8,471
1020	942,816	1585	595	150.0	101	98	131.24	24,466	0.01184	7,819
1022	1,334,746	1255	1064	140.0	92	91	131.24	46,944	0.00698	8,847
1023	1,634,998	1381	1184	140.0	90	85	131.24	56,974	0.00634	9,758
1024	3,207,740	2784	1152	150.0	87	82	131.24	64,650	0.00674	11,762
1025	1,395,224	1759	793	150.0	83	79	131.24	47,279	0.01067	13,614
1026	971,956	1243	782	150.0	78	76	131.24	49,751	0.01509	20,273
									TOTAL:	362,943

k= 27 ft/day

Magnolia Lake Flownet Analysis - 2/27/95 (March 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	3,774,110	2795	1350	140.0	103	105	124.03	37,820	0.00571	5,835
2002	1,505,505	1577	955	140.0	102	104	124.03	27,709	0.01013	7,576
2003	1,473,062	1703	865	140.0	101	103	124.03	25,963	0.00938	6,574
2004	1,380,917	2110	654	140.0	98	102	124.03	20,938	0.00757	4,279
2006	3,360,590	2425	1386	135.0	101	102	124.03	38,829	0.00452	4,743
2007	2,167,017	2070	1047	135.0	101	102	124.03	29,332	0.00530	4,197
2008	1,745,956	2174	803	135.0	101	101	124.03	22,898	0.00505	3,120
2010	2,127,762	1368	1555	120.0	102	103	124.03	30,346	-0.00295	(2,414)
2011	3,387,228	2328	1455	115.0	105	105	124.03	21,119	-0.00388	(2,212)
									TOTAL:	31,697

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 2/27/95 (March 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	3,803,435	2918	1303	110.0	82	82	102.89	31,852	0.00244	2,095
3002	2,237,074	2404	931	110.0	83	83	102.89	21,827	0.00296	1,743
3003	2,225,731	2505	889	110.0	84	81	102.89	21,287	0.00284	1,631
3004	3,427,102	2336	1467	110.0	85	86	102.89	30,726	0.00304	2,525
3006	3,586,317	1957	1833	95.0	92	87	102.89	17,313	-0.00403	(1,885)
3007	3,334,945	2376	1404	95.0	91	78	102.89	20,281	-0.00332	(1,818)
3008	4,855,741	3733	1301	95.0	92	75	102.89	20,094	-0.00211	(1,147)
3009	4,858,269	3863	1258	95.0	93	89	102.89	9,995	-0.00204	(551)
3011	4,059,392	2201	1844	110.0	102	90	102.89	19,261	0.00323	1,680
3012	3,820,798	1944	1965	110.0	98	90	102.89	24,454	0.00366	2,415
3013	1,322,362	1558	849	110.0	93	88	102.89	13,537	0.00456	1,668
3015	2,081,289	1668	1248	90.0	84	86	102.89	14,283	-0.00773	(2,980)
3016	1,526,378	1527	1000	90.0	84	87	102.89	10,945	-0.00844	(2,495)
3017	4,154,642	1763	2357	90.0	84	93	102.89	18,726	-0.00731	(3,697)
3018	2,710,893	1932	1403	95.0	85	89	102.89	16,759	-0.00408	(1,848)
3020	1,126,653	845	1333	102.5	89	90	102.89	17,589	-0.00046	(219)
3022	4,454,799	3821	1166	100.0	86	90	102.89	15,677	-0.00076	(320)
3023	3,432,019	4125	832	100.0	86	87	102.89	12,434	-0.00070	(235)
3024	3,835,053	2742	1399	100.0	86	83	102.89	23,706	-0.00105	(675)
3025	1,783,665	1293	1379	100.0	85	86	102.89	21,988	-0.00224	(1,327)
									TOTAL:	(5,439)

k= 27 ft/day

Lake Geneva Flownet Analysis - 2/27/95 (March 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,554,914	984	1580	100.0	67	69	91.60	43,924	0.00854	10,124
4002	3,982,427	1280	3111	100.0	74	76	91.60	64,709	0.00656	11,466
4003	627,190	992	632	100.0	78	78	91.60	11,250	0.00847	2,572
4004	1,451,586	895	1622	100.0	82	82	91.60	22,384	0.00939	5,672
4005	709,082	1100	645	100.0	85	83	91.60	7,611	0.00764	1,569
4006	1,669,700	1008	1656	100.0	89	87	91.60	12,917	0.00833	2,906
4008	1,251,438	701	1785	100.0	90	87	91.60	13,030	0.01198	4,216
4009	568,116	992	573	100.0	87	83	91.60	6,188	0.00847	1,415
4010	825,627	1115	740	100.0	85	80	91.60	9,842	0.00753	2,002
4011	1,477,482	998	1480	100.0	82	78	91.60	23,384	0.00842	5,314
4012	1,407,592	1107	1272	100.0	78	75	91.60	24,550	0.00759	5,030
4013	3,620,143	2189	1654	100.0	73	73	91.60	37,711	0.00384	3,907
4014	6,915,082	4157	1663	100.0	76	76	91.60	32,927	0.00202	1,796
4015	8,782,424	3896	2254	100.0	80	78	91.60	37,867	0.00216	2,204
4016	4,497,908	2206	2039	100.0	86	83	91.60	23,041	0.00381	2,369
4017	2,712,982	1402	1935	100.0	87	85	91.60	18,963	0.00599	3,068
4018	1,759,028	1016	1731	100.0	87	87	91.60	15,233	0.00827	3,400
4019	3,164,165	1275	2482	100.0	86	86	91.60	24,324	0.00659	4,327
4020	3,080,708	1852	1663	100.0	84	85	91.60	18,792	0.00454	2,301
4021	2,873,546	915	3140	95.0	77	77	91.60	51,182	0.00372	5,135
4022	1,392,187	981	1419	95.0	70	70	91.60	33,063	0.00347	3,094
4023	1,290,491	751	1718	95.0	87	88	91.60	9,964	0.00453	1,218
4024	4,115,175	2804	1468	100.0	88	87	91.60	12,184	0.00300	986
4025	6,832,384	2894	2361	100.0	68	75	91.60	57,372	0.00290	4,496
4026	5,165,995	1888	2736	100.0	57	70	91.60	88,373	0.00445	10,616
									TOTAL:	101,203

k= 27 ft/day

Lowry Lake Flownet Analysis - 3/31/95 (April 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	528,476	965	548	150.0	76	74	133.19	36,494	0.01742	17,164
1002	1,104,881	1286	859	150.0	73	72	133.19	59,353	0.01307	20,947
1003	1,787,538	1970	907	150.0	72	70	133.19	64,030	0.00853	14,752
1004	1,754,843	2515	698	150.0	70	70	133.19	49,973	0.00668	9,018
1005	3,307,757	2625	1260	150.0	70	70	133.19	90,210	0.00640	15,598
1006	4,594,619	2646	1736	150.0	75	74	133.19	116,477	0.00635	19,979
1007	2,297,673	2733	841	150.0	82	83	133.19	49,699	0.00615	8,254
1008	3,463,861	2827	1225	150.0	87	88	133.19	66,266	0.00595	10,639
1009	4,535,893	2737	1657	150.0	95	95	133.19	77,208	0.00614	12,803
1010	3,386,877	2367	1431	150.0	103	100	133.19	57,376	0.00710	11,002
1011	2,946,781	1761	1673	150.0	109	104	133.19	58,714	0.00955	15,133
1012	2,725,521	1729	1576	160.0	115	110	133.19	53,734	0.01551	22,496
1013	1,283,243	1340	958	160.0	117	113	133.19	30,268	0.02001	16,351
1014	891,694	1142	781	150.0	117	114	133.19	20,380	0.01472	8,100
1015	2,091,415	1170	1788	145.0	115	113	133.19	44,870	0.01009	12,229
1016	2,095,175	1324	1582	145.0	112	112	133.19	42,864	0.00892	10,323
1017	3,246,935	1850	1755	150.0	110	110	133.19	55,449	0.00909	13,604
1018	2,904,235	2033	1429	150.0	110	108	133.19	46,578	0.00827	10,399
1019	3,024,928	1603	1887	145.0	107	105	133.19	62,450	0.00737	12,423
1020	1,333,000	1175	1134	145.0	102	102	133.19	42,066	0.01005	11,416
1021	528,334	776	681	145.0	101	100	133.19	26,283	0.01522	10,800
1022	711,705	1293	550	145.0	100	96	133.19	22,602	0.00913	5,574
1024	1,604,054	1307	1227	140.0	92	91	133.19	55,332	0.00521	7,784
1025	1,432,941	1321	1085	140.0	88	84	133.19	54,896	0.00516	7,641
1026	2,684,793	2420	1109	150.0	85	81	133.19	64,982	0.00695	12,187
1027	1,097,861	1545	711	150.0	82	78	133.19	43,794	0.01088	12,865
1028	796,710	1137	701	150.0	78	76	133.19	45,281	0.01478	18,075
									TOTAL:	347,556

k= 27 ft/day

Magnolia Lake Flownet Analysis - 3/31/95 (April 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	3,098,089	2877	1077	140.0	104	105	124.01	29,623	0.00556	4,445
2002	2,159,355	1755	1230	140.0	102	104	124.01	35,676	0.00911	8,776
2003	1,453,261	1778	817	140.0	100	103	124.01	24,923	0.00899	6,052
2004	1,392,982	2574	541	140.0	98	102	124.01	17,315	0.00621	2,904
2005	964,153	1545	624	130.0	99	102	124.01	16,539	0.00388	1,731
2006	3,190,336	2238	1426	135.0	101	102	124.01	39,935	0.00491	5,295
2007	3,016,250	2100	1436	135.0	102	102	124.01	39,497	0.00523	5,581
2009	1,775,020	1339	1326	120.0	102	103	124.01	25,864	-0.00299	(2,091)
2010	2,656,047	2331	1139	115.0	105	105	124.01	16,521	-0.00387	(1,724)
2011	3,126,434	2357	1326	115.0	105	105	124.01	19,234	-0.00382	(1,985)
									TOTAL:	28,984

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 3/31/95 (April 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	4,235,476	2988	1417	110.0	84	84	102.60	31,599	0.00248	2,113
3002	3,377,550	2437	1386	110.0	84	81	102.60	32,987	0.00304	2,704
3003	4,289,580	2551	1682	110.0	85	85	102.60	35,827	0.00290	2,806
3005	3,733,448	1952	1913	95.0	92	86	102.60	18,747	-0.00389	(1,971)
3006	4,058,036	2431	1669	95.0	90	82	102.60	21,363	-0.00313	(1,803)
3007	2,906,742	3687	788	95.0	91	75	102.60	12,450	-0.00206	(693)
3008	5,466,066	3687	1483	95.0	92	87	102.60	13,792	-0.00206	(768)
3010	4,681,619	2215	2114	110.0	103	90	102.60	20,717	0.00334	1,869
3011	3,076,269	1959	1570	110.0	98	90	102.60	19,311	0.00378	1,970
3012	1,739,790	1594	1091	110.0	93	88	102.60	17,238	0.00464	2,161
3014	3,055,378	1770	1726	90.0	83	86	102.60	20,367	-0.00712	(3,915)
3015	2,422,281	2195	1104	90.0	84	91	102.60	9,715	-0.00574	(1,506)
3016	2,321,284	2304	1008	90.0	84	92	102.60	8,366	-0.00547	(1,235)
3017	1,868,986	1710	1093	95.0	85	88	102.60	13,444	-0.00444	(1,613)
3018	441,304	364	1212	102.0	89	90	102.60	15,514	-0.00165	(690)
3020	4,159,116	3692	1127	100.0	86	90	102.60	14,989	-0.00070	(285)
3021	3,682,767	3930	937	100.0	86	88	102.60	13,399	-0.00066	(239)
3022	3,315,089	2557	1296	100.0	86	85	102.60	20,477	-0.00102	(562)
3023	1,463,309	1178	1242	100.0	85	86	102.60	19,624	-0.00221	(1,169)
									TOTAL:	(2,827)

k= 27 ft/day

Lake Geneva Flownet Analysis - 3/31/95 (April 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	2,275,817	1144	1989	100.0	68	70	91.54	53,246	0.00740	10,631
4002	3,306,833	1448	2284	100.0	75	76	91.54	46,297	0.00584	7,303
4003	667,828	999	668	100.0	79	79	91.54	11,202	0.00847	2,561
4004	1,444,842	927	1559	100.0	82	81	91.54	22,247	0.00913	5,482
4005	783,190	1116	702	100.0	85	83	91.54	8,263	0.00758	1,691
4006	1,593,044	1007	1582	100.0	89	87	91.54	12,292	0.00840	2,788
4008	1,133,276	753	1505	100.0	90	87	91.54	10,941	0.01124	3,319
4009	615,488	1000	615	100.0	87	84	91.54	6,316	0.00846	1,443
4010	1,009,787	1070	944	100.0	85	80	91.54	12,527	0.00791	2,674
4011	997,559	921	1083	100.0	84	79	91.54	15,454	0.00919	3,833
4012	1,096,580	796	1378	100.0	80	76	91.54	24,487	0.01063	7,027
4013	4,184,100	1951	2145	100.0	74	74	91.54	46,697	0.00434	5,467
4014	6,982,473	4130	1691	100.0	75	75	91.54	35,122	0.00205	1,943
4015	7,763,406	4118	1885	100.0	79	78	91.54	32,554	0.00205	1,806
4016	5,281,298	2542	2078	100.0	85	83	91.54	24,458	0.00333	2,198
4017	3,783,673	1484	2550	100.0	86	85	91.54	26,189	0.00570	4,031
4018	3,396,973	1289	2635	100.0	87	86	91.54	24,426	0.00656	4,329
4019	5,858,630	1993	2940	100.0	85	86	91.54	30,194	0.00424	3,461
4020	3,268,171	829	3942	95.0	74	75	91.54	73,991	0.00417	8,338
4021	1,923,053	700	2747	95.0	75	75	91.54	50,188	0.00494	6,698
4022	1,700,499	1022	1664	95.0	90	83	91.54	11,265	0.00339	1,030
4023	9,278,185	2929	3168	100.0	70	77	91.54	70,551	0.00289	5,502
4024	5,247,502	1927	2723	100.0	58	69	91.54	87,871	0.00439	10,416
									TOTAL:	103,970

k= 27 ft/day

Lowry Lake Flownet Analysis - 4/28/95 (May 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	1,170,739	1237	946	150.0	75	73	131.34	63,070	0.01508	25,688
1002	1,093,316	1289	848	145.0	72	71	131.34	56,536	0.01060	16,177
1003	1,506,379	1310	1150	145.0	66	70	131.34	80,696	0.01043	22,719
1004	1,526,617	1479	1032	145.0	69	70	131.34	70,867	0.00924	17,672
1005	2,171,870	1806	1203	145.0	75	75	131.34	75,994	0.00756	15,519
1006	2,382,964	1841	1294	145.0	80	80	131.34	75,272	0.00742	15,080
1007	3,211,149	1957	1641	145.0	87	89	131.34	82,329	0.00698	15,516
1008	2,668,536	1943	1373	145.0	85	97	131.34	64,764	0.00703	12,294
1009	2,155,821	1723	1251	145.0	102	100	131.34	46,500	0.00793	9,954
1010	1,900,892	1338	1421	145.0	107	104	131.34	46,424	0.01021	12,797
1011	1,641,304	1452	1130	155.0	113	109	131.34	36,352	0.01629	15,993
1012	952,176	1032	923	155.0	115	112	131.34	27,385	0.02293	16,952
1013	608,388	715	851	145.0	116	113	131.34	20,143	0.01910	10,390
1014	1,215,008	1073	1132	145.0	117	113	131.34	26,228	0.01273	9,015
1015	1,836,930	1353	1358	145.0	114	112	131.34	34,181	0.01010	9,318
1016	2,083,759	1380	1510	145.0	110	110	131.34	42,537	0.00990	11,368
1017	4,319,144	1970	2192	150.0	110	105	131.34	72,709	0.00947	18,595
1018	2,350,883	1670	1408	145.0	109	107	131.34	42,479	0.00818	9,382
1019	833,061	869	959	140.0	105	104	131.34	29,892	0.00997	8,043
1020	988,718	1025	965	150.0	102	102	131.34	37,317	0.01820	18,342
1021	445,008	819	543	150.0	101	100	131.34	21,812	0.02278	13,418
1022	373,440	1165	321	150.0	100	97	131.34	13,537	0.01602	5,854
1024	681,507	1078	632	140.0	92	92	131.34	27,599	0.00803	5,986
1025	1,193,783	1248	957	140.0	91	88	131.34	44,185	0.00694	8,278
1026	2,230,024	1299	1717	140.0	87	82	131.34	87,859	0.00667	15,815
1027	1,102,024	1352	815	145.0	82	79	131.34	47,001	0.01010	12,822
1028	996,960	1222	816	150.0	78	76	131.34	51,955	0.01527	21,420
									TOTAL:	374,407

k= 27 ft/day

Magnolia Lake Flownet Analysis - 4/28/95 (May 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,226,474	1978	1126	135.0	105	105	124.16	27,677	0.00548	4,095
2002	1,147,925	942	1219	135.0	103	103	124.16	32,401	0.01151	10,067
2003	738,641	919	804	135.0	102	103	124.16	21,772	0.01180	6,934
2004	737,532	1166	633	130.0	101	103	124.16	15,876	0.00501	2,147
2005	2,110,680	1529	1380	130.0	100	103	124.16	35,300	0.00382	3,640
2006	2,201,656	2113	1042	135.0	101	102	124.16	29,259	0.00513	4,053
2007	1,184,615	1951	607	135.0	101	101	124.16	17,348	0.00556	2,602
2008	1,910,847	2293	833	135.0	100	100	124.16	24,640	0.00473	3,145
2010	1,448,383	1334	1086	120.0	102	103	124.16	21,264	-0.00312	(1,790)
2011	3,083,796	2471	1248	115.0	105	105	124.16	18,196	-0.00371	(1,821)
2012	2,205,127	2302	958	115.0	105	105	124.16	13,968	-0.00398	(1,501)
									TOTAL:	31,572

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 4/28/95 (May 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculated Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	4,780,155	3222	1484	110.0	84	84	102.94	33,345	0.00219	1,973
3002	3,780,761	2594	1458	110.0	84	82	102.94	34,219	0.00272	2,515
3003	4,466,489	2625	1702	110.0	85	85	102.94	36,542	0.00269	2,654
3005	4,198,411	2196	1912	95.0	92	87	102.94	18,107	-0.00362	(1,768)
3006	4,680,536	2749	1703	95.0	91	82	102.94	21,236	-0.00289	(1,656)
3007	4,333,420	4328	1001	95.0	93	75	102.94	14,985	-0.00183	(742)
3008	4,058,274	4226	960	95.0	94	90	102.94	6,691	-0.00188	(339)
3010	4,015,998	2253	1783	110.0	103	91	102.94	16,885	0.00313	1,429
3011	3,119,312	1912	1631	110.0	99	90	102.94	19,523	0.00369	1,946
3012	2,132,925	1487	1434	110.0	94	88	102.94	22,184	0.00475	2,844
3014	2,209,603	1692	1306	90.0	83	86	102.94	15,633	-0.00765	(3,228)
3015	2,477,792	2029	1221	90.0	84	91	102.94	10,952	-0.00638	(1,886)
3016	2,944,605	2192	1343	90.0	84	91	102.94	12,047	-0.00590	(1,920)
3017	1,492,018	1530	975	95.0	85	88	102.94	12,158	-0.00519	(1,704)
3018	725,786	330	2199	102.0	89	90	102.94	28,521	-0.00285	(2,194)
3020	4,064,885	3697	1100	100.0	86	90	102.94	14,817	-0.00080	(318)
3021	3,349,777	3937	851	100.0	86	88	102.94	12,314	-0.00075	(248)
3022	3,161,450	2551	1239	100.0	86	85	102.94	19,787	-0.00115	(616)
3023	1,580,081	1217	1298	100.0	85	86	102.94	20,729	-0.00242	(1,352)
									TOTAL:	(4,611)

k= 27 ft/day

Lake Geneva Flownet Analysis - 4/28/95 (May 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculated Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	1,984,262	1197	1658	100.0	68	70	91.84	44,633	0.00682	8,215
4002	1,768,738	1584	1117	100.0	73	75	91.84	24,485	0.00515	3,406
4003	1,856,976	1763	1053	100.0	77	77	91.84	19,923	0.00463	2,490
4004	614,123	942	652	100.0	78	78	91.84	11,684	0.00866	2,733
4005	1,417,547	889	1595	100.0	83	82	91.84	21,405	0.00918	5,305
4006	716,248	1076	666	100.0	85	84	91.84	7,606	0.00758	1,557
4007	1,572,089	994	1582	100.0	89	88	91.84	11,738	0.00821	2,602
4009	1,237,354	698	1773	100.0	90	87	91.84	13,156	0.01169	4,153
4010	729,994	1038	703	100.0	86	84	91.84	7,677	0.00786	1,629
4011	704,892	1141	618	100.0	84	80	91.84	8,603	0.00715	1,661
4012	987,959	896	1103	100.0	83	78	91.84	17,008	0.00911	4,182
4013	1,077,120	781	1379	100.0	80	76	91.84	24,712	0.01045	6,971
4014	4,271,449	1961	2178	100.0	74	74	91.84	47,742	0.00416	5,364
4015	6,003,302	4152	1446	100.0	75	75	91.84	30,250	0.00197	1,605
4016	7,407,765	4180	1772	100.0	78	78	91.84	31,754	0.00195	1,674
4017	6,300,444	2604	2420	100.0	83	82	91.84	32,476	0.00313	2,748
4018	4,322,620	1512	2859	100.0	86	85	91.84	29,791	0.00540	4,341
4019	3,610,080	1301	2775	100.0	87	86	91.84	26,141	0.00627	4,427
4020	5,281,402	1968	2684	100.0	83	85	91.84	31,993	0.00415	3,582
4021	3,633,019	760	4780	95.0	71	74	91.84	99,998	0.00416	11,226
4022	2,287,064	837	2732	95.0	83	82	91.84	29,833	0.00378	3,041
4023	9,141,500	3369	2713	100.0	72	80	91.84	54,043	0.00242	3,534
4024	7,168,982	2286	3136	100.0	57	70	91.84	101,669	0.00357	9,799
									TOTAL:	96,243

k= 27 ft/day

Lowry Lake Flownet Analysis - 5/31/95 (June 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	576,051	1035	557	150.0	76	74	131.22	36,545	0.01814	17,904
1002	1,319,634	1406	939	150.0	73	72	131.22	63,955	0.01336	23,065
1003	2,115,400	2235	946	150.0	73	70	131.22	65,378	0.00840	14,832
1004	2,631,486	2718	968	150.0	70	70	131.22	68,350	0.00691	12,751
1005	4,813,344	2646	1819	150.0	70	71	131.22	127,530	0.00710	24,439
1006	5,049,281	2736	1845	150.0	80	80	131.22	111,825	0.00686	20,724
1007	6,233,825	2866	2175	150.0	90	90	131.22	110,077	0.00655	19,475
1008	3,303,093	2694	1226	150.0	102	103	131.22	46,723	0.00697	8,794
1009	4,747,280	2129	2230	150.0	105	102	131.22	82,755	0.00882	19,710
1010	3,199,278	2141	1494	160.0	115	108	131.22	50,960	0.01344	18,496
1011	1,106,509	1296	854	160.0	115	112	131.22	27,422	0.02221	16,442
1012	817,981	1286	636	160.0	117	113	131.22	19,468	0.02238	11,763
1013	573,806	825	696	145.0	116	113	131.22	16,433	0.01670	7,411
1014	1,696,822	1171	1449	145.0	116	113	131.22	34,211	0.01177	10,870
1015	1,828,199	1399	1307	145.0	113	112	131.22	33,472	0.00985	8,902
1016	1,578,528	1383	1141	145.0	111	112	131.22	30,362	0.00996	8,168
1017	1,657,551	1266	1309	145.0	110	110	131.22	36,796	0.01088	10,814
1018	1,836,474	1385	1326	145.0	110	108	131.22	38,600	0.00995	10,369
1019	1,536,301	1713	897	145.0	108	106	131.22	27,906	0.00804	6,061
1020	2,325,263	1560	1491	145.0	104	104	131.22	50,858	0.00883	12,130
1021	815,529	968	842	145.0	102	102	131.22	30,405	0.01424	11,686
1022	662,907	1196	554	150.0	101	100	131.22	22,221	0.01570	9,421
1023	542,085	1586	342	150.0	101	96	131.22	14,402	0.01184	4,604
1025	1,211,865	1180	1027	140.0	92	91	131.22	45,301	0.00744	9,101
1026	1,290,010	1373	940	140.0	90	85	131.22	45,223	0.00639	7,808
1027	2,844,588	2259	1259	145.0	87	82	131.22	67,495	0.00610	11,117
1028	1,493,135	1791	834	150.0	83	79	131.22	49,715	0.01049	14,075
1029	1,079,953	1239	872	150.0	78	76	131.22	55,468	0.01516	22,700
									TOTAL:	373,632

k= 27 ft/day

Magnolia Lake Flownet Analysis - 5/31/95 (June 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,579,895	2820	915	140.0	104	105	124.05	25,185	0.00566	3,846
2002	2,203,209	1637	1346	140.0	103	104	124.05	38,395	0.00974	10,101
2003	1,611,278	1631	988	140.0	101	102	124.05	30,159	0.00978	7,963
2004	2,065,135	2761	748	140.0	98	102	124.05	23,955	0.00578	3,736
2005	878,786	1718	512	130.0	98	102	124.05	13,837	0.00346	1,294
2006	1,857,076	2325	799	135.0	101	102	124.05	22,392	0.00471	2,847
2007	2,236,615	2087	1072	135.0	102	102	124.05	29,507	0.00525	4,180
2008	2,086,076	2087	1000	135.0	101	101	124.05	28,525	0.00525	4,041
2010	1,855,354	1412	1314	120.0	102	103	124.05	25,656	-0.00287	(1,987)
2011	2,560,569	2321	1103	115.0	105	105	124.05	16,021	-0.00390	(1,687)
2012	1,698,106	2290	742	115.0	105	105	124.05	10,778	-0.00395	(1,150)
									TOTAL:	33,185

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 5/31/95 (June 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	4,943,287	2865	1725	110.0	84	84	102.82	38,657	0.00251	2,616
3002	3,042,361	2186	1392	110.0	84	81	102.82	33,283	0.00328	2,952
3003	4,376,608	2456	1782	110.0	85	85	102.82	38,153	0.00292	3,012
3005	4,200,831	2111	1990	95.0	93	87	102.82	17,731	-0.00370	(1,773)
3006	4,426,836	2577	1718	95.0	91	81	102.82	22,179	-0.00303	(1,817)
3007	3,815,817	4129	924	95.0	92	74	102.82	14,701	-0.00189	(752)
3008	4,487,232	4063	1104	95.0	94	90	102.82	7,629	-0.00192	(396)
3010	3,822,478	2283	1674	110.0	103	91	102.82	15,752	0.00314	1,338
3011	3,761,995	1967	1913	110.0	100	90	102.82	21,827	0.00365	2,151
3012	1,929,715	1536	1256	110.0	94	88	102.82	19,355	0.00467	2,443
3014	2,707,716	1686	1606	90.0	83	85	102.82	19,930	-0.00760	(4,092)
3015	2,631,000	2109	1248	90.0	84	90	102.82	11,744	-0.00608	(1,927)
3016	2,407,469	2264	1063	90.0	84	91	102.82	9,471	-0.00566	(1,448)
3017	1,277,119	1462	874	95.0	85	88	102.82	10,846	-0.00535	(1,566)
3018	520,430	271	1920	102.0	90	90	102.82	23,827	-0.00303	(1,947)
3020	4,022,494	3727	1079	100.0	87	90	102.82	13,930	-0.00076	(285)
3021	3,452,549	3972	869	100.0	86	88	102.82	12,522	-0.00071	(240)
3022	3,385,376	2594	1305	100.0	86	85	102.82	20,763	-0.00109	(609)
3023	1,529,252	1222	1251	100.0	85	86	102.82	19,903	-0.00231	(1,240)
									TOTAL:	(3,583)

k= 27 ft/day

Lake Geneva Flownet Analysis - 5/31/95 (June 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	2,810,632	1307	2150	100.0	70	72	91.57	53,288	0.00645	9,280
4002	2,652,201	1577	1682	100.0	76	77	91.57	32,437	0.00535	4,682
4003	685,065	1006	681	100.0	78	77	91.57	12,452	0.00838	2,817
4004	1,450,372	925	1568	100.0	84	83	91.57	19,263	0.00911	4,740
4005	806,277	1091	739	100.0	85	84	91.57	8,340	0.00773	1,740
4006	1,555,513	990	1571	100.0	89	87	91.57	12,230	0.00852	2,812
4008	1,223,025	701	1745	100.0	90	87	91.57	12,712	0.01203	4,128
4009	673,943	1012	666	100.0	86	83	91.57	7,516	0.00833	1,690
4010	838,881	1117	751	100.0	85	80	91.57	9,977	0.00755	2,033
4011	1,003,155	900	1115	100.0	83	79	91.57	16,485	0.00937	4,169
4012	1,500,547	990	1516	100.0	79	76	91.57	27,720	0.00852	6,373
4013	4,227,239	2223	1902	100.0	74	73	91.57	42,386	0.00379	4,340
4014	6,195,384	4218	1469	100.0	75	75	91.57	30,533	0.00200	1,648
4015	7,307,857	4152	1760	100.0	78	78	91.57	31,302	0.00203	1,716
4016	5,752,245	2543	2262	100.0	84	83	91.57	27,789	0.00331	2,487
4017	4,370,441	1493	2927	100.0	86	85	91.57	30,104	0.00565	4,589
4018	3,763,958	1328	2834	100.0	87	86	91.57	26,314	0.00635	4,510
4019	5,177,795	2010	2576	100.0	83	86	91.57	29,070	0.00419	3,292
4020	3,819,548	759	5032	95.0	73	74	91.57	99,558	0.00452	12,148
4021	2,302,403	712	3234	95.0	74	77	91.57	57,517	0.00482	7,481
4022	10,443,395	3317	3148	100.0	73	80	91.57	60,709	0.00254	4,166
4023	7,516,629	2293	3278	100.0	56	70	91.57	107,469	0.00368	10,668
									TOTAL:	101,508

k= 27 ft/day

Lowry Lake Flownet Analysis - 7/4/95 (July 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
1001	429,709	943	456	150.0	74	76	131.61	30,007	0.01950	15,800
1002	1,561,602	1365	1144	150.0	72	73	131.61	78,141	0.01347	28,424
1003	2,026,921	2266	894	150.0	70	72	131.61	62,406	0.00812	13,674
1004	2,376,703	2675	888	150.0	70	70	131.61	62,875	0.00687	11,671
1005	3,517,578	2553	1378	150.0	72	70	131.61	96,191	0.00720	18,708
1006	5,653,032	2625	2154	150.0	80	78	131.61	133,128	0.00701	25,182
1007	6,732,792	2735	2462	150.0	90	90	131.61	125,082	0.00672	22,708
1008	3,857,281	2513	1535	150.0	100	98	131.61	64,171	0.00732	12,679
1009	2,569,687	2196	1170	150.0	107	102	131.61	42,477	0.00837	9,604
1010	3,582,438	2460	1456	160.0	114	107	131.61	51,404	0.01154	16,017
1011	1,362,964	1397	976	160.0	115	112	131.61	31,530	0.02032	17,300
1012	1,390,387	1377	1010	160.0	117	113	131.61	31,113	0.02062	17,320
1013	1,068,381	958	1115	145.0	116	113	131.61	26,543	0.01398	10,017
1014	1,814,758	1257	1444	145.0	115	113	131.61	35,096	0.01065	10,094
1015	1,522,816	1270	1199	145.0	112	112	131.61	31,540	0.01054	8,978
1016	2,121,323	1773	1196	150.0	111	111	131.61	35,647	0.01037	9,983
1017	1,875,282	1742	1077	150.0	111	110	131.61	32,638	0.01056	9,303
1018	2,980,183	2136	1395	150.0	110	107	131.61	45,065	0.00861	10,476
1019	1,389,435	1294	1074	145.0	106	105	131.61	35,233	0.01035	9,844
1020	1,067,495	1404	760	145.0	103	103	131.61	26,832	0.00954	6,909
1021	915,804	1344	681	150.0	102	102	131.61	26,426	0.01368	9,763
1022	477,601	1088	439	150.0	101	100	131.61	17,694	0.01690	8,075
1023	851,806	1522	560	150.0	101	97	131.61	23,411	0.01208	7,637
1025	731,865	982	745	140.0	93	93	131.61	31,890	0.00854	7,356
1026	714,156	938	761	140.0	91	89	131.61	34,858	0.00894	8,418
1027	843,645	1301	648	140.0	89	85	131.61	31,626	0.00645	5,507
1028	2,913,957	1995	1461	145.0	87	82	131.61	78,609	0.00671	14,245
1029	1,242,875	1552	801	150.0	82	78	131.61	48,705	0.01185	15,582
1030	769,487	1125	684	150.0	78	76	131.61	43,643	0.01635	19,262
									TOTAL:	380,538

k= 27 ft/day

Magnolia Lake Flownet Analysis - 7/4/95 (July 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
2001	2,759,153	2541	1086	140.0	104	105	125.01	30,413	0.00590	4,844
2002	1,605,239	1356	1184	140.0	103	104	125.01	34,342	0.01105	10,250
2003	1,239,972	1354	916	140.0	101	103	125.01	27,943	0.01107	8,352
2004	2,608,763	2590	1007	140.0	98	103	125.01	32,229	0.00579	5,036
2006	3,071,112	2428	1265	135.0	101	101	125.01	36,691	0.00411	4,076
2007	2,716,807	2618	1038	140.0	102	102	125.01	31,664	0.00573	4,895
2008	1,757,187	2702	650	140.0	102	102	125.01	19,828	0.00555	2,970
2009	1,461,762	3096	472	140.0	101	101	125.01	14,870	0.00484	1,944
2011	1,896,419	1654	1147	120.0	102	103	125.01	22,946	-0.00303	(1,877)
2012	3,358,851	2577	1303	115.0	105	105	125.01	19,552	-0.00388	(2,051)
2013	2,408,215	2423	994	115.0	105	105	125.01	14,915	-0.00413	(1,664)
									TOTAL:	36,778

k= 27 ft/day

Lake Brooklyn Flownet Analysis - 7/4/95 (July 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
3001	3,632,713	2437	1491	110.0	83	84	103.97	35,016	0.00247	2,339
3002	3,176,645	1750	1815	110.0	84	82	103.97	43,533	0.00345	4,050
3003	3,316,747	1959	1693	110.0	85	85	103.97	37,221	0.00308	3,093
3005	4,859,917	2330	2086	95.0	93	87	103.97	19,786	-0.00385	(2,057)
3006	4,781,672	2854	1675	95.0	92	82	103.97	20,912	-0.00314	(1,775)
3007	4,129,927	4320	956	95.0	92	74	103.97	15,760	-0.00208	(884)
3008	4,178,824	4217	991	95.0	94	91	103.97	6,922	-0.00213	(398)
3010	3,788,760	2122	1785	110.0	103	91	103.97	17,823	0.00284	1,367
3011	3,200,798	1819	1760	110.0	99	90	103.97	21,974	0.00332	1,967
3012	2,151,523	1388	1550	110.0	93	88	103.97	25,552	0.00434	2,997
3014	2,948,523	1800	1638	90.0	83	86	103.97	20,450	-0.00776	(4,285)
3015	2,278,102	2086	1092	90.0	84	89	103.97	11,450	-0.00670	(2,070)
3016	2,836,324	2265	1252	90.0	84	92	103.97	11,249	-0.00617	(1,873)
3017	1,457,040	1567	930	95.0	85	89	103.97	11,611	-0.00572	(1,795)
3018	520,170	412	1263	103.0	90	90	103.97	17,032	-0.00235	(1,083)
3020	3,995,101	3880	1030	100.0	87	90	103.97	13,890	-0.00102	(384)
3021	3,127,684	4120	759	100.0	86	88	103.97	11,374	-0.00096	(296)
3022	3,115,345	2733	1140	100.0	86	85	103.97	18,793	-0.00145	(737)
3023	1,882,965	1441	1307	100.0	85	86	103.97	21,546	-0.00276	(1,603)
									TOTAL:	(3,424)

k= 27 ft/day

Lake Geneva Flownet Analysis - 7/4/95 (July 1995)

Streamtube Poly Number	A/I Area (sq. ft.)	Average Length (ft)	Calculate Width (ft)	Exterior WT Elevation (ft NGVD)	Exterior Hawthorn Elevation (ft NGVD)	Interior Hawthorn Elevation (ft NGVD)	Lake Water Level (ft NGVD)	Cross Sectional Area (sq. ft)	Hydraulic Gradient (ft/ft)	Flowrate cfd
4001	2,134,024	1220	1749	100.0	68	70	91.78	47,031	0.00674	8,556
4002	3,488,237	1511	2309	100.0	75	77	91.78	45,926	0.00544	6,746
4003	649,351	973	667	100.0	79	78	91.78	11,599	0.00845	2,646
4004	2,205,514	1110	1987	100.0	84	83	91.78	24,619	0.00741	4,922
4005	1,554,502	1007	1544	100.0	89	87	91.78	12,182	0.00816	2,685
4007	1,259,155	698	1804	100.0	90	87	91.78	13,332	0.01178	4,239
4008	641,296	1015	632	100.0	86	83	91.78	7,198	0.00810	1,574
4009	700,173	1143	613	100.0	84	80	91.78	8,515	0.00719	1,653
4010	989,825	909	1089	100.0	83	79	91.78	16,215	0.00904	3,959
4011	1,534,765	963	1594	100.0	79	76	91.78	29,314	0.00854	6,756
4012	4,102,718	2186	1877	100.0	74	73	91.78	42,026	0.00376	4,267
4013	5,710,405	4053	1409	100.0	75	76	91.78	28,730	0.00203	1,573
4014	6,327,182	3993	1585	100.0	78	78	91.78	28,356	0.00206	1,576
4015	5,422,129	2537	2137	100.0	83	81	91.78	29,683	0.00324	2,597
4016	4,626,961	1477	3133	100.0	86	84	91.78	34,118	0.00557	5,127
4017	2,725,005	1336	2040	100.0	87	86	91.78	19,156	0.00615	3,182
4018	3,834,199	1705	2249	100.0	85	86	91.78	23,367	0.00482	3,042
4019	4,549,831	2246	2026	100.0	81	83	91.78	28,141	0.00366	2,781
4020	3,106,329	886	3506	95.0	73	74	91.78	69,734	0.00363	6,843
4021	2,044,691	668	3061	95.0	78	78	91.78	47,109	0.00482	6,131
4022	4,799,676	3329	1442	100.0	81	83	91.78	20,029	0.00247	1,335
4023	7,983,765	3133	2548	100.0	68	75	91.78	62,146	0.00262	4,402
4024	5,066,346	1920	2639	100.0	57	69	91.78	86,797	0.00428	10,033
									TOTAL:	96,625

k= 27 ft/day

APPENDIX G

WATER-BUDGET CALCULATIONS

LOWRY LAKE DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 5555

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0439 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Natural Springs Inflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Aug-94	0.21	0.91	0.00	77.37	131.65	54.28	1289.64	19615.35	NA	20.54			9.15	12.08	9.18	23.46	NA	NA
02-Aug-94	0.21	0.91	0.00	77.39	131.64	54.25	1289.32	19602.46	-12.89	20.53			9.15	12.31	9.20	22.86	-0.69	-9.87E-06
03-Aug-94	0.26	0.91	0.29	77.42	131.63	54.21	1289.01	19589.57	-12.89	25.41	31.15	1.34	9.16	12.53	9.23	22.27	0.16	2.30E-06
04-Aug-94	0.20	0.91	0.16	77.44	131.61	54.17	1288.38	19563.79	-25.77	19.54	17.18	0.74	9.18	12.76	9.26	21.11	41.51	5.95E-04
05-Aug-94	0.15	0.91	0.19	77.46	131.61	54.15	1288.38	19563.79	0.00	14.66	20.40	0.88	9.19	12.99	9.28	21.11	8.46	1.21E-04
06-Aug-94	0.19	0.91	2.77	77.48	131.65	54.17	1289.64	19615.35	51.56	18.58	297.69	12.82	9.20	13.21	9.31	23.46	-34.59	-4.95E-04
07-Aug-94	0.17	0.91	0.12	77.50	131.80	54.30	1294.32	19809.15	193.80	16.69	12.94	0.56	9.21	13.44	9.33	33.11	106.40	1.51E-03
08-Aug-94	0.12	0.91	0.00	77.52	131.80	54.28	1294.32	19809.15	0.00	11.78			9.22	13.67	9.36	33.11	-4.32	-6.15E-05
09-Aug-94	0.07	0.91	0.07	77.54	131.78	54.24	1293.70	19783.27	-25.88	6.87	7.55	0.32	9.23	13.89	9.39	31.75	13.24	1.89E-04
10-Aug-94	0.18	0.91	0.00	77.56	131.76	54.20	1293.07	19757.41	-25.87	17.65			9.25	14.12	9.41	30.41	27.63	3.94E-04
11-Aug-94	0.17	0.91	0.05	77.59	131.74	54.15	1292.45	19731.55	-25.86	16.66	5.39	0.23	9.26	14.34	9.44	29.10	10.57	1.51E-04
12-Aug-94	0.19	0.91	0.24	77.61	131.73	54.12	1292.14	19718.63	-12.92	18.62	25.84	1.11	9.27	14.57	9.47	28.45	5.82	8.32E-05
13-Aug-94	0.16	0.91	0.14	77.63	131.73	54.10	1292.14	19718.63	0.00	15.68	15.07	0.65	9.28	14.80	9.49	28.45	13.19	1.89E-04
14-Aug-94	0.23	0.91	0.99	77.65	131.74	54.09	1292.45	19731.55	12.92	22.54	106.63	4.58	9.29	15.02	9.52	29.10	-7.76	-1.11E-04
15-Aug-94	0.19	0.91	0.50	77.67	131.77	54.10	1293.39	19770.34	38.79	18.64	53.89	2.31	9.30	15.25	9.55	31.08	54.62	7.81E-04
16-Aug-94	0.13	0.91	0.22	77.69	131.80	54.11	1294.32	19809.15	38.82	12.76	23.73	1.02	9.31	15.48	9.57	33.11	1.77	2.53E-05
17-Aug-94	0.00	0.91	0.00	77.71	131.79	54.08	1294.01	19796.21	-12.94	0.00			9.33	15.70	9.60	32.43	26.18	3.74E-04
18-Aug-94	0.11	0.91	0.00	77.73	131.77	54.04	1293.39	19770.34	-25.87	10.79			9.34	15.93	9.62	31.08	28.07	4.02E-04
19-Aug-94	0.22	0.91	0.00	77.75	131.75	54.00	1292.76	19744.48	-25.86	21.57			9.35	16.16	9.65	29.75	18.88	2.71E-04
20-Aug-94	0.24	0.91	0.00	77.78	131.75	53.97	1292.76	19744.48	0.00	23.53			9.36	16.38	9.68	29.75	-16.16	-2.32E-04
21-Aug-94	0.21	0.91	0.31	77.80	131.73	53.93	1292.14	19718.63	-25.85	20.58	33.38	1.44	9.37	16.61	9.70	28.45	7.99	1.15E-04
22-Aug-94	0.25	0.91	0.08	77.82	131.74	53.92	1292.45	19731.55	12.92	24.50	8.62	0.37	9.38	16.83	9.73	29.10	8.55	1.23E-04
23-Aug-94	0.08	0.91	0.49	77.84	131.74	53.90	1292.45	19731.55	0.00	7.84	52.78	2.27	9.40	17.06	9.76	29.10	-8.66	-1.24E-04
24-Aug-94	0.12	0.91	0.00	77.86	131.75	53.89	1292.76	19744.48	12.93	11.76			9.41	17.29	9.78	29.75	41.39	5.94E-04
25-Aug-94	0.16	0.91	0.00	77.85	131.73	53.88	1292.14	19718.63	-25.85	15.68			9.42	17.51	9.81	28.45	20.81	2.99E-04
26-Aug-94	0.18	0.91	0.32	77.84	131.72	53.88	1291.82	19705.71	-12.92	17.63	34.45	1.48	9.43	17.74	9.83	27.80	5.54	7.95E-05
27-Aug-94	0.09	0.91	0.00	77.83	131.72	53.89	1291.82	19705.71	0.00	8.82			9.44	17.97	9.86	27.80	27.50	3.95E-04
28-Aug-94	0.16	0.91	0.01	77.82	131.71	53.89	1291.51	19692.79	-12.92	15.67	1.08	0.05	9.45	18.19	9.89	27.16	13.57	1.95E-04
29-Aug-94	0.21	0.91	0.00	77.81	131.69	53.88	1290.89	19666.97	-25.82	20.56			9.47	18.42	9.91	25.90	21.65	3.11E-04
30-Aug-94	0.21	0.91	0.00	77.80	131.68	53.88	1290.57	19654.06	-12.91	20.55			9.48	18.64	9.94	25.28	4.24	6.10E-05
31-Aug-94	0.23	0.91	0.00	77.79	131.66	53.87	1289.95	19628.25	-25.81	22.50			9.49	18.37	9.91	24.06	18.03	2.60E-04
01-Sep-94	0.21	0.85	0.00	77.78	131.64	53.86	1289.32	19602.46	-25.79	19.18			9.50	18.10	9.89	22.86	17.01	2.45E-04
02-Sep-94	0.18	0.85	0.00	77.77	131.63	53.86	1289.01	19589.57	-12.89	16.43			9.51	17.83	9.86	22.27	8.34	1.20E-04
03-Sep-94	0.17	0.85	0.00	77.76	131.61	53.85	1288.38	19563.79	-25.77	15.51			9.50	17.56	9.84	21.11	24.27	3.50E-04
04-Sep-94	0.23	0.85	0.00	77.75	131.60	53.85	1288.07	19550.91	-12.88	20.98			9.49	17.28	9.81	20.54	13.15	1.90E-04
05-Sep-94	0.13	0.85	0.00	77.74	131.56	53.82	1286.82	19499.41	-51.50	11.85			9.48	17.01	9.79	18.32	46.56	6.72E-04
06-Sep-94	0.19	0.85	0.00	77.73	131.54	53.81	1286.20	19473.68	-25.73	17.31			9.47	16.74	9.76	17.25	31.84	4.60E-04
07-Sep-94	0.21	0.85	0.00	77.72	131.52	53.80	1285.57	19447.96	-25.72	19.12			9.46	16.47	9.73	16.20	27.13	3.92E-04
08-Sep-94	0.20	0.85	0.01	77.71	131.51	53.80	1285.26	19435.11	-12.85	18.21	1.07	0.05	9.45	16.19	9.71	15.69	13.19	1.91E-04
09-Sep-94	0.05	0.85	0.12	77.70	131.49	53.79	1284.63	19409.41	-25.70	4.55	12.85	0.56	9.43	15.92	9.68	14.69	28.27	4.09E-04
10-Sep-94	0.18	0.85	0.01	77.69	131.49	53.80	1284.63	19409.41	0.00	16.38	1.07	0.05	9.42	15.65	9.66	14.69	29.20	4.23E-04
11-Sep-94	0.12	0.85	0.06	77.68	131.47	53.79	1284.01	19383.72	-25.69	10.91	6.42	0.28	9.41	15.38	9.63	13.71	30.46	4.41E-04
12-Sep-94	0.18	0.85	0.03	77.67	131.47	53.80	1284.01	19383.72	0.00	16.37	3.21	0.14	9.40	15.10	9.60	13.71	16.49	2.39E-04
13-Sep-94	0.18	0.85	0.00	77.66	131.45	53.79	1283.38	19358.05	-25.67	16.36			9.39	14.83	9.58	12.77	33.05	4.79E-04
14-Sep-94	0.23	0.85	0.00	77.70	131.43	53.73	1282.76	19332.39	-25.66	20.90			9.38	14.56	9.55	11.85	30.33	4.40E-04
15-Sep-94	0.12	0.85	0.01	77.73	131.42	53.69	1282.45	19319.56	-12.83	10.90	1.07	0.05	9.37	14.29	9.53	11.41	13.57	1.97E-04
16-Sep-94	0.20	0.85	0.39	77.77	131.41	53.64	1282.13	19306.74	-12.82	18.16	41.67	1.81	9.36	14.01	9.50	10.97	24.81	3.61E-04
17-Sep-94	0.17	0.85	0.05	77.81	131.43	53.62	1282.76	19332.39	25.65	15.45	5.34	0.23	9.35	13.74	9.48	11.85	21.57	3.14E-04
18-Sep-94	0.14	0.85	0.17	77.84	131.43	53.59	1282.76	19332.39	0.00	12.72	18.17	0.79	9.33	13.47	9.45	11.85	10.84	1.58E-04
19-Sep-94	0.17	0.85	0.00	77.88	131.43	53.55	1282.76	19332.39	0.00	15.45			9.32	13.20	9.42	11.85	26.64	3.88E-04
20-Sep-94	0.15	0.85	0.15	77.92	131.43	53.52	1282.76	19332.39	0.00	13.63	16.03	0.69	9.31	12.92	9.40	11.85	4.64	6.76E-05
21-Sep-94	0.07	0.85	0.01	77.95	131.42	53.47	1282.45	19319.56	-12.83	6.36	1.07	0.05	9.30	12.65	9.37	11.41	35.71	5.21E-04
22-Sep-94	0.19	0.85	0.00	77.99	131.40	53.41	1281.82	19293.92	-25.64	17.25			9.29	12.38	9.35	10.53	40.32	5.89E-04
23-Sep-94	0.19	0.85	0.37	78.02	131.39	53.37	1281.51	19281.10	-12.82	17.25	39.51	1.71	9.28	12.11	9.32	10.11	16.05	2.35E-04
24-Sep-94	0.13	0.85	0.04	78.06	131.40	53.34	1281.82	19293.92	12.82	11.80	4.27	0.19	9.27	11.83	9.29	10.53	31.76	4.64E-04
25-Sep-94	0.04	0.85	0.02	78.10	131.39	53.29	1281.51	19281.10	-12.82	3.63	2.14	0.09	9.26	11.56	9.27	10.11	25.33	3.71E-04
26-Sep-94	0.02	0.85	0.00	78.13	131.39	53.26	1281.51	19281.10	0.00	1.82			9.24	11.29	9.24	10.11	18.57	2.72E-04
27-Sep-94	0.15	0.85	0.00	78.17	131.38	53.21	1281.19	19268.29	-12.81	13.61			9.23	11.02	9.22	9.69	30.67	4.50E-04
28-Sep-94	0.16	0.85	0.00	78.17	131.38	53.21	1281.19	19268.29	0.00	14.52			9.22	10.75	9.19	9.69	6.16	9.04E-05
29-Sep-94	0.14	0.85	0.00	78.16	131.36	53.20	1280.57	19242.67	-25.62	12.70			9.21	10.47	9.17	8.88	30.56	4.49E-04
30-Sep-94	0.17	0.85	0.00	78.16	131.36	53.20	1280.57	19242.67	0.00	15.42			9.20	10.59	9.14	8.88	7.27	1.07E-04

LOWRY LAKE DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 5555

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0439 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Natural Springs Inflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Oct-94	0.20	0.76	0.25	78.15	131.35	53.20	1280.26	19229.87	-12.80	16.22	26.67	1.16	9.19	10.71	9.11	8.49	17.43	2.56E-04
02-Oct-94	0.08	0.76	0.65	78.27	131.38	53.11	1281.19	19268.29	38.42	6.49	69.40	3.01	9.18	10.83	9.09	9.69	-6.29	-9.24E-05
03-Oct-94	0.08	0.76	0.29	78.36	131.41	53.05	1282.13	19306.74	38.45	6.50	30.98	1.34	9.17	10.94	9.06	10.97	46.86	6.89E-04
04-Oct-94	0.17	0.76	0.10	78.24	131.41	53.17	1282.13	19306.74	0.00	13.80	10.68	0.46	9.16	11.06	9.04	10.97	44.04	6.46E-04
05-Oct-94	0.07	0.76	0.00	78.23	131.40	53.17	1281.82	19293.92	-12.82	5.68			9.15	11.18	9.01	10.53	28.45	4.17E-04
06-Oct-94	0.17	0.76	0.00	78.23	131.38	53.15	1281.19	19268.29	-25.63	13.79			9.13	11.30	8.98	9.69	38.75	5.69E-04
07-Oct-94	0.16	0.76	0.00	78.19	131.37	53.18	1280.88	19255.48	-12.81	12.98			9.12	11.41	8.96	9.28	18.74	2.75E-04
08-Oct-94	0.16	0.76	0.30	78.22	131.38	53.16	1281.19	19268.29	12.81	12.98	32.03	1.39	9.11	11.53	8.93	9.69	-5.58	-8.19E-05
09-Oct-94	0.15	0.76	0.01	78.30	131.39	53.09	1281.51	19281.10	12.81	12.17	1.07	0.05	9.10	11.65	8.91	10.11	27.51	4.04E-04
10-Oct-94	0.11	0.76	0.09	78.33	131.39	53.06	1281.51	19281.10	0.00	8.93	9.61	0.42	9.09	11.77	8.88	10.11	8.49	1.25E-04
11-Oct-94	0.04	0.76	2.91	78.38	131.56	53.18	1286.82	19499.41	218.31	3.26	312.05	13.47	9.08	11.88	8.86	18.32	-197.58	-2.89E-03
12-Oct-94	0.02	0.76	0.01	78.50	131.67	53.17	1290.26	19641.15	141.74	1.63	1.08	0.05	9.07	12.00	8.83	24.67	192.03	2.80E-03
13-Oct-94	0.02	0.76	0.00	78.58	131.67	53.09	1290.26	19641.15	0.00	1.63			9.06	12.12	8.80	24.67	4.72	6.89E-05
14-Oct-94	0.09	0.76	0.49	78.66	131.66	53.00	1289.95	19628.25	-12.90	7.35	52.67	2.27	9.05	12.24	8.78	24.06	16.58	2.43E-04
15-Oct-94	0.14	0.76	0.01	78.69	131.67	52.98	1290.26	19641.15	12.90	11.44	1.08	0.05	9.04	12.35	8.75	24.67	40.69	5.95E-04
16-Oct-94	0.09	0.76	0.00	78.67	131.64	52.97	1289.32	19602.46	-38.69	7.35			9.03	12.47	8.73	22.86	33.85	4.96E-04
17-Oct-94	0.12	0.76	0.00	78.70	131.62	52.92	1288.70	19576.68	-25.78	9.79			9.02	12.59	8.70	21.69	25.80	3.78E-04
18-Oct-94	0.17	0.76	0.00	78.76	131.61	52.85	1288.38	19563.79	-12.89	13.87			9.01	12.71	8.67	21.11	11.71	1.72E-04
19-Oct-94	0.11	0.76	0.00	78.81	131.60	52.79	1288.07	19550.91	-12.88	8.97			9.00	12.82	8.65	20.54	8.29	1.22E-04
20-Oct-94	0.15	0.76	0.00	78.85	131.59	52.74	1287.76	19538.03	-12.88	12.23			8.99	12.94	8.62	19.97	13.84	2.04E-04
21-Oct-94	0.14	0.76	0.00	78.93	131.57	52.64	1287.13	19512.28	-25.75	11.41			8.98	13.06	8.60	18.86	24.10	3.56E-04
22-Oct-94	0.13	0.76	0.00	78.97	131.56	52.59	1286.82	19499.41	-12.87	10.59			8.97	13.18	8.57	18.32	13.23	1.95E-04
23-Oct-94	0.12	0.76	0.00	78.97	131.54	52.57	1286.20	19473.68	-25.73	9.78			8.96	13.29	8.55	17.25	27.53	4.07E-04
24-Oct-94	0.16	0.76	0.00	78.95	131.53	52.58	1285.88	19460.82	-12.86	13.03			8.95	13.41	8.52	16.72	16.64	2.46E-04
25-Oct-94	0.14	0.76	0.00	78.98	131.52	52.54	1285.57	19447.96	-12.86	11.40			8.93	13.53	8.49	16.20	13.98	2.07E-04
26-Oct-94	0.14	0.76	0.04	79.00	131.51	52.51	1285.26	19435.11	-12.85	11.40	4.28	0.19	8.92	13.65	8.47	15.69	16.21	2.40E-04
27-Oct-94	0.03	0.76	0.00	78.99	131.50	52.52	1284.95	19422.26	-12.85	2.44			8.91	13.63	8.44	15.19	21.27	3.15E-04
28-Oct-94	0.16	0.76	0.27	78.95	131.47	52.52	1284.01	19383.72	-38.53	13.01	28.89	1.25	8.90	13.62	8.42	13.71	51.90	7.70E-04
29-Oct-94	0.05	0.76	0.09	78.97	131.48	52.51	1284.32	19396.57	12.84	4.07	9.63	0.42	8.89	13.60	8.39	14.20	21.51	3.19E-04
30-Oct-94	0.04	0.76	0.30	79.02	131.49	52.47	1284.63	19409.41	12.84	3.25	32.12	1.39	8.88	13.59	8.37	14.69	9.82	1.46E-04
31-Oct-94	0.06	0.76	0.01	79.12	131.50	52.38	1284.95	19422.26	12.85	4.88	1.07	0.05	8.87	13.57	8.34	15.19	33.55	4.98E-04
01-Nov-94	0.09	0.71	0.00	79.18	131.50	52.32	1284.95	19422.26	0.00	6.84			8.86	13.56	8.31	15.19	11.83	1.76E-04
02-Nov-94	0.14	0.71	0.00	79.05	131.48	52.43	1284.32	19396.57	-25.69	10.64			8.85	13.54	8.29	14.20	34.40	5.11E-04
03-Nov-94	0.14	0.71	0.00	79.01	131.46	52.45	1283.70	19370.89	-25.68	10.63			8.86	13.53	8.26	13.24	31.53	4.68E-04
04-Nov-94	0.11	0.71	0.00	79.04	131.45	52.41	1283.38	19358.05	-12.84	8.35			8.88	13.51	8.24	12.77	19.62	2.92E-04
05-Nov-94	0.14	0.71	0.00	79.11	131.43	52.32	1282.76	19332.39	-25.66	10.63			8.89	13.50	8.21	11.85	35.17	5.24E-04
06-Nov-94	0.16	0.71	0.00	79.15	131.42	52.27	1282.45	19319.56	-12.83	12.14			8.90	13.49	8.18	11.41	20.95	3.12E-04
07-Nov-94	0.09	0.71	0.00	79.13	131.42	52.29	1282.45	19319.56	0.00	6.83			8.91	13.47	8.16	11.41	7.02	1.05E-04
08-Nov-94	0.13	0.71	0.00	79.08	131.42	52.34	1282.45	19319.56	0.00	9.86			8.93	13.46	8.13	11.41	12.31	1.83E-04
09-Nov-94	0.10	0.71	0.00	79.12	131.41	52.29	1282.13	19306.74	-12.82	7.59			8.94	13.44	8.11	10.97	22.07	3.29E-04
10-Nov-94	0.11	0.71	0.11	79.17	131.41	52.24	1282.13	19306.74	0.00	8.34	11.75	0.51	8.95	13.43	8.08	10.97	11.93	1.78E-04
11-Nov-94	0.08	0.71	0.08	79.13	131.41	52.28	1282.13	19306.74	0.00	6.07	8.55	0.37	8.96	13.41	8.06	10.97	23.41	3.49E-04
12-Nov-94	0.07	0.71	0.41	79.11	131.41	52.30	1282.13	19306.74	0.00	5.31	43.81	1.90	8.97	13.40	8.03	10.97	22.31	3.33E-04
13-Nov-94	0.02	0.71	0.00	79.13	131.43	52.30	1282.76	19332.39	25.65	1.52			8.99	13.38	8.00	11.85	34.18	5.09E-04
14-Nov-94	0.12	0.71	0.00	79.20	131.42	52.22	1282.45	19319.56	-12.83	9.11			9.00	13.37	7.98	11.41	29.83	4.45E-04
15-Nov-94	0.15	0.71	1.43	79.28	131.45	52.17	1283.38	19358.05	38.49	11.39	152.94	6.62	9.01	13.35	7.95	12.77	-28.65	-4.28E-04
16-Nov-94	0.00	0.71	0.14	79.45	131.55	52.10	1286.51	19486.55	128.50	0.00	15.01	0.65	9.02	13.34	7.93	17.78	37.22	5.55E-04
17-Nov-94	0.05	0.71	0.04	79.44	131.55	52.11	1286.51	19486.55	0.00	3.81	4.29	0.19	9.04	13.32	7.90	17.78	28.17	4.20E-04
18-Nov-94	0.07	0.71	0.00	79.36	131.54	52.18	1286.20	19473.68	-12.86	5.33			9.05	13.31	7.87	17.25	26.02	3.88E-04
19-Nov-94	0.07	0.71	0.00	79.32	131.53	52.21	1285.88	19460.82	-12.86	5.33			9.06	13.14	7.87	16.72	20.52	3.06E-04
20-Nov-94	0.14	0.71	0.02	79.34	131.52	52.18	1285.57	19447.96	-12.86	10.65	2.14	0.09	9.07	12.98	7.87	16.20	20.89	3.11E-04
21-Nov-94	0.09	0.71	0.04	79.39	131.52	52.13	1285.57	19447.96	0.00	6.85	4.29	0.19	9.09	12.81	7.86	16.20	5.30	7.91E-05
22-Nov-94	0.09	0.71	0.01	79.29	131.52	52.23	1285.57	19447.96	0.00	6.85	1.07	0.05	9.10	12.64	7.86	16.20	11.18	1.67E-04
23-Nov-94	0.10	0.71	0.01	79.24	131.51	52.27	1285.26	19435.11	-12.85	7.60	1.07	0.05	9.11	12.47	7.86	15.69	20.52	3.06E-04
24-Nov-94	0.15	0.71	0.00	79.19	131.49	52.30	1284.63	19409.41	-25.70	11.40			9.12	12.31	7.85	14.69	32.96	4.91E-04
25-Nov-94	0.07	0.71	0.00	79.24	131.46	52.22	1283.70	19370.89	-38.53	5.32			9.14	12.14	7.85	13.24	41.72	6.22E-04
26-Nov-94	0.08	0.71	0.00	79.31	131.46	52.15	1283.70	19370.89	0.00	6.08			9.15	11.97	7.85	13.24	10.57	1.58E-04
27-Nov-94	0.06	0.71	0.00	79.36	131.46	52.10	1283.70	19370.89	0.00	4.56			9.16	11.81	7.84	13.24	9.65	1.44E-04
28-Nov-94	0.10	0.71	0.00	79.40	131.45	52.05	1283.38	19358.05	-12.84	7.59			9.17	11.64	7.84	12.77	23.85	3.57E-04
29-Nov-94	0.08	0.71	0.03	79.34	131.45	52.11	1283.38	19358.05	0.00	6.07	3.21	0.14	9.16	11.47	7.84	12.77	8.29	1.24E-04
30-Nov-94	0.10	0.71	0.01	79.26	131.47	52.21	1284.01	19383.72	25.67	7.60	1.07	0.05	9.14	11.30	7.83	13.71	-12.71	-1.90E-04

LOWRY LAKE DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

										Runoff Coeff. =		0.01						
										Drain. Area (ac) =		5555						
Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0439 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Natural Springs Inflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Dec-94	0.05	0.83	0.00	79.18	131.46	52.28	1283.70	19370.89	-12.84	4.44			9.12	11.14	7.83	13.24	20.92	3.12E-04
02-Dec-94	0.11	0.83	0.00	79.21	131.44	52.23	1283.07	19345.22	-25.67	9.76			9.10	10.97	7.82	12.31	36.07	5.38E-04
03-Dec-94	0.05	0.83	0.00	79.25	131.43	52.18	1282.76	19332.39	-12.83	4.44			9.08	10.80	7.82	11.85	18.65	2.79E-04
04-Dec-94	0.04	0.83	0.00	79.30	131.42	52.12	1282.45	19319.56	-12.83	3.55			9.06	10.64	7.82	11.41	24.24	3.63E-04
05-Dec-94	0.09	0.83	0.31	79.32	131.46	52.14	1283.70	19370.89	51.32	7.99	33.16	1.44	9.04	10.47	7.81	13.24	-38.76	-5.79E-04
06-Dec-94	0.11	0.83	0.00	79.27	131.46	52.19	1283.70	19370.89	0.00	9.77			9.02	10.30	7.81	13.24	40.69	6.07E-04
07-Dec-94	0.10	0.83	0.01	79.26	131.45	52.19	1283.38	19358.05	-12.84	8.88	1.07	0.05	9.00	10.13	7.81	12.77	16.96	2.53E-04
08-Dec-94	0.06	0.83	0.00	79.25	131.43	52.18	1282.76	19332.39	-25.66	5.32			8.99	9.97	7.80	11.85	32.08	4.79E-04
09-Dec-94	0.07	0.83	0.01	79.25	131.42	52.17	1282.45	19319.56	-12.83	6.21	1.07	0.05	8.97	9.80	7.80	11.41	22.40	3.35E-04
10-Dec-94	0.05	0.83	0.00	79.32	131.42	52.10	1282.45	19319.56	0.00	4.44			8.95	9.63	7.80	11.41	10.07	1.51E-04
11-Dec-94	0.11	0.83	0.16	79.40	131.42	52.02	1282.45	19319.56	0.00	9.76	17.10	0.74	8.93	9.47	7.79	11.41	10.54	1.58E-04
12-Dec-94	0.09	0.83	0.00	79.28	131.39	52.11	1281.51	19281.10	-38.46	7.98			8.91	9.30	7.79	10.11	61.32	9.18E-04
13-Dec-94	0.09	0.83	0.00	79.28	131.38	52.10	1281.19	19268.29	-12.81	7.98			8.89	9.13	7.79	9.69	20.72	3.10E-04
14-Dec-94	0.05	0.83	0.00	79.28	131.37	52.09	1280.88	19255.48	-12.81	4.43			8.87	8.96	7.78	9.28	20.95	3.14E-04
15-Dec-94	0.06	0.83	0.01	79.21	131.35	52.14	1280.26	19229.87	-25.61	5.31	1.07	0.05	8.85	8.80	7.78	8.49	37.52	5.62E-04
16-Dec-94	0.04	0.83	0.00	79.21	131.35	52.14	1280.26	19229.87	0.00	3.54			8.83	8.63	7.77	8.49	12.74	1.91E-04
17-Dec-94	0.02	0.83	0.00	79.27	131.34	52.07	1279.94	19217.07	-12.80	1.77			8.81	8.46	7.77	8.10	26.01	3.90E-04
18-Dec-94	0.04	0.83	0.00	79.33	131.33	52.00	1279.63	19204.27	-12.80	3.54			8.80	8.30	7.77	7.72	27.98	4.20E-04
19-Dec-94	0.08	0.83	0.00	79.29	131.32	52.04	1279.32	19191.47	-12.79	7.08			8.78	8.13	7.76	7.35	26.39	3.96E-04
20-Dec-94	0.11	0.83	0.00	79.27	131.31	52.04	1279.01	19178.68	-12.79	9.73			8.76	7.96	7.76	6.99	23.03	3.46E-04
21-Dec-94	0.02	0.83	0.38	79.35	131.32	51.98	1279.32	19191.47	12.79	1.77	40.51	1.76	8.74	7.79	7.76	7.35	-5.03	-7.57E-05
22-Dec-94	0.02	0.83	0.35	79.46	131.35	51.89	1280.26	19229.87	38.39	1.77	37.34	1.62	8.72	7.63	7.75	8.49	19.05	2.87E-04
23-Dec-94	0.00	0.83	0.15	79.60	131.37	51.77	1280.88	19255.48	25.61	0.00	16.01	0.69	8.70	7.46	7.75	9.28	27.19	4.10E-04
24-Dec-94	0.06	0.83	0.00	79.55	131.37	51.82	1280.88	19255.48	0.00	5.32			8.68	7.29	7.75	9.28	31.33	4.72E-04
25-Dec-94	0.08	0.83	0.00	79.46	131.36	51.90	1280.57	19242.67	-12.81	7.09			8.66	7.13	7.74	8.88	21.93	3.30E-04
26-Dec-94	0.07	0.83	0.01	79.39	131.35	51.96	1280.26	19229.87	-12.80	6.20	1.07	0.05	8.64	6.96	7.74	8.49	20.37	3.06E-04
27-Dec-94	0.08	0.83	0.00	79.33	131.34	52.01	1279.94	19217.07	-12.80	7.08			8.63	6.79	7.74	8.10	22.57	3.39E-04
28-Dec-94	0.09	0.83	0.00	79.33	131.33	52.00	1279.63	19204.27	-12.80	7.97			8.61	6.62	7.73	7.72	20.77	3.12E-04
29-Dec-94	0.08	0.83	0.28	79.36	131.33	51.97	1279.63	19204.27	0.00	7.08	29.86	1.30	8.59	6.61	7.73	7.72	7.28	1.09E-04
30-Dec-94	0.05	0.83	0.13	79.35	131.37	52.02	1280.88	19255.48	51.21	4.43	13.88	0.60	8.59	6.60	7.73	9.28	-11.93	-1.79E-04
31-Dec-94	0.04	0.83	0.00	79.30	131.37	52.07	1280.88	19255.48	0.00	3.54			8.59	6.59	7.72	9.28	23.68	3.55E-04
01-Jan-95	0.05	0.77	0.00	79.32	131.36	52.04	1280.57	19242.67	-12.81	4.11			8.59	6.58	7.72	8.88	22.88	3.43E-04
02-Jan-95	0.03	0.77	0.00	79.32	131.35	52.03	1280.26	19229.87	-12.80	2.46			8.59	6.57	7.71	8.49	22.70	3.41E-04
03-Jan-95	0.13	0.77	0.00	79.27	131.34	52.07	1279.94	19217.07	-12.80	10.68			8.59	6.56	7.71	8.10	24.72	3.71E-04
04-Jan-95	0.05	0.77	0.00	79.27	131.32	52.05	1279.32	19191.47	-25.59	4.10			8.59	6.55	7.71	7.35	29.68	4.46E-04
05-Jan-95	0.06	0.77	0.00	79.21	131.30	52.09	1278.69	19165.89	-25.58	4.92			8.59	6.54	7.70	6.64	36.97	5.55E-04
06-Jan-95	0.08	0.77	0.00	79.30	131.30	52.00	1278.69	19165.89	0.00	6.56			8.59	6.53	7.70	6.64	11.27	1.70E-04
07-Jan-95	0.11	0.77	1.28	79.46	131.38	51.92	1281.19	19268.29	102.40	9.04	136.66	5.93	8.59	6.52	7.70	9.69	-92.78	-1.39E-03
08-Jan-95	0.14	0.77	0.00	79.32	131.40	52.08	1281.82	19293.92	25.63	11.52			8.59	6.51	7.69	10.53	121.02	1.81E-03
09-Jan-95	0.17	0.77	0.00	79.28	131.39	52.11	1281.51	19281.10	-12.82	13.98			8.59	6.50	7.69	10.11	13.56	2.03E-04
10-Jan-95	0.09	0.77	0.00	79.27	131.39	52.12	1281.51	19281.10	0.00	7.40			8.59	6.49	7.69	10.11	-1.31	-1.97E-05
11-Jan-95	0.05	0.77	0.00	79.26	131.38	52.12	1281.19	19268.29	-12.81	4.11			8.59	6.48	7.68	9.69	18.06	2.71E-04
12-Jan-95	0.08	0.77	0.00	79.29	131.37	52.08	1280.88	19255.48	-12.81	6.58			8.59	6.47	7.68	9.28	21.75	3.26E-04
13-Jan-95	0.09	0.77	0.00	79.37	131.37	52.00	1280.88	19255.48	0.00	7.40			8.59	6.46	7.68	9.28	6.87	1.03E-04
14-Jan-95	0.05	0.77	1.04	79.51	131.41	51.90	1282.13	19306.74	51.26	4.11	111.12	4.81	8.59	6.45	7.67	10.97	-45.22	-6.80E-04
15-Jan-95	0.02	0.77	0.46	79.57	131.49	51.92	1284.63	19409.41	102.67	1.65	49.24	2.13	8.59	6.44	7.67	14.69	20.89	3.13E-04
16-Jan-95	0.06	0.77	0.01	79.48	131.48	52.00	1284.32	19396.57	-12.84	4.94	1.07	0.05	8.59	6.43	7.66	14.20	70.57	1.06E-03
17-Jan-95	0.04	0.77	0.00	79.37	131.48	52.11	1284.32	19396.57	0.00	3.30			8.59	6.41	7.66	14.20	4.65	6.95E-05
18-Jan-95	0.06	0.77	0.00	79.36	131.47	52.11	1284.01	19383.72	-12.84	4.94			8.59	6.40	7.66	13.71	18.01	2.69E-04
19-Jan-95	0.06	0.77	0.02	79.43	131.46	52.03	1283.70	19370.89	-12.84	4.94	2.14	0.09	8.59	6.39	7.65	13.24	16.83	2.52E-04
20-Jan-95	0.04	0.77	0.01	79.46	131.44	51.98	1283.07	19345.22	-25.67	3.29	1.07	0.05	8.59	6.38	7.65	12.31	32.35	4.85E-04
21-Jan-95	0.09	0.77	0.00	79.41	131.43	52.02	1282.76	19332.39	-12.83	7.41			8.59	6.37	7.65	11.85	20.96	3.14E-04
22-Jan-95	0.08	0.77	0.00	79.35	131.41	52.06	1282.13	19306.74	-25.65	6.58			8.59	6.36	7.64	10.97	28.99	4.34E-04
23-Jan-95	0.10	0.77	0.00	79.44	131.40	51.96	1281.82	19293.92	-12.82	8.23			8.59	6.35	7.64	10.53	17.86	2.68E-04
24-Jan-95	0.10	0.77	0.00	79.30	131.39	52.09	1281.51	19281.10	-12.82	8.22			8.59	6.34	7.64	10.11	16.64	2.49E-04
25-Jan-95	0.08	0.77	0.00	79.20	131.37	52.17	1280.88	19255.48	-25.62	6.58			8.59	6.33	7.63	9.28	29.86	4.47E-04
26-Jan-95	0.09	0.77	0.00	79.24	131.37	52.13	1280.88	19255.48	0.00	7.40			8.59	6.32	7.63	9.28	6.69	1.00E-04
27-Jan-95	0.10	0.77	0.00	79.24	131.37	52.13	1280.88	19255.48	0.00	8.22			8.59	6.31	7.63	9.28	5.86	8.77E-05
28-Jan-95	0.08	0.77	0.06	79.23	131.37	52.14	1280.88	19255.48	0.00	6.58	6.40	0.28	8.59	6.30	7.62	9.28	5.02	7.52E-05
29-Jan-95	0.05	0.77	0.00	79.23	131.37	52.14	1280.88	19255.48	0.00	4.11			8.59	6.29	7.62	9.28	13.33	2.00E-04
30-Jan-95	0.06	0.77	0.00	79.22	131.35	52.13	1280.26	19229.87	-25.61	4.93			8.59	6.28	7.61	8.49	34.71	5.20E-04
31-Jan-95	0.08	0.77	0.01	79.22	131.33	52.11	1279.63	19204.27	-25.60	6.57	1.07	0.05	8.58	6.27	7.61	7.72	34.66	5.20E-04

LOWRY LAKE DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 5555

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0439 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Natural Springs Inflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Feb-95	0.10	0.69	0.02	79.22	131.30	52.08	1278.69	19165.89	-38.38	7.35	2.13	0.09	8.57	6.22	7.61	6.64	47.65	7.16E-04
02-Feb-95	0.14	0.69	0.00	79.21	131.30	52.09	1278.69	19165.89	0.00	10.29			8.56	6.17	7.60	6.64	10.63	1.60E-04
03-Feb-95	0.11	0.69	0.00	79.21	131.30	52.09	1278.69	19165.89	0.00	8.09			8.55	6.12	7.60	6.64	5.40	8.11E-05
04-Feb-95	0.19	0.69	0.52	79.20	131.33	52.13	1279.63	19204.27	38.38	13.98	55.45	2.41	8.54	6.07	7.60	7.72	-30.83	-4.62E-04
05-Feb-95	0.13	0.69	0.00	79.20	131.30	52.10	1278.69	19165.89	-38.38	9.56			8.53	6.02	7.59	6.64	96.74	1.45E-03
06-Feb-95	0.15	0.69	0.00	79.20	131.29	52.09	1278.38	19153.11	-12.79	11.03			8.52	5.97	7.59	6.29	18.73	2.81E-04
07-Feb-95	0.12	0.69	0.00	79.19	131.29	52.10	1278.38	19153.11	0.00	8.82			8.51	5.92	7.59	6.29	4.77	7.15E-05
08-Feb-95	0.15	0.69	0.00	79.19	131.25	52.06	1277.13	19102.00	-51.11	11.02			8.50	5.87	7.58	4.99	58.02	8.73E-04
09-Feb-95	0.12	0.69	0.00	79.18	131.25	52.07	1277.13	19102.00	0.00	8.81			8.50	5.82	7.58	4.99	5.95	8.95E-05
10-Feb-95	0.11	0.69	0.00	79.18	131.25	52.07	1277.13	19102.00	0.00	8.08			8.49	5.77	7.58	4.99	8.10	1.22E-04
11-Feb-95	0.11	0.69	0.00	79.18	131.25	52.07	1277.13	19102.00	0.00	8.08			8.48	5.72	7.57	4.99	8.77	1.32E-04
12-Feb-95	0.07	0.69	0.85	79.17	131.29	52.12	1278.38	19153.11	51.11	5.15	90.55	3.93	8.47	5.67	7.57	6.29	-42.41	-6.36E-04
13-Feb-95	0.07	0.69	0.07	79.17	131.29	52.12	1278.38	19153.11	0.00	5.15	7.46	0.32	8.46	5.62	7.57	6.29	104.76	1.57E-03
14-Feb-95	0.05	0.69	0.01	79.16	131.29	52.13	1278.38	19153.11	0.00	3.68	1.07	0.05	8.45	5.57	7.56	6.29	17.99	2.70E-04
15-Feb-95	0.10	0.69	0.00	79.16	131.29	52.13	1278.38	19153.11	0.00	7.35			8.44	5.52	7.56	6.29	12.73	1.91E-04
16-Feb-95	0.05	0.69	0.00	79.15	131.29	52.14	1278.38	19153.11	0.00	3.68			8.43	5.47	7.55	6.29	7.88	1.18E-04
17-Feb-95	0.10	0.69	0.00	79.15	131.29	52.14	1278.38	19153.11	0.00	7.35			8.42	5.42	7.55	6.29	11.49	1.72E-04
18-Feb-95	0.08	0.69	0.00	79.15	131.29	52.14	1278.38	19153.11	0.00	5.88			8.41	5.37	7.55	6.29	7.75	1.16E-04
19-Feb-95	0.12	0.69	0.00	79.14	131.29	52.15	1278.38	19153.11	0.00	8.82			8.40	5.32	7.54	6.29	9.16	1.37E-04
20-Feb-95	0.04	0.69	0.17	79.14	131.29	52.15	1278.38	19153.11	0.00	2.94	18.11	0.79	8.40	5.27	7.54	6.29	6.16	9.24E-05
21-Feb-95	0.05	0.69	0.00	79.13	131.29	52.16	1278.38	19153.11	0.00	3.68			8.39	5.22	7.54	6.29	30.87	4.63E-04
22-Feb-95	0.16	0.69	0.00	79.13	131.27	52.14	1277.76	19127.55	-25.56	11.76			8.38	5.17	7.53	5.62	36.74	5.51E-04
23-Feb-95	0.12	0.69	0.00	79.10	131.25	52.15	1277.13	19102.00	-25.55	8.81			8.37	5.12	7.53	4.99	29.25	4.39E-04
24-Feb-95	0.10	0.69	0.00	79.08	131.25	52.17	1277.13	19102.00	0.00	7.34			8.36	5.07	7.53	4.99	7.22	1.08E-04
25-Feb-95	0.11	0.69	0.00	79.07	131.25	52.18	1277.13	19102.00	0.00	8.08			8.35	5.02	7.52	4.99	8.63	1.29E-04
26-Feb-95	0.19	0.69	0.00	79.05	131.25	52.20	1277.13	19102.00	0.00	13.95			8.34	4.97	7.52	4.99	7.83	1.17E-04
27-Feb-95	0.15	0.69	0.00	79.04	131.23	52.19	1276.51	19076.46	-25.54	11.01			8.33	4.92	7.52	4.38	27.43	4.12E-04
28-Feb-95	0.17	0.69	0.05	79.02	131.23	52.21	1276.51	19076.46	0.00	12.48	5.32	0.23	8.32	4.89	7.51	4.38	5.37	8.06E-05
01-Mar-95	0.04	0.73	0.04	79.01	131.23	52.22	1276.51	19076.46	0.00	3.11	4.26	0.19	8.31	4.87	7.51	4.38	9.41	1.41E-04
02-Mar-95	0.08	0.73	0.03	78.99	131.21	52.22	1275.88	19050.94	-25.52	6.21	3.19	0.14	8.30	4.84	7.50	3.82	43.16	6.48E-04
03-Mar-95	0.05	0.73	0.00	78.98	131.21	52.23	1275.88	19050.94	0.00	3.88			8.29	4.81	7.50	3.82	13.95	2.09E-04
04-Mar-95	0.11	0.73	0.00	78.96	131.21	52.25	1275.88	19050.94	0.00	8.54			8.28	4.79	7.50	3.82	12.91	1.94E-04
05-Mar-95	0.17	0.73	0.00	78.95	131.21	52.26	1275.88	19050.94	0.00	13.19			8.27	4.76	7.49	3.82	8.21	1.23E-04
06-Mar-95	0.12	0.73	0.03	78.93	131.21	52.28	1275.88	19050.94	0.00	9.31	3.19	0.14	8.25	4.74	7.49	3.82	3.51	5.26E-05
07-Mar-95	0.13	0.73	0.00	78.92	131.21	52.29	1275.88	19050.94	0.00	10.09			8.24	4.71	7.49	3.82	10.68	1.60E-04
08-Mar-95	0.25	0.73	0.79	78.90	131.29	52.39	1278.38	19153.11	102.17	19.44	84.16	3.66	8.23	4.68	7.48	6.29	-95.64	-1.43E-03
09-Mar-95	0.12	0.73	0.00	78.89	131.25	52.36	1277.13	19102.00	-51.11	9.32			8.22	4.66	7.48	4.99	133.60	2.00E-03
10-Mar-95	0.19	0.73	0.00	78.87	131.25	52.38	1277.13	19102.00	0.00	14.76			8.21	4.63	7.48	4.99	6.05	9.04E-05
11-Mar-95	0.17	0.73	0.00	78.86	131.23	52.37	1276.51	19076.46	-25.54	13.20			8.20	4.60	7.47	4.38	26.11	3.91E-04
12-Mar-95	0.13	0.73	0.00	78.84	131.21	52.37	1275.88	19050.94	-25.52	10.09			8.19	4.58	7.47	3.82	28.22	4.22E-04
13-Mar-95	0.24	0.73	0.00	78.83	131.21	52.38	1275.88	19050.94	0.00	18.63			8.18	4.55	7.47	3.82	6.33	9.47E-05
14-Mar-95	0.28	0.73	0.02	78.81	131.21	52.40	1275.88	19050.94	0.00	21.73	2.13	0.09	8.17	4.53	7.46	3.82	-2.25	-3.36E-05
15-Mar-95	0.19	0.73	0.04	78.80	131.21	52.41	1275.88	19050.94	0.00	14.75	4.25	0.19	8.16	4.50	7.46	3.82	-3.17	-4.75E-05
16-Mar-95	0.13	0.73	0.00	78.78	131.19	52.41	1275.25	19025.42	-25.51	10.09			8.14	4.47	7.45	3.28	31.50	4.71E-04
17-Mar-95	0.07	0.73	1.35	78.77	131.29	52.52	1278.38	19153.11	127.68	5.44	143.82	6.25	8.13	4.45	7.45	6.29	-120.98	-1.80E-03
18-Mar-95	0.07	0.73	0.07	78.75	131.29	52.54	1278.38	19153.11	0.00	5.44	7.46	0.32	8.12	4.42	7.45	6.29	158.37	2.36E-03
19-Mar-95	0.15	0.73	0.02	78.74	131.29	52.55	1278.38	19153.11	0.00	11.67	2.13	0.09	8.11	4.39	7.44	6.29	16.04	2.39E-04
20-Mar-95	0.19	0.73	0.00	78.72	131.27	52.55	1277.76	19127.55	-25.56	14.77			8.10	4.37	7.44	5.62	29.78	4.44E-04
21-Mar-95	0.16	0.73	0.00	78.71	131.25	52.54	1277.13	19102.00	-25.55	12.43			8.09	4.34	7.44	4.99	25.07	3.74E-04
22-Mar-95	0.18	0.73	0.00	78.69	131.25	52.56	1277.13	19102.00	0.00	13.98			8.08	4.32	7.43	4.99	2.45	3.65E-05
23-Mar-95	0.22	0.73	0.00	78.68	131.25	52.57	1277.13	19102.00	0.00	17.09			8.07	4.29	7.43	4.99	0.86	1.28E-05
24-Mar-95	0.23	0.73	0.00	78.66	131.23	52.57	1276.51	19076.46	-25.54	17.86			8.06	4.26	7.43	4.38	23.25	3.46E-04
25-Mar-95	0.16	0.73	0.00	78.65	131.21	52.56	1275.88	19050.94	-25.52	12.42			8.05	4.24	7.42	3.82	23.03	3.43E-04
26-Mar-95	0.22	0.73	0.00	78.63	131.21	52.58	1275.88	19050.94	0.00	17.08			8.03	4.21	7.42	3.82	3.47	5.17E-05
27-Mar-95	0.20	0.73	0.00	78.62	131.19	52.57	1275.25	19025.42	-25.51	15.52			8.02	4.18	7.42	3.28	24.29	3.62E-04
28-Mar-95	0.15	0.73	0.00	78.60	131.16	52.56	1274.32	18987.18	-38.24	11.63			8.01	4.16	7.41	2.55	39.07	5.83E-04
29-Mar-95	0.19	0.73	0.02	78.59	131.16	52.57	1274.32	18987.18	0.00	14.73	2.12	0.09	8.00	4.13	7.41	2.55	5.41	8.07E-05
30-Mar-95	0.21	0.73	0.00	78.59	131.14	52.55	1273.69	18961.70	-25.48	16.27			7.99	4.11	7.41	2.10	29.96	4.48E-04
31-Mar-95	0.21	0.73	1.81	78.58	131.28	52.70	1278.07	19140.32	178.63	16.33	192.78	8.38	7.98	4.44	7.40	5.95	-177.49	-2.64E-03

LOWRY LAKE DAILY WATER BUDGET: 1994-1995

August 1, 1994 to July 31, 1995

											Runoff Coeff. =	0.01						
											Drain. Area (ac) =	5555						
Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0439 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Natural Springs Inflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Apr-95	0.00	0.84	0.16	78.58	131.28	52.70	1278.07	19140.32	0.00	0.00	17.04	0.74	8.00	4.76	7.40	5.95	198.69	2.95E-03
02-Apr-95	0.12	0.84	0.00	78.57	131.28	52.71	1278.07	19140.32	0.00	10.74			8.02	5.09	7.39	5.95	31.99	4.75E-04
03-Apr-95	0.21	0.84	0.00	78.57	131.26	52.69	1277.44	19114.77	-25.56	18.78			8.04	5.42	7.39	5.30	29.38	4.36E-04
04-Apr-95	0.19	0.84	0.00	78.56	131.24	52.68	1276.82	19089.23	-25.54	16.98			8.07	5.75	7.39	4.68	22.33	3.32E-04
05-Apr-95	0.12	0.84	0.48	78.56	131.28	52.72	1278.07	19140.32	51.10	10.74	51.12	2.22	8.09	6.08	7.38	5.95	-51.55	-7.65E-04
06-Apr-95	0.00	0.84	1.98	78.55	131.43	52.88	1282.76	19332.39	192.06	0.00	211.66	9.17	8.11	6.41	7.38	11.85	-133.85	-1.97E-03
07-Apr-95	0.09	0.84	0.00	78.55	131.41	52.86	1282.13	19306.74	-25.65	8.08			8.13	6.74	7.38	10.97	256.52	3.78E-03
08-Apr-95	0.14	0.84	0.09	78.54	131.41	52.87	1282.13	19306.74	0.00	12.56	9.62	0.42	8.15	7.07	7.37	10.97	3.21	4.73E-05
09-Apr-95	0.17	0.84	0.01	78.54	131.39	52.85	1281.51	19281.10	-25.64	15.25	1.07	0.05	8.18	7.40	7.37	10.11	34.74	5.13E-04
10-Apr-95	0.20	0.84	0.00	78.53	131.39	52.86	1281.51	19281.10	0.00	17.94			8.20	7.73	7.37	10.11	-1.30	-1.92E-05
11-Apr-95	0.23	0.84	0.48	78.53	131.43	52.90	1282.76	19332.39	51.29	20.65	51.31	2.22	8.22	8.06	7.36	11.85	-56.04	-8.26E-04
12-Apr-95	0.16	0.84	0.09	78.53	131.43	52.90	1282.76	19332.39	0.00	14.37	9.62	0.42	8.24	8.39	7.36	11.85	44.67	6.58E-04
13-Apr-95	0.05	0.84	0.00	78.52	131.41	52.89	1282.13	19306.74	-25.65	4.49			8.26	8.35	7.35	10.97	33.46	4.93E-04
14-Apr-95	0.21	0.84	0.00	78.52	131.39	52.87	1281.51	19281.10	-25.64	18.84			8.29	8.31	7.34	10.11	34.14	5.04E-04
15-Apr-95	0.21	0.84	0.00	78.51	131.39	52.88	1281.51	19281.10	0.00	18.84			8.31	8.27	7.33	10.11	-5.02	-7.40E-05
16-Apr-95	0.21	0.84	0.00	78.51	131.36	52.85	1280.57	19242.67	-38.43	18.82			8.33	8.22	7.32	8.88	33.39	4.93E-04
17-Apr-95	0.19	0.84	0.00	78.50	131.36	52.86	1280.57	19242.67	0.00	17.03			8.35	8.18	7.31	8.88	-3.83	-5.66E-05
18-Apr-95	0.24	0.84	0.02	78.50	131.36	52.86	1280.57	19242.67	0.00	21.51	2.13	0.09	8.38	8.14	7.30	8.88	-2.07	-3.06E-05
19-Apr-95	0.24	0.84	0.00	78.49	131.34	52.85	1279.94	19217.07	-25.61	21.50			8.40	8.10	7.29	8.10	21.25	3.14E-04
20-Apr-95	0.20	0.84	0.00	78.49	131.32	52.83	1279.32	19191.47	-25.59	17.91			8.42	8.06	7.27	7.35	19.77	2.93E-04
21-Apr-95	0.25	0.84	0.06	78.48	131.29	52.81	1278.38	19153.11	-38.37	22.37	6.39	0.28	8.44	8.02	7.26	6.29	36.86	5.46E-04
22-Apr-95	0.19	0.84	0.00	78.48	131.29	52.81	1278.38	19153.11	0.00	17.00			8.46	7.98	7.25	6.29	1.73	2.57E-05
23-Apr-95	0.21	0.84	0.00	78.47	131.28	52.81	1278.07	19140.32	-12.78	18.79			8.49	7.93	7.24	5.95	13.18	1.95E-04
24-Apr-95	0.26	0.84	0.99	78.47	131.36	52.89	1280.57	19242.67	102.35	23.31	105.65	4.58	8.51	7.89	7.23	8.88	-103.42	-1.53E-03
25-Apr-95	0.11	0.84	0.00	78.46	131.29	52.83	1278.38	19153.11	-89.56	9.84			8.53	7.85	7.22	6.29	191.24	2.83E-03
26-Apr-95	0.19	0.84	0.00	78.46	131.29	52.83	1278.38	19153.11	0.00	17.00			8.55	7.81	7.21	6.29	7.47	1.11E-04
27-Apr-95	0.13	0.84	0.86	78.45	131.34	52.89	1279.94	19217.07	63.96	11.65	91.73	3.98	8.57	7.77	7.20	8.10	-63.68	-9.41E-04
28-Apr-95	0.18	0.84	0.00	78.45	131.34	52.89	1279.94	19217.07	0.00	16.13			8.60	7.73	7.19	8.10	99.51	1.47E-03
29-Apr-95	0.18	0.84	0.00	78.44	131.32	52.88	1279.32	19191.47	-25.59	16.12			8.59	7.69	7.18	7.35	24.88	3.68E-04
30-Apr-95	0.26	0.84	0.00	78.44	131.29	52.85	1278.38	19153.11	-38.37	23.27			8.59	7.64	7.17	6.29	38.36	5.68E-04
01-May-95	0.21	0.82	0.00	78.44	131.29	52.85	1278.38	19153.11	0.00	18.34			8.59	7.60	7.16	6.29	-6.15	-9.10E-05
02-May-95	0.26	0.82	0.00	78.43	131.28	52.85	1278.07	19140.32	-12.78	22.71			8.59	7.56	7.15	5.95	11.50	1.70E-04
03-May-95	0.30	0.82	0.00	78.43	131.26	52.83	1277.44	19114.77	-25.56	26.19			8.59	7.52	7.14	5.30	20.20	2.99E-04
04-May-95	0.24	0.82	0.00	78.42	131.24	52.82	1276.82	19089.23	-25.54	20.94			8.59	7.48	7.13	4.68	17.31	2.57E-04
05-May-95	0.17	0.82	0.20	78.42	131.26	52.84	1277.44	19114.77	25.54	14.84	21.29	0.93	8.59	7.44	7.12	5.30	-27.96	-4.14E-04
06-May-95	0.25	0.82	0.00	78.42	131.24	52.82	1276.82	19089.23	-25.54	21.81			8.59	7.40	7.11	4.68	50.77	7.53E-04
07-May-95	0.28	0.82	0.00	78.41	131.22	52.81	1276.19	19063.70	-25.53	24.42			8.59	7.35	7.10	4.09	22.13	3.28E-04
08-May-95	0.26	0.82	0.00	78.41	131.20	52.79	1275.57	19038.18	-25.52	22.66			8.59	7.31	7.09	3.54	20.05	2.98E-04
09-May-95	0.28	0.82	0.02	78.41	131.18	52.78	1274.94	19012.67	-25.51	24.39	2.12	0.09	8.59	7.27	7.08	3.03	22.29	3.31E-04
10-May-95	0.19	0.82	0.00	78.40	131.16	52.76	1274.32	18987.18	-25.49	16.54			8.59	7.23	7.06	2.55	23.23	3.45E-04
11-May-95	0.19	0.82	1.70	78.40	131.26	52.86	1277.44	19114.77	127.59	16.59	180.97	7.87	8.59	7.19	7.05	5.30	-123.80	-1.83E-03
12-May-95	0.12	0.82	0.72	78.39	131.34	52.95	1279.94	19217.07	102.30	10.50	76.80	3.33	8.59	7.15	7.04	8.10	87.49	1.29E-03
13-May-95	0.21	0.82	0.03	78.39	131.32	52.93	1279.32	19191.47	-25.59	18.36	3.20	0.14	8.59	7.11	7.03	7.35	109.90	1.62E-03
14-May-95	0.22	0.82	0.00	78.39	131.29	52.90	1278.38	19153.11	-38.37	19.22			8.59	7.06	7.02	6.29	38.72	5.72E-04
15-May-95	0.25	0.82	0.02	78.38	131.29	52.91	1278.38	19153.11	0.00	21.84	2.13	0.09	8.59	7.02	7.01	6.29	-2.83	-4.19E-05
16-May-95	0.26	0.82	0.00	78.38	131.28	52.90	1278.07	19140.32	-12.78	22.71			8.59	6.98	7.00	5.95	9.50	1.40E-04
17-May-95	0.29	0.82	0.00	78.37	131.28	52.91	1278.07	19140.32	0.00	25.33			8.58	7.13	7.08	5.95	-6.09	-9.00E-05
18-May-95	0.27	0.82	0.00	78.37	131.26	52.89	1277.44	19114.77	-25.56	23.57			8.58	7.28	7.16	5.30	17.07	2.53E-04
19-May-95	0.25	0.82	0.25	78.37	131.24	52.87	1276.82	19089.23	-25.54	21.81	26.60	1.16	8.58	7.43	7.24	4.68	19.70	2.92E-04
20-May-95	0.18	0.82	0.81	78.36	131.32	52.96	1279.32	19191.47	102.25	15.74	86.35	3.75	8.58	7.58	7.32	7.35	-77.73	-1.15E-03
21-May-95	0.21	0.82	0.00	78.36	131.29	52.93	1278.38	19153.11	-38.37	18.34			8.58	7.73	7.40	6.29	128.86	1.90E-03
22-May-95	0.24	0.82	0.00	78.35	131.28	52.93	1278.07	19140.32	-12.78	20.96			8.58	7.88	7.48	5.95	11.86	1.75E-04
23-May-95	0.32	0.82	0.47	78.35	131.32	52.97	1279.32	19191.47	51.15	27.97	50.11	2.18	8.58	8.03	7.56	7.35	-54.12	-7.99E-04
24-May-95	0.28	0.82	0.00	78.34	131.29	52.95	1278.38	19153.11	-38.37	24.46			8.58	8.18	7.64	6.29	79.49	1.17E-03
25-May-95	0.29	0.82	0.00	78.34	131.28	52.94	1278.07	19140.32	-12.78	25.33			8.58	8.32	7.72	5.95	6.43	9.50E-05
26-May-95	0.26	0.82	0.00	78.33	131.28	52.95	1278.07	19140.32	0.00	22.71			8.58	8.47	7.80	5.95	-6.66	-9.84E-05
27-May-95	0.31	0.82	0.00	78.32	131.24	52.92	1276.82	19089.23	-51.10	27.05			8.58	8.62	7.87	4.68	47.29	7.00E-04
28-May-95	0.25	0.82	0.00	78.32	131.24	52.92	1276.82	19089.23	0.00	21.81			8.58	8.77	7.95	4.68	-6.65	-9.84E-05
29-May-95	0.25	0.82	0.02	78.31	131.20	52.89	1275.57	19038.18	-51.05	21.79	2.13	0.09	8.58	8.92	8.03	3.54	49.86	7.39E-04
30-May-95	0.23	0.82	0.37	78.30	131.24	52.94	1276.82	19089.23	51.05	20.07	39.37	1.71	8.58	9.07	8.11	4.68	-48.63	-7.19E-04
31-May-95	0.23	0.82	0.00	78.30	131.22	52.92	1276.19	19063.70	-25.53	20.06			8.58	9.22	8.19	4.09	67.63	1.00E-03

LOWRY LAKE DAILY WATER BUDGET: 1994-1995

August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01

Drain. Area (ac) = 5555

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0439 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Natural Springs Inflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Jun-95	0.33	0.85	0.12	78.29	131.20	52.91	1275.57	19038.18	-25.52	29.82	12.76	0.56	8.58	9.37	8.27	3.54	27.35	4.05E-04
02-Jun-95	0.23	0.85	0.13	78.28	131.20	52.92	1275.57	19038.18	0.00	20.78	13.82	0.60	8.59	9.52	8.35	3.54	6.17	9.15E-05
03-Jun-95	0.03	0.85	1.63	78.28	131.36	53.08	1280.57	19242.67	204.49	2.72	173.94	7.55	8.59	9.67	8.43	8.88	-187.94	-2.76E-03
04-Jun-95	0.12	0.85	2.30	78.27	131.55	53.28	1286.51	19486.55	243.87	10.94	246.58	10.65	8.60	9.82	8.51	17.78	-47.30	-6.90E-04
05-Jun-95	0.00	0.85	0.10	78.26	131.51	53.25	1285.26	19435.11	-51.44	0.00	10.71	0.46	8.60	9.97	8.59	15.69	306.87	4.48E-03
06-Jun-95	0.15	0.85	0.00	78.26	131.51	53.25	1285.26	19435.11	0.00	13.66			8.61	10.12	8.67	15.69	22.64	3.31E-04
07-Jun-95	0.27	0.85	0.00	78.25	131.47	53.22	1284.01	19383.72	-51.39	24.56			8.61	10.26	8.75	13.71	49.43	7.23E-04
08-Jun-95	0.30	0.85	0.00	78.24	131.47	53.23	1284.01	19383.72	0.00	27.29			8.61	10.41	8.83	13.71	-10.65	-1.56E-04
09-Jun-95	0.23	0.85	0.00	78.24	131.45	53.21	1283.38	19358.05	-25.67	20.91			8.62	10.56	8.91	12.77	12.53	1.83E-04
10-Jun-95	0.29	0.85	0.00	78.23	131.43	53.20	1282.76	19332.39	-25.66	26.35			8.62	10.71	8.99	11.85	20.07	2.94E-04
11-Jun-95	0.25	0.85	3.56	78.22	131.67	53.45	1290.26	19641.15	308.77	22.85	382.78	16.48	8.63	10.86	9.06	24.67	-318.65	-4.62E-03
12-Jun-95	0.23	0.85	0.16	78.22	131.69	53.47	1290.89	19666.97	25.81	21.03	17.21	0.74	8.63	11.01	9.14	25.90	354.48	5.14E-03
13-Jun-95	0.20	0.85	0.00	78.21	131.67	53.46	1290.26	19641.15	-25.81	18.28			8.64	11.16	9.22	24.67	25.62	3.71E-04
14-Jun-95	0.25	0.85	0.00	78.20	131.63	53.43	1289.01	19589.57	-51.59	22.83			8.64	11.31	9.30	22.27	37.66	5.47E-04
15-Jun-95	0.27	0.85	0.00	78.20	131.59	53.39	1287.76	19538.03	-51.54	24.63			8.65	11.46	9.38	19.97	35.89	5.19E-04
16-Jun-95	0.33	0.85	0.59	78.19	131.63	53.44	1289.01	19589.57	51.54	30.13	63.38	2.73	8.65	11.61	9.46	22.27	-66.65	-9.68E-04
17-Jun-95	0.25	0.85	0.00	78.18	131.59	53.41	1287.76	19538.03	-51.54	22.80			8.66	11.76	9.54	19.97	94.96	1.38E-03
18-Jun-95	0.28	0.85	0.02	78.18	131.59	53.41	1287.76	19538.03	0.00	25.54	2.15	0.09	8.66	11.91	9.62	19.97	-12.82	-1.86E-04
19-Jun-95	0.25	0.85	0.58	78.17	131.67	53.50	1290.26	19641.15	103.12	22.85	62.36	2.68	8.67	12.06	9.70	24.67	-116.21	-1.68E-03
20-Jun-95	0.26	0.85	0.01	78.16	131.63	53.47	1289.01	19589.57	-51.59	23.74	1.07	0.05	8.67	12.20	9.78	22.27	99.54	1.44E-03
21-Jun-95	0.22	0.85	0.04	78.16	131.63	53.47	1289.01	19589.57	0.00	20.09	4.30	0.19	8.68	12.35	9.86	22.27	-14.23	-2.07E-04
22-Jun-95	0.30	0.85	0.16	78.15	131.63	53.48	1289.01	19589.57	0.00	27.39	17.19	0.74	8.68	12.50	9.94	22.27	-6.99	-1.01E-04
23-Jun-95	0.27	0.85	0.01	78.14	131.61	53.47	1288.38	19563.79	-25.77	24.64	1.07	0.05	8.68	12.65	10.02	21.11	25.16	3.65E-04
24-Jun-95	0.19	0.85	0.00	78.14	131.57	53.43	1287.13	19512.28	-51.51	17.32			8.69	12.80	10.10	18.86	38.24	5.56E-04
25-Jun-95	0.24	0.85	1.08	78.13	131.65	53.52	1289.64	19615.35	103.07	21.92	116.07	5.00	8.69	12.95	10.18	23.46	-107.67	-1.56E-03
26-Jun-95	0.04	0.85	0.36	78.12	131.65	53.53	1289.64	19615.35	0.00	3.65	38.69	1.67	8.70	13.10	10.25	23.46	107.51	1.56E-03
27-Jun-95	0.15	0.85	0.00	78.12	131.63	53.51	1289.01	19589.57	-25.79	13.70			8.70	13.25	10.33	22.27	71.08	1.03E-03
28-Jun-95	0.21	0.85	0.80	78.11	131.67	53.56	1290.26	19641.15	51.59	19.19	86.02	3.70	8.71	13.40	10.41	24.67	-55.26	-8.00E-04
29-Jun-95	0.21	0.85	0.80	78.10	131.71	53.61	1291.51	19692.79	51.64	19.21	86.10	3.70	8.71	13.55	10.49	27.16	26.74	3.86E-04
30-Jun-95	0.21	0.85	0.00	78.10	131.71	53.61	1291.51	19692.79	0.00	19.21			8.72	14.60	10.60	27.16	76.18	1.10E-03
01-Jul-95	0.26	0.91	0.00	78.09	131.67	53.58	1290.26	19641.15	-51.64	25.44			8.72	15.66	10.70	24.67	39.18	5.67E-04
02-Jul-95	0.25	0.91	0.00	78.08	131.67	53.59	1290.26	19641.15	0.00	24.46			8.73	16.71	10.80	24.67	-15.03	-2.17E-04
03-Jul-95	0.20	0.91	0.02	78.08	131.63	53.55	1289.01	19589.57	-51.59	19.55	2.15	0.09	8.73	17.77	10.90	22.27	38.70	5.61E-04
04-Jul-95	0.22	0.91	0.00	78.07	131.61	53.54	1288.38	19563.79	-25.77	21.49			8.74	18.83	11.01	21.11	23.60	3.42E-04
05-Jul-95	0.22	0.91	0.03	78.07	131.61	53.54	1288.38	19563.79	0.00	21.49	3.22	0.14	8.74	19.88	11.11	21.11	-4.03	-5.85E-05
06-Jul-95	0.25	0.91	0.00	78.06	131.59	53.53	1287.76	19538.03	-25.76	24.41			8.74	20.94	11.21	19.97	26.25	3.81E-04
07-Jul-95	0.24	0.91	0.07	78.05	131.55	53.50	1286.51	19486.55	-51.49	23.41	7.50	0.32	8.74	21.99	11.32	17.78	47.99	6.97E-04
08-Jul-95	0.23	0.91	0.00	78.05	131.55	53.50	1286.51	19486.55	0.00	22.44			8.74	23.05	11.42	17.78	8.68	1.26E-04
09-Jul-95	0.29	0.91	0.00	78.04	131.51	53.47	1285.26	19435.11	-51.44	28.26			8.74	24.10	11.52	15.69	54.42	7.92E-04
10-Jul-95	0.25	0.91	1.89	78.03	131.61	53.58	1288.38	19563.79	128.68	24.43	202.92	8.75	8.74	25.16	11.62	21.11	-128.28	-1.86E-03
11-Jul-95	0.18	0.91	0.00	78.03	131.59	53.56	1287.76	19538.03	-25.76	17.58			8.74	26.22	11.73	19.97	237.42	3.44E-03
12-Jul-95	0.14	0.91	0.00	78.02	131.55	53.53	1286.51	19486.55	-51.49	13.66			8.74	27.27	11.83	17.78	60.61	8.80E-04
13-Jul-95	0.28	0.91	0.00	78.02	131.55	53.53	1286.51	19486.55	0.00	27.32			8.74	28.33	11.93	17.78	16.40	2.38E-04
14-Jul-95	0.18	0.91	0.00	78.01	131.53	53.52	1285.88	19460.82	-25.72	17.55			8.74	29.38	12.04	16.72	29.63	4.30E-04
15-Jul-95	0.21	0.91	0.07	78.00	131.53	53.53	1285.88	19460.82	0.00	20.48	7.50	0.32	8.74	30.44	12.14	16.72	15.88	2.31E-04
16-Jul-95	0.21	0.91	0.40	78.00	131.55	53.55	1286.51	19486.55	25.72	20.49	42.88	1.85	8.74	31.49	12.24	17.78	-3.79	-5.49E-05
17-Jul-95	0.18	0.91	1.75	77.99	131.67	53.68	1290.26	19641.15	154.61	17.61	188.16	8.10	8.74	32.55	12.34	24.67	-95.67	-1.38E-03
18-Jul-95	0.03	0.91	0.00	77.98	131.67	53.69	1290.26	19641.15	0.00	2.94			8.74	33.60	12.45	24.67	207.61	3.00E-03
19-Jul-95	0.22	0.91	0.00	77.98	131.65	53.67	1289.64	19615.35	-25.80	21.52			8.74	34.66	12.55	23.46	52.98	7.65E-04
20-Jul-95	0.27	0.91	2.49	77.97	131.75	53.78	1292.76	19744.48	129.12	26.47	268.25	11.53	8.74	35.72	12.65	29.75	-118.15	-1.70E-03
21-Jul-95	0.26	0.91	0.00	77.97	131.75	53.78	1292.76	19744.48	0.00	25.49			8.74	36.77	12.76	29.75	280.66	4.04E-03
22-Jul-95	0.16	0.91	0.29	77.96	131.75	53.79	1292.76	19744.48	0.00	15.69	31.24	1.34	8.74	37.83	12.86	29.75	3.02	4.35E-05
23-Jul-95	0.19	0.91	0.14	77.95	131.75	53.80	1292.76	19744.48	0.00	18.63	15.08	0.65	8.74	38.88	12.96	29.75	46.57	6.70E-04
24-Jul-95	0.18	0.91	0.12	77.95	131.75	53.80	1292.76	19744.48	0.00	17.65	12.93	0.56	8.74	39.94	13.06	29.75	27.93	4.02E-04
25-Jul-95	0.27	0.91	2.23	77.94	131.84	53.90	1295.58	19860.95	116.48	26.53	240.76	10.32	8.74	40.99	13.17	35.90	-88.65	-1.27E-03
26-Jul-95	0.11	0.91	0.00	77.94	131.84	53.90	1295.58	19860.95	0.00	10.81			8.74	42.05	13.27	35.90	251.55	3.60E-03
27-Jul-95	0.20	0.91	0.08	77.94	131.82	53.88	1294.95	19835.05	-25.91	19.64	8.63	0.37	8.74	42.05	13.27	34.50	43.25	6.20E-04
28-Jul-95	0.20	0.91	0.54	77.94	131.86	53.92	1296.20	19886.87	51.82	19.66	58.33	2.50	8.74	42.05	13.27	37.33	-32.90	-4.71E-04
29-Jul-95	0.27	0.91	0.01	77.94	131.82	53.88	1294.95	19835.05	-51.82	26.51	1.08	0.05	8.74	42.05	13.27	34.50	119.72	1.72E-03
30-Jul-95	0.16	0.91	0.00	77.94	131.82	53.88	1294.95	19835.05	0.00	15.71			8.74	42.05	13.27	34.50	4.17	5.98E-05
31-Jul-95	0.25	0.91	0.00	77.94	131.79	53.85	1294.01	19796.21	-38.83	24.53			8.74	42.05	13.27	32.43	52.68	7.56E-04
																	Average=	2.95E-04
																	Variance =	7.50E-07
																	Std. Dev.=	8.66E-04
Maximum	0.33	0.91	3.56	79.60	131.86	54.30	1296.20	19886.87	308.77	30.13	382.78	16.48	9.51	42.05	13.27	37.33	354.48	
Minimum	0.00	0.69	0.00	77.37	131.14	51.77	1273.69	18961.70	-89.56	0.00	0.00	0.00	7.98	4.11	7.00	2.10	-318.65	
Average	0.15	0.81	0.16	78.59	131.44	52.86	1283.08	19346.22	0.50	13.15	17.48	0.76	8.75	11.53	8.55	13.34	20.07	

Lowry Lake Daily Water Budget (Mean Values)

August 1, 1994 to July 31, 1995

Values in in/yr were calculated using the average lake area.

With negative LEAKAGE values:

Precipitation	17.48	ac-ft/day	59.67	in/yr
Runoff	0.76	ac-ft/day	2.58	in/yr
Surficial Aquifer Inflow	8.75	ac-ft/day	29.88	in/yr
Surface Water Inflow	20.08	ac-ft/day	68.56	in/yr
Leakage	20.07	ac-ft/day	68.50	in/yr
Evaporation	13.15	ac-ft/day	44.89	in/yr
Surface Water Outflow	13.34	ac-ft/day	45.54	in/yr

MAGNOLIA LAKE DAILY WATER BUDGET: 1994 -1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 2176

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0451 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Aug-94	0.21	0.91	0.00	79.04	124.81	45.77	208.70	5356.96	NA	3.32			0.99	23.46	0.15	42.24	NA	NA
02-Aug-94	0.21	0.91	0.00	79.06	124.83	45.77	208.77	5360.54	3.58	3.32			0.99	22.86	0.15	41.56	-24.85	-2.60E-03
03-Aug-94	0.26	0.91	0.29	79.08	124.84	45.76	208.84	5364.12	3.58	4.12	5.05	0.53	0.98	22.27	0.15	40.88	-24.77	-2.59E-03
04-Aug-94	0.20	0.91	0.16	79.10	124.86	45.76	208.92	5367.70	3.58	3.17	2.79	0.29	0.98	21.11	0.15	40.21	-19.90	-2.08E-03
05-Aug-94	0.15	0.91	0.19	79.12	124.88	45.76	208.99	5371.28	3.58	2.38	3.31	0.34	0.98	21.11	0.15	39.53	-21.94	-2.29E-03
06-Aug-94	0.19	0.91	2.77	79.14	124.90	45.76	209.06	5374.86	3.58	3.01	48.26	5.02	0.98	23.46	0.15	38.85	-19.89	-2.08E-03
07-Aug-94	0.17	0.91	0.12	79.16	124.91	45.76	209.13	5378.45	3.58	2.70	2.09	0.22	0.98	33.11	0.15	38.18	32.12	3.36E-03
08-Aug-94	0.12	0.91	0.00	79.18	124.93	45.75	209.20	5382.03	3.59	1.90			0.98	33.11	0.14	37.50	-8.20	-8.57E-04
09-Aug-94	0.07	0.91	0.07	79.20	124.91	45.72	209.12	5377.85	-4.18	1.11	1.22	0.13	0.98	31.75	0.14	36.82	-1.27	-1.33E-04
10-Aug-94	0.18	0.91	0.00	79.21	124.89	45.68	209.03	5373.67	-4.18	2.85			0.98	30.41	0.14	36.15	0.18	1.91E-05
11-Aug-94	0.17	0.91	0.05	79.23	124.87	45.64	208.95	5369.49	-4.18	2.69	0.87	0.09	0.97	29.10	0.14	35.47	-3.57	-3.75E-04
12-Aug-94	0.19	0.91	0.24	79.25	124.85	45.60	208.87	5365.31	-4.18	3.01	4.18	0.44	0.97	28.45	0.14	34.79	-3.09	-3.25E-04
13-Aug-94	0.16	0.91	0.14	79.27	124.83	45.56	208.78	5361.13	-4.18	2.53	2.44	0.25	0.97	28.45	0.14	34.12	0.27	2.79E-05
14-Aug-94	0.23	0.91	0.99	79.29	124.81	45.52	208.70	5356.96	-4.17	3.64	17.22	1.80	0.97	29.10	0.14	33.44	-0.51	-5.34E-05
15-Aug-94	0.19	0.91	0.50	79.31	124.79	45.48	208.62	5352.79	-4.17	3.01	8.69	0.91	0.97	31.08	0.14	32.76	16.03	1.69E-03
16-Aug-94	0.13	0.91	0.22	79.33	124.78	45.46	208.59	5351.59	-1.19	2.06	3.82	0.40	0.97	33.11	0.14	32.09	6.93	7.31E-04
17-Aug-94	0.00	0.91	0.00	79.35	124.78	45.43	208.57	5350.40	-1.19	0.00			0.97	32.43	0.14	31.41	5.22	5.51E-04
18-Aug-94	0.11	0.91	0.00	79.37	124.77	45.41	208.54	5349.21	-1.19	1.74			0.97	31.08	0.14	30.73	3.04	3.21E-04
19-Aug-94	0.22	0.91	0.00	79.39	124.77	45.38	208.52	5348.02	-1.19	3.48			0.97	29.75	0.14	30.06	0.63	6.65E-05
20-Aug-94	0.24	0.91	0.00	79.40	124.76	45.36	208.50	5346.83	-1.19	3.79			0.96	29.75	0.14	29.38	-1.76	-1.86E-04
21-Aug-94	0.21	0.91	0.31	79.42	124.76	45.33	208.47	5345.64	-1.19	3.32	5.39	0.56	0.96	28.45	0.14	28.70	-1.40	-1.48E-04
22-Aug-94	0.25	0.91	0.08	79.44	124.75	45.31	208.45	5344.44	-1.19	3.95	1.39	0.15	0.96	29.10	0.13	28.03	4.39	4.65E-04
23-Aug-94	0.08	0.91	0.49	79.46	124.74	45.28	208.40	5342.06	-2.38	1.26	8.51	0.89	0.96	29.10	0.13	27.35	1.86	1.97E-04
24-Aug-94	0.12	0.91	0.00	79.48	124.73	45.25	208.35	5339.68	-2.38	1.90			0.96	29.75	0.13	26.67	13.09	1.39E-03
25-Aug-94	0.16	0.91	0.00	79.49	124.72	45.23	208.31	5337.30	-2.38	2.53			0.96	28.45	0.13	26.00	4.39	4.66E-04
26-Aug-94	0.18	0.91	0.32	79.50	124.70	45.21	208.26	5334.92	-2.38	2.84	5.55	0.58	0.96	27.80	0.13	25.32	3.13	3.32E-04
27-Aug-94	0.09	0.91	0.00	79.51	124.69	45.18	208.21	5332.54	-2.38	1.42			0.96	27.80	0.13	24.64	8.98	9.54E-04
28-Aug-94	0.16	0.91	0.01	79.52	124.68	45.16	208.16	5330.16	-2.38	2.53	0.17	0.02	0.95	27.16	0.13	23.97	4.94	5.26E-04
29-Aug-94	0.21	0.91	0.00	79.53	124.67	45.14	208.11	5327.78	-2.38	3.31			0.95	25.90	0.13	23.29	4.07	4.33E-04
30-Aug-94	0.21	0.91	0.00	79.54	124.66	45.12	208.07	5325.40	-2.38	3.31			0.95	25.28	0.13	22.61	2.50	2.67E-04
31-Aug-94	0.23	0.91	0.00	79.55	124.65	45.10	208.02	5323.03	-2.38	3.63			0.95	24.06	0.13	22.25	2.56	2.73E-04
01-Sep-94	0.21	0.85	0.00	79.56	124.64	45.08	207.97	5320.65	-2.38	3.09			0.95	22.86	0.13	21.88	1.38	1.48E-04
02-Sep-94	0.18	0.85	0.00	79.56	124.62	45.06	207.92	5318.27	-2.38	2.65			0.95	22.27	0.13	21.51	1.09	1.16E-04
03-Sep-94	0.17	0.85	0.00	79.57	124.61	45.04	207.87	5315.90	-2.38	2.50			0.95	21.11	0.13	21.15	1.30	1.39E-04
04-Sep-94	0.23	0.85	0.00	79.58	124.60	45.02	207.83	5313.52	-2.38	3.39			0.95	20.54	0.13	20.78	0.65	6.99E-05
05-Sep-94	0.13	0.85	0.00	79.59	124.59	45.00	207.78	5311.15	-2.37	1.91			0.95	18.32	0.13	20.41	-0.44	-4.66E-05
06-Sep-94	0.19	0.85	0.00	79.60	124.58	44.98	207.73	5308.77	-2.37	2.80			0.94	17.25	0.13	20.05	-0.82	-8.77E-05
07-Sep-94	0.21	0.85	0.00	79.61	124.57	44.96	207.68	5306.40	-2.37	3.09			0.94	16.20	0.13	19.68	-2.41	-2.58E-04
08-Sep-94	0.20	0.85	0.01	79.62	124.56	44.93	207.64	5304.02	-2.37	2.94	0.17	0.02	0.94	15.69	0.13	19.32	-3.38	-3.62E-04
09-Sep-94	0.05	0.85	0.12	79.63	124.54	44.91	207.59	5301.65	-2.37	0.74	2.08	0.22	0.94	14.69	0.13	18.95	-3.19	-3.42E-04
10-Sep-94	0.18	0.85	0.01	79.64	124.53	44.89	207.54	5299.28	-2.37	2.65	0.17	0.02	0.94	14.69	0.13	18.58	0.48	5.19E-05
11-Sep-94	0.12	0.85	0.06	79.65	124.52	44.87	207.49	5296.91	-2.37	1.76	1.04	0.11	0.94	13.71	0.13	18.22	-3.17	-3.40E-04
12-Sep-94	0.18	0.85	0.03	79.66	124.51	44.85	207.44	5294.54	-2.37	2.64	0.52	0.05	0.94	13.71	0.13	17.85	-1.94	-2.08E-04
13-Sep-94	0.18	0.85	0.00	79.67	124.50	44.83	207.40	5292.17	-2.37	2.64			0.94	12.77	0.13	17.48	-3.03	-3.26E-04
14-Sep-94	0.23	0.85	0.00	79.68	124.49	44.81	207.35	5289.80	-2.37	3.38			0.94	11.85	0.13	17.12	-4.18	-4.50E-04
15-Sep-94	0.12	0.85	0.01	79.69	124.48	44.79	207.30	5287.43	-2.37	1.76	0.17	0.02	0.93	11.41	0.13	16.75	-5.47	-5.89E-04
16-Sep-94	0.20	0.85	0.39	79.70	124.46	44.77	207.25	5285.06	-2.37	2.94	6.74	0.71	0.93	10.97	0.13	16.38	-3.74	-4.03E-04
17-Sep-94	0.17	0.85	0.05	79.71	124.45	44.75	207.21	5282.69	-2.37	2.50	0.86	0.09	0.93	11.85	0.13	16.02	2.26	2.44E-04
18-Sep-94	0.14	0.85	0.17	79.72	124.44	44.73	207.16	5280.32	-2.37	2.05	2.93	0.31	0.93	11.85	0.13	15.65	-2.53	-2.74E-04
19-Sep-94	0.17	0.85	0.00	79.72	124.43	44.71	207.11	5277.96	-2.37	2.49			0.93	11.85	0.13	15.29	0.56	6.05E-05
20-Sep-94	0.15	0.85	0.15	79.73	124.42	44.68	207.06	5275.59	-2.37	2.20	2.59	0.27	0.93	11.85	0.13	14.92	-2.76	-2.98E-04
21-Sep-94	0.07	0.85	0.01	79.74	124.41	44.66	207.01	5273.22	-2.37	1.03	0.17	0.02	0.93	11.41	0.13	14.55	0.76	8.22E-05
22-Sep-94	0.19	0.85	0.00	79.75	124.40	44.64	206.97	5270.86	-2.37	2.79			0.93	10.53	0.13	14.19	-0.82	-8.85E-05
23-Sep-94	0.19	0.85	0.37	79.76	124.38	44.62	206.92	5268.49	-2.37	2.78	6.38	0.67	0.93	10.11	0.13	13.82	-3.28	-3.55E-04
24-Sep-94	0.13	0.85	0.04	79.77	124.37	44.60	206.87	5266.13	-2.36	1.90	0.69	0.07	0.93	10.53	0.13	13.45	3.72	4.03E-04
25-Sep-94	0.04	0.85	0.02	79.78	124.36	44.58	206.82	5263.76	-2.36	0.59	0.34	0.04	0.92	10.11	0.13	13.09	-0.90	-9.80E-05
26-Sep-94	0.02	0.85	0.00	79.79	124.35	44.56	206.78	5261.40	-2.36	0.29			0.92	10.11	0.13	12.72	-0.03	-2.77E-06
27-Sep-94	0.15	0.85	0.00	79.80	124.36	44.56	206.80	5262.58	1.18	2.20			0.92	9.69	0.13	12.36	-3.29	-3.57E-04
28-Sep-94	0.16	0.85	0.00	79.84	124.36	44.53	206.82	5263.76	1.18	2.34			0.92	9.69	0.13	11.99	-5.25	-5.70E-04
29-Sep-94	0.14	0.85	0.00	79.87	124.37	44.49	206.85	5264.95	1.18	2.05			0.92	8.88	0.13	11.62	-5.03	-5.47E-04
30-Sep-94	0.17	0.85	0.00	79.91	124.37	44.46	206.87	5266.13	1.18	2.49			0.92	8.88	0.13	11.86	-5.18	-5.64E-04

MAGNOLIA LAKE DAILY WATER BUDGET: 1994 -1995

August 1, 1994 to July 31, 1995

Runoff Coeff = 0.01

Dram. Area (ac) = 2176

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0451 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Oct-94	0.20	0.76	0.25	79.95	124.38	44.43	206.89	5267.31	1.18	2.62	4.31	0.45	0.92	8.49	0.13	12.10	-5.87	-6.38E-04
02-Oct-94	0.08	0.76	0.65	79.98	124.38	44.40	206.92	5268.49	1.18	1.05	11.21	1.18	0.92	9.69	0.13	12.35	-1.87	-2.03E-04
03-Oct-94	0.08	0.76	0.29	80.02	124.39	44.37	206.94	5269.67	1.18	1.05	5.00	0.53	0.92	10.97	0.13	12.59	8.29	9.03E-04
04-Oct-94	0.17	0.76	0.10	80.05	124.39	44.34	206.94	5269.67	0.00	2.23	1.72	0.18	0.92	10.97	0.13	12.83	3.64	3.97E-04
05-Oct-94	0.07	0.76	0.00	80.09	124.39	44.30	206.94	5269.67	0.00	0.92			0.92	10.53	0.13	13.07	-1.40	-1.52E-04
06-Oct-94	0.17	0.76	0.00	80.13	124.39	44.26	206.94	5269.67	0.00	2.23			0.92	9.69	0.13	13.31	-2.66	-2.91E-04
07-Oct-94	0.16	0.76	0.00	80.16	124.39	44.23	206.94	5269.67	0.00	2.10			0.92	9.28	0.13	13.55	-5.05	-5.52E-04
08-Oct-94	0.16	0.76	0.30	80.20	124.39	44.19	206.94	5269.67	0.00	2.10	5.17	0.54	0.92	9.69	0.13	13.79	-5.57	-6.09E-04
09-Oct-94	0.15	0.76	0.01	80.24	124.39	44.15	206.94	5269.67	0.00	1.97	0.17	0.02	0.92	10.11	0.12	14.03	0.32	3.45E-05
10-Oct-94	0.11	0.76	0.09	80.27	124.39	44.12	206.94	5269.67	0.00	1.44	1.55	0.16	0.92	10.11	0.12	14.27	-4.90	-5.37E-04
11-Oct-94	0.04	0.76	2.91	80.31	124.43	44.12	207.11	5277.96	8.28	0.52	50.22	5.28	0.92	18.32	0.12	14.51	-11.37	-1.24E-03
12-Oct-94	0.02	0.76	0.01	80.34	124.47	44.13	207.28	5286.24	8.29	0.26	0.17	0.02	0.92	24.67	0.12	14.76	51.29	5.61E-03
13-Oct-94	0.02	0.76	0.00	80.38	124.51	44.13	207.44	5294.54	8.29	0.26			0.92	24.67	0.12	15.00	2.35	2.56E-04
14-Oct-94	0.09	0.76	0.49	80.42	124.55	44.13	207.61	5302.84	8.30	1.18	8.48	0.89	0.92	24.06	0.12	15.24	1.91	2.09E-04
15-Oct-94	0.14	0.76	0.01	80.45	124.59	44.14	207.78	5311.15	8.31	1.84	0.17	0.02	0.93	24.67	0.12	15.48	9.50	1.04E-03
16-Oct-94	0.09	0.76	0.00	80.49	124.63	44.14	207.95	5319.46	8.31	1.19			0.93	22.86	0.12	15.72	0.03	3.30E-06
17-Oct-94	0.12	0.76	0.00	80.53	124.67	44.14	208.11	5327.78	8.32	1.58			0.93	21.69	0.12	15.96	-1.56	-1.70E-04
18-Oct-94	0.17	0.76	0.00	80.56	124.65	44.09	208.04	5324.21	-3.57	2.24			0.93	21.11	0.12	16.20	8.52	9.29E-04
19-Oct-94	0.11	0.76	0.00	80.60	124.64	44.04	207.97	5320.65	-3.57	1.45			0.93	20.54	0.11	16.44	7.04	7.69E-04
20-Oct-94	0.15	0.76	0.00	80.63	124.62	43.98	207.90	5317.08	-3.56	1.98			0.93	19.97	0.11	16.68	7.02	7.68E-04
21-Oct-94	0.14	0.76	0.00	80.67	124.60	43.93	207.83	5313.52	-3.56	1.84			0.93	18.86	0.11	16.92	5.69	6.23E-04
22-Oct-94	0.13	0.76	0.00	80.71	124.58	43.88	207.76	5309.96	-3.56	1.71			0.93	18.32	0.11	17.17	4.47	4.91E-04
23-Oct-94	0.12	0.76	0.00	80.74	124.57	43.82	207.68	5306.40	-3.56	1.58			0.93	17.25	0.11	17.41	3.82	4.20E-04
24-Oct-94	0.16	0.76	0.00	80.78	124.55	43.77	207.61	5302.84	-3.56	2.10			0.93	16.72	0.11	17.65	2.64	2.91E-04
25-Oct-94	0.14	0.76	0.00	80.79	124.54	43.76	207.58	5301.28	-1.56	1.84			0.93	16.20	0.11	17.89	-0.65	-7.17E-05
26-Oct-94	0.14	0.76	0.04	80.79	124.54	43.74	207.55	5299.72	-1.56	1.84	0.69	0.07	0.93	15.69	0.11	18.13	-1.15	-1.26E-04
27-Oct-94	0.03	0.76	0.00	80.80	124.53	43.73	207.52	5298.17	-1.56	0.39			0.93	15.19	0.11	18.13	-1.13	-1.25E-04
28-Oct-94	0.16	0.76	0.27	80.81	124.52	43.71	207.49	5296.61	-1.56	2.10	4.67	0.49	0.93	13.71	0.11	18.12	-0.95	-1.05E-04
29-Oct-94	0.05	0.76	0.09	80.82	124.51	43.70	207.46	5295.06	-1.56	0.66	1.56	0.16	0.94	14.20	0.11	18.12	1.03	1.14E-04
30-Oct-94	0.04	0.76	0.30	80.82	124.51	43.68	207.42	5293.50	-1.56	0.53	5.19	0.54	0.94	14.69	0.10	18.12	-0.47	-5.24E-05
31-Oct-94	0.06	0.76	0.01	80.83	124.50	43.67	207.39	5291.94	-1.56	0.79	0.17	0.02	0.94	15.19	0.10	18.12	4.16	4.60E-04
01-Nov-94	0.09	0.71	0.00	80.84	124.49	43.65	207.36	5290.39	-1.56	1.10			0.94	15.19	0.10	18.11	-1.14	-1.26E-04
02-Nov-94	0.14	0.71	0.00	80.84	124.47	43.63	207.29	5286.84	-3.55	1.72			0.94	14.20	0.10	18.11	0.36	3.97E-05
03-Nov-94	0.14	0.71	0.00	80.85	124.46	43.61	207.22	5283.28	-3.55	1.72			0.94	13.24	0.10	18.11	-1.24	-1.37E-04
04-Nov-94	0.11	0.71	0.00	80.86	124.44	43.58	207.15	5279.73	-3.55	1.35			0.94	12.77	0.10	18.11	-2.20	-2.43E-04
05-Nov-94	0.14	0.71	0.00	80.86	124.42	43.56	207.07	5276.18	-3.55	1.72			0.94	11.85	0.10	18.10	-2.29	-2.54E-04
06-Nov-94	0.18	0.71	0.00	80.87	124.40	43.53	207.00	5272.63	-3.55	1.96			0.94	11.41	0.10	18.10	-3.58	-3.97E-04
07-Nov-94	0.09	0.71	0.00	80.88	124.39	43.51	206.93	5269.08	-3.55	1.10			0.94	11.41	0.10	18.10	-4.27	-4.74E-04
08-Nov-94	0.13	0.71	0.00	80.89	124.37	43.48	206.86	5265.54	-3.55	1.59			0.94	11.41	0.10	18.10	-3.41	-3.79E-04
09-Nov-94	0.10	0.71	0.00	80.89	124.37	43.48	206.87	5266.23	0.69	1.22			0.94	10.97	0.10	18.09	-8.13	-9.04E-04
10-Nov-94	0.11	0.71	0.11	80.90	124.38	43.48	206.89	5266.92	0.69	1.35	1.90	0.20	0.94	10.97	0.10	18.09	-8.20	-9.11E-04
11-Nov-94	0.08	0.71	0.08	80.91	124.38	43.47	206.90	5267.60	0.69	0.98	1.38	0.15	0.94	10.97	0.10	18.09	-6.22	-6.92E-04
12-Nov-94	0.07	0.71	0.41	80.91	124.38	43.47	206.91	5268.29	0.69	0.86	7.07	0.74	0.95	10.97	0.10	18.08	-6.42	-7.14E-04
13-Nov-94	0.02	0.71	0.00	80.92	124.39	43.47	206.93	5268.98	0.69	0.24			0.95	11.85	0.10	18.08	-0.01	-8.32E-07
14-Nov-94	0.12	0.71	0.00	80.93	124.39	43.46	206.94	5269.67	0.69	1.47			0.95	11.41	0.10	18.08	-6.32	-7.02E-04
15-Nov-94	0.15	0.71	1.43	80.93	124.39	43.46	206.95	5270.27	0.59	1.84	24.66	2.59	0.95	12.77	0.10	18.08	-7.89	-8.77E-04
16-Nov-94	0.00	0.71	0.14	80.94	124.40	43.45	206.97	5270.86	0.59	0.00	2.41	0.25	0.95	17.78	0.10	18.07	20.37	2.26E-03
17-Nov-94	0.05	0.71	0.04	80.95	124.40	43.45	206.98	5271.45	0.59	0.61	0.69	0.07	0.95	17.78	0.10	18.07	2.63	2.92E-04
18-Nov-94	0.07	0.71	0.00	80.96	124.40	43.45	206.99	5272.04	0.59	0.86			0.95	17.25	0.10	18.07	0.11	1.25E-05
19-Nov-94	0.07	0.71	0.00	80.96	124.40	43.44	207.00	5272.63	0.59	0.86			0.95	16.72	0.10	17.86	-1.42	-1.58E-04
20-Nov-94	0.14	0.71	0.02	80.97	124.41	43.44	207.01	5273.22	0.59	1.71	0.35	0.04	0.95	16.20	0.10	17.64	-1.73	-1.93E-04
21-Nov-94	0.09	0.71	0.04	80.98	124.41	43.43	207.03	5273.81	0.59	1.10	0.69	0.07	0.95	16.20	0.10	17.43	-2.51	-2.80E-04
22-Nov-94	0.09	0.71	0.01	80.98	124.40	43.41	206.98	5271.45	-2.37	1.10	0.17	0.02	0.95	16.20	0.10	17.21	1.65	1.84E-04
23-Nov-94	0.10	0.71	0.01	80.99	124.39	43.40	206.93	5269.08	-2.37	1.22	0.17	0.02	0.95	15.69	0.10	17.00	1.29	1.44E-04
24-Nov-94	0.15	0.71	0.00	81.00	124.38	43.38	206.88	5266.72	-2.36	1.84			0.95	14.69	0.10	16.79	0.87	9.72E-05
25-Nov-94	0.07	0.71	0.00	81.00	124.36	43.36	206.83	5264.35	-2.36	0.86			0.95	13.24	0.10	16.57	-0.72	-8.00E-05
26-Nov-94	0.08	0.71	0.00	81.01	124.35	43.34	206.79	5261.99	-2.36	0.98			0.96	13.24	0.10	16.36	-0.97	-1.09E-04
27-Nov-94	0.06	0.71	0.00	81.02	124.34	43.32	206.74	5259.63	-2.36	0.73			0.96	13.24	0.10	16.15	-0.88	-9.86E-05
28-Nov-94	0.10	0.71	0.00	81.03	124.33	43.30	206.69	5257.27	-2.36	1.22			0.96	12.77	0.10	15.93	-0.42	-4.74E-05
29-Nov-94	0.08	0.71	0.03	81.03	124.33	43.30	206.69	5257.27	0.00	0.98	0.52	0.05	0.95	12.77	0.10	15.72	-3.53	-3.94E-04
30-Nov-94	0.10	0.71	0.01	81.04	124.33	43.29	206.69	5257.27	0.00	1.22	0.17	0.02	0.95	13.71	0.10	15.50	-2.50	-2.80E-04

MAGNOLIA LAKE DAILY WATER BUDGET: 1994 -1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 2176

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0451 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Dec-94	0.05	0.83	0.00	81.04	124.33	43.29	206.69	5257.27	0.00	0.71			0.95	13.24	0.10	15.29	-1.97	-2.20E-04
02-Dec-94	0.11	0.83	0.00	81.05	124.33	43.28	206.69	5257.27	0.00	1.57			0.95	12.31	0.10	15.08	-1.92	-2.15E-04
03-Dec-94	0.05	0.83	0.00	81.05	124.33	43.28	206.69	5257.27	0.00	0.71			0.95	11.85	0.10	14.86	-3.50	-3.91E-04
04-Dec-94	0.04	0.83	0.00	81.06	124.33	43.27	206.69	5257.27	0.00	0.57			0.94	11.41	0.10	14.65	-2.88	-3.22E-04
05-Dec-94	0.09	0.83	0.31	81.06	124.33	43.27	206.69	5257.27	0.00	1.29	5.34	0.56	0.94	13.24	0.10	14.44	-2.97	-3.33E-04
06-Dec-94	0.11	0.83	0.00	81.07	124.32	43.26	206.67	5256.08	-1.18	1.57			0.94	13.24	0.10	14.22	5.44	6.08E-04
07-Dec-94	0.10	0.83	0.01	81.07	124.32	43.25	206.64	5254.90	-1.18	1.43	0.17	0.02	0.94	12.77	0.10	14.01	-0.54	-6.03E-05
08-Dec-94	0.06	0.83	0.00	81.07	124.31	43.24	206.62	5253.72	-1.18	0.86			0.94	11.85	0.10	13.80	-0.46	-5.19E-05
09-Dec-94	0.07	0.83	0.01	81.08	124.31	43.23	206.60	5252.54	-1.18	1.00	0.17	0.02	0.93	11.41	0.10	13.58	-0.79	-8.81E-05
10-Dec-94	0.05	0.83	0.00	81.08	124.30	43.22	206.57	5251.36	-1.18	0.71			0.93	11.41	0.10	13.37	-0.98	-1.09E-04
11-Dec-94	0.11	0.83	0.16	81.09	124.30	43.21	206.55	5250.18	-1.18	1.57	2.75	0.29	0.93	11.41	0.10	13.15	-0.67	-7.49E-05
12-Dec-94	0.09	0.83	0.00	81.09	124.29	43.20	206.52	5249.00	-1.18	1.29			0.93	10.11	0.10	12.94	1.73	1.94E-04
13-Dec-94	0.09	0.83	0.00	81.10	124.27	43.18	206.45	5245.46	-3.54	1.29			0.92	9.69	0.10	12.73	0.25	2.78E-05
14-Dec-94	0.05	0.83	0.00	81.10	124.26	43.16	206.38	5241.92	-3.54	0.71			0.92	9.28	0.11	12.51	0.04	4.40E-06
15-Dec-94	0.06	0.83	0.01	81.10	124.24	43.13	206.31	5238.39	-3.54	0.86	0.17	0.02	0.92	8.49	0.11	12.30	0.41	4.62E-05
16-Dec-94	0.04	0.83	0.00	81.11	124.22	43.11	206.24	5234.85	-3.54	0.57			0.92	8.49	0.11	12.09	-0.13	-1.43E-05
17-Dec-94	0.02	0.83	0.00	81.11	124.20	43.09	206.17	5231.31	-3.53	0.29			0.92	8.10	0.11	11.87	0.18	2.01E-05
18-Dec-94	0.04	0.83	0.00	81.12	124.19	43.07	206.09	5227.78	-3.53	0.57			0.91	7.72	0.11	11.66	0.29	3.25E-05
19-Dec-94	0.08	0.83	0.00	81.12	124.17	43.05	206.02	5224.25	-3.53	1.14			0.91	7.35	0.11	11.44	-0.17	-1.86E-05
20-Dec-94	0.11	0.83	0.00	81.13	124.17	43.04	206.01	5223.66	-0.59	1.57			0.91	6.99	0.11	11.23	-3.84	-4.33E-04
21-Dec-94	0.02	0.83	0.38	81.13	124.16	43.03	206.00	5223.07	-0.59	0.28	6.52	0.69	0.91	7.35	0.11	11.02	-4.42	-4.98E-04
22-Dec-94	0.02	0.83	0.35	81.13	124.16	43.04	205.99	5222.48	-0.59	0.28	6.01	0.63	0.91	8.49	0.11	10.80	4.65	5.25E-04
23-Dec-94	0.00	0.83	0.15	81.12	124.16	43.04	205.97	5221.89	-0.59	0.00	2.57	0.27	0.90	9.28	0.11	10.59	5.43	6.12E-04
24-Dec-94	0.06	0.83	0.00	81.12	124.16	43.04	205.96	5221.31	-0.59	0.85			0.90	9.28	0.11	10.38	2.92	3.30E-04
25-Dec-94	0.08	0.83	0.00	81.11	124.15	43.04	205.95	5220.72	-0.59	1.14			0.90	8.88	0.11	10.16	-0.57	-6.38E-05
26-Dec-94	0.07	0.83	0.01	81.11	124.15	43.04	205.94	5220.13	-0.59	1.00	0.17	0.02	0.90	8.49	0.11	9.95	-1.04	-1.17E-04
27-Dec-94	0.08	0.83	0.00	81.10	124.15	43.05	205.94	5220.13	0.00	1.14			0.89	8.10	0.11	9.73	-1.48	-1.67E-04
28-Dec-94	0.09	0.83	0.00	81.10	124.15	43.05	205.94	5220.13	0.00	1.28			0.89	7.72	0.11	9.52	-1.99	-2.24E-04
29-Dec-94	0.08	0.83	0.28	81.10	124.15	43.05	205.94	5220.13	0.00	1.14	4.81	0.51	0.89	7.72	0.11	9.54	-2.30	-2.59E-04
30-Dec-94	0.05	0.83	0.13	81.09	124.15	43.06	205.94	5220.13	0.00	0.71	2.23	0.24	0.89	9.28	0.11	9.56	3.14	3.54E-04
31-Dec-94	0.04	0.83	0.00	81.09	124.15	43.06	205.94	5220.13	0.00	0.57			0.89	9.28	0.11	9.57	2.26	2.55E-04
01-Jan-95	0.05	0.77	0.00	81.08	124.15	43.07	205.94	5220.13	0.00	0.66			0.89	8.88	0.11	9.59	-0.08	-8.89E-06
02-Jan-95	0.03	0.77	0.00	81.08	124.15	43.07	205.94	5220.13	0.00	0.40			0.89	8.49	0.11	9.61	-0.59	-6.65E-05
03-Jan-95	0.13	0.77	0.00	81.07	124.16	43.08	205.97	5221.89	1.77	1.72			0.89	8.10	0.11	9.63	-2.50	-2.82E-04
04-Jan-95	0.05	0.77	0.00	81.07	124.17	43.10	206.01	5223.66	1.77	0.66			0.89	7.35	0.11	9.64	-4.23	-4.76E-04
05-Jan-95	0.06	0.77	0.00	81.07	124.18	43.11	206.05	5225.43	1.77	0.79			0.89	6.64	0.11	9.66	-3.94	-4.43E-04
06-Jan-95	0.08	0.77	0.00	81.06	124.18	43.12	206.08	5227.19	1.77	1.06			0.89	6.64	0.11	9.68	-4.81	-5.41E-04
07-Jan-95	0.11	0.77	1.28	81.06	124.19	43.14	206.12	5228.96	1.77	1.45	21.99	2.32	0.89	9.69	0.11	9.70	-5.09	-5.72E-04
08-Jan-95	0.14	0.77	0.00	81.05	124.20	43.15	206.15	5230.73	1.77	1.85			0.89	10.53	0.11	9.71	21.86	2.46E-03
09-Jan-95	0.17	0.77	0.00	81.05	124.21	43.16	206.19	5232.49	1.77	2.25			0.89	10.11	0.11	9.73	-2.02	-2.27E-04
10-Jan-95	0.09	0.77	0.00	81.04	124.22	43.18	206.25	5235.44	2.95	1.19			0.89	10.11	0.11	9.75	-4.04	-4.53E-04
11-Jan-95	0.05	0.77	0.00	81.04	124.24	43.20	206.31	5238.39	2.95	0.66			0.89	9.69	0.11	9.77	-3.00	-3.37E-04
12-Jan-95	0.08	0.77	0.00	81.04	124.25	43.22	206.37	5241.33	2.95	1.06			0.89	9.28	0.11	9.78	-2.91	-3.26E-04
13-Jan-95	0.09	0.77	0.00	81.03	124.27	43.24	206.43	5244.28	2.95	1.19			0.88	9.28	0.11	9.80	-3.73	-4.18E-04
14-Jan-95	0.05	0.77	1.04	81.03	124.28	43.25	206.49	5247.23	2.95	0.66	17.90	1.89	0.88	10.97	0.11	9.82	-3.88	-4.35E-04
15-Jan-95	0.02	0.77	0.46	81.02	124.30	43.27	206.55	5250.18	2.95	0.27	7.92	0.83	0.88	14.69	0.11	9.84	18.09	2.02E-03
16-Jan-95	0.06	0.77	0.01	81.02	124.31	43.29	206.61	5253.13	2.95	0.80	0.17	0.02	0.88	14.20	0.11	9.85	11.16	1.25E-03
17-Jan-95	0.04	0.77	0.00	81.01	124.30	43.29	206.57	5251.36	-1.77	0.53			0.88	14.20	0.11	9.87	6.29	7.03E-04
18-Jan-95	0.06	0.77	0.00	81.01	124.29	43.28	206.54	5249.59	-1.77	0.80			0.88	13.71	0.11	9.89	6.34	7.09E-04
19-Jan-95	0.06	0.77	0.02	81.01	124.28	43.28	206.50	5247.82	-1.77	0.80	0.34	0.04	0.88	13.24	0.11	9.91	5.58	6.24E-04
20-Jan-95	0.04	0.77	0.01	81.00	124.28	43.27	206.46	5246.05	-1.77	0.53	0.17	0.02	0.88	12.31	0.11	9.92	5.46	6.11E-04
21-Jan-95	0.09	0.77	0.00	81.00	124.27	43.27	206.43	5244.28	-1.77	1.19			0.88	11.85	0.11	9.94	4.59	5.14E-04
22-Jan-95	0.08	0.77	0.00	80.99	124.26	43.27	206.39	5242.51	-1.77	1.06			0.88	10.97	0.11	9.96	3.26	3.65E-04
23-Jan-95	0.10	0.77	0.00	80.99	124.25	43.26	206.36	5240.74	-1.77	1.32			0.88	10.53	0.11	9.98	2.49	2.79E-04
24-Jan-95	0.10	0.77	0.00	80.98	124.24	43.25	206.31	5238.39	-2.36	1.32			0.88	10.11	0.11	9.99	2.36	2.65E-04
25-Jan-95	0.08	0.77	0.00	80.98	124.23	43.25	206.26	5236.03	-2.36	1.06			0.88	9.28	0.11	10.01	1.92	2.15E-04
26-Jan-95	0.09	0.77	0.00	80.98	124.22	43.23	206.21	5233.67	-2.36	1.19			0.88	9.28	0.11	10.03	1.34	1.51E-04
27-Jan-95	0.10	0.77	0.00	80.99	124.20	43.22	206.17	5231.31	-2.36	1.32			0.88	9.28	0.11	10.05	1.19	1.34E-04
28-Jan-95	0.08	0.77	0.06	80.99	124.19	43.20	206.12	5228.96	-2.36	1.06	1.03	0.11	0.88	9.28	0.11	10.06	1.04	1.17E-04
29-Jan-95	0.05	0.77	0.00	81.00	124.18	43.18	206.07	5226.60	-2.36	0.66			0.88	9.28	0.11	10.08	2.43	2.73E-04
30-Jan-95	0.06	0.77	0.00	81.00	124.17	43.17	206.02	5224.25	-2.35	0.79			0.88	8.49	0.11	10.10	1.67	1.87E-04
31-Jan-95	0.08	0.77	0.01	81.01	124.16	43.16	205.99	5222.48	-1.77	1.06	0.17	0.02	0.88	7.72	0.11	10.12	0.13	1.47E-05

MAGNOLIA LAKE DAILY WATER BUDGET: 1994 -1995

August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01

Drain. Area (ac) = 2176

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0451 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Feb-95	0.10	0.69	0.02	81.01	124.15	43.14	205.95	5220.72	-1.77	1.18	0.34	0.04	0.88	6.64	0.11	9.98	-0.73	-8.19E-05
02-Feb-95	0.14	0.69	0.00	81.01	124.14	43.13	205.91	5218.95	-1.77	1.66			0.87	6.64	0.11	9.85	-1.62	-1.82E-04
03-Feb-95	0.11	0.69	0.00	81.02	124.14	43.12	205.88	5217.19	-1.76	1.30			0.87	6.64	0.11	9.72	-2.34	-2.64E-04
04-Feb-95	0.19	0.69	0.52	81.02	124.13	43.10	205.84	5215.42	-1.76	2.25	8.92	0.94	0.87	7.72	0.11	9.58	-1.86	-2.09E-04
05-Feb-95	0.13	0.69	0.00	81.03	124.12	43.09	205.81	5213.66	-1.76	1.54			0.87	6.64	0.11	9.45	8.28	9.34E-04
06-Feb-95	0.15	0.69	0.00	81.03	124.11	43.08	205.77	5211.89	-1.76	1.77			0.87	6.29	0.11	9.32	-1.83	-2.06E-04
07-Feb-95	0.12	0.69	0.00	81.04	124.11	43.07	205.77	5211.89	0.00	1.42			0.87	6.29	0.11	9.19	-4.04	-4.56E-04
08-Feb-95	0.15	0.69	0.00	81.04	124.11	43.07	205.77	5211.89	0.00	1.77			0.86	4.99	0.11	9.05	-3.56	-4.02E-04
09-Feb-95	0.12	0.69	0.00	81.04	124.11	43.07	205.77	5211.89	0.00	1.42			0.86	4.99	0.11	8.92	-5.09	-5.74E-04
10-Feb-95	0.11	0.69	0.00	81.05	124.11	43.06	205.77	5211.89	0.00	1.30			0.86	4.99	0.11	8.79	-4.60	-5.19E-04
11-Feb-95	0.11	0.69	0.00	81.05	124.11	43.06	205.77	5211.89	0.00	1.30			0.86	4.99	0.11	8.65	-4.35	-4.91E-04
12-Feb-95	0.07	0.69	0.85	81.06	124.11	43.05	205.77	5211.89	0.00	0.83	14.58	1.54	0.86	6.29	0.11	8.52	-4.22	-4.76E-04
13-Feb-95	0.07	0.69	0.07	81.06	124.11	43.05	205.77	5211.89	0.00	0.83	1.20	0.13	0.86	6.29	0.11	8.39	13.81	1.56E-03
14-Feb-95	0.05	0.69	0.01	81.07	124.11	43.05	205.78	5212.48	0.59	0.59	0.17	0.02	0.85	6.29	0.11	8.25	-1.44	-1.62E-04
15-Feb-95	0.10	0.69	0.00	81.07	124.12	43.05	205.79	5213.07	0.59	1.18			0.85	6.29	0.11	8.12	-2.21	-2.49E-04
16-Feb-95	0.05	0.69	0.00	81.07	124.12	43.04	205.81	5213.66	0.59	0.59			0.85	6.29	0.11	7.99	-2.86	-3.23E-04
17-Feb-95	0.10	0.69	0.00	81.08	124.12	43.04	205.82	5214.25	0.59	1.18			0.85	6.29	0.11	7.86	-2.14	-2.41E-04
18-Feb-95	0.08	0.69	0.00	81.08	124.12	43.04	205.83	5214.83	0.59	0.95			0.85	6.29	0.11	7.72	-2.60	-2.93E-04
19-Feb-95	0.12	0.69	0.00	81.09	124.13	43.04	205.84	5215.42	0.59	1.42			0.85	6.29	0.11	7.59	-2.23	-2.51E-04
20-Feb-95	0.04	0.69	0.17	81.09	124.13	43.04	205.85	5216.01	0.59	0.47	2.92	0.31	0.84	6.29	0.11	7.46	-2.57	-2.90E-04
21-Feb-95	0.05	0.69	0.00	81.10	124.12	43.02	205.81	5213.95	-2.06	0.59			0.84	6.29	0.11	7.32	4.38	4.95E-04
22-Feb-95	0.16	0.69	0.00	81.10	124.11	43.01	205.77	5211.89	-2.06	1.89			0.84	5.62	0.11	7.19	1.17	1.32E-04
23-Feb-95	0.12	0.69	0.00	81.08	124.09	43.01	205.69	5207.78	-4.11	1.42			0.84	4.99	0.11	7.06	1.39	1.57E-04
24-Feb-95	0.10	0.69	0.00	81.05	124.08	43.03	205.65	5205.72	-2.06	1.18			0.84	4.99	0.11	6.92	-0.70	-7.93E-05
25-Feb-95	0.11	0.69	0.00	81.03	124.07	43.04	205.60	5203.67	-2.06	1.30			0.84	4.99	0.11	6.79	-0.33	-3.77E-05
26-Feb-95	0.19	0.69	0.00	81.01	124.05	43.04	205.52	5199.56	-4.11	2.25			0.84	4.99	0.11	6.66	1.73	1.96E-04
27-Feb-95	0.15	0.69	0.00	80.98	124.03	43.05	205.44	5195.45	-4.11	1.77			0.83	4.38	0.11	6.53	0.92	1.04E-04
28-Feb-95	0.17	0.69	0.05	80.96	124.03	43.07	205.42	5194.86	-0.59	2.01	0.86	0.09	0.83	4.38	0.11	6.45	-2.60	-2.94E-04
01-Mar-95	0.04	0.73	0.04	80.94	124.02	43.09	205.41	5194.27	-0.59	0.50	0.68	0.07	0.83	4.38	0.11	6.38	-1.82	-2.06E-04
02-Mar-95	0.08	0.73	0.03	80.91	124.02	43.11	205.40	5193.69	-0.59	1.00	0.51	0.05	0.83	3.82	0.11	6.31	-0.43	-4.86E-05
03-Mar-95	0.05	0.73	0.00	80.89	124.02	43.13	205.39	5193.10	-0.59	0.62			0.83	3.82	0.11	6.24	-1.62	-1.83E-04
04-Mar-95	0.11	0.73	0.00	80.86	124.02	43.15	205.38	5192.51	-0.59	1.37			0.83	3.82	0.11	6.16	-1.74	-1.96E-04
05-Mar-95	0.17	0.73	0.00	80.84	124.01	43.17	205.36	5191.92	-0.59	2.12			0.83	3.82	0.11	6.09	-2.42	-2.73E-04
06-Mar-95	0.12	0.73	0.03	80.82	124.01	43.19	205.35	5191.34	-0.59	1.50	0.51	0.05	0.83	3.82	0.11	6.02	-3.10	-3.49E-04
07-Mar-95	0.13	0.73	0.00	80.79	124.01	43.21	205.34	5190.75	-0.59	1.62			0.83	3.82	0.11	5.95	-1.84	-2.07E-04
08-Mar-95	0.25	0.73	0.79	80.77	124.00	43.23	205.33	5190.16	-0.59	3.12	13.52	1.43	0.82	6.29	0.11	5.88	-2.46	-2.77E-04
09-Mar-95	0.12	0.73	0.00	80.75	124.00	43.25	205.32	5189.58	-0.59	1.50			0.82	4.99	0.11	5.80	13.54	1.52E-03
10-Mar-95	0.19	0.73	0.00	80.72	124.00	43.28	205.30	5188.99	-0.59	2.37			0.82	4.99	0.12	5.73	-1.02	-1.15E-04
11-Mar-95	0.17	0.73	0.00	80.70	124.00	43.30	205.29	5188.40	-0.59	2.12			0.82	4.38	0.12	5.66	-1.83	-2.05E-04
12-Mar-95	0.13	0.73	0.00	80.68	123.99	43.32	205.28	5187.82	-0.59	1.62			0.82	3.82	0.12	5.59	-2.11	-2.37E-04
13-Mar-95	0.24	0.73	0.00	80.65	123.99	43.34	205.27	5187.23	-0.59	3.00			0.82	3.82	0.12	5.51	-2.11	-2.37E-04
14-Mar-95	0.28	0.73	0.02	80.63	124.00	43.37	205.30	5188.99	1.76	3.50	0.34	0.04	0.82	3.82	0.12	5.44	-5.75	-6.46E-04
15-Mar-95	0.19	0.73	0.04	80.61	124.01	43.40	205.34	5190.75	1.76	2.37	0.68	0.07	0.82	3.82	0.12	5.37	-5.81	-6.51E-04
16-Mar-95	0.13	0.73	0.00	80.58	124.02	43.43	205.38	5192.51	1.76	1.62			0.82	3.28	0.12	5.30	-4.23	-4.75E-04
17-Mar-95	0.07	0.73	1.35	80.56	124.02	43.47	205.41	5194.27	1.76	0.87	23.11	2.45	0.81	6.29	0.12	5.22	-4.71	-5.27E-04
18-Mar-95	0.07	0.73	0.07	80.54	124.03	43.50	205.45	5196.03	1.76	0.87	1.20	0.13	0.81	6.29	0.12	5.15	24.68	2.76E-03
19-Mar-95	0.15	0.73	0.02	80.51	124.04	43.53	205.48	5197.79	1.76	1.88	0.34	0.04	0.81	6.29	0.12	5.08	0.52	5.78E-05
20-Mar-95	0.19	0.73	0.00	80.49	124.05	43.56	205.52	5199.56	1.76	2.38			0.81	5.62	0.12	5.01	-1.36	-1.52E-04
21-Mar-95	0.16	0.73	0.00	80.46	124.04	43.57	205.46	5196.62	-2.94	2.00			0.81	4.99	0.12	4.93	1.86	2.08E-04
22-Mar-95	0.18	0.73	0.00	80.44	124.02	43.58	205.40	5193.69	-2.93	2.25			0.81	4.99	0.13	4.86	1.67	1.87E-04
23-Mar-95	0.22	0.73	0.00	80.42	124.01	43.59	205.34	5190.75	-2.93	2.75			0.81	4.99	0.13	4.79	1.49	1.66E-04
24-Mar-95	0.23	0.73	0.00	80.39	123.99	43.60	205.28	5187.82	-2.93	2.87			0.81	4.38	0.13	4.72	1.06	1.19E-04
25-Mar-95	0.16	0.73	0.00	80.37	123.98	43.61	205.22	5184.89	-2.93	2.00			0.81	3.82	0.13	4.65	0.40	4.52E-05
26-Mar-95	0.22	0.73	0.00	80.35	123.96	43.62	205.16	5181.95	-2.93	2.75			0.80	3.82	0.13	4.57	0.78	8.72E-05
27-Mar-95	0.20	0.73	0.00	80.32	123.95	43.63	205.10	5179.02	-2.93	2.50			0.80	3.28	0.13	4.50	0.10	1.14E-05
28-Mar-95	0.15	0.73	0.00	80.30	123.96	43.66	205.16	5181.95	2.93	1.87			0.80	2.55	0.13	4.43	-5.97	-6.67E-04
29-Mar-95	0.19	0.73	0.02	80.30	123.98	43.68	205.22	5184.89	2.93	2.37	0.34	0.04	0.80	2.55	0.13	4.36	-6.02	-6.71E-04
30-Mar-95	0.21	0.73	0.00	80.30	123.99	43.69	205.28	5187.82	2.93	2.62			0.80	2.10	0.13	4.28	-6.07	-6.77E-04
31-Mar-95	0.21	0.73	1.81	80.30	124.01	43.70	205.34	5190.75	2.93	2.62	30.97	3.28	0.80	5.95	0.13	4.35	-7.07	-7.88E-04

MAGNOLIA LAKE DAILY WATER BUDGET: 1994 -1995

August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01

Drain. Area (ac) = 2176

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0451 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Apr-95	0.00	0.84	0.16	80.31	124.02	43.72	205.40	5193.69	2.93	0.00	2.74	0.29	0.80	5.95	0.13	4.47	30.97	3.45E-03
02-Apr-95	0.12	0.84	0.00	80.31	124.04	43.73	205.46	5196.62	2.93	1.73			0.80	5.95	0.13	4.60	2.24	2.49E-04
03-Apr-95	0.21	0.84	0.00	80.31	124.05	43.74	205.52	5199.56	2.94	3.02			0.80	5.30	0.13	4.72	-2.64	-2.93E-04
04-Apr-95	0.19	0.84	0.00	80.31	124.08	43.77	205.63	5204.84	5.29	2.73			0.80	4.68	0.13	4.94	-7.06	-7.84E-04
05-Apr-95	0.12	0.84	0.48	80.31	124.10	43.79	205.73	5210.13	5.29	1.73	8.23	0.87	0.81	5.95	0.13	5.17	-7.61	-8.45E-04
06-Apr-95	0.00	0.84	1.98	80.31	124.13	43.81	205.84	5215.42	5.29	0.00	33.96	3.59	0.81	11.85	0.13	5.39	3.54	3.92E-04
07-Apr-95	0.09	0.84	0.00	80.31	124.15	43.84	205.95	5220.72	5.29	1.30			0.81	10.97	0.13	5.62	39.40	4.36E-03
08-Apr-95	0.14	0.84	0.09	80.32	124.18	43.86	206.06	5226.01	5.30	2.02	1.55	0.16	0.81	10.97	0.13	5.84	-0.56	-6.25E-05
09-Apr-95	0.17	0.84	0.01	80.32	124.20	43.89	206.17	5231.31	5.30	2.45	0.17	0.02	0.81	10.11	0.13	6.07	0.20	2.18E-05
10-Apr-95	0.20	0.84	0.00	80.32	124.23	43.91	206.27	5236.62	5.30	2.89			0.81	10.11	0.13	6.29	-2.84	-3.13E-04
11-Apr-95	0.23	0.84	0.48	80.32	124.23	43.91	206.26	5236.03	-0.59	3.32	8.25	0.87	0.82	11.85	0.13	6.26	2.21	2.44E-04
12-Apr-95	0.16	0.84	0.09	80.32	124.22	43.90	206.25	5235.44	-0.59	2.31	1.55	0.16	0.82	11.85	0.13	6.24	12.67	1.40E-03
13-Apr-95	0.05	0.84	0.00	80.32	124.22	43.90	206.24	5234.85	-0.59	0.72			0.82	10.97	0.13	6.21	6.29	6.95E-04
14-Apr-95	0.21	0.84	0.00	80.32	124.22	43.90	206.23	5234.26	-0.59	3.03			0.82	10.11	0.13	6.19	5.31	5.87E-04
15-Apr-95	0.21	0.84	0.00	80.32	124.22	43.89	206.21	5233.67	-0.59	3.03			0.82	10.11	0.12	6.17	2.17	2.40E-04
16-Apr-95	0.21	0.84	0.00	80.33	124.21	43.89	206.20	5233.08	-0.59	3.03			0.82	8.88	0.12	6.14	2.20	2.43E-04
17-Apr-95	0.19	0.84	0.00	80.33	124.21	43.88	206.19	5232.49	-0.59	2.74			0.83	8.88	0.12	6.12	1.00	1.10E-04
18-Apr-95	0.24	0.84	0.02	80.33	124.20	43.87	206.14	5230.14	-2.36	3.46	0.34	0.04	0.83	8.88	0.12	6.02	3.08	3.41E-04
19-Apr-95	0.24	0.84	0.00	80.33	124.19	43.86	206.09	5227.78	-2.36	3.46			0.83	8.10	0.12	5.92	2.84	3.14E-04
20-Apr-95	0.20	0.84	0.00	80.33	124.18	43.84	206.05	5225.43	-2.36	2.88			0.83	7.35	0.12	5.82	1.78	1.97E-04
21-Apr-95	0.25	0.84	0.06	80.33	124.16	43.83	206.00	5223.07	-2.35	3.60	1.03	0.11	0.83	6.29	0.12	5.72	1.71	1.90E-04
22-Apr-95	0.19	0.84	0.00	80.33	124.15	43.82	205.95	5220.72	-2.35	2.74			0.83	6.29	0.12	5.62	1.17	1.30E-04
23-Apr-95	0.21	0.84	0.00	80.34	124.14	43.81	205.90	5218.36	-2.35	3.03			0.83	5.95	0.12	5.52	1.00	1.11E-04
24-Apr-95	0.26	0.84	0.99	80.34	124.13	43.79	205.85	5216.01	-2.35	3.75	16.98	1.80	0.84	8.88	0.12	5.42	0.47	5.26E-05
25-Apr-95	0.11	0.84	0.00	80.34	124.14	43.80	205.89	5217.78	1.76	1.59			0.84	6.29	0.12	5.49	17.45	1.93E-03
26-Apr-95	0.19	0.84	0.00	80.34	124.15	43.81	205.93	5219.54	1.76	2.74			0.84	6.29	0.12	5.57	-1.84	-2.03E-04
27-Apr-95	0.13	0.84	0.86	80.34	124.16	43.82	205.96	5221.31	1.77	1.87	14.76	1.56	0.84	8.10	0.12	5.64	-3.06	-3.39E-04
28-Apr-95	0.18	0.84	0.00	80.33	124.16	43.83	206.00	5223.07	1.77	2.60			0.84	8.10	0.12	5.72	15.86	1.76E-03
29-Apr-95	0.18	0.84	0.00	80.33	124.17	43.84	206.03	5224.84	1.77	2.60			0.84	7.35	0.12	5.79	-1.25	-1.39E-04
30-Apr-95	0.26	0.84	0.00	80.33	124.18	43.85	206.07	5226.60	1.77	3.75			0.84	6.29	0.12	5.87	-2.08	-2.30E-04
01-May-95	0.21	0.82	0.00	80.32	124.19	43.87	206.11	5228.37	1.77	2.96			0.84	6.29	0.12	5.94	-4.37	-4.83E-04
02-May-95	0.26	0.82	0.00	80.32	124.18	43.85	206.05	5225.43	-2.94	3.66			0.85	5.95	0.12	5.82	1.06	1.18E-04
03-May-95	0.30	0.82	0.00	80.32	124.16	43.84	205.99	5222.48	-2.94	4.22			0.85	5.30	0.12	5.69	0.15	1.62E-05
04-May-95	0.24	0.82	0.00	80.32	124.15	43.83	205.93	5219.54	-2.94	3.38			0.85	4.68	0.12	5.57	-0.94	-1.04E-04
05-May-95	0.17	0.82	0.20	80.31	124.13	43.82	205.87	5216.60	-2.94	2.39	3.43	0.36	0.85	5.30	0.12	5.44	-0.59	-6.56E-05
06-May-95	0.25	0.82	0.00	80.31	124.12	43.81	205.81	5213.66	-2.94	3.52			0.85	4.68	0.12	5.32	4.93	5.47E-04
07-May-95	0.28	0.82	0.00	80.31	124.10	43.80	205.75	5210.72	-2.94	3.94			0.85	4.09	0.12	5.19	-0.48	-5.33E-05
08-May-95	0.26	0.82	0.00	80.30	124.09	43.79	205.69	5207.78	-2.94	3.65			0.85	3.54	0.12	5.07	-1.36	-1.51E-04
09-May-95	0.28	0.82	0.02	80.30	124.10	43.80	205.72	5209.54	1.76	3.94	0.34	0.04	0.85	3.03	0.12	5.14	-6.21	-6.89E-04
10-May-95	0.19	0.82	0.00	80.30	124.11	43.81	205.76	5211.31	1.76	2.67			0.85	2.55	0.11	5.22	-6.70	-7.43E-04
11-May-95	0.19	0.82	1.70	80.29	124.12	43.82	205.79	5213.07	1.76	2.67	29.15	3.08	0.85	5.30	0.11	5.29	-6.37	-7.06E-04
12-May-95	0.12	0.82	0.72	80.29	124.12	43.83	205.83	5214.83	1.76	1.69	12.35	1.31	0.86	8.10	0.11	5.37	28.55	3.16E-03
13-May-95	0.21	0.82	0.03	80.29	124.13	43.85	205.87	5216.60	1.76	2.95	0.51	0.05	0.86	7.35	0.11	5.44	13.68	1.52E-03
14-May-95	0.22	0.82	0.00	80.28	124.14	43.86	205.90	5218.36	1.76	3.10			0.86	6.29	0.11	5.52	-1.50	-1.66E-04
15-May-95	0.25	0.82	0.02	80.28	124.15	43.87	205.94	5220.13	1.77	3.52	0.34	0.04	0.86	6.29	0.11	5.59	-3.35	-3.70E-04
16-May-95	0.26	0.82	0.00	80.28	124.15	43.87	205.93	5219.61	-0.51	3.66			0.86	5.95	0.11	5.57	-1.18	-1.31E-04
17-May-95	0.29	0.82	0.00	80.28	124.15	43.87	205.92	5219.10	-0.51	4.08			0.86	5.95	0.11	5.55	-2.02	-2.23E-04
18-May-95	0.27	0.82	0.00	80.27	124.14	43.87	205.91	5218.58	-0.51	3.80			0.86	5.30	0.11	5.53	-2.42	-2.68E-04
19-May-95	0.25	0.82	0.25	80.27	124.14	43.87	205.90	5218.07	-0.51	3.52	4.29	0.45	0.86	4.68	0.11	5.50	-2.76	-3.06E-04
20-May-95	0.18	0.82	0.81	80.27	124.14	43.87	205.89	5217.55	-0.51	2.53	13.90	1.47	0.86	7.35	0.11	5.48	1.66	1.84E-04
21-May-95	0.21	0.82	0.00	80.26	124.14	43.87	205.88	5217.04	-0.51	2.95			0.86	6.29	0.11	5.46	15.97	1.77E-03
22-May-95	0.24	0.82	0.00	80.26	124.13	43.87	205.86	5216.53	-0.51	3.38			0.86	5.95	0.11	5.44	-0.86	-9.54E-05
23-May-95	0.32	0.82	0.47	80.26	124.13	43.87	205.85	5216.01	-0.51	4.50	8.06	0.85	0.87	7.35	0.11	5.42	-1.60	-1.77E-04
24-May-95	0.28	0.82	0.00	80.25	124.12	43.86	205.81	5213.66	-2.35	3.94			0.87	6.29	0.11	5.32	9.45	1.05E-03
25-May-95	0.29	0.82	0.00	80.25	124.11	43.86	205.76	5211.31	-2.35	4.08			0.87	5.95	0.11	5.22	0.14	1.54E-05
26-May-95	0.26	0.82	0.00	80.25	124.10	43.85	205.71	5208.96	-2.35	3.65			0.87	5.95	0.11	5.12	-0.24	-2.65E-05
27-May-95	0.31	0.82	0.00	80.24	124.08	43.84	205.66	5206.60	-2.35	4.36			0.87	4.68	0.11	5.02	0.28	3.15E-05
28-May-95	0.25	0.82	0.00	80.24	124.07	43.83	205.62	5204.25	-2.35	3.51			0.87	4.68	0.11	4.92	-1.59	-1.76E-04
29-May-95	0.25	0.82	0.02	80.24	124.06	43.82	205.57	5201.90	-2.35	3.51	0.34	0.04	0.87	3.54	0.11	4.82	-0.64	-7.15E-05
30-May-95	0.23	0.82	0.37	80.23	124.05	43.82	205.52	5199.56	-2.35	3.23	6.34	0.67	0.87	4.68	0.11	4.72	-1.30	-1.44E-04
31-May-95	0.23	0.82	0.00	80.23	124.11	43.87	205.76	5211.21	11.65	3.23			0.87	4.09	0.11	5.21	-7.15	-7.93E-04

MAGNOLIA LAKE DAILY WATER BUDGET: 1994 -1995

August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01

Drain. Area (ac) = 2176

Date	Gaines. Evap. (in)	Pan Coeff.	Lowry Precip. (in)	C-0451 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Alligator Creek Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Jun-95	0.33	0.85	0.12	80.23	124.16	43.93	205.99	5222.87	11.67	4.82	2.06	0.22	0.88	3.54	0.11	5.71	-15.26	-1.69E-03
02-Jun-95	0.23	0.85	0.13	80.23	124.22	43.99	206.23	5234.55	11.68	3.36	2.23	0.24	0.88	3.54	0.11	6.20	-15.62	-1.72E-03
03-Jun-95	0.03	0.85	1.63	80.22	124.28	44.05	206.47	5246.25	11.69	0.44	28.05	2.96	0.88	8.88	0.11	6.70	-14.48	-1.59E-03
04-Jun-95	0.12	0.85	2.30	80.22	124.33	44.11	206.71	5257.95	11.71	1.76	39.62	4.17	0.88	17.78	0.11	7.19	21.81	2.39E-03
05-Jun-95	0.00	0.85	0.10	80.22	124.39	44.17	206.94	5269.67	11.72	0.00	1.72	0.18	0.89	15.69	0.11	7.68	41.67	4.56E-03
06-Jun-95	0.15	0.85	0.00	80.21	124.40	44.19	207.00	5272.63	2.96	2.20			0.89	15.69	0.11	7.81	7.73	8.45E-04
07-Jun-95	0.27	0.85	0.00	80.21	124.42	44.21	207.06	5275.59	2.96	3.96			0.89	13.71	0.11	7.93	3.50	3.82E-04
08-Jun-95	0.30	0.85	0.00	80.21	124.43	44.23	207.12	5278.55	2.96	4.40			0.90	13.71	0.11	8.06	-0.36	-3.92E-05
09-Jun-95	0.23	0.85	0.00	80.20	124.45	44.24	207.18	5281.51	2.96	3.38			0.90	12.77	0.12	8.18	-0.92	-1.01E-04
10-Jun-95	0.29	0.85	0.00	80.20	124.46	44.26	207.24	5284.47	2.96	4.26			0.90	11.85	0.12	8.31	-0.97	-1.05E-04
11-Jun-95	0.25	0.85	3.56	80.20	124.48	44.28	207.30	5287.43	2.96	3.67	61.50	6.46	0.90	24.67	0.12	8.43	-2.89	-3.14E-04
12-Jun-95	0.23	0.85	0.16	80.19	124.49	44.30	207.36	5290.39	2.96	3.38	2.76	0.29	0.91	25.90	0.12	8.56	78.35	8.53E-03
13-Jun-95	0.20	0.85	0.00	80.19	124.48	44.28	207.30	5287.43	-2.96	2.94			0.91	24.67	0.12	8.43	20.78	2.26E-03
14-Jun-95	0.25	0.85	0.00	80.19	124.46	44.27	207.24	5284.47	-2.96	3.67			0.91	22.27	0.12	8.31	17.05	1.86E-03
15-Jun-95	0.27	0.85	0.00	80.18	124.45	44.26	207.18	5281.51	-2.96	3.96			0.92	19.97	0.12	8.18	14.05	1.53E-03
16-Jun-95	0.33	0.85	0.59	80.18	124.43	44.25	207.12	5278.55	-2.96	4.84	10.18	1.07	0.92	22.27	0.12	8.06	11.56	1.26E-03
17-Jun-95	0.25	0.85	0.00	80.18	124.42	44.24	207.06	5275.59	-2.96	3.67			0.92	19.97	0.12	7.93	24.38	2.66E-03
18-Jun-95	0.28	0.85	0.02	80.18	124.40	44.23	207.00	5272.63	-2.96	4.11	0.35	0.04	0.93	19.97	0.12	7.81	12.13	1.33E-03
19-Jun-95	0.25	0.85	0.58	80.17	124.39	44.22	206.94	5269.67	-2.96	3.66	10.00	1.05	0.93	24.67	0.12	7.68	12.20	1.33E-03
20-Jun-95	0.26	0.85	0.01	80.17	124.54	44.37	207.57	5300.76	31.09	3.82	0.17	0.02	0.93	22.27	0.12	8.99	-5.91	-6.41E-04
21-Jun-95	0.22	0.85	0.04	80.17	124.54	44.37	207.56	5300.47	-0.30	3.23	0.69	0.07	0.93	22.27	0.12	8.98	10.75	1.17E-03
22-Jun-95	0.30	0.85	0.16	80.16	124.54	44.37	207.56	5300.17	-0.30	4.41	2.77	0.29	0.94	22.27	0.12	8.97	11.93	1.30E-03
23-Jun-95	0.27	0.85	0.01	80.16	124.54	44.38	207.55	5299.87	-0.30	3.97	0.17	0.02	0.94	21.11	0.12	8.96	13.06	1.42E-03
24-Jun-95	0.19	0.85	0.00	80.16	124.53	44.38	207.55	5299.58	-0.30	2.79			0.94	18.86	0.12	8.94	9.49	1.03E-03
25-Jun-95	0.24	0.85	1.08	80.15	124.53	44.38	207.54	5299.28	-0.30	3.53	18.68	1.96	0.95	23.46	0.12	8.93	8.24	8.95E-04
26-Jun-95	0.04	0.85	0.36	80.15	124.54	44.39	207.57	5300.76	1.48	0.59	6.23	0.65	0.95	23.46	0.12	8.99	30.97	3.36E-03
27-Jun-95	0.15	0.85	0.00	80.14	124.53	44.39	207.53	5298.69	-2.08	2.20			0.95	22.27	0.12	8.91	23.66	2.57E-03
28-Jun-95	0.21	0.85	0.80	80.14	124.53	44.39	207.54	5299.28	0.59	3.09	13.84	1.45	0.95	24.67	0.13	8.93	11.39	1.24E-03
29-Jun-95	0.21	0.85	0.80	80.13	124.54	44.40	207.56	5300.21	0.93	3.09	13.84	1.45	0.96	27.16	0.13	8.97	27.83	3.02E-03
30-Jun-95	0.21	0.85	0.00	80.13	124.54	44.41	207.56	5300.19	-0.02	3.09			0.96	27.16	0.13	8.97	31.25	3.39E-03
01-Jul-95	0.26	0.91	0.00	80.12	124.54	44.42	207.57	5300.58	0.39	4.09			0.96	24.67	0.13	8.99	15.55	1.69E-03
02-Jul-95	0.25	0.91	0.00	80.12	124.54	44.42	207.57	5300.62	0.04	3.94			0.97	24.67	0.13	8.99	12.39	1.34E-03
03-Jul-95	0.20	0.91	0.02	80.11	124.55	44.44	207.61	5302.84	2.22	3.15	0.35	0.04	0.97	22.27	0.13	9.08	10.37	1.12E-03
04-Jul-95	0.22	0.91	0.00	80.11	124.54	44.44	207.58	5301.06	-1.78	3.46			0.97	21.11	0.13	9.01	13.04	1.41E-03
05-Jul-95	0.22	0.91	0.03	80.10	124.53	44.43	207.54	5299.28	-1.78	3.46	0.52	0.05	0.97	21.11	0.13	8.93	11.26	1.22E-03
06-Jul-95	0.25	0.91	0.00	80.09	124.52	44.43	207.50	5297.50	-1.78	3.93			0.97	19.97	0.13	8.86	11.91	1.29E-03
07-Jul-95	0.24	0.91	0.07	80.09	124.52	44.43	207.47	5295.72	-1.78	3.78	1.21	0.13	0.97	17.78	0.13	8.78	9.80	1.06E-03
08-Jul-95	0.23	0.91	0.00	80.08	124.51	44.42	207.43	5293.94	-1.78	3.62			0.97	17.78	0.13	8.71	9.18	9.96E-04
09-Jul-95	0.29	0.91	0.00	80.08	124.50	44.42	207.40	5292.17	-1.78	4.56			0.97	15.69	0.13	8.63	8.08	8.77E-04
10-Jul-95	0.25	0.91	1.89	80.07	124.49	44.42	207.36	5290.39	-1.78	3.93	32.66	3.43	0.97	21.11	0.13	8.56	5.12	5.56E-04
11-Jul-95	0.18	0.91	0.00	80.07	124.51	44.44	207.43	5293.94	3.56	2.83			0.97	19.97	0.13	8.71	42.00	4.56E-03
12-Jul-95	0.14	0.91	0.00	80.06	124.52	44.46	207.50	5297.50	3.56	2.20			0.97	17.78	0.13	8.86	5.72	6.20E-04
13-Jul-95	0.28	0.91	0.00	80.06	124.54	44.49	207.58	5301.06	3.56	4.41			0.97	17.78	0.13	9.01	4.01	4.34E-04
14-Jul-95	0.18	0.91	0.00	80.05	124.56	44.51	207.65	5304.62	3.56	2.83			0.97	16.72	0.13	9.15	1.65	1.79E-04
15-Jul-95	0.21	0.91	0.07	80.05	124.58	44.53	207.72	5308.18	3.56	3.31	1.21	0.13	0.97	16.72	0.13	9.30	2.02	2.18E-04
16-Jul-95	0.21	0.91	0.40	80.04	124.59	44.55	207.79	5311.74	3.56	3.31	6.93	0.73	0.97	17.78	0.13	9.45	2.73	2.95E-04
17-Jul-95	0.18	0.91	1.75	80.03	124.61	44.58	207.86	5315.30	3.56	2.84	30.31	3.17	0.97	24.67	0.13	9.60	9.95	1.07E-03
18-Jul-95	0.03	0.91	0.00	80.03	124.62	44.60	207.92	5318.27	2.97	0.47			0.97	24.67	0.13	9.73	43.59	4.70E-03
19-Jul-95	0.22	0.91	0.00	80.02	124.64	44.62	207.98	5321.24	2.97	3.47			0.97	23.46	0.13	9.85	12.34	1.33E-03
20-Jul-95	0.27	0.91	2.49	80.02	124.65	44.64	208.04	5324.21	2.97	4.26	43.17	4.52	0.97	29.75	0.13	9.98	8.01	8.62E-04
21-Jul-95	0.26	0.91	0.00	80.01	124.67	44.66	208.10	5327.19	2.97	4.10			0.97	29.75	0.13	10.10	61.07	6.57E-03
22-Jul-95	0.16	0.91	0.29	80.01	124.68	44.67	208.16	5330.16	2.97	2.53	5.03	0.53	0.97	29.75	0.13	10.23	13.42	1.44E-03
23-Jul-95	0.19	0.91	0.14	80.00	124.70	44.69	208.22	5333.13	2.97	3.00	2.43	0.25	0.97	29.75	0.13	10.35	20.43	2.19E-03
24-Jul-95	0.18	0.91	0.12	80.00	124.71	44.71	208.28	5336.11	2.98	2.84	2.08	0.22	0.97	29.75	0.13	10.48	16.95	1.82E-03
25-Jul-95	0.27	0.91	2.23	79.99	124.72	44.73	208.34	5339.09	2.98	4.27	38.72	4.04	0.97	35.90	0.13	10.60	16.60	1.78E-03
26-Jul-95	0.11	0.91	0.00	79.99	124.74	44.75	208.40	5342.06	2.98	1.74			0.97	35.90	0.13	10.72	61.66	6.61E-03
27-Jul-95	0.20	0.91	0.08	79.99	124.75	44.76	208.46	5345.04	2.98	3.16	1.39	0.15	0.97	34.50	0.13	10.85	21.31	2.28E-03
28-Jul-95	0.20	0.91	0.54	79.99	124.77	44.78	208.52	5348.02	2.98	3.16	9.38	0.98	0.97	37.33	0.13	10.97	19.89	2.13E-03
29-Jul-95	0.27	0.91	0.01	79.99	124.78	44.79	208.58	5351.00	2.98	4.27	0.17	0.02	0.97	34.50	0.13	11.10	31.42	3.36E-03
30-Jul-95	0.16	0.91	0.00	79.99	124.80	44.81	208.64	5353.98	2.98	2.53			0.97	34.50	0.13	11.22	17.18	1.84E-03
31-Jul-95	0.25	0.91	0.00	79.99	124.81	44.82	208.6999	5356.96	2.98	3.96			0.97	32.43	0.13	11.35	18.61	1.99E-03
																	Average=	3.10E-04
																	Variance =	1.47E-06
																	Std. Dev.=	1.21E-03
Maximum	0.33	0.91	3.56	81.13	124.93	45.77	209.20	5382.03	31.09	4.84	61.50	6.46	0.99	37.33	0.15	42.24	78.35	
Minimum	0.00	0.69	0.00	79.04	123.95	43.01	205.10	5179.02	-4.18	0.00	0.00	0.00	0.80	2.10	0.10	4.28	-24.85	
Average	0.15	0.81	0.16	80.41	124.34	43.93	206.74	5259.79	0.00	2.12	2.81	0.30	0.90	13.34	0.12	12.22	2.85	

Magnolia Lake Daily Water Budget (Mean Values)

August 1, 1994 to July 31, 1995

Values in in/yr were calculated using the average lake area.

With negative LEAKAGE values:

Precipitation	2.81	ac-ft/day	59.63	in/yr
Runoff	0.30	ac-ft/day	6.27	in/yr
Surficial Aquifer Inflow	0.90	ac-ft/day	19.11	in/yr
Surface Water Inflow	13.34	ac-ft/day	282.61	in/yr
Surficial Aquifer Outflow	0.12	ac-ft/day	2.50	in/yr
Leakage	2.85	ac-ft/day	60.33	in/yr
Evaporation	2.12	ac-ft/day	44.90	in/yr
Surface Water Outflow	12.22	ac-ft/day	258.85	in/yr

LAKE BROOKLYN DAILY WATER BUDGET: 1994-1995

August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01

Drain. Area (ac) = 1920

Date	G'ville Evap. (in)	Pan Coeff.	Brklyn. Precip. (in)	C-0120 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Aug-94	0.21	0.91	0.00	80.26	98.95	18.69	303.46	2251.81	NA	4.83			0.36	42.24	0.38	NA	NA
02-Aug-94	0.21	0.91	0.00	80.29	98.76	18.47	299.42	2193.53	-58.28	4.77			0.36	41.56	0.38	95.67	1.73E-02
03-Aug-94	0.26	0.91	0.00	80.31	98.56	18.25	295.37	2136.03	-57.50	5.82			0.36	40.88	0.38	94.27	1.75E-02
04-Aug-94	0.20	0.91	0.00	80.34	98.37	18.03	291.32	2079.32	-56.71	4.42			0.36	40.21	0.38	91.76	1.75E-02
05-Aug-94	0.15	0.91	1.19	80.37	98.37	18.00	291.32	2079.32	0.00	3.31	28.89	1.90	0.36	39.53	0.38	35.77	6.82E-03
06-Aug-94	0.19	0.91	1.85	80.39	98.59	18.20	295.96	2144.41	65.09	4.26	45.63	2.96	0.36	38.85	0.38	1.90	3.52E-04
07-Aug-94	0.17	0.91	0.25	80.42	98.81	18.39	300.60	2210.53	66.12	3.88	6.26	0.40	0.35	38.18	0.37	17.04	3.08E-03
08-Aug-94	0.12	0.91	0.32	80.45	99.04	18.59	305.24	2277.68	67.15	2.78	8.14	0.51	0.35	37.50	0.37	-26.21	-4.62E-03
09-Aug-94	0.07	0.91	0.01	80.47	99.26	18.78	309.89	2345.86	68.18	1.64	0.26	0.02	0.35	36.82	0.37	-24.82	-4.26E-03
10-Aug-94	0.18	0.91	0.00	80.50	99.48	18.98	314.53	2415.07	69.21	4.29			0.35	36.15	0.37	-33.78	-5.66E-03
11-Aug-94	0.17	0.91	0.02	80.53	99.70	19.17	319.17	2485.30	70.24	4.11	0.53	0.03	0.35	35.47	0.37	-38.40	-6.28E-03
12-Aug-94	0.19	0.91	0.20	80.55	99.70	19.15	319.17	2485.30	0.00	4.60	5.32	0.32	0.35	34.79	0.37	31.90	5.22E-03
13-Aug-94	0.16	0.91	0.53	80.58	99.79	19.21	321.12	2515.19	29.88	3.90	14.18	0.85	0.35	34.12	0.37	5.93	9.61E-04
14-Aug-94	0.23	0.91	0.12	80.61	99.89	19.28	323.08	2545.25	30.06	5.64	3.23	0.19	0.35	33.44	0.37	15.17	2.43E-03
15-Aug-94	0.19	0.91	0.48	80.63	99.98	19.35	325.03	2575.49	30.25	4.68	13.00	0.77	0.34	32.76	0.37	0.96	1.53E-04
16-Aug-94	0.13	0.91	0.24	80.66	100.07	19.41	326.99	2605.92	30.43	3.22	6.54	0.38	0.34	32.09	0.37	11.40	1.80E-03
17-Aug-94	0.00	0.91	0.01	80.69	100.17	19.48	328.94	2636.53	30.61	0.00	0.27	0.02	0.34	31.41	0.37	5.15	8.04E-04
18-Aug-94	0.11	0.91	0.00	80.71	100.26	19.55	330.90	2667.33	30.79	2.76			0.34	30.73	0.36	0.88	1.37E-04
19-Aug-94	0.22	0.91	0.00	80.74	100.26	19.52	330.90	2667.33	0.00	5.52			0.34	30.06	0.36	27.95	4.33E-03
20-Aug-94	0.24	0.91	0.00	80.77	100.30	19.54	331.80	2681.69	14.36	6.04			0.34	29.38	0.36	10.15	1.57E-03
21-Aug-94	0.21	0.91	0.02	80.79	100.35	19.55	332.71	2696.08	14.40	5.30	0.55	0.03	0.34	28.70	0.36	8.92	1.37E-03
22-Aug-94	0.25	0.91	0.24	80.82	100.39	19.57	333.62	2710.52	14.44	6.32	6.67	0.38	0.34	28.03	0.36	9.53	1.46E-03
23-Aug-94	0.08	0.91	0.00	80.82	100.43	19.61	334.52	2725.00	14.48	2.03			0.33	27.35	0.36	14.26	2.17E-03
24-Aug-94	0.12	0.91	0.10	80.82	100.48	19.65	335.43	2739.51	14.52	3.05	2.80	0.16	0.33	26.67	0.36	10.78	1.63E-03
25-Aug-94	0.16	0.91	0.02	80.83	100.52	19.69	336.34	2754.07	14.56	4.08	0.56	0.03	0.33	26.00	0.36	11.99	1.81E-03
26-Aug-94	0.18	0.91	0.00	80.83	100.52	19.69	336.34	2754.07	0.00	4.59			0.33	25.32	0.36	22.48	3.39E-03
27-Aug-94	0.09	0.91	0.00	80.83	100.54	19.71	336.83	2761.92	7.85	2.30			0.33	24.64	0.36	12.85	1.94E-03
28-Aug-94	0.16	0.91	0.00	80.83	100.57	19.73	337.32	2769.79	7.87	4.09			0.33	23.97	0.35	14.45	2.17E-03
29-Aug-94	0.21	0.91	0.00	80.84	100.59	19.75	337.81	2777.67	7.88	5.38			0.33	23.29	0.35	11.97	1.79E-03
30-Aug-94	0.21	0.91	0.00	80.84	100.61	19.77	338.29	2785.55	7.89	5.39			0.33	22.61	0.35	9.99	1.49E-03
31-Aug-94	0.23	0.91	0.00	80.84	100.64	19.79	338.78	2793.45	7.90	5.91			0.32	22.25	0.35	9.30	1.39E-03
01-Sep-94	0.21	0.85	0.00	80.85	100.66	19.81	339.27	2801.36	7.91	5.05			0.32	21.88	0.35	8.40	1.25E-03
02-Sep-94	0.18	0.85	0.00	80.85	100.66	19.81	339.27	2801.36	0.00	4.33			0.32	21.51	0.35	16.80	2.50E-03
03-Sep-94	0.17	0.85	0.04	80.85	100.68	19.83	339.62	2807.02	5.66	4.09	1.13	0.06	0.32	21.15	0.35	11.50	1.71E-03
04-Sep-94	0.23	0.85	0.00	80.85	100.69	19.84	339.97	2812.69	5.66	5.54			0.32	20.78	0.36	12.56	1.86E-03
05-Sep-94	0.13	0.85	0.00	80.86	100.71	19.85	340.32	2818.35	5.67	3.13			0.32	20.41	0.36	9.54	1.41E-03
06-Sep-94	0.19	0.85	0.00	80.86	100.73	19.87	340.67	2824.03	5.68	4.58			0.32	20.05	0.36	11.57	1.71E-03
07-Sep-94	0.21	0.85	0.00	80.86	100.74	19.88	341.02	2829.71	5.68	5.07			0.32	19.68	0.37	9.74	1.44E-03
08-Sep-94	0.20	0.85	0.01	80.87	100.76	19.89	341.37	2835.40	5.69	4.84	0.28	0.02	0.32	19.32	0.37	8.88	1.31E-03
09-Sep-94	0.05	0.85	0.72	80.87	100.76	19.89	341.37	2835.40	0.00	1.21	20.48	1.15	0.32	18.95	0.37	14.73	2.17E-03
10-Sep-94	0.18	0.85	0.42	80.87	100.78	19.91	341.78	2842.23	6.83	4.36	11.96	0.67	0.32	18.58	0.38	32.49	4.77E-03
11-Sep-94	0.12	0.85	0.26	80.87	100.80	19.93	342.20	2849.07	6.84	2.91	7.41	0.42	0.32	18.22	0.38	19.96	2.93E-03
12-Sep-94	0.18	0.85	0.07	80.88	100.82	19.94	342.62	2855.92	6.85	4.37	2.00	0.11	0.32	17.85	0.38	16.23	2.38E-03
13-Sep-94	0.18	0.85	0.01	80.88	100.84	19.96	343.04	2862.77	6.86	4.37	0.29	0.02	0.32	17.48	0.39	8.67	1.27E-03
14-Sep-94	0.23	0.85	0.09	80.88	100.86	19.98	343.46	2869.64	6.87	5.60	2.58	0.14	0.32	17.12	0.39	6.48	9.45E-04
15-Sep-94	0.12	0.85	0.02	80.94	100.88	19.94	343.88	2876.51	6.87	2.92	0.57	0.03	0.32	16.75	0.39	7.30	1.06E-03
16-Sep-94	0.20	0.85	0.53	81.00	100.88	19.88	343.88	2876.51	0.00	4.87	15.19	0.85	0.32	16.38	0.40	14.36	2.10E-03
17-Sep-94	0.17	0.85	0.10	81.06	100.88	19.82	343.95	2877.66	1.15	4.14	2.87	0.16	0.32	16.02	0.40	26.33	3.86E-03
18-Sep-94	0.14	0.85	0.13	81.12	100.89	19.77	344.02	2878.81	1.15	3.41	3.73	0.21	0.32	15.65	0.40	13.68	2.01E-03
19-Sep-94	0.17	0.85	0.00	81.18	100.89	19.71	344.09	2879.95	1.15	4.14			0.32	15.29	0.40	14.95	2.20E-03
20-Sep-94	0.15	0.85	0.28	81.24	100.89	19.65	344.16	2881.10	1.15	3.66	8.03	0.45	0.32	14.92	0.41	9.91	1.47E-03
21-Sep-94	0.07	0.85	0.00	81.3	100.90	19.60	344.23	2882.25	1.15	1.71			0.32	14.55	0.41	18.51	2.74E-03
22-Sep-94	0.19	0.85	0.00	81.30	100.90	19.60	344.30	2883.39	1.15	4.63			0.32	14.19	0.41	11.61	1.72E-03
23-Sep-94	0.19	0.85	0.25	81.33	100.90	19.57	344.30	2883.39	0.00	4.63	7.17	0.40	0.32	13.82	0.42	9.46	1.40E-03
24-Sep-94	0.13	0.85	0.01	81.36	100.92	19.56	344.65	2889.14	5.74	3.17	0.29	0.02	0.32	13.45	0.42	10.92	1.62E-03
25-Sep-94	0.04	0.85	0.00	81.39	100.93	19.54	344.99	2894.88	5.75	0.98			0.32	13.09	0.42	4.74	7.02E-04
26-Sep-94	0.02	0.85	0.00	81.42	100.95	19.53	345.34	2900.64	5.75	0.49			0.32	12.72	0.43	6.25	9.27E-04
27-Sep-94	0.15	0.85	0.00	81.45	100.97	19.52	345.69	2906.39	5.76	3.67			0.32	12.36	0.43	6.37	9.43E-04
28-Sep-94	0.16	0.85	0.00	81.48	100.98	19.50	346.04	2912.16	5.76	3.92			0.32	11.99	0.43	2.81	4.16E-04
29-Sep-94	0.14	0.85	0.01	81.51	101.00	19.49	346.39	2917.93	5.77	3.44	0.29	0.02	0.32	11.62	0.44	2.18	3.23E-04
30-Sep-94	0.17	0.85	0.00	81.54	101.06	19.52	347.72	2939.91	21.98	4.19			0.32	11.86	0.44	-13.61	-2.00E-03

LAKE BROOKLYN DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

											Runoff Coeff =	0.01					
											Drain. Area (ac) =	1920					
Date	G'ville Evap. (in)	Pan Coeff.	Brklyn. Precip. (in)	C-0120 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Oct-94	0.20	0.76	0.76	81.57	101.13	19.56	349.04	2961.98	22.06	4.42	22.11	1.22	0.32	12.10	0.44	-14.51	-2.13E-03
02-Oct-94	0.08	0.76	0.99	81.60	101.19	19.59	350.37	2984.12	22.15	1.78	28.91	1.58	0.32	12.35	0.45	8.73	1.27E-03
03-Oct-94	0.08	0.76	0.05	81.63	101.25	19.62	351.70	3006.36	22.23	1.78	1.47	0.08	0.32	12.59	0.45	18.70	2.71E-03
04-Oct-94	0.17	0.76	0.18	81.66	101.32	19.66	353.02	3028.67	22.32	3.80	5.30	0.29	0.32	12.83	0.45	-10.10	-1.46E-03
05-Oct-94	0.07	0.76	0.00	81.69	101.38	19.69	354.35	3051.07	22.40	1.57			0.32	13.07	0.45	-7.92	-1.14E-03
06-Oct-94	0.17	0.76	0.00	81.72	101.44	19.72	355.67	3073.56	22.48	3.83			0.32	13.31	0.44	-11.11	-1.58E-03
07-Oct-94	0.16	0.76	0.00	81.75	101.51	19.76	357.00	3096.13	22.57	3.62			0.32	13.55	0.44	-13.21	-1.87E-03
08-Oct-94	0.16	0.76	0.12	81.78	101.57	19.79	358.33	3118.78	22.65	3.63	3.58	0.19	0.32	13.79	0.44	-12.84	-1.81E-03
09-Oct-94	0.15	0.76	0.01	81.81	101.63	19.82	359.65	3141.52	22.74	3.42	0.30	0.02	0.32	14.03	0.44	-8.92	-1.25E-03
10-Oct-94	0.11	0.76	1.77	81.84	101.70	19.86	360.98	3164.34	22.82	2.51	53.24	2.83	0.32	14.27	0.44	-12.01	-1.68E-03
11-Oct-94	0.04	0.76	4.78	81.87	101.76	19.89	362.30	3187.24	22.90	0.92	144.32	7.65	0.32	14.51	0.43	44.81	6.22E-03
12-Oct-94	0.02	0.76	0.00	81.90	101.82	19.92	363.63	3210.23	22.99	0.46			0.32	14.76	0.43	142.46	1.97E-02
13-Oct-94	0.02	0.76	0.01	81.93	101.89	19.96	364.96	3233.30	23.07	0.46	0.30	0.02	0.32	15.00	0.43	-8.89	-1.22E-03
14-Oct-94	0.09	0.76	0.51	81.96	101.95	19.99	366.28	3256.46	23.16	2.09	15.57	0.82	0.32	15.24	0.43	-8.41	-1.15E-03
15-Oct-94	0.14	0.76	0.00	81.99	102.01	20.02	367.61	3279.70	23.24	3.26			0.32	15.48	0.43	6.18	8.40E-04
16-Oct-94	0.09	0.76	0.00	82.02	102.08	20.06	368.94	3303.02	23.32	2.10			0.32	15.72	0.42	-11.21	-1.52E-03
17-Oct-94	0.12	0.76	0.00	82.05	102.14	20.09	370.26	3326.43	23.41	2.81			0.32	15.96	0.42	-9.90	-1.33E-03
18-Oct-94	0.17	0.76	0.00	82.08	102.16	20.08	370.63	3332.97	6.54	3.99			0.32	16.20	0.42	6.51	8.75E-04
19-Oct-94	0.11	0.76	0.00	82.11	102.18	20.07	371.00	3339.51	6.54	2.58			0.32	16.44	0.42	5.57	7.48E-04
20-Oct-94	0.15	0.76	0.01	82.14	102.19	20.05	371.37	3346.06	6.55	3.53	0.31	0.02	0.32	16.68	0.42	7.21	9.68E-04
21-Oct-94	0.14	0.76	0.00	82.17	102.21	20.04	371.74	3352.62	6.56	3.30			0.32	16.92	0.41	6.83	9.17E-04
22-Oct-94	0.13	0.76	0.01	82.20	102.23	20.03	372.11	3359.18	6.56	3.06	0.31	0.02	0.32	17.17	0.41	6.97	9.36E-04
23-Oct-94	0.12	0.76	0.00	82.23	102.25	20.02	372.48	3365.75	6.57	2.83			0.32	17.41	0.41	7.77	1.04E-03
24-Oct-94	0.16	0.76	0.01	82.26	102.26	20.00	372.85	3372.33	6.58	3.78	0.31	0.02	0.32	17.65	0.41	7.91	1.06E-03
25-Oct-94	0.14	0.76	0.00	82.26	102.28	20.02	373.22	3378.91	6.58	3.31			0.32	17.89	0.41	7.53	1.01E-03
26-Oct-94	0.14	0.76	0.06	82.27	102.30	20.03	373.59	3385.50	6.59	3.31	1.87	0.10	0.32	18.13	0.40	7.91	1.06E-03
27-Oct-94	0.03	0.76	0.00	82.28	102.32	20.03	373.96	3392.10	6.60	0.71			0.32	18.13	0.40	10.10	1.35E-03
28-Oct-94	0.16	0.76	0.14	82.29	102.33	20.04	374.33	3398.70	6.60	3.79	4.37	0.22	0.32	18.12	0.40	10.73	1.43E-03
29-Oct-94	0.05	0.76	0.11	82.30	102.35	20.05	374.70	3405.31	6.61	1.19	3.43	0.18	0.32	18.12	0.40	12.24	1.63E-03
30-Oct-94	0.04	0.76	0.30	82.31	102.37	20.06	375.07	3411.93	6.62	0.95	9.38	0.48	0.32	18.12	0.40	13.86	1.84E-03
31-Oct-94	0.06	0.76	0.00	82.33	102.39	20.06	375.43	3418.55	6.62	1.43			0.32	18.12	0.39	20.33	2.70E-03
01-Nov-94	0.09	0.71	0.00	82.34	102.40	20.07	375.80	3425.18	6.63	2.00			0.32	18.11	0.39	9.99	1.32E-03
02-Nov-94	0.14	0.71	0.00	82.35	102.42	20.08	376.17	3431.81	6.64	3.12			0.33	18.11	0.39	9.41	1.25E-03
03-Nov-94	0.14	0.71	0.01	82.36	102.44	20.08	376.54	3438.46	6.64	3.12	0.31	0.02	0.33	18.11	0.39	8.29	1.10E-03
04-Nov-94	0.11	0.71	0.00	82.37	102.44	20.07	376.54	3438.46	0.00	2.45			0.33	18.11	0.39	15.26	2.02E-03
05-Nov-94	0.14	0.71	0.01	82.38	102.45	20.07	376.82	3443.48	5.02	3.12	0.31	0.02	0.33	18.10	0.39	10.57	1.40E-03
06-Nov-94	0.16	0.71	0.00	82.39	102.47	20.08	377.10	3448.50	5.03	3.57			0.33	18.10	0.39	10.23	1.35E-03
07-Nov-94	0.09	0.71	0.00	82.40	102.48	20.08	377.38	3453.53	5.03	2.01			0.33	18.10	0.39	9.44	1.25E-03
08-Nov-94	0.13	0.71	0.00	82.41	102.49	20.08	377.66	3458.57	5.03	2.90			0.33	18.10	0.39	11.00	1.45E-03
09-Nov-94	0.10	0.71	0.00	82.42	102.51	20.08	377.94	3463.61	5.04	2.24			0.33	18.09	0.39	10.10	1.33E-03
10-Nov-94	0.11	0.71	0.01	82.43	102.52	20.09	378.22	3468.65	5.04	2.46	0.32	0.02	0.33	18.09	0.38	10.76	1.42E-03
11-Nov-94	0.08	0.71	0.08	82.45	102.52	20.08	378.22	3468.65	0.00	1.79	2.52	0.13	0.34	18.09	0.38	15.91	2.10E-03
12-Nov-94	0.07	0.71	0.76	82.46	102.55	20.09	378.78	3478.74	10.09	1.57	23.99	1.22	0.34	18.08	0.38	8.80	1.16E-03
13-Nov-94	0.02	0.71	0.00	82.47	102.57	20.11	379.34	3488.85	10.11	0.45			0.34	18.08	0.38	31.57	4.14E-03
14-Nov-94	0.12	0.71	0.12	82.48	102.60	20.12	379.89	3498.97	10.12	2.70	3.80	0.19	0.34	18.08	0.38	7.47	9.77E-04
15-Nov-94	0.15	0.71	0.81	82.49	102.63	20.14	380.45	3509.11	10.14	3.38	25.68	1.30	0.34	18.08	0.38	9.19	1.20E-03
16-Nov-94	0.00	0.71	0.07	82.50	102.65	20.15	381.01	3519.26	10.15	0.00	2.22	0.11	0.34	18.07	0.38	31.48	4.10E-03
17-Nov-94	0.05	0.71	0.00	82.51	102.68	20.17	381.57	3529.43	10.17	1.13			0.34	18.07	0.38	10.20	1.33E-03
18-Nov-94	0.07	0.71	0.01	82.52	102.69	20.16	381.69	3531.72	2.29	1.58	0.32	0.02	0.34	18.07	0.38	14.62	1.90E-03
19-Nov-94	0.07	0.71	0.00	82.53	102.69	20.16	381.82	3534.01	2.29	1.58			0.34	17.86	0.38	14.50	1.88E-03
20-Nov-94	0.14	0.71	0.05	82.54	102.70	20.16	381.95	3536.30	2.29	3.16	1.59	0.08	0.35	17.64	0.38	13.95	1.81E-03
21-Nov-94	0.09	0.71	0.02	82.55	102.70	20.15	382.07	3538.59	2.29	2.03	0.64	0.03	0.35	17.43	0.38	13.83	1.80E-03
22-Nov-94	0.09	0.71	0.01	82.56	102.71	20.15	382.20	3540.89	2.29	2.04	0.32	0.02	0.35	17.21	0.38	13.74	1.78E-03
23-Nov-94	0.10	0.71	0.00	82.58	102.72	20.14	382.32	3543.18	2.29	2.26			0.35	17.00	0.38	13.19	1.71E-03
24-Nov-94	0.15	0.71	0.00	82.59	102.72	20.14	382.45	3545.48	2.29	3.39			0.35	16.79	0.37	12.42	1.61E-03
25-Nov-94	0.07	0.71	0.00	82.60	102.73	20.13	382.57	3547.77	2.30	1.58			0.35	16.57	0.37	11.07	1.44E-03
26-Nov-94	0.08	0.71	0.00	82.61	102.73	20.13	382.70	3550.07	2.30	1.81			0.35	16.36	0.37	12.67	1.65E-03
27-Nov-94	0.06	0.71	0.00	82.62	102.74	20.12	382.83	3552.36	2.30	1.36			0.35	16.15	0.37	12.23	1.59E-03
28-Nov-94	0.10	0.71	0.02	82.63	102.74	20.11	382.83	3552.36	0.00	2.27	0.64	0.03	0.35	15.93	0.37	14.77	1.92E-03
29-Nov-94	0.08	0.71	0.24	82.63	102.75	20.12	383.03	3556.19	3.83	1.81	7.66	0.38	0.36	15.72	0.37	10.49	1.36E-03
30-Nov-94	0.10	0.71	0.00	82.63	102.76	20.13	383.24	3560.02	3.83	2.27			0.36	15.50	0.37	18.10	2.35E-03

LAKE BROOKLYN DAILY WATER BUDGET: 1994-1995

August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01

Drain. Area (ac) = 1920

Date	G'ville Evap. (in)	Pan Coeff.	Brklyn. Precip. (in)	C-0120 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Dec-94	0.05	0.83	0.00	82.63	102.76	20.14	383.24	3560.02	0.00	1.33			0.36	15.29	0.37	13.22	1.71E-03
02-Dec-94	0.11	0.83	0.00	82.62	102.76	20.14	383.24	3560.02	0.00	2.92			0.36	15.08	0.38	13.95	1.81E-03
03-Dec-94	0.05	0.83	0.00	82.62	102.78	20.16	383.56	3565.78	5.75	1.33			0.37	14.86	0.38	6.40	8.28E-04
04-Dec-94	0.04	0.83	0.76	82.62	102.79	20.17	383.87	3571.53	5.76	1.06	24.31	1.22	0.37	14.65	0.38	7.77	1.00E-03
05-Dec-94	0.09	0.83	0.13	82.62	102.81	20.19	384.19	3577.29	5.76	2.39	4.16	0.21	0.37	14.44	0.38	33.35	4.30E-03
06-Dec-94	0.11	0.83	0.01	82.61	102.82	20.21	384.50	3583.06	5.77	2.93	0.32	0.02	0.37	14.22	0.38	10.64	1.37E-03
07-Dec-94	0.10	0.83	0.01	82.61	102.84	20.22	384.81	3588.83	5.77	2.66	0.32	0.02	0.38	14.01	0.38	5.86	7.52E-04
08-Dec-94	0.06	0.83	0.00	82.61	102.85	20.24	385.13	3594.60	5.77	1.60			0.38	13.80	0.38	5.90	7.57E-04
09-Dec-94	0.07	0.83	0.00	82.61	102.85	20.25	385.13	3594.60	0.00	1.86			0.38	13.58	0.38	12.19	1.56E-03
10-Dec-94	0.05	0.83	0.01	82.60	102.86	20.25	385.23	3596.53	1.93	1.33	0.32	0.02	0.38	13.37	0.39	9.79	1.25E-03
11-Dec-94	0.11	0.83	0.02	82.60	102.86	20.26	385.34	3598.45	1.93	2.93	0.64	0.03	0.38	13.15	0.39	10.44	1.34E-03
12-Dec-94	0.09	0.83	0.02	82.60	102.87	20.27	385.44	3600.38	1.93	2.40	0.64	0.03	0.39	12.94	0.39	8.97	1.15E-03
13-Dec-94	0.09	0.83	0.13	82.60	102.87	20.27	385.55	3602.31	1.93	2.40	4.18	0.21	0.39	12.73	0.39	9.29	1.19E-03
14-Dec-94	0.05	0.83	0.00	82.59	102.88	20.28	385.65	3604.24	1.93	1.33			0.39	12.51	0.39	12.78	1.63E-03
15-Dec-94	0.06	0.83	0.00	82.59	102.88	20.29	385.76	3606.17	1.93	1.60			0.39	12.30	0.39	9.25	1.18E-03
16-Dec-94	0.04	0.83	0.01	82.59	102.88	20.29	385.76	3606.17	0.00	1.07	0.32	0.02	0.40	12.09	0.39	10.70	1.37E-03
17-Dec-94	0.02	0.83	0.01	82.59	102.88	20.29	385.69	3604.88	-1.29	0.53	0.32	0.02	0.40	11.87	0.39	12.64	1.62E-03
18-Dec-94	0.04	0.83	0.00	82.58	102.87	20.29	385.62	3603.59	-1.29	1.07			0.40	11.66	0.40	12.97	1.66E-03
19-Dec-94	0.08	0.83	0.00	82.58	102.87	20.29	385.55	3602.31	-1.29	2.13			0.40	11.44	0.40	11.88	1.52E-03
20-Dec-94	0.11	0.83	0.06	82.58	102.87	20.29	385.48	3601.02	-1.29	2.93	1.93	0.10	0.40	11.23	0.40	10.60	1.36E-03
21-Dec-94	0.02	0.83	0.28	82.59	102.86	20.28	385.41	3599.74	-1.28	0.53	8.99	0.45	0.41	11.02	0.40	11.61	1.49E-03
22-Dec-94	0.02	0.83	0.42	82.59	102.86	20.27	385.34	3598.45	-1.28	0.53	13.49	0.67	0.41	10.80	0.40	21.22	2.72E-03
23-Dec-94	0.00	0.83	0.12	82.60	102.86	20.26	385.34	3598.45	0.00	0.00	3.85	0.19	0.41	10.59	0.40	24.44	3.13E-03
24-Dec-94	0.06	0.83	0.00	82.61	102.87	20.26	385.48	3601.02	2.57	1.60			0.41	10.38	0.40	12.08	1.55E-03
25-Dec-94	0.08	0.83	0.00	82.61	102.87	20.26	385.62	3603.59	2.57	2.13			0.42	10.16	0.40	6.22	7.96E-04
26-Dec-94	0.07	0.83	0.00	82.62	102.88	20.26	385.76	3606.17	2.57	1.87			0.42	9.95	0.40	5.47	7.00E-04
27-Dec-94	0.08	0.83	0.00	82.63	102.89	20.26	385.90	3608.74	2.57	2.14			0.42	9.73	0.41	5.52	7.06E-04
28-Dec-94	0.09	0.83	0.00	82.63	102.89	20.26	386.04	3611.31	2.57	2.40			0.42	9.52	0.41	5.04	6.45E-04
29-Dec-94	0.08	0.83	0.33	82.64	102.90	20.26	386.18	3613.89	2.57	2.14	10.62	0.53	0.43	9.54	0.41	4.56	5.83E-04
30-Dec-94	0.05	0.83	0.01	82.65	102.89	20.25	386.04	3611.31	-2.57	1.34	0.32	0.02	0.42	9.56	0.41	21.14	2.70E-03
31-Dec-94	0.04	0.83	0.00	82.65	102.89	20.23	385.90	3608.74	-2.57	1.07			0.42	9.57	0.41	11.15	1.43E-03
01-Jan-95	0.05	0.77	0.00	82.66	102.88	20.22	385.76	3606.17	-2.57	1.24			0.42	9.59	0.40	11.09	1.42E-03
02-Jan-95	0.03	0.77	0.00	82.67	102.87	20.21	385.62	3603.59	-2.57	0.74			0.42	9.61	0.40	10.94	1.40E-03
03-Jan-95	0.13	0.77	0.00	82.67	102.87	20.19	385.48	3601.02	-2.57	3.22			0.41	9.63	0.40	11.45	1.47E-03
04-Jan-95	0.05	0.77	0.00	82.68	102.86	20.18	385.34	3598.45	-2.57	1.24			0.41	9.64	0.40	8.99	1.16E-03
05-Jan-95	0.06	0.77	0.00	82.69	102.86	20.17	385.34	3598.45	0.00	1.48			0.41	9.66	0.40	8.42	1.08E-03
06-Jan-95	0.08	0.77	0.98	82.70	102.86	20.17	385.34	3598.45	0.00	1.98	31.47	1.57	0.41	9.68	0.40	8.19	1.05E-03
07-Jan-95	0.11	0.77	0.00	82.70	102.87	20.17	385.55	3602.31	3.85	2.72			0.40	9.70	0.40	36.89	4.74E-03
08-Jan-95	0.14	0.77	0.02	82.71	102.88	20.17	385.76	3606.17	3.86	3.47	0.64	0.03	0.40	9.71	0.40	3.12	4.01E-04
09-Jan-95	0.17	0.77	0.00	82.72	102.89	20.17	385.97	3610.02	3.86	4.21			0.40	9.73	0.40	3.07	3.94E-04
10-Jan-95	0.09	0.77	0.00	82.72	102.90	20.18	386.18	3613.89	3.86	2.23			0.40	9.75	0.39	1.66	2.13E-04
11-Jan-95	0.05	0.77	0.01	82.73	102.91	20.18	386.38	3617.75	3.86	1.24	0.32	0.02	0.39	9.77	0.39	3.66	4.69E-04
12-Jan-95	0.08	0.77	0.00	82.74	102.92	20.18	386.59	3621.61	3.86	1.98			0.39	9.78	0.39	5.00	6.41E-04
13-Jan-95	0.09	0.77	0.30	82.74	102.92	20.18	386.59	3621.61	0.00	2.23	9.66	0.48	0.39	9.80	0.39	7.80	1.00E-03
14-Jan-95	0.05	0.77	1.10	82.75	102.95	20.20	387.22	3633.22	11.61	1.24	35.50	1.76	0.39	9.82	0.39	6.10	7.80E-04
15-Jan-95	0.02	0.77	0.10	82.76	102.98	20.22	387.85	3644.85	11.63	0.50	3.23	0.16	0.38	9.84	0.39	34.20	4.36E-03
16-Jan-95	0.06	0.77	0.00	82.76	103.01	20.25	388.48	3656.49	11.65	1.50			0.38	9.85	0.39	1.08	1.37E-04
17-Jan-95	0.04	0.77	0.01	82.77	103.04	20.27	389.11	3668.16	11.66	1.00	0.32	0.02	0.38	9.87	0.39	-3.31	-4.20E-04
18-Jan-95	0.06	0.77	0.00	82.78	103.07	20.29	389.74	3679.84	11.68	1.50			0.38	9.89	0.39	-2.48	-3.13E-04
19-Jan-95	0.06	0.77	0.04	82.78	103.10	20.32	390.36	3691.54	11.70	1.50	1.30	0.06	0.37	9.91	0.38	-3.32	-4.19E-04
20-Jan-95	0.04	0.77	0.00	82.79	103.10	20.31	390.36	3691.54	0.00	1.00			0.37	9.92	0.38	9.76	1.23E-03
21-Jan-95	0.09	0.77	0.00	82.80	103.09	20.30	390.22	3688.94	-2.60	2.25			0.37	9.94	0.38	11.51	1.45E-03
22-Jan-95	0.08	0.77	0.00	82.80	103.09	20.28	390.08	3686.34	-2.60	2.00			0.37	9.96	0.38	10.28	1.30E-03
23-Jan-95	0.10	0.77	0.00	82.81	103.08	20.27	389.94	3683.74	-2.60	2.50			0.37	9.98	0.38	10.54	1.33E-03
24-Jan-95	0.10	0.77	0.00	82.81	103.07	20.26	389.81	3681.14	-2.60	2.50			0.36	9.99	0.38	10.06	1.27E-03
25-Jan-95	0.08	0.77	0.00	82.81	103.07	20.26	389.67	3678.54	-2.60	2.00			0.36	10.01	0.38	10.07	1.28E-03
26-Jan-95	0.09	0.77	0.00	82.80	103.06	20.26	389.53	3675.94	-2.60	2.25			0.36	10.03	0.38	10.59	1.34E-03
27-Jan-95	0.10	0.77	0.00	82.80	103.06	20.26	389.53	3675.94	0.00	2.50			0.36	10.05	0.38	7.76	9.83E-04
28-Jan-95	0.08	0.77	0.01	82.79	103.06	20.27	389.46	3674.64	-1.30	2.00	0.32	0.02	0.35	10.06	0.37	8.82	1.12E-03
29-Jan-95	0.05	0.77	0.00	82.79	103.05	20.27	389.39	3673.35	-1.30	1.25			0.35	10.08	0.37	9.68	1.23E-03
30-Jan-95	0.06	0.77	0.00	82.78	103.05	20.27	389.32	3672.05	-1.30	1.50			0.35	10.10	0.37	10.11	1.28E-03
31-Jan-95	0.08	0.77	0.00	82.78	103.05	20.27	389.25	3670.75	-1.30	2.00			0.35	10.12	0.37	9.87	1.25E-03

LAKE BROOKLYN DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 1920

Date	G'ville Evap. (in)	Pan Coeff.	Brklyn. Precip. (in)	C-0120 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Feb-95	0.10	0.69	0.00	82.77	103.04	20.27	389.18	3669.45	-1.30	2.24			0.35	9.98	0.38	9.39	1.19E-03
02-Feb-95	0.14	0.69	0.00	82.77	103.04	20.27	389.11	3668.16	-1.30	3.13			0.34	9.85	0.38	9.01	1.14E-03
03-Feb-95	0.11	0.69	0.55	82.76	103.04	20.28	389.11	3668.16	0.00	2.46	17.83	0.88	0.34	9.72	0.38	6.68	8.47E-04
04-Feb-95	0.19	0.69	0.00	82.76	103.03	20.27	388.83	3662.97	-5.19	4.25			0.34	9.58	0.38	31.12	3.95E-03
05-Feb-95	0.13	0.69	0.00	82.75	103.01	20.26	388.55	3657.79	-5.18	2.90			0.34	9.45	0.39	10.48	1.33E-03
06-Feb-95	0.15	0.69	0.00	82.75	103.00	20.25	388.27	3652.61	-5.18	3.35			0.34	9.32	0.39	11.68	1.49E-03
07-Feb-95	0.12	0.69	0.00	82.74	102.99	20.24	387.99	3647.43	-5.18	2.68			0.34	9.19	0.39	11.10	1.41E-03
08-Feb-95	0.15	0.69	0.00	82.74	102.97	20.24	387.71	3642.26	-5.17	3.34			0.34	9.05	0.39	11.63	1.48E-03
09-Feb-95	0.12	0.69	0.00	82.73	102.96	20.23	387.43	3637.09	-5.17	2.67			0.34	8.92	0.40	10.82	1.38E-03
10-Feb-95	0.11	0.69	0.00	82.73	102.96	20.23	387.43	3637.09	0.00	2.45			0.34	8.79	0.40	6.19	7.89E-04
11-Feb-95	0.11	0.69	0.60	82.72	102.97	20.24	387.57	3639.68	2.58	2.45	19.38	0.96	0.33	8.65	0.40	3.69	4.70E-04
12-Feb-95	0.07	0.69	0.02	82.72	102.97	20.25	387.71	3642.26	2.58	1.56	0.65	0.03	0.33	8.52	0.40	23.89	3.04E-03
13-Feb-95	0.07	0.69	0.03	82.71	102.98	20.27	387.85	3644.85	2.59	1.56	0.97	0.05	0.33	8.39	0.41	4.96	6.34E-04
14-Feb-95	0.05	0.69	0.01	82.71	102.99	20.28	387.99	3647.43	2.59	1.12	0.32	0.02	0.33	8.25	0.41	5.18	6.59E-04
15-Feb-95	0.10	0.69	0.00	82.70	102.99	20.29	388.13	3650.02	2.59	2.23			0.33	8.12	0.41	4.81	6.11E-04
16-Feb-95	0.05	0.69	0.00	82.70	103.00	20.30	388.27	3652.61	2.59	1.12			0.33	7.99	0.41	3.22	4.09E-04
17-Feb-95	0.10	0.69	0.02	82.69	103.00	20.31	388.27	3652.61	0.00	2.23	0.65	0.03	0.33	7.86	0.42	6.79	8.61E-04
18-Feb-95	0.08	0.69	0.01	82.69	102.99	20.30	387.99	3647.43	-5.18	1.78	0.32	0.02	0.33	7.72	0.42	11.39	1.45E-03
19-Feb-95	0.12	0.69	0.04	82.68	102.97	20.29	387.71	3642.26	-5.17	2.68	1.29	0.06	0.33	7.59	0.42	11.36	1.44E-03
20-Feb-95	0.04	0.69	0.09	82.68	102.96	20.28	387.43	3637.09	-5.17	0.89	2.91	0.14	0.32	7.46	0.42	11.34	1.44E-03
21-Feb-95	0.05	0.69	0.00	82.68	102.95	20.27	387.15	3631.93	-5.16	1.11			0.32	7.32	0.43	14.68	1.87E-03
22-Feb-95	0.16	0.69	0.00	82.65	102.93	20.29	386.87	3626.77	-5.16	3.56			0.32	7.19	0.43	11.27	1.44E-03
23-Feb-95	0.12	0.69	0.00	82.61	102.92	20.31	386.59	3621.61	-5.16	2.67			0.32	7.06	0.43	8.68	1.11E-03
24-Feb-95	0.10	0.69	0.00	82.58	102.92	20.34	386.59	3621.61	0.00	2.22			0.32	6.92	0.43	4.28	5.44E-04
25-Feb-95	0.11	0.69	0.00	82.55	102.91	20.36	386.38	3617.75	-3.86	2.44			0.32	6.79	0.44	8.45	1.07E-03
26-Feb-95	0.19	0.69	0.01	82.52	102.90	20.38	386.18	3613.89	-3.86	4.22	0.32	0.02	0.32	6.66	0.44	8.09	1.03E-03
27-Feb-95	0.15	0.69	0.00	82.48	102.89	20.41	385.97	3610.02	-3.86	3.33			0.32	6.53	0.44	6.52	8.27E-04
28-Feb-95	0.17	0.69	0.08	82.45	102.88	20.43	385.76	3606.17	-3.86	3.77	2.57	0.13	0.32	6.45	0.44	6.93	8.79E-04
01-Mar-95	0.04	0.73	0.07	82.42	102.87	20.45	385.55	3602.31	-3.86	0.94	2.25	0.11	0.32	6.38	0.44	9.12	1.16E-03
02-Mar-95	0.08	0.73	0.00	82.39	102.86	20.47	385.34	3598.45	-3.85	1.88			0.32	6.31	0.43	11.54	1.46E-03
03-Mar-95	0.05	0.73	0.00	82.35	102.86	20.51	385.34	3598.45	0.00	1.17			0.32	6.24	0.43	4.31	5.46E-04
04-Mar-95	0.11	0.73	0.00	82.32	102.85	20.53	385.13	3594.60	-3.85	2.58			0.32	6.16	0.43	8.80	1.11E-03
05-Mar-95	0.17	0.73	0.00	82.29	102.84	20.55	384.92	3590.75	-3.85	3.98			0.32	6.09	0.43	7.32	9.26E-04
06-Mar-95	0.12	0.73	0.00	82.25	102.83	20.58	384.71	3586.90	-3.85	2.81			0.32	6.02	0.43	5.85	7.39E-04
07-Mar-95	0.13	0.73	0.00	82.22	102.82	20.60	384.50	3583.06	-3.85	3.04			0.32	5.95	0.42	6.95	8.77E-04
08-Mar-95	0.25	0.73	1.01	82.19	102.81	20.62	384.29	3579.21	-3.84	5.84	32.34	1.62	0.31	5.88	0.42	6.64	8.38E-04
09-Mar-95	0.12	0.73	0.00	82.16	102.80	20.64	384.08	3575.37	-3.84	2.80			0.31	5.80	0.42	37.73	4.76E-03
10-Mar-95	0.19	0.73	0.00	82.12	102.80	20.68	384.08	3575.37	0.00	4.44			0.31	5.73	0.42	2.89	3.64E-04
11-Mar-95	0.17	0.73	0.00	82.09	102.79	20.70	383.87	3571.53	-3.84	3.97			0.31	5.66	0.42	5.03	6.33E-04
12-Mar-95	0.13	0.73	0.00	82.06	102.78	20.72	383.66	3567.69	-3.84	3.03			0.31	5.59	0.42	5.42	6.82E-04
13-Mar-95	0.24	0.73	0.00	82.02	102.77	20.75	383.45	3563.86	-3.84	5.60			0.31	5.51	0.41	6.29	7.90E-04
14-Mar-95	0.28	0.73	0.00	81.99	102.76	20.77	383.24	3560.02	-3.83	6.53			0.31	5.44	0.41	3.65	4.59E-04
15-Mar-95	0.19	0.73	0.06	81.96	102.75	20.79	383.03	3556.19	-3.83	4.43	1.92	0.10	0.31	5.37	0.41	2.65	3.33E-04
16-Mar-95	0.13	0.73	0.00	81.93	102.74	20.81	382.83	3552.36	-3.83	3.03			0.31	5.30	0.41	6.69	8.39E-04
17-Mar-95	0.07	0.73	1.00	81.89	102.74	20.85	382.83	3552.36	0.00	1.63	31.90	1.60	0.31	5.22	0.41	2.18	2.73E-04
18-Mar-95	0.07	0.73	0.12	81.86	102.74	20.88	382.83	3552.36	0.00	1.63	3.83	0.19	0.31	5.15	0.40	37.00	4.63E-03
19-Mar-95	0.15	0.73	0.00	81.83	102.74	20.91	382.83	3552.36	0.00	3.49			0.31	5.08	0.40	7.45	9.31E-04
20-Mar-95	0.19	0.73	0.00	81.80	102.74	20.94	382.83	3552.36	0.00	4.42			0.31	5.01	0.40	1.50	1.87E-04
21-Mar-95	0.16	0.73	0.00	81.76	102.74	20.98	382.83	3552.36	0.00	3.73			0.31	4.93	0.40	0.50	6.19E-05
22-Mar-95	0.18	0.73	0.00	81.73	102.74	21.01	382.83	3552.36	0.00	4.19			0.31	4.86	0.40	1.13	1.40E-04
23-Mar-95	0.22	0.73	0.00	81.70	102.74	21.04	382.83	3552.36	0.00	5.12			0.31	4.79	0.39	0.59	7.31E-05
24-Mar-95	0.23	0.73	0.00	81.66	102.74	21.08	382.83	3552.36	0.00	5.36			0.31	4.72	0.39	-0.41	-5.12E-05
25-Mar-95	0.16	0.73	0.00	81.63	102.72	21.09	382.34	3543.44	-8.93	3.72			0.31	4.65	0.39	8.21	1.02E-03
26-Mar-95	0.22	0.73	0.00	81.60	102.69	21.10	381.85	3534.52	-8.92	5.11			0.31	4.57	0.39	9.76	1.21E-03
27-Mar-95	0.20	0.73	0.00	81.57	102.67	21.10	381.36	3525.62	-8.90	4.64			0.31	4.50	0.39	8.29	1.03E-03
28-Mar-95	0.15	0.73	0.00	81.53	102.65	21.11	380.87	3516.72	-8.89	3.48			0.31	4.43	0.38	8.68	1.08E-03
29-Mar-95	0.19	0.73	0.03	81.5	102.62	21.12	380.38	3507.84	-8.88	4.40	0.95	0.05	0.31	4.36	0.38	9.76	1.22E-03
30-Mar-95	0.21	0.73	0.00	81.50	102.60	21.10	379.89	3498.97	-8.87	4.85			0.31	4.28	0.38	9.76	1.22E-03
31-Mar-95	0.21	0.73	2.15	81.52	102.60	21.08	379.89	3498.97	0.00	4.85	68.06	3.44	0.31	4.35	0.38	-0.64	-7.94E-05

LAKE BROOKLYN DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 1920

Date	G'ville Evap. (in)	Pan Coeff.	Brklyn. Precip. (in)	C-0120 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Apr-95	0.00	0.84	0.00	81.54	102.65	21.11	381.01	3519.26	20.29	0.00			0.31	4.47	0.38	50.64	6.30E-03
02-Apr-95	0.12	0.84	0.00	81.56	102.71	21.15	382.13	3539.61	20.35	3.21			0.31	4.60	0.38	-15.95	-1.97E-03
03-Apr-95	0.21	0.84	0.00	81.58	102.76	21.18	383.24	3560.02	20.41	5.63			0.31	4.72	0.38	-19.09	-2.35E-03
04-Apr-95	0.19	0.84	0.00	81.60	102.81	21.21	384.36	3580.49	20.47	5.11			0.31	4.94	0.38	-21.45	-2.63E-03
05-Apr-95	0.12	0.84	0.00	81.62	102.87	21.25	385.48	3601.02	20.53	3.24			0.31	5.17	0.38	-20.77	-2.54E-03
06-Apr-95	0.00	0.84	2.64	81.64	102.92	21.28	386.59	3621.61	20.59	0.00	85.05	4.22	0.31	5.39	0.39	-18.73	-2.28E-03
07-Apr-95	0.09	0.84	0.03	81.66	102.92	21.26	386.59	3621.61	0.00	2.44	0.97	0.05	0.31	5.62	0.39	94.59	1.15E-02
08-Apr-95	0.14	0.84	0.05	81.68	102.94	21.26	386.94	3628.06	6.45	3.79	1.61	0.08	0.31	5.84	0.39	-2.33	-2.83E-04
09-Apr-95	0.17	0.84	0.00	81.70	102.95	21.25	387.29	3634.51	6.45	4.61			0.31	6.07	0.39	-2.79	-3.39E-04
10-Apr-95	0.20	0.84	0.00	81.72	102.97	21.25	387.64	3640.97	6.46	5.43			0.31	6.29	0.39	-5.08	-6.17E-04
11-Apr-95	0.23	0.84	0.55	81.74	102.98	21.25	387.99	3647.43	6.46	6.25	17.78	0.88	0.31	6.26	0.39	-5.68	-6.89E-04
12-Apr-95	0.16	0.84	0.03	81.76	103.00	21.24	388.34	3653.90	6.47	4.35	0.97	0.05	0.31	6.24	0.39	12.13	1.47E-03
13-Apr-95	0.05	0.84	0.00	81.78	103.02	21.24	388.69	3660.38	6.48	1.36			0.31	6.21	0.39	-3.65	-4.42E-04
14-Apr-95	0.21	0.84	0.00	81.80	103.02	21.22	388.69	3660.38	0.00	5.71			0.31	6.19	0.40	4.77	5.78E-04
15-Apr-95	0.21	0.84	0.00	81.82	102.99	21.17	388.13	3650.02	-10.36	5.71			0.31	6.17	0.40	10.75	1.31E-03
16-Apr-95	0.21	0.84	0.00	81.84	102.97	21.13	387.57	3639.68	-10.34	5.70			0.31	6.14	0.40	10.72	1.31E-03
17-Apr-95	0.19	0.84	0.00	81.86	102.94	21.08	387.01	3629.35	-10.33	5.15			0.31	6.12	0.40	10.68	1.31E-03
18-Apr-95	0.24	0.84	0.00	81.88	102.91	21.03	386.45	3619.04	-10.31	6.49			0.31	6.02	0.40	11.19	1.38E-03
19-Apr-95	0.24	0.84	0.00	81.90	102.89	20.99	385.90	3608.74	-10.30	6.48			0.31	5.92	0.40	9.73	1.20E-03
20-Apr-95	0.20	0.84	0.00	81.92	102.86	20.94	385.34	3598.45	-10.28	5.39			0.31	5.82	0.40	9.62	1.19E-03
21-Apr-95	0.25	0.84	0.00	81.94	102.86	20.92	385.34	3598.45	0.00	6.74			0.31	5.72	0.40	0.33	4.06E-05
22-Apr-95	0.19	0.84	0.00	81.96	102.87	20.91	385.62	3603.59	5.14	5.13			0.31	5.62	0.41	-6.26	-7.77E-04
23-Apr-95	0.21	0.84	0.00	81.98	102.89	20.91	385.90	3608.74	5.14	5.67			0.31	5.52	0.41	-4.75	-5.89E-04
24-Apr-95	0.26	0.84	1.35	82.00	102.90	20.90	386.18	3613.89	5.15	7.03	43.44	2.16	0.31	5.42	0.41	-5.40	-6.69E-04
25-Apr-95	0.11	0.84	0.02	82.02	102.91	20.89	386.45	3619.04	5.15	2.98	0.64	0.03	0.31	5.49	0.41	38.74	4.80E-03
26-Apr-95	0.19	0.84	0.00	82.02	102.93	20.91	386.73	3624.19	5.15	5.14			0.31	5.57	0.41	-2.06	-2.55E-04
27-Apr-95	0.13	0.84	0.78	82.01	102.94	20.93	387.01	3629.35	5.16	3.52	25.16	1.25	0.31	5.64	0.41	-4.84	-5.97E-04
28-Apr-95	0.18	0.84	0.00	82.01	102.94	20.93	387.01	3629.35	0.00	4.88			0.31	5.72	0.41	28.42	3.51E-03
29-Apr-95	0.18	0.84	0.00	82.00	102.95	20.95	387.15	3631.93	2.58	4.88			0.31	5.79	0.41	-1.85	-2.28E-04
30-Apr-95	0.26	0.84	0.00	82.00	102.95	20.96	387.29	3634.51	2.58	7.05			0.31	5.87	0.41	-1.77	-2.18E-04
01-May-95	0.21	0.82	0.01	81.99	102.96	20.97	387.43	3637.09	2.58	5.56	0.32	0.02	0.31	5.94	0.41	-3.87	-4.76E-04
02-May-95	0.26	0.82	0.00	81.98	102.97	20.98	387.57	3639.68	2.58	6.89			0.31	5.82	0.41	-1.97	-2.42E-04
03-May-95	0.30	0.82	0.00	81.98	102.97	21.00	387.71	3642.26	2.58	7.95			0.31	5.69	0.41	-3.76	-4.62E-04
04-May-95	0.24	0.82	0.00	81.97	102.98	21.01	387.85	3644.85	2.59	6.36			0.31	5.57	0.41	-4.94	-6.07E-04
05-May-95	0.17	0.82	0.03	81.96	102.98	21.02	387.85	3644.85	0.00	4.51	0.97	0.05	0.31	5.44	0.41	-0.90	-1.10E-04
06-May-95	0.25	0.82	0.00	81.96	102.97	21.01	387.71	3642.26	-2.59	6.62			0.31	5.32	0.41	4.44	5.45E-04
07-May-95	0.28	0.82	0.00	81.95	102.97	21.01	387.57	3639.68	-2.58	7.42			0.31	5.19	0.41	1.18	1.45E-04
08-May-95	0.26	0.82	0.00	81.95	102.96	21.01	387.43	3637.09	-2.58	6.88			0.31	5.07	0.41	0.26	3.22E-05
09-May-95	0.28	0.82	0.00	81.94	102.95	21.01	387.29	3634.51	-2.58	7.41			0.32	5.14	0.41	0.67	8.22E-05
10-May-95	0.19	0.82	0.00	81.93	102.95	21.01	387.15	3631.93	-2.58	5.03			0.32	5.22	0.41	0.22	2.67E-05
11-May-95	0.19	0.82	1.39	81.93	102.94	21.01	387.01	3629.35	-2.58	5.02	44.83	2.22	0.32	5.29	0.41	2.68	3.29E-04
12-May-95	0.12	0.82	0.86	81.92	102.94	21.02	387.01	3629.35	0.00	3.17	27.74	1.38	0.32	5.37	0.41	47.22	5.81E-03
13-May-95	0.21	0.82	0.00	81.92	102.93	21.02	386.87	3626.77	-2.58	5.55			0.32	5.44	0.41	33.79	4.16E-03
14-May-95	0.22	0.82	0.00	81.91	102.93	21.02	386.73	3624.19	-2.58	5.81			0.32	5.52	0.41	2.37	2.92E-04
15-May-95	0.25	0.82	0.00	81.90	102.92	21.02	386.59	3621.61	-2.58	6.60			0.32	5.59	0.41	2.19	2.69E-04
16-May-95	0.26	0.82	0.00	81.90	102.91	21.02	386.45	3619.04	-2.58	6.87			0.32	5.57	0.41	1.47	1.81E-04
17-May-95	0.29	0.82	0.00	81.89	102.91	21.02	386.32	3616.46	-2.58	7.66			0.32	5.55	0.41	1.19	1.46E-04
18-May-95	0.27	0.82	0.00	81.88	102.90	21.02	386.18	3613.89	-2.58	7.12			0.32	5.53	0.41	0.38	4.63E-05
19-May-95	0.25	0.82	1.05	81.88	102.90	21.02	386.18	3613.89	0.00	6.60	33.79	1.68	0.32	5.50	0.41	-1.69	-2.08E-04
20-May-95	0.18	0.82	0.00	81.87	102.90	21.03	386.25	3615.17	1.29	4.75			0.32	5.48	0.41	33.00	4.06E-03
21-May-95	0.21	0.82	0.00	81.87	102.91	21.04	386.32	3616.46	1.29	5.54			0.33	5.46	0.41	-0.65	-7.94E-05
22-May-95	0.24	0.82	0.00	81.86	102.91	21.05	386.38	3617.75	1.29	6.34			0.33	5.44	0.41	-1.46	-1.79E-04
23-May-95	0.32	0.82	0.15	81.86	102.91	21.06	386.45	3619.04	1.29	8.45	4.83	0.24	0.33	5.42	0.41	-2.27	-2.79E-04
24-May-95	0.28	0.82	0.00	81.86	102.92	21.06	386.52	3620.32	1.29	7.40			0.33	5.32	0.41	0.66	8.13E-05
25-May-95	0.29	0.82	0.00	81.85	102.92	21.07	386.59	3621.61	1.29	7.66			0.33	5.22	0.41	-3.45	-4.24E-04
26-May-95	0.26	0.82	0.00	81.85	102.92	21.07	386.59	3621.61	0.00	6.87			0.33	5.12	0.41	-2.53	-3.11E-04
27-May-95	0.31	0.82	0.00	81.85	102.90	21.05	386.18	3613.89	-7.73	8.18			0.33	5.02	0.42	5.89	7.25E-04
28-May-95	0.25	0.82	0.00	81.85	102.88	21.03	385.76	3606.17	-7.72	6.59			0.33	4.92	0.42	4.47	5.51E-04
29-May-95	0.25	0.82	0.38	81.85	102.86	21.01	385.34	3598.45	-7.71	6.58	12.20	0.61	0.33	4.82	0.42	5.96	7.36E-04
30-May-95	0.23	0.82	0.11	81.84	102.84	21.00	384.92	3590.75	-7.70	6.05	3.53	0.18	0.33	4.72	0.42	18.67	2.31E-03
31-May-95	0.23	0.82	0.00	81.84	102.82	20.98	384.50	3583.06	-7.69	6.04			0.33	5.21	0.42	9.99	1.24E-03

LAKE BROOKLYN DAILY WATER BUDGET: 1994-1995
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 1920

Date	G'ville Evap. (in)	Pan Coeff.	Brklyn. Precip. (in)	C-0120 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H Lake - Floridan (feet)	Lake Surface Area (acre)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Alligator Creek Inflow Volume (ac-ft)	Surficial Aquifer Outflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Jun-95	0.33	0.85	0.05	81.84	102.80	20.96	384.08	3575.37	-7.69	8.98	1.60	0.08	0.33	5.71	0.42	6.77	8.42E-04
02-Jun-95	0.23	0.85	0.15	81.84	102.80	20.96	384.08	3575.37	0.00	6.26	4.80	0.24	0.33	6.20	0.42	-1.67	-2.08E-04
03-Jun-95	0.03	0.85	1.09	81.84	102.88	21.04	385.69	3604.88	29.51	0.82	35.03	1.74	0.34	6.70	0.42	-24.60	-3.03E-03
04-Jun-95	0.12	0.85	2.34	81.83	102.95	21.12	387.29	3634.51	29.63	3.29	75.52	3.74	0.34	7.19	0.42	12.94	1.58E-03
05-Jun-95	0.00	0.85	0.10	81.83	103.03	21.20	388.90	3664.27	29.75	0.00	3.24	0.16	0.34	7.68	0.42	53.33	6.47E-03
06-Jun-95	0.15	0.85	0.00	81.83	103.11	21.28	390.50	3694.14	29.88	4.15			0.34	7.81	0.42	-18.87	-2.27E-03
07-Jun-95	0.27	0.85	0.00	81.83	103.18	21.35	392.11	3724.14	30.00	7.50			0.34	7.93	0.42	-26.42	-3.16E-03
08-Jun-95	0.30	0.85	0.00	81.83	103.26	21.43	393.71	3754.27	30.12	8.37			0.34	8.06	0.42	-29.77	-3.53E-03
09-Jun-95	0.23	0.85	0.00	81.83	103.26	21.44	393.71	3754.27	0.00	6.41			0.34	8.18	0.42	-0.39	-4.61E-05
10-Jun-95	0.29	0.85	0.00	81.82	103.28	21.45	394.06	3760.83	6.56	8.09			0.34	8.31	0.42	-4.88	-5.77E-04
11-Jun-95	0.25	0.85	0.40	81.82	103.29	21.47	394.41	3767.40	6.57	6.98	13.15	0.64	0.34	8.43	0.42	-6.44	-7.60E-04
12-Jun-95	0.23	0.85	0.03	81.82	103.31	21.49	394.76	3773.98	6.58	6.43	0.99	0.05	0.34	8.56	0.42	8.58	1.01E-03
13-Jun-95	0.20	0.85	0.00	81.82	103.33	21.51	395.11	3780.56	6.58	5.60			0.34	8.43	0.43	-3.50	-4.12E-04
14-Jun-95	0.25	0.85	0.00	81.82	103.34	21.53	395.46	3787.15	6.59	7.00			0.35	8.31	0.43	-3.83	-4.50E-04
15-Jun-95	0.27	0.85	0.00	81.81	103.36	21.55	395.81	3793.75	6.59	7.57			0.35	8.18	0.43	-5.37	-6.30E-04
16-Jun-95	0.33	0.85	0.00	81.81	103.36	21.55	395.81	3793.75	0.00	9.25			0.35	8.06	0.43	0.53	6.24E-05
17-Jun-95	0.25	0.85	0.00	81.81	103.38	21.57	396.16	3800.35	6.60	7.02			0.35	7.93	0.43	-7.87	-9.22E-04
18-Jun-95	0.28	0.85	0.00	81.81	103.39	21.59	396.51	3806.95	6.61	7.86			0.35	7.81	0.43	-5.77	-6.74E-04
19-Jun-95	0.25	0.85	0.00	81.81	103.41	21.60	396.85	3813.56	6.61	7.03			0.35	7.68	0.43	-6.75	-7.87E-04
20-Jun-95	0.26	0.85	0.01	81.80	103.36	21.56	395.81	3793.75	-19.82	7.29	0.33	0.02	0.35	8.99	0.43	20.39	2.39E-03
21-Jun-95	0.22	0.85	0.00	81.80	103.38	21.57	396.16	3800.35	6.60	6.17			0.35	8.98	0.43	-4.63	-5.42E-04
22-Jun-95	0.30	0.85	0.15	81.80	103.46	21.66	397.90	3833.43	33.09	8.46	4.97	0.24	0.35	8.97	0.43	-30.36	-3.52E-03
23-Jun-95	0.27	0.85	0.00	81.80	103.62	21.82	401.25	3897.37	63.93	7.67			0.35	8.96	0.43	-58.29	-6.66E-03
24-Jun-95	0.19	0.85	0.00	81.80	103.78	21.98	404.60	3961.84	64.47	5.45			0.35	8.94	0.43	-63.27	-7.11E-03
25-Jun-95	0.24	0.85	0.90	81.79	103.78	21.99	404.60	3961.84	0.00	6.88	30.35	1.44	0.36	8.93	0.43	3.42	3.84E-04
26-Jun-95	0.04	0.85	0.10	81.79	103.78	21.99	404.60	3961.84	0.00	1.15	3.37	0.16	0.36	8.99	0.44	33.76	3.79E-03
27-Jun-95	0.15	0.85	0.00	81.79	103.78	21.99	404.60	3961.84	0.00	4.30			0.36	8.91	0.44	11.30	1.27E-03
28-Jun-95	0.21	0.85	0.65	81.79	103.78	21.99	404.60	3961.84	0.00	6.02	21.92	1.04	0.36	8.93	0.44	4.53	5.09E-04
29-Jun-95	0.21	0.85	0.80	81.79	103.78	21.99	404.60	3961.84	0.00	6.02	26.97	1.28	0.36	8.97	0.44	25.79	2.90E-03
30-Jun-95	0.21	0.85	0.00	81.79	103.82	22.03	405.39	3977.02	15.19	6.03			0.36	8.97	0.44	15.94	1.78E-03
01-Jul-95	0.26	0.91	0.11	81.79	103.86	22.07	406.17	3992.24	15.22	8.01	3.72	0.18	0.36	8.99	0.44	-12.36	-1.38E-03
02-Jul-95	0.25	0.91	0.00	81.79	103.89	22.11	406.96	4007.49	15.25	7.72			0.36	8.99	0.44	-10.45	-1.16E-03
03-Jul-95	0.20	0.91	0.00	81.79	103.93	22.14	407.74	4022.76	15.28	6.18			0.36	9.08	0.44	-14.08	-1.56E-03
04-Jul-95	0.22	0.91	0.00	81.79	103.97	22.18	408.53	4038.07	15.31	6.82			0.36	9.01	0.44	-12.49	-1.38E-03
05-Jul-95	0.22	0.91	0.03	81.78	104.01	22.22	409.31	4053.40	15.33	6.83	1.02	0.05	0.36	8.93	0.44	-13.22	-1.45E-03
06-Jul-95	0.25	0.91	0.00	81.78	104.04	22.26	410.10	4068.77	15.36	7.77			0.36	8.86	0.44	-12.27	-1.34E-03
07-Jul-95	0.24	0.91	0.07	81.78	104.08	22.30	410.88	4084.16	15.39	7.48	2.40	0.11	0.36	8.78	0.44	-14.39	-1.57E-03
08-Jul-95	0.23	0.91	0.00	81.78	104.12	22.34	411.67	4099.58	15.42	7.18			0.36	8.71	0.44	-11.69	-1.27E-03
09-Jul-95	0.29	0.91	0.00	81.78	104.16	22.37	412.45	4115.04	15.45	9.07			0.36	8.63	0.44	-14.01	-1.52E-03
10-Jul-95	0.25	0.91	0.08	81.78	104.19	22.41	413.24	4130.52	15.48	7.83	2.75	0.13	0.36	8.56	0.44	-16.00	-1.73E-03
11-Jul-95	0.18	0.91	0.00	81.78	104.23	22.45	414.03	4146.03	15.51	5.65			0.36	8.71	0.44	-11.98	-1.29E-03
12-Jul-95	0.14	0.91	0.00	81.78	104.27	22.49	414.81	4161.57	15.54	4.40			0.36	8.86	0.44	-12.56	-1.35E-03
13-Jul-95	0.26	0.91	0.00	81.78	104.31	22.53	415.60	4177.14	15.57	8.82			0.36	9.01	0.44	-11.20	-1.20E-03
14-Jul-95	0.18	0.91	0.19	81.78	104.34	22.56	416.38	4192.74	15.60	5.68	6.59	0.30	0.36	9.15	0.44	-15.50	-1.65E-03
15-Jul-95	0.21	0.91	0.00	81.78	104.38	22.60	417.17	4208.37	15.63	6.64			0.36	9.30	0.44	-5.34	-5.66E-04
16-Jul-95	0.21	0.91	0.99	81.78	104.42	22.64	417.95	4224.03	15.66	6.66	34.48	1.58	0.36	9.45	0.44	-13.08	-1.38E-03
17-Jul-95	0.18	0.91	0.29	81.78	104.46	22.68	418.74	4239.72	15.69	5.72	10.12	0.46	0.36	9.60	0.44	23.10	2.43E-03
18-Jul-95	0.03	0.91	0.00	81.78	104.49	22.72	419.52	4255.44	15.72	0.95			0.36	9.73	0.44	-1.33	-1.39E-04
19-Jul-95	0.22	0.91	0.00	81.77	104.53	22.76	420.31	4271.16	15.75	7.01			0.36	9.85	0.44	-7.05	-7.37E-04
20-Jul-95	0.27	0.91	0.20	81.77	104.57	22.79	421.09	4286.96	15.78	8.62	7.02	0.32	0.36	9.98	0.44	-13.01	-1.36E-03
21-Jul-95	0.26	0.91	0.00	81.77	104.61	22.83	421.88	4302.77	15.81	8.32			0.36	10.10	0.44	-7.19	-7.47E-04
22-Jul-95	0.16	0.91	0.00	81.77	104.64	22.87	422.66	4318.60	15.84	5.13			0.36	10.23	0.44	-14.13	-1.46E-03
23-Jul-95	0.19	0.91	0.15	81.77	104.68	22.91	423.45	4334.47	15.86	6.10	5.29	0.24	0.36	10.35	0.44	-10.85	-1.12E-03
24-Jul-95	0.18	0.91	0.80	81.77	104.72	22.95	424.23	4350.36	15.89	5.79	28.28	1.28	0.36	10.48	0.44	-6.19	-6.36E-04
25-Jul-95	0.27	0.91	0.05	81.77	104.76	22.99	425.02	4366.28	15.92	8.70	1.77	0.08	0.36	10.60	0.44	18.24	1.87E-03
26-Jul-95	0.11	0.91	0.00	81.77	104.79	23.02	425.80	4382.24	15.95	3.55			0.36	10.72	0.44	-12.28	-1.25E-03
27-Jul-95	0.20	0.91	0.00	81.77	104.83	23.06	426.59	4398.22	15.98	6.47			0.36	10.85	0.44	-8.89	-9.04E-04
28-Jul-95	0.20	0.91	0.37	81.77	104.87	23.10	427.37	4414.23	16.01	6.48	13.18	0.59	0.36	10.97	0.44	-11.71	-1.19E-03
29-Jul-95	0.27	0.91	0.01	81.77	104.91	23.14	428.16	4430.27	16.04	8.77	0.36	0.02	0.36	11.10	0.44	2.14	2.16E-04
30-Jul-95	0.16	0.91	0.00	81.77	104.94	23.17	428.94	4446.35	16.07	5.20			0.36	11.22	0.44	-13.45	-1.35E-03
31-Jul-95	0.25	0.91	0.00	81.77	104.98	23.21	429.73	4462.45	16.10	8.15			0.36	11.35	0.44	-10.16	-1.02E-03
																Average=	9.81E-04
																Variance =	6.70E-06
																Std. Dev.=	2.59E-03

Maximum	0.33	0.91	4.78	82.81	104.98	23.21	429.73	4462.45	70.24	9.25	144.32	7.65	0.43	42.24	0.45	142.46	
Minimum	0.00	0.69	0.00	80.26	98.37	18.00	291.32	2079.32	-58.28	0.00	0.00	0.00	0.31	4.28	0.35	-63.27	
Average	0.15	0.81	0.14	81.95	102.53	20.57	378.37	3486.08	6.06	3.88	4.33	0.22	0.34	12.22	0.40	6.76	

Lake Brooklyn Daily Water Budget (Mean Values)
August 1, 1994 to July 31, 1995

Values in in/yr were calculated using the average lake area.

With negative LEAKAGE values:

Precipitation	4.33	ac-ft/day	50.16	in/yr
Runoff	0.22	ac-ft/day	2.58	in/yr
Surficial Aquifer Inflow	0.34	ac-ft/day	3.95	in/yr
Surface Water Inflow	12.22	ac-ft/day	141.43	in/yr
Surficial Aquifer Outflow	0.40	ac-ft/day	4.67	in/yr
Leakage	6.76	ac-ft/day	78.28	in/yr
Evaporation	3.88	ac-ft/day	44.96	in/yr
Surface Water Outflow	0.00	ac-ft/day	0.00	in/yr

LAKE GENEVA DAILY WATER BUDGET:
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 11584

Date	Gaines. Evap. (in)	Pan Coeff.	Geneva Precip. (in)	C-0436 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H (Lake - Floridan) (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Aug-94	0.21	0.91	0.00	80.14	90.50	10.36	1012.19	6812.20	NA	16.12			2.06	NA	NA
02-Aug-94	0.21	0.91	0.00	80.16	90.50	10.33	1011.83	6807.14	-5.06	16.11			2.06	-9.00	-8.61E-04
03-Aug-94	0.26	0.91	0.00	80.18	90.49	10.31	1011.48	6802.08	-5.06	19.94			2.06	-9.00	-8.63E-04
04-Aug-94	0.20	0.91	0.46	80.20	90.49	10.28	1011.12	6797.02	-5.06	15.34	38.76	4.44	2.07	-12.82	-1.23E-03
05-Aug-94	0.15	0.91	0.87	80.22	90.48	10.26	1010.77	6791.97	-5.05	11.50	73.28	8.40	2.08	34.99	3.38E-03
06-Aug-94	0.19	0.91	1.11	80.24	90.52	10.28	1013.82	6835.35	43.38	14.61	93.78	10.72	2.08	28.87	2.77E-03
07-Aug-94	0.17	0.91	0.47	80.27	90.57	10.30	1016.87	6878.87	43.51	13.11	39.83	4.54	2.09	46.45	4.63E-03
08-Aug-94	0.12	0.91	0.93	80.29	90.61	10.32	1019.92	6922.51	43.65	9.28	79.04	8.98	2.09	-10.30	-9.79E-04
09-Aug-94	0.07	0.91	0.04	80.31	90.65	10.34	1022.97	6966.29	43.78	5.43	3.41	0.39	2.10	37.05	3.50E-03
10-Aug-94	0.18	0.91	0.00	80.33	90.69	10.37	1026.02	7010.19	43.91	14.01			2.10	-43.44	-4.08E-03
11-Aug-94	0.17	0.91	0.04	80.35	90.74	10.39	1029.07	7054.23	44.04	13.27	3.43	0.39	2.11	-55.94	-5.23E-03
12-Aug-94	0.19	0.91	0.13	80.37	90.78	10.41	1032.12	7098.40	44.17	14.87	11.18	1.25	2.11	-51.51	-4.79E-03
13-Aug-94	0.16	0.91	0.06	80.39	90.79	10.39	1032.53	7104.30	5.90	12.53	5.16	0.58	2.12	-6.22	-5.80E-04
14-Aug-94	0.23	0.91	0.25	80.41	90.79	10.38	1032.93	7110.20	5.90	18.02	21.52	2.41	2.12	-10.57	-9.86E-04
15-Aug-94	0.19	0.91	0.48	80.43	90.80	10.36	1033.34	7116.10	5.90	14.89	41.33	4.63	2.13	2.14	1.99E-04
16-Aug-94	0.13	0.91	0.23	80.45	90.80	10.35	1033.75	7122.01	5.91	10.19	19.81	2.22	2.13	27.30	2.55E-03
17-Aug-94	0.00	0.91	0.01	80.47	90.81	10.33	1034.15	7127.92	5.91	0.00	0.86	0.10	2.14	8.07	7.55E-04
18-Aug-94	0.11	0.91	0.00	80.50	90.81	10.32	1034.56	7133.83	5.91	8.63			2.14	-2.81	-2.64E-04
19-Aug-94	0.22	0.91	0.00	80.52	90.82	10.30	1034.97	7139.74	5.91	17.27			2.15	-12.40	-1.16E-03
20-Aug-94	0.24	0.91	0.00	80.54	90.82	10.28	1034.97	7139.74	0.00	18.84			2.15	-15.12	-1.42E-03
21-Aug-94	0.21	0.91	0.00	80.56	90.82	10.26	1034.97	7139.74	0.00	16.48			2.16	-16.68	-1.57E-03
22-Aug-94	0.25	0.91	0.40	80.58	90.82	10.24	1034.97	7139.74	0.00	19.62	34.50	3.86	2.16	-14.32	-1.35E-03
23-Aug-94	0.08	0.91	0.08	80.6	90.82	10.22	1034.97	7139.74	0.00	6.28	6.90	0.77	2.17	20.90	1.98E-03
24-Aug-94	0.12	0.91	0.00	80.60	90.82	10.22	1034.97	7139.74	0.00	9.42			2.18	3.56	3.37E-04
25-Aug-94	0.16	0.91	0.00	80.61	90.82	10.21	1034.97	7139.74	0.00	12.56			2.18	-7.24	-6.86E-04
26-Aug-94	0.18	0.91	0.00	80.62	90.82	10.20	1034.97	7139.74	0.00	14.13			2.19	-10.38	-9.83E-04
27-Aug-94	0.09	0.91	0.00	80.64	90.80	10.17	1033.75	7122.01	-17.73	7.06			2.19	5.79	5.51E-04
28-Aug-94	0.16	0.91	0.00	80.65	90.79	10.14	1032.53	7104.30	-17.71	12.53			2.20	12.85	1.23E-03
29-Aug-94	0.21	0.91	0.00	80.66	90.77	10.11	1031.31	7086.61	-17.69	16.42			2.20	7.36	7.06E-04
30-Aug-94	0.21	0.91	0.00	80.67	90.75	10.08	1030.09	7068.94	-17.67	16.40			2.21	3.45	3.32E-04
31-Aug-94	0.23	0.91	0.00	80.69	90.73	10.05	1028.87	7051.29	-17.65	17.95			2.21	3.45	3.34E-04
01-Sep-94	0.21	0.85	0.00	80.70	90.72	10.02	1027.65	7033.67	-17.63	15.29			2.22	1.89	1.84E-04
02-Sep-94	0.18	0.85	0.00	80.71	90.70	9.99	1026.43	7016.06	-17.61	13.09			2.22	4.54	4.43E-04
03-Sep-94	0.17	0.85	0.01	80.72	90.68	9.96	1025.21	6998.47	-17.59	12.35	0.85	0.10	2.22	6.72	6.58E-04
04-Sep-94	0.23	0.85	0.00	80.74	90.67	9.93	1023.99	6980.91	-17.56	16.68			2.23	8.39	8.26E-04
05-Sep-94	0.13	0.85	0.00	80.75	90.65	9.90	1022.77	6963.37	-17.54	9.42			2.23	3.09	3.05E-04
06-Sep-94	0.19	0.85	0.00	80.76	90.63	9.87	1021.55	6945.84	-17.52	13.75			2.23	10.33	1.02E-03
07-Sep-94	0.21	0.85	0.00	80.77	90.61	9.84	1020.32	6928.34	-17.50	15.18			2.23	5.98	5.96E-04
08-Sep-94	0.20	0.85	0.00	80.79	90.60	9.81	1019.10	6910.86	-17.48	14.44			2.24	4.54	4.54E-04
09-Sep-94	0.05	0.85	1.04	80.80	90.58	9.78	1017.88	6893.40	-17.46	3.61	88.22	10.04	2.24	5.26	5.28E-04
10-Sep-94	0.18	0.85	0.05	80.81	90.58	9.77	1018.09	6896.31	2.91	12.98	4.24	0.48	2.24	93.98	9.45E-03
11-Sep-94	0.12	0.85	0.39	80.82	90.59	9.76	1018.29	6899.22	2.91	8.66	33.09	3.76	2.24	-8.93	-8.98E-04
12-Sep-94	0.18	0.85	0.19	80.84	90.59	9.75	1018.49	6902.13	2.91	12.99	16.13	1.83	2.24	27.54	2.77E-03
13-Sep-94	0.18	0.85	0.00	80.85	90.59	9.74	1018.70	6905.04	2.91	12.99			2.25	4.31	4.34E-04
14-Sep-94	0.23	0.85	0.21	80.86	90.59	9.73	1018.90	6907.95	2.91	16.60	17.83	2.03	2.25	-13.65	-1.38E-03
15-Sep-94	0.12	0.85	0.16	80.87	90.60	9.72	1019.10	6910.86	2.91	8.66	13.59	1.54	2.25	2.59	2.62E-04
16-Sep-94	0.20	0.85	0.47	80.89	90.60	9.71	1019.31	6913.77	2.91	14.44	39.92	4.54	2.25	5.81	5.87E-04
17-Sep-94	0.17	0.85	0.69	80.90	90.65	9.76	1023.17	6969.21	55.44	12.32	58.83	6.66	2.25	-23.17	-2.32E-03
18-Sep-94	0.14	0.85	0.18	80.91	90.71	9.80	1027.04	7024.86	55.65	10.18	15.41	1.74	2.26	-0.22	-2.20E-05
19-Sep-94	0.17	0.85	0.01	80.92	90.76	9.84	1030.90	7080.72	55.86	12.41	0.86	0.10	2.26	-46.64	-4.60E-03
20-Sep-94	0.15	0.85	1.09	80.94	90.82	9.88	1034.76	7136.79	56.07	10.99	93.99	10.52	2.26	-65.27	-6.38E-03
21-Sep-94	0.07	0.85	0.01	80.95	90.87	9.92	1038.63	7193.06	56.28	5.15	0.87	0.10	2.26	39.50	3.83E-03
22-Sep-94	0.19	0.85	0.00	80.96	90.93	9.97	1042.49	7249.55	56.49	14.03			2.26	-58.41	-5.62E-03
23-Sep-94	0.19	0.85	0.22	80.97	90.98	10.01	1046.36	7306.25	56.70	14.08	19.18	2.12	2.27	-68.46	-6.54E-03
24-Sep-94	0.13	0.85	0.00	80.99	90.95	9.96	1043.92	7270.42	-35.83	9.61			2.27	45.32	4.36E-03
25-Sep-94	0.04	0.85	0.04	81.00	90.91	9.91	1041.48	7234.67	-35.75	2.95	3.47	0.39	2.27	28.41	2.75E-03
26-Sep-94	0.02	0.85	0.00	81.01	90.88	9.87	1039.04	7199.00	-35.67	1.47			2.27	38.84	3.79E-03
27-Sep-94	0.15	0.85	0.00	81.01	90.84	9.83	1036.59	7163.42	-35.58	11.01			2.28	36.38	3.57E-03
28-Sep-94	0.16	0.85	0.00	81.05	90.81	9.76	1034.15	7127.92	-35.50	11.72			2.28	26.76	2.65E-03
29-Sep-94	0.14	0.85	0.00	81.09	90.77	9.69	1031.71	7092.50	-35.41	10.23			2.28	25.97	2.60E-03
30-Sep-94	0.17	0.85	0.00	81.13	90.74	9.61	1029.27	7057.17	-35.33	12.39			2.28	27.38	2.77E-03

LAKE GENEVA DAILY WATER BUDGET:
August 1, 1994 to July 31, 1995

										Runoff Coeff. =		0.01			
										Drain. Area (ac) =		11584			
Date	Gaines. Evap. (in)	Pan Coeff.	Geneva Precip. (in)	C-0436 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H (Lake - Floridan) (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Oct-94	0.20	0.76	0.38	81.17	90.75	9.58	1029.78	7064.53	7.35	13.04	32.61	3.67	2.28	-17.47	-1.77E-03
02-Oct-94	0.08	0.76	0.59	81.20	90.75	9.55	1030.29	7071.88	7.36	5.22	50.66	5.70	2.29	18.16	1.85E-03
03-Oct-94	0.08	0.76	0.90	81.24	90.76	9.52	1030.80	7079.25	7.36	5.22	77.31	8.69	2.29	46.06	4.69E-03
04-Oct-94	0.17	0.76	0.21	81.28	90.77	9.49	1031.31	7086.61	7.36	11.10	18.05	2.03	2.29	75.70	7.74E-03
05-Oct-94	0.07	0.76	0.00	81.32	90.78	9.45	1031.82	7093.98	7.37	4.57			2.30	3.90	4.00E-04
06-Oct-94	0.17	0.76	0.00	81.36	90.78	9.42	1032.32	7101.35	7.37	11.11			2.31	-9.65	-9.92E-04
07-Oct-94	0.16	0.76	0.02	81.40	90.79	9.39	1032.83	7108.73	7.38	10.47	1.72	0.19	2.31	-16.18	-1.67E-03
08-Oct-94	0.16	0.76	0.14	81.44	90.90	9.46	1040.56	7221.28	112.56	10.54	12.14	1.35	2.32	-118.79	-1.21E-02
09-Oct-94	0.15	0.76	0.01	81.48	91.01	9.53	1048.29	7334.68	113.39	9.96	0.87	0.10	2.33	-108.13	-1.08E-02
10-Oct-94	0.11	0.76	0.01	81.52	91.12	9.60	1056.02	7448.91	114.23	7.36	0.88	0.10	2.33	-120.90	-1.19E-02
11-Oct-94	0.04	0.76	6.51	81.56	91.22	9.67	1063.74	7563.98	115.07	2.69	577.08	62.84	2.34	-119.12	-1.16E-02
12-Oct-94	0.02	0.76	0.03	81.59	91.33	9.74	1071.47	7679.89	115.91	1.36	2.68	0.29	2.34	523.66	5.02E-02
13-Oct-94	0.02	0.76	0.02	81.63	91.44	9.81	1079.20	7796.65	116.75	1.37	1.80	0.19	2.35	-112.80	-1.07E-02
14-Oct-94	0.09	0.76	0.71	81.67	91.55	9.88	1086.93	7914.23	117.59	6.20	64.31	6.85	2.36	-114.61	-1.07E-02
15-Oct-94	0.14	0.76	0.00	81.71	91.56	9.85	1087.34	7920.45	6.21	9.64			2.36	61.11	5.71E-03
16-Oct-94	0.09	0.76	0.00	81.75	91.56	9.81	1087.74	7926.66	6.21	6.20			2.37	-13.49	-1.26E-03
17-Oct-94	0.12	0.76	0.00	81.79	91.57	9.78	1088.15	7932.88	6.22	8.27			2.38	-10.05	-9.44E-04
18-Oct-94	0.17	0.76	0.00	81.83	91.57	9.75	1088.56	7939.10	6.22	11.72			2.38	-12.11	-1.14E-03
19-Oct-94	0.11	0.76	0.00	81.87	91.58	9.71	1088.96	7945.32	6.22	7.59			2.39	-15.56	-1.47E-03
20-Oct-94	0.15	0.76	0.00	81.91	91.58	9.68	1089.37	7951.54	6.22	10.35			2.39	-11.42	-1.08E-03
21-Oct-94	0.14	0.76	0.00	81.94	91.59	9.65	1089.78	7957.77	6.23	9.66			2.40	-14.18	-1.35E-03
22-Oct-94	0.13	0.76	0.00	81.98	91.59	9.61	1090.08	7962.44	4.67	8.98			2.41	-11.93	-1.14E-03
23-Oct-94	0.12	0.76	0.00	82.02	91.60	9.58	1090.39	7967.11	4.67	8.29			2.41	-11.24	-1.08E-03
24-Oct-94	0.16	0.76	0.00	82.06	91.60	9.54	1090.69	7971.79	4.67	11.05			2.42	-10.55	-1.01E-03
25-Oct-94	0.14	0.76	0.00	82.1	91.61	9.51	1091.00	7976.46	4.68	9.67			2.43	-13.31	-1.28E-03
26-Oct-94	0.14	0.76	0.05	82.10	91.61	9.51	1091.30	7981.14	4.68	9.68	4.55	0.48	2.43	-11.92	-1.15E-03
27-Oct-94	0.03	0.76	0.00	82.11	91.62	9.51	1091.61	7985.82	4.68	2.07			2.44	-6.89	-6.64E-04
28-Oct-94	0.16	0.76	0.11	82.11	91.62	9.51	1091.91	7990.49	4.68	11.06	10.01	1.06	2.45	-4.31	-4.16E-04
29-Oct-94	0.05	0.76	0.10	82.12	91.62	9.50	1091.61	7985.82	-4.68	3.46	9.10	0.97	2.45	7.13	6.88E-04
30-Oct-94	0.04	0.76	0.34	82.12	91.61	9.49	1091.30	7981.14	-4.68	2.76	30.92	3.28	2.46	13.73	1.33E-03
31-Oct-94	0.06	0.76	0.00	82.13	91.61	9.48	1091.00	7976.46	-4.68	4.15			2.46	38.57	3.73E-03
01-Nov-94	0.09	0.71	0.00	82.14	91.60	9.47	1090.69	7971.79	-4.68	5.81			2.47	2.99	2.90E-04
02-Nov-94	0.14	0.71	0.00	82.14	91.60	9.46	1090.39	7967.11	-4.67	9.03			2.48	1.34	1.30E-04
03-Nov-94	0.14	0.71	0.00	82.15	91.59	9.45	1090.08	7962.44	-4.67	9.03			2.48	-1.88	-1.83E-04
04-Nov-94	0.11	0.71	0.00	82.15	91.59	9.44	1089.78	7957.77	-4.67	7.09			2.48	-1.88	-1.83E-04
05-Nov-94	0.14	0.71	0.00	82.16	91.58	9.43	1089.37	7951.54	-6.23	9.02			2.48	1.61	1.57E-04
06-Nov-94	0.16	0.71	0.00	82.16	91.58	9.41	1088.96	7945.32	-6.22	10.31			2.48	-0.32	-3.14E-05
07-Nov-94	0.09	0.71	0.00	82.17	91.57	9.40	1088.56	7939.10	-6.22	5.80			2.48	-1.61	-1.57E-04
08-Nov-94	0.13	0.71	0.01	82.18	91.57	9.39	1088.15	7932.88	-6.22	8.37	0.91	0.10	2.48	2.90	2.84E-04
09-Nov-94	0.10	0.71	0.00	82.18	91.56	9.38	1087.74	7926.66	-6.22	6.44			2.48	1.33	1.30E-04
10-Nov-94	0.11	0.71	0.00	82.19	91.56	9.37	1087.34	7920.45	-6.21	7.08			2.48	2.26	2.22E-04
11-Nov-94	0.08	0.71	0.08	82.19	91.55	9.36	1086.93	7914.23	-6.21	5.14	7.25	0.77	2.48	1.61	1.59E-04
12-Nov-94	0.07	0.71	0.45	82.20	91.56	9.36	1087.64	7925.11	10.87	4.50	40.79	4.34	2.48	-5.52	-5.42E-04
13-Nov-94	0.02	0.71	0.00	82.21	91.57	9.36	1088.35	7935.99	10.88	1.29			2.48	32.23	3.16E-03
14-Nov-94	0.12	0.71	0.00	82.21	91.58	9.37	1089.06	7946.87	10.89	7.73			2.48	-9.70	-9.50E-04
15-Nov-94	0.15	0.71	0.56	82.22	91.59	9.37	1089.95	7960.49	13.62	9.67	50.86	5.41	2.48	-18.87	-1.85E-03
16-Nov-94	0.00	0.71	0.18	82.22	91.61	9.38	1090.84	7974.12	13.63	0.00	16.36	1.74	2.48	35.45	3.46E-03
17-Nov-94	0.05	0.71	0.02	82.23	91.62	9.39	1091.73	7987.76	13.64	3.23	1.82	0.19	2.48	6.94	6.77E-04
18-Nov-94	0.07	0.71	0.00	82.24	91.63	9.39	1092.62	8001.42	13.65	4.53			2.48	-12.39	-1.21E-03
19-Nov-94	0.07	0.71	0.00	82.24	91.62	9.38	1092.05	7992.68	-8.74	4.52			2.48	6.69	6.53E-04
20-Nov-94	0.14	0.71	0.02	82.25	91.61	9.37	1091.48	7983.94	-8.73	9.04	1.82	0.19	2.48	6.69	6.55E-04
21-Nov-94	0.09	0.71	0.02	82.25	91.61	9.35	1090.92	7975.21	-8.73	5.81	1.82	0.19	2.48	4.18	4.10E-04
22-Nov-94	0.09	0.71	0.02	82.26	91.60	9.34	1090.35	7966.49	-8.73	5.81	1.82	0.19	2.48	7.41	7.28E-04
23-Nov-94	0.10	0.71	0.00	82.26	91.59	9.33	1089.78	7957.77	-8.72	6.45			2.48	7.41	7.29E-04
24-Nov-94	0.15	0.71	0.00	82.27	91.58	9.31	1089.21	7949.05	-8.72	9.67			2.48	4.75	4.68E-04
25-Nov-94	0.07	0.71	0.00	82.28	91.57	9.30	1088.64	7940.34	-8.71	4.51			2.48	1.53	1.51E-04
26-Nov-94	0.08	0.71	0.00	82.28	91.57	9.28	1088.07	7931.63	-8.71	5.15			2.48	6.68	6.61E-04
27-Nov-94	0.06	0.71	0.00	82.29	91.56	9.27	1087.50	7922.93	-8.70	3.86			2.48	6.04	5.99E-04
28-Nov-94	0.10	0.71	0.00	82.29	91.55	9.26	1086.93	7914.23	-8.70	6.43			2.48	7.32	7.28E-04
29-Nov-94	0.08	0.71	0.03	82.3	91.55	9.25	1086.93	7914.23	0.00	5.14	2.72	0.29	2.49	-3.95	-3.93E-04
30-Nov-94	0.10	0.71	0.01	82.30	91.55	9.25	1086.93	7914.23	0.00	6.43	0.91	0.10	2.50	0.35	3.50E-05

LAKE GENEVA DAILY WATER BUDGET:
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 11584

Date	Gaines. Evap. (in)	Pan Coeff.	Geneva Precip. (in)	C-0436 Flordan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H (Lake - Floridan) (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Dec-94	0.05	0.83	0.00	82.30	91.55	9.25	1086.93	7914.23	0.00	3.76			2.50	-2.93	-2.92E-04
02-Dec-94	0.11	0.83	0.00	82.30	91.55	9.25	1086.93	7914.23	0.00	8.27			2.51	-1.26	-1.25E-04
03-Dec-94	0.05	0.83	0.00	82.31	91.56	9.25	1087.54	7923.55	9.32	3.76			2.51	-15.08	-1.50E-03
04-Dec-94	0.04	0.83	0.28	82.31	91.57	9.26	1088.15	7932.88	9.32	3.01	25.39	2.70	2.52	-10.57	-1.05E-03
05-Dec-94	0.09	0.83	0.57	82.31	91.58	9.26	1088.76	7942.21	9.33	6.78	51.72	5.50	2.53	18.27	1.81E-03
06-Dec-94	0.11	0.83	0.00	82.31	91.58	9.27	1089.37	7951.54	9.33	8.29			2.53	43.63	4.32E-03
07-Dec-94	0.10	0.83	0.01	82.32	91.59	9.28	1089.98	7960.88	9.34	7.54	0.91	0.10	2.54	-15.10	-1.49E-03
08-Dec-94	0.06	0.83	0.00	82.32	91.60	9.28	1090.59	7970.23	9.35	4.53			2.55	-13.34	-1.32E-03
09-Dec-94	0.07	0.83	0.00	82.32	91.61	9.29	1091.20	7979.58	9.35	5.28			2.55	-11.33	-1.12E-03
10-Dec-94	0.05	0.83	0.01	82.32	91.61	9.28	1090.84	7974.12	-5.46	3.77	0.91	0.10	2.56	2.72	2.69E-04
11-Dec-94	0.11	0.83	0.13	82.33	91.60	9.27	1090.49	7968.67	-5.45	8.30	11.81	1.25	2.56	5.24	5.19E-04
12-Dec-94	0.09	0.83	0.01	82.33	91.60	9.27	1090.13	7963.22	-5.45	6.79	0.91	0.10	2.57	12.79	1.27E-03
13-Dec-94	0.09	0.83	0.00	82.33	91.59	9.26	1089.78	7957.77	-5.45	6.78			2.58	2.24	2.22E-04
14-Dec-94	0.05	0.83	0.00	82.33	91.59	9.25	1089.42	7952.32	-5.45	3.77			2.58	1.24	1.23E-04
15-Dec-94	0.06	0.83	0.00	82.34	91.58	9.24	1089.06	7946.87	-5.45	4.52			2.59	4.26	4.23E-04
16-Dec-94	0.04	0.83	0.00	82.34	91.55	9.21	1086.93	7914.23	-32.64	3.01			2.60	30.71	3.07E-03
17-Dec-94	0.02	0.83	0.00	82.34	91.55	9.21	1087.13	7917.34	3.11	1.50			2.60	-3.52	-3.51E-04
18-Dec-94	0.04	0.83	0.00	82.34	91.56	9.21	1087.34	7920.45	3.11	3.01			2.61	-2.01	-2.01E-04
19-Dec-94	0.08	0.83	0.00	82.35	91.56	9.21	1087.54	7923.55	3.11	6.02			2.61	-3.51	-3.50E-04
20-Dec-94	0.11	0.83	0.00	82.35	91.56	9.21	1087.74	7926.66	3.11	8.28			2.62	-6.51	-6.50E-04
21-Dec-94	0.02	0.83	0.33	82.35	91.56	9.21	1087.95	7929.77	3.11	1.50	29.92	3.19	2.63	-8.76	-8.74E-04
22-Dec-94	0.02	0.83	0.42	82.35	91.57	9.22	1088.15	7932.88	3.11	1.51	38.09	4.05	2.63	31.12	3.10E-03
23-Dec-94	0.00	0.83	0.11	82.35	91.57	9.22	1088.35	7935.99	3.11	0.00	9.98	1.06	2.64	40.16	4.00E-03
24-Dec-94	0.06	0.83	0.00	82.34	91.57	9.23	1088.59	7939.62	3.63	4.52			2.65	10.05	1.00E-03
25-Dec-94	0.08	0.83	0.01	82.34	91.58	9.24	1088.83	7943.25	3.63	6.02	0.91	0.10	2.65	-5.50	-5.47E-04
26-Dec-94	0.07	0.83	0.00	82.34	91.58	9.24	1089.06	7946.87	3.63	5.27			2.66	-6.00	-5.96E-04
27-Dec-94	0.08	0.83	0.00	82.33	91.58	9.25	1089.30	7950.51	3.63	6.03			2.66	-6.25	-6.20E-04
28-Dec-94	0.09	0.83	0.00	82.33	91.59	9.26	1089.54	7954.14	3.63	6.78			2.67	-7.00	-6.94E-04
29-Dec-94	0.08	0.83	0.12	82.33	91.59	9.26	1089.78	7957.77	3.63	6.03	10.90	1.16	2.68	-7.74	-7.67E-04
30-Dec-94	0.05	0.83	0.14	82.32	91.59	9.26	1089.51	7953.68	-4.09	3.77	12.71	1.35	2.67	12.79	1.27E-03
31-Dec-94	0.04	0.83	0.00	82.32	91.58	9.26	1089.24	7949.60	-4.09	3.01			2.66	17.05	1.69E-03
01-Jan-95	0.05	0.77	0.01	82.32	91.58	9.26	1088.98	7945.51	-4.08	3.49	0.91	0.10	2.65	3.73	3.70E-04
02-Jan-95	0.03	0.77	0.00	82.31	91.58	9.26	1088.71	7941.43	-4.08	2.10			2.65	4.25	4.21E-04
03-Jan-95	0.13	0.77	0.00	82.31	91.57	9.26	1088.44	7937.35	-4.08	9.08			2.64	4.63	4.59E-04
04-Jan-95	0.05	0.77	0.00	82.31	91.57	9.26	1088.17	7933.27	-4.08	3.49			2.63	-2.36	-2.34E-04
05-Jan-95	0.06	0.77	0.00	82.30	91.56	9.26	1087.91	7929.19	-4.08	4.19			2.62	3.22	3.19E-04
06-Jan-95	0.08	0.77	0.00	82.30	91.56	9.26	1087.64	7925.11	-4.08	5.58			2.61	2.51	2.49E-04
07-Jan-95	0.11	0.77	0.86	82.30	91.58	9.28	1088.86	7943.76	18.66	7.69	78.04	8.30	2.61	-21.62	-2.14E-03
08-Jan-95	0.14	0.77	0.00	82.29	91.59	9.30	1090.08	7962.44	18.68	9.79			2.60	62.58	6.17E-03
09-Jan-95	0.17	0.77	0.00	82.29	91.61	9.32	1091.30	7981.14	18.70	11.90			2.59	-25.89	-2.54E-03
10-Jan-95	0.09	0.77	0.00	82.28	91.63	9.34	1092.52	7999.86	18.72	6.31			2.58	-28.03	-2.75E-03
11-Jan-95	0.05	0.77	0.01	82.28	91.65	9.36	1093.74	8018.60	18.74	3.51	0.91	0.10	2.58	-22.46	-2.19E-03
12-Jan-95	0.08	0.77	0.00	82.28	91.66	9.38	1094.96	8037.36	18.76	5.62			2.57	-18.69	-1.82E-03
13-Jan-95	0.09	0.77	0.00	82.27	91.68	9.41	1096.18	8056.14	18.78	6.33			2.56	-21.83	-2.12E-03
14-Jan-95	0.05	0.77	0.93	82.27	91.69	9.42	1096.79	8065.54	9.40	3.52	85.00	8.98	2.55	-13.17	-1.27E-03
15-Jan-95	0.02	0.77	0.49	82.27	91.70	9.43	1097.40	8074.94	9.40	1.41	44.81	4.73	2.55	83.61	8.08E-03
16-Jan-95	0.06	0.77	0.00	82.26	91.71	9.44	1098.01	8084.35	9.41	4.23			2.54	41.27	3.98E-03
17-Jan-95	0.04	0.77	0.00	82.26	91.71	9.45	1098.62	8093.76	9.41	2.82			2.53	-11.10	-1.07E-03
18-Jan-95	0.06	0.77	0.01	82.26	91.72	9.47	1099.23	8103.18	9.42	4.23	0.92	0.10	2.52	-9.71	-9.33E-04
19-Jan-95	0.06	0.77	0.02	82.25	91.73	9.48	1099.84	8112.61	9.42	4.23	1.83	0.19	2.51	-10.12	-9.71E-04
20-Jan-95	0.04	0.77	0.00	82.25	91.74	9.49	1100.45	8122.04	9.43	2.82			2.51	-9.12	-8.74E-04
21-Jan-95	0.09	0.77	0.00	82.25	91.73	9.49	1100.05	8115.75	-6.29	6.35			2.50	5.97	5.72E-04
22-Jan-95	0.08	0.77	0.00	82.24	91.73	9.48	1099.64	8109.46	-6.28	5.64			2.49	2.43	2.33E-04
23-Jan-95	0.10	0.77	0.00	82.24	91.72	9.48	1099.23	8103.18	-6.28	7.05			2.48	3.13	3.00E-04
24-Jan-95	0.10	0.77	0.00	82.24	91.72	9.48	1098.83	8096.90	-6.28	7.05			2.48	1.71	1.64E-04
25-Jan-95	0.08	0.77	0.00	82.23	91.71	9.48	1098.42	8090.62	-6.28	5.64			2.47	1.70	1.64E-04
26-Jan-95	0.09	0.77	0.00	82.23	91.71	9.48	1098.01	8084.35	-6.28	6.34			2.46	3.11	2.98E-04
27-Jan-95	0.10	0.77	0.00	82.23	91.70	9.47	1097.61	8078.08	-6.27	7.04			2.45	2.39	2.30E-04
28-Jan-95	0.08	0.77	0.00	82.23	91.69	9.46	1097.20	8071.80	-6.27	5.63			2.45	1.68	1.62E-04
29-Jan-95	0.05	0.77	0.00	82.23	91.69	9.46	1096.79	8065.54	-6.27	3.52			2.44	3.08	2.97E-04
30-Jan-95	0.06	0.77	0.00	82.23	91.68	9.45	1096.39	8059.27	-6.27	4.22			2.43	5.19	5.00E-04
31-Jan-95	0.08	0.77	0.02	82.23	91.68	9.44	1095.98	8053.01	-6.26	5.63	1.83	0.19	2.43	4.47	4.32E-04

LAKE GENEVA DAILY WATER BUDGET
August 1, 1994 to July 31, 1995

											Runoff Coeff. =	0.01				
											Drain. Area (ac) =	11584				
Date	Gaines. Evap. (in)	Pan Coeff.	Geneva Precip. (in)	C-0436 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H (Lake - Floridan) (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Feb-95	0.10	0.69	0.00	82.23	91.67	9.44	1095.57	8046.74	-6.26	6.30			2.42	5.08	4.91E-04
02-Feb-95	0.14	0.69	0.00	82.23	91.67	9.43	1095.17	8040.48	-6.26	8.82			2.42	2.38	2.31E-04
03-Feb-95	0.11	0.69	0.00	82.24	91.66	9.42	1094.76	8034.23	-6.26	6.92			2.41	-0.14	-1.36E-05
04-Feb-95	0.19	0.69	0.38	82.24	91.66	9.42	1094.56	8031.10	-3.13	11.96	34.66	3.67	2.41	-1.38	-1.34E-04
05-Feb-95	0.13	0.69	0.02	82.24	91.65	9.42	1094.35	8027.97	-3.13	8.18	1.82	0.19	2.41	31.91	3.10E-03
06-Feb-95	0.15	0.69	0.00	82.24	91.65	9.41	1094.15	8024.85	-3.13	9.44			2.40	-0.63	-6.11E-05
07-Feb-95	0.12	0.69	0.00	82.24	91.65	9.41	1093.95	8021.72	-3.13	7.55			2.40	-3.91	-3.80E-04
08-Feb-95	0.15	0.69	0.00	82.24	91.65	9.41	1093.74	8018.60	-3.13	9.43			2.40	-2.02	-1.97E-04
09-Feb-95	0.12	0.69	0.00	82.24	91.64	9.40	1093.54	8015.47	-3.12	7.55			2.39	-3.91	-3.81E-04
10-Feb-95	0.11	0.69	0.00	82.24	91.64	9.40	1093.34	8012.35	-3.12	6.92			2.39	-2.03	-1.97E-04
11-Feb-95	0.11	0.69	0.00	82.24	91.64	9.40	1093.54	8015.47	3.12	6.92			2.38	-7.65	-7.44E-04
12-Feb-95	0.07	0.69	0.60	82.24	91.65	9.40	1093.74	8018.60	3.12	4.40	54.69	5.79	2.38	-7.66	-7.45E-04
13-Feb-95	0.07	0.69	0.06	82.24	91.65	9.40	1093.95	8021.72	3.13	4.40	5.47	0.58	2.38	55.33	5.38E-03
14-Feb-95	0.05	0.69	0.00	82.24	91.65	9.41	1094.15	8024.85	3.13	3.15			2.37	0.90	8.71E-05
15-Feb-95	0.10	0.69	0.00	82.25	91.65	9.41	1094.35	8027.97	3.13	6.29			2.37	-3.90	-3.79E-04
16-Feb-95	0.05	0.69	0.00	82.25	91.66	9.41	1094.56	8031.10	3.13	3.15			2.37	-7.05	-6.84E-04
17-Feb-95	0.10	0.69	0.44	82.25	91.66	9.41	1094.76	8034.23	3.13	6.29	40.14	4.25	2.36	-3.91	-3.79E-04
18-Feb-95	0.08	0.69	0.00	82.25	91.66	9.41	1094.76	8034.23	0.00	5.04			2.36	40.46	3.93E-03
19-Feb-95	0.12	0.69	0.00	82.25	91.66	9.41	1094.76	8034.23	0.00	7.55			2.35	-2.68	-2.60E-04
20-Feb-95	0.04	0.69	0.13	82.25	91.66	9.41	1094.76	8034.23	0.00	2.52	11.86	1.25	2.35	-5.20	-5.05E-04
21-Feb-95	0.05	0.69	0.00	82.25	91.66	9.41	1094.76	8034.23	0.00	3.15			2.35	12.95	1.26E-03
22-Feb-95	0.16	0.69	0.00	82.25	91.66	9.41	1094.76	8034.23	0.00	10.07			2.34	-0.80	-7.78E-05
23-Feb-95	0.12	0.69	0.00	82.23	91.66	9.43	1094.76	8034.23	0.00	7.55			2.34	-7.73	-7.49E-04
24-Feb-95	0.10	0.69	0.00	82.21	91.66	9.45	1094.76	8034.23	0.00	6.29			2.33	-5.22	-5.04E-04
25-Feb-95	0.11	0.69	0.00	82.18	91.64	9.46	1093.34	8012.35	-21.88	6.92			2.33	17.92	1.73E-03
26-Feb-95	0.19	0.69	0.00	82.16	91.62	9.46	1091.91	7990.49	-21.85	11.93			2.33	17.27	1.67E-03
27-Feb-95	0.15	0.69	0.00	82.14	91.60	9.46	1090.49	7968.67	-21.82	9.41			2.32	12.22	1.18E-03
28-Feb-95	0.17	0.69	0.05	82.12	91.61	9.49	1090.84	7974.12	5.45	10.66	4.55	0.48	2.33	-12.54	-1.21E-03
01-Mar-95	0.04	0.73	0.05	82.10	91.61	9.51	1091.20	7979.58	5.46	2.66	4.55	0.48	2.33	-8.76	-8.44E-04
02-Mar-95	0.08	0.73	0.02	82.08	91.62	9.54	1091.56	7985.04	5.46	5.31	1.82	0.19	2.33	-0.76	-7.26E-05
03-Mar-95	0.05	0.73	0.00	82.05	91.62	9.57	1091.91	7990.49	5.46	3.32			2.33	-6.43	-6.16E-04
04-Mar-95	0.11	0.73	0.00	82.03	91.62	9.59	1092.11	7993.61	3.12	7.31			2.33	-4.11	-3.92E-04
05-Mar-95	0.17	0.73	0.00	82.01	91.63	9.62	1092.32	7996.74	3.12	11.30			2.34	-8.10	-7.71E-04
06-Mar-95	0.12	0.73	0.00	81.99	91.63	9.64	1092.52	7999.86	3.12	7.98			2.34	-12.08	-1.15E-03
07-Mar-95	0.13	0.73	0.00	81.97	91.63	9.66	1092.73	8002.98	3.12	8.64			2.34	-8.76	-8.30E-04
08-Mar-95	0.25	0.73	1.20	81.95	91.63	9.69	1092.93	8006.10	3.12	16.62	109.29	11.58	2.34	-9.42	-8.90E-04
09-Mar-95	0.12	0.73	0.00	81.92	91.64	9.71	1093.13	8009.22	3.12	7.98			2.34	103.47	9.74E-03
10-Mar-95	0.19	0.73	0.00	81.90	91.64	9.74	1093.34	8012.35	3.12	12.64			2.35	-8.76	-8.23E-04
11-Mar-95	0.17	0.73	0.00	81.88	91.63	9.75	1092.93	8006.10	-6.25	11.30			2.35	-4.05	-3.79E-04
12-Mar-95	0.13	0.73	0.00	81.86	91.63	9.77	1092.52	7999.86	-6.24	8.64			2.35	-2.71	-2.54E-04
13-Mar-95	0.24	0.73	0.02	81.84	91.62	9.79	1092.11	7993.61	-6.24	15.94	1.82	0.19	2.35	-0.05	-4.59E-06
14-Mar-95	0.28	0.73	0.00	81.81	91.62	9.80	1091.71	7987.37	-6.24	18.60			2.35	-5.34	-4.99E-04
15-Mar-95	0.19	0.73	0.04	81.79	91.61	9.82	1091.30	7981.14	-6.24	12.61	3.64	0.39	2.36	-10.01	-9.34E-04
16-Mar-95	0.13	0.73	0.03	81.77	91.61	9.83	1090.89	7974.90	-6.23	8.63	2.73	0.29	2.36	0.00	7.92E-09
17-Mar-95	0.07	0.73	0.99	81.75	91.60	9.85	1090.49	7968.67	-6.23	4.64	89.97	9.56	2.36	2.98	2.77E-04
18-Mar-95	0.07	0.73	0.04	81.73	91.60	9.88	1090.69	7971.79	3.12	4.64	3.64	0.39	2.36	94.12	8.74E-03
19-Mar-95	0.15	0.73	0.04	81.71	91.61	9.90	1090.89	7974.90	3.12	9.95	3.64	0.39	2.36	-1.38	-1.28E-04
20-Mar-95	0.19	0.73	0.00	81.68	91.61	9.92	1091.10	7978.02	3.12	12.61			2.36	-6.69	-6.17E-04
21-Mar-95	0.16	0.73	0.00	81.66	91.61	9.95	1091.30	7981.14	3.12	10.62			2.37	-13.36	-1.23E-03
22-Mar-95	0.18	0.73	0.00	81.64	91.61	9.97	1091.50	7984.26	3.12	11.95			2.37	-11.37	-1.04E-03
23-Mar-95	0.22	0.73	0.00	81.62	91.62	10.00	1091.71	7987.37	3.12	14.61			2.37	-12.70	-1.16E-03
24-Mar-95	0.23	0.73	0.00	81.60	91.62	10.02	1091.91	7990.49	3.12	15.28			2.37	-15.36	-1.40E-03
25-Mar-95	0.16	0.73	0.00	81.58	91.61	10.03	1091.10	7978.02	-12.47	10.62			2.37	-0.43	-3.93E-05
26-Mar-95	0.22	0.73	0.00	81.55	91.60	10.04	1090.28	7965.56	-12.47	14.59			2.38	4.22	3.85E-04
27-Mar-95	0.20	0.73	0.00	81.53	91.59	10.05	1089.47	7953.10	-12.46	13.26			2.38	0.24	2.20E-05
28-Mar-95	0.15	0.73	0.00	81.51	91.57	10.06	1088.66	7940.65	-12.45	9.93			2.38	1.57	1.43E-04
29-Mar-95	0.19	0.73	0.05	81.51	91.56	10.05	1087.84	7928.22	-12.44	12.57	4.53	0.48	2.38	4.88	4.47E-04
30-Mar-95	0.21	0.73	0.01	81.51	91.55	10.04	1087.03	7915.79	-12.43	13.89	0.91	0.10	2.38	7.25	6.65E-04
31-Mar-95	0.21	0.73	1.94	81.52	91.54	10.03	1086.22	7903.37	-12.42	13.88	175.61	18.73	2.39	1.92	1.76E-04

LAKE GENEVA DAILY WATER BUDGET:
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 11584

Date	Gaines. Evap. (in)	Pan Coeff.	Geneva Precip. (in)	C-0436 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H (Lake - Floridan) (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Apr-95	0.00	0.84	0.16	81.52	91.60	10.08	1090.49	7968.67	65.30	0.00	14.54	1.54	2.38	117.54	1.07E-02
02-Apr-95	0.12	0.84	0.00	81.52	91.66	10.14	1094.76	8034.23	65.56	9.20			2.37	-47.09	-4.24E-03
03-Apr-95	0.21	0.84	0.00	81.52	91.72	10.20	1099.03	8100.04	65.81	16.16			2.37	-72.64	-6.48E-03
04-Apr-95	0.19	0.84	0.00	81.53	91.78	10.25	1103.30	8166.11	66.07	14.67			2.36	-79.86	-7.06E-03
05-Apr-95	0.12	0.84	0.50	81.53	91.84	10.31	1107.57	8232.44	66.33	9.30	46.15	4.83	2.36	-78.64	-6.88E-03
06-Apr-95	0.00	0.84	1.84	81.53	91.90	10.37	1111.84	8299.02	66.58	0.00	170.48	17.76	2.35	-22.56	-1.96E-03
07-Apr-95	0.09	0.84	0.00	81.53	91.90	10.37	1112.02	8301.80	2.78	7.01			2.34	187.81	1.63E-02
08-Apr-95	0.14	0.84	0.04	81.54	91.91	10.37	1112.20	8304.58	2.78	10.90	3.71	0.39	2.34	-7.44	-6.45E-04
09-Apr-95	0.17	0.84	0.03	81.54	91.91	10.37	1112.38	8307.36	2.78	13.24	2.78	0.29	2.33	-7.25	-6.29E-04
10-Apr-95	0.20	0.84	0.00	81.54	91.91	10.37	1112.55	8310.14	2.78	15.58			2.32	-10.62	-9.20E-04
11-Apr-95	0.23	0.84	0.55	81.54	91.91	10.37	1112.73	8312.92	2.78	17.91	51.00	5.31	2.32	-16.03	-1.39E-03
12-Apr-95	0.16	0.84	0.05	81.55	91.92	10.37	1112.91	8315.71	2.78	12.46	4.64	0.48	2.31	37.93	3.29E-03
13-Apr-95	0.05	0.84	0.00	81.55	91.92	10.37	1113.09	8318.49	2.78	3.90			2.30	-7.82	-6.77E-04
14-Apr-95	0.21	0.84	0.00	81.55	91.92	10.37	1113.27	8321.27	2.78	16.37			2.30	-4.37	-3.79E-04
15-Apr-95	0.21	0.84	0.02	81.55	91.89	10.34	1111.23	8289.49	-31.78	16.34	1.85	0.19	2.29	17.71	1.54E-03
16-Apr-95	0.21	0.84	0.00	81.56	91.86	10.31	1109.20	8257.77	-31.72	16.31			2.29	19.72	1.72E-03
17-Apr-95	0.19	0.84	0.00	81.56	91.83	10.28	1107.16	8226.11	-31.66	14.73			2.28	17.64	1.55E-03
18-Apr-95	0.24	0.84	0.00	81.56	91.81	10.25	1105.13	8194.51	-31.60	18.57			2.27	19.16	1.69E-03
19-Apr-95	0.24	0.84	0.00	81.56	91.78	10.21	1103.10	8162.96	-31.55	18.53			2.27	15.25	1.35E-03
20-Apr-95	0.20	0.84	0.00	81.57	91.75	10.18	1101.06	8131.47	-31.49	15.41			2.26	15.22	1.36E-03
21-Apr-95	0.25	0.84	0.00	81.57	91.72	10.15	1099.03	8100.04	-31.43	19.23			2.25	18.28	1.64E-03
22-Apr-95	0.19	0.84	0.00	81.57	91.74	10.17	1100.45	8122.04	21.99	14.64			2.25	-38.97	-3.48E-03
23-Apr-95	0.21	0.84	0.00	81.57	91.76	10.19	1101.88	8144.06	22.02	16.20			2.24	-34.41	-3.07E-03
24-Apr-95	0.26	0.84	1.03	81.58	91.78	10.21	1103.30	8166.11	22.05	20.08	94.70	9.94	2.23	-36.01	-3.20E-03
25-Apr-95	0.11	0.84	0.00	81.58	91.80	10.22	1104.72	8188.19	22.08	8.51			2.23	64.72	5.73E-03
26-Apr-95	0.19	0.84	0.02	81.58	91.82	10.24	1106.15	8210.30	22.11	14.71	1.84	0.19	2.22	-28.39	-2.51E-03
27-Apr-95	0.13	0.84	0.34	81.58	91.84	10.26	1107.57	8232.44	22.14	10.08	31.38	3.28	2.22	-32.59	-2.87E-03
28-Apr-95	0.18	0.84	0.00	81.58	91.84	10.26	1107.22	8226.90	-5.54	13.95			2.21	32.34	2.85E-03
29-Apr-95	0.18	0.84	0.00	81.58	91.83	10.25	1106.86	8221.37	-5.54	13.95			2.21	-6.21	-5.47E-04
30-Apr-95	0.26	0.84	0.02	81.57	91.83	10.25	1106.50	8215.83	-5.53	20.14	1.84	0.19	2.22	-6.20	-5.47E-04
01-May-95	0.21	0.82	0.00	81.57	91.82	10.25	1106.15	8210.30	-5.53	15.87			2.22	-10.35	-9.13E-04
02-May-95	0.26	0.82	0.00	81.57	91.82	10.25	1105.79	8204.77	-5.53	19.65			2.22	-8.12	-7.17E-04
03-May-95	0.30	0.82	0.00	81.57	91.81	10.24	1105.44	8199.24	-5.53	22.66			2.23	-11.89	-1.05E-03
04-May-95	0.24	0.82	0.00	81.57	91.81	10.24	1105.08	8193.72	-5.53	18.12			2.23	-14.91	-1.32E-03
05-May-95	0.17	0.82	0.25	81.56	91.80	10.24	1104.72	8188.19	-5.52	12.83	23.02	2.41	2.24	-10.37	-9.17E-04
06-May-95	0.25	0.82	0.03	81.56	91.80	10.24	1104.93	8191.35	3.16	18.88	2.76	0.29	2.24	11.67	1.03E-03
07-May-95	0.28	0.82	0.00	81.56	91.81	10.25	1105.13	8194.51	3.16	21.14			2.24	-16.74	-1.48E-03
08-May-95	0.26	0.82	0.00	81.56	91.81	10.25	1105.33	8197.66	3.16	19.64			2.25	-22.06	-1.95E-03
09-May-95	0.28	0.82	0.00	81.55	91.81	10.26	1105.54	8200.82	3.16	21.15			2.25	-20.55	-1.81E-03
10-May-95	0.19	0.82	0.00	81.55	91.81	10.26	1105.74	8203.98	3.16	14.36			2.25	-22.06	-1.94E-03
11-May-95	0.19	0.82	0.71	81.55	91.82	10.27	1105.94	8207.14	3.16	14.36	65.44	6.85	2.26	-15.26	-1.34E-03
12-May-95	0.12	0.82	0.94	81.55	91.82	10.27	1106.15	8210.30	3.16	9.07	86.65	9.07	2.26	57.03	5.02E-03
13-May-95	0.21	0.82	0.00	81.55	91.81	10.27	1105.54	8200.82	-9.48	15.86			2.26	98.39	8.67E-03
14-May-95	0.22	0.82	0.00	81.54	91.80	10.26	1104.93	8191.35	-9.47	16.61			2.27	-4.13	-3.64E-04
15-May-95	0.25	0.82	0.02	81.54	91.79	10.25	1104.32	8181.88	-9.47	18.87	1.84	0.19	2.27	-4.87	-4.31E-04
16-May-95	0.26	0.82	0.00	81.54	91.79	10.25	1103.71	8172.42	-9.46	19.61			2.28	-5.10	-4.51E-04
17-May-95	0.29	0.82	0.00	81.54	91.78	10.24	1103.10	8162.96	-9.46	21.86			2.28	-7.88	-6.97E-04
18-May-95	0.27	0.82	0.00	81.54	91.77	10.23	1102.49	8153.51	-9.45	20.34			2.28	-10.13	-8.98E-04
19-May-95	0.25	0.82	0.00	81.53	91.76	10.23	1101.88	8144.06	-9.45	18.82			2.29	-8.61	-7.64E-04
20-May-95	0.18	0.82	0.49	81.53	91.75	10.22	1101.06	8131.47	-12.59	13.54	44.96	4.73	2.29	-3.95	-3.51E-04
21-May-95	0.21	0.82	0.00	81.53	91.74	10.21	1100.25	8118.89	-12.58	15.79			2.29	51.02	4.54E-03
22-May-95	0.24	0.82	0.00	81.53	91.73	10.20	1099.44	8106.32	-12.57	18.03			2.30	-0.93	-8.25E-05
23-May-95	0.32	0.82	0.00	81.52	91.71	10.19	1098.62	8093.76	-12.56	24.02			2.30	-3.17	-2.83E-04
24-May-95	0.28	0.82	0.00	81.52	91.70	10.18	1097.81	8081.21	-12.55	21.00			2.30	-9.17	-8.21E-04
25-May-95	0.29	0.82	0.00	81.52	91.69	10.17	1097.00	8068.67	-12.54	21.74			2.31	-6.16	-5.52E-04
26-May-95	0.26	0.82	0.00	81.52	91.68	10.16	1096.18	8056.14	-12.53	19.48			2.31	-6.90	-6.19E-04
27-May-95	0.31	0.82	0.00	81.51	91.66	10.14	1094.66	8032.66	-23.47	23.19			2.32	6.31	5.68E-04
28-May-95	0.25	0.82	0.00	81.51	91.64	10.13	1093.13	8009.22	-23.44	18.67			2.32	2.57	2.32E-04
29-May-95	0.25	0.82	0.26	81.51	91.62	10.11	1091.61	7985.82	-23.41	18.65	23.65	2.51	2.32	7.05	6.39E-04
30-May-95	0.23	0.82	0.00	81.51	91.59	10.09	1090.08	7962.44	-23.38	17.13			2.33	33.21	3.02E-03
31-May-95	0.23	0.82	0.00	81.50	91.57	10.07	1088.56	7939.10	-23.34	17.11			2.33	8.54	7.79E-04

LAKE GENEVA DAILY WATER BUDGET:
August 1, 1994 to July 31, 1995

Runoff Coeff. = 0.01
Drain. Area (ac) = 11584

Date	Gaines. Evap. (in)	Pan Coeff.	Geneva Precip. (in)	C-0436 Floridan Aquifer Level (ft NGVD)	Lake Elev. (ft NGVD)	Delta H (Lake - Floridan) (ft)	Lake Surface Area (ac)	Lake Volume (ac-ft)	Change in Lake Volume (ac-ft)	Lake Evap. Volume (ac-ft)	Lake Precip. Volume (ac-ft)	Surface Runoff Volume (ac-ft)	Surficial Aquifer Inflow Volume (ac-ft)	Leakage Volume (ac-ft)	Leakance (1/day)
01-Jun-95	0.33	0.85	0.01	81.50	91.55	10.05	1087.03	7915.79	-23.31	25.41	0.91	0.10	2.33	8.53	7.81E-04
02-Jun-95	0.23	0.85	0.34	81.50	91.53	10.03	1085.51	7892.51	-23.28	17.68	30.76	3.28	2.32	1.20	1.10E-04
03-Jun-95	0.03	0.85	1.52	81.49	91.58	10.09	1089.37	7951.54	59.03	2.31	137.99	14.67	2.32	-40.36	-3.67E-03
04-Jun-95	0.12	0.85	2.58	81.49	91.64	10.15	1093.23	8010.79	59.24	9.29	235.05	24.91	2.32	93.42	8.42E-03
05-Jun-95	0.00	0.85	0.13	81.49	91.69	10.21	1097.10	8070.24	59.45	0.00	11.89	1.25	2.31	193.52	1.73E-02
06-Jun-95	0.15	0.85	0.00	81.48	91.75	10.26	1100.96	8129.90	59.66	11.70			2.31	-44.21	-3.91E-03
07-Jun-95	0.27	0.85	0.00	81.48	91.80	10.32	1104.83	8189.77	59.87	21.13			2.31	-69.26	-6.07E-03
08-Jun-95	0.30	0.85	0.02	81.48	91.86	10.38	1108.69	8249.85	60.08	23.56	1.85	0.19	2.30	-78.90	-6.86E-03
09-Jun-95	0.23	0.85	0.00	81.48	91.91	10.43	1112.55	8310.14	60.29	18.13			2.30	-79.51	-6.85E-03
10-Jun-95	0.29	0.85	0.00	81.47	91.89	10.41	1110.93	8284.73	-25.41	22.82			2.30	9.59	8.29E-04
11-Jun-95	0.25	0.85	0.12	81.47	91.86	10.39	1109.30	8259.36	-25.37	19.64	11.09	1.16	2.29	4.85	4.21E-04
12-Jun-95	0.23	0.85	0.18	81.47	91.84	10.37	1107.67	8234.02	-25.34	18.05	16.62	1.74	2.29	20.24	1.76E-03
13-Jun-95	0.20	0.85	0.00	81.46	91.82	10.35	1106.05	8208.72	-25.30	15.67			2.29	27.90	2.44E-03
14-Jun-95	0.25	0.85	0.00	81.46	91.80	10.33	1104.42	8183.46	-25.26	19.56			2.28	11.88	1.04E-03
15-Jun-95	0.27	0.85	0.00	81.46	91.77	10.31	1102.79	8158.23	-25.23	21.09			2.28	7.95	6.99E-04
16-Jun-95	0.33	0.85	0.00	81.46	91.75	10.29	1101.17	8133.04	-25.19	25.74			2.28	6.38	5.63E-04
17-Jun-95	0.25	0.85	0.00	81.45	91.73	10.28	1099.74	8111.04	-22.01	19.47			2.27	-1.45	-1.29E-04
18-Jun-95	0.26	0.85	0.05	81.45	91.71	10.26	1098.32	8089.05	-21.98	21.78	4.58	0.48	2.27	4.78	4.24E-04
19-Jun-95	0.25	0.85	0.00	81.45	91.69	10.24	1096.89	8067.10	-21.95	19.42			2.27	7.50	6.67E-04
20-Jun-95	0.26	0.85	0.00	81.44	91.67	10.23	1095.47	8045.18	-21.92	20.17			2.26	4.77	4.26E-04
21-Jun-95	0.22	0.85	0.00	81.44	91.67	10.23	1095.47	8045.18	0.00	17.07			2.26	-17.91	-1.60E-03
22-Jun-95	0.30	0.85	0.17	81.44	91.67	10.23	1095.47	8045.18	0.00	23.28	15.52	1.64	2.26	-14.81	-1.32E-03
23-Jun-95	0.27	0.85	0.03	81.43	91.67	10.24	1095.47	8045.18	0.00	20.95	2.74	0.29	2.25	-3.86	-3.44E-04
24-Jun-95	0.19	0.85	0.00	81.43	91.69	10.26	1096.89	8067.10	21.92	14.76			2.25	-37.59	-3.34E-03
25-Jun-95	0.24	0.85	0.95	81.43	91.71	10.28	1098.32	8089.05	21.95	18.67	86.95	9.17	2.25	-34.46	-3.05E-03
26-Jun-95	0.04	0.85	0.30	81.43	91.73	10.30	1099.74	8111.04	21.98	3.12	27.49	2.90	2.24	57.72	5.09E-03
27-Jun-95	0.15	0.85	0.05	81.42	91.75	10.33	1101.17	8133.04	22.01	11.70	4.59	0.48	2.24	7.51	6.60E-04
28-Jun-95	0.21	0.85	0.85	81.42	91.77	10.35	1102.59	8155.08	22.04	16.40	78.10	8.21	2.24	-26.43	-2.32E-03
29-Jun-95	0.21	0.85	0.37	81.41	91.79	10.38	1104.01	8177.15	22.07	16.42	34.04	3.57	2.23	50.08	4.37E-03
30-Jun-95	0.21	0.85	0.00	81.41	91.81	10.40	1105.44	8199.24	22.09	16.44			2.23	1.33	1.16E-04
01-Jul-95	0.26	0.91	0.13	81.40	91.80	10.40	1104.84	8190.03	-9.21	21.78	11.97	1.25	2.23	-5.00	-4.35E-04
02-Jul-95	0.25	0.91	0.01	81.39	91.79	10.40	1104.25	8180.83	-9.20	20.93	0.92	0.10	2.22	2.87	2.50E-04
03-Jul-95	0.20	0.91	0.00	81.38	91.79	10.40	1103.66	8171.63	-9.20	16.74			2.22	-8.49	-7.40E-04
04-Jul-95	0.22	0.91	0.02	81.38	91.78	10.40	1103.06	8162.43	-9.19	18.40	1.84	0.19	2.22	-5.32	-4.64E-04
05-Jul-95	0.22	0.91	0.00	81.37	91.77	10.40	1102.47	8153.24	-9.19	18.39			2.22	-4.96	-4.33E-04
06-Jul-95	0.25	0.91	0.00	81.36	91.76	10.40	1101.88	8144.06	-9.18	20.89			2.22	-6.99	-6.10E-04
07-Jul-95	0.24	0.91	0.00	81.35	91.74	10.39	1100.45	8122.04	-22.02	20.03			2.22	3.35	2.93E-04
08-Jul-95	0.23	0.91	0.00	81.35	91.72	10.37	1099.03	8100.04	-21.99	19.17			2.22	4.18	3.67E-04
09-Jul-95	0.29	0.91	0.00	81.34	91.70	10.36	1097.61	8078.08	-21.97	24.14			2.22	5.02	4.41E-04
10-Jul-95	0.25	0.91	0.09	81.33	91.68	10.35	1096.18	8056.14	-21.94	20.78	8.22	0.87	2.22	0.02	1.58E-06
11-Jul-95	0.18	0.91	0.02	81.32	91.66	10.34	1094.76	8034.23	-21.91	14.94	1.82	0.19	2.22	12.44	1.10E-03
12-Jul-95	0.14	0.91	0.00	81.32	91.64	10.32	1093.34	8012.35	-21.88	11.61			2.22	11.17	9.90E-04
13-Jul-95	0.28	0.91	0.00	81.31	91.62	10.31	1091.91	7990.49	-21.85	23.18			2.22	12.46	1.11E-03
14-Jul-95	0.18	0.91	0.00	81.30	91.60	10.30	1090.49	7968.67	-21.82	14.89			2.22	0.86	7.63E-05
15-Jul-95	0.21	0.91	0.48	81.29	91.60	10.31	1090.69	7971.79	3.12	17.37	43.63	4.63	2.22	-15.78	-1.40E-03
16-Jul-95	0.21	0.91	0.07	81.29	91.61	10.32	1090.89	7974.90	3.12	17.37	6.36	0.68	2.22	29.99	2.66E-03
17-Jul-95	0.18	0.91	1.04	81.28	91.61	10.33	1091.10	7978.02	3.12	14.89	94.56	10.04	2.22	-11.23	-9.97E-04
18-Jul-95	0.03	0.91	0.00	81.27	91.61	10.34	1091.30	7981.14	3.12	2.48			2.22	88.81	7.87E-03
19-Jul-95	0.22	0.91	0.00	81.26	91.61	10.35	1091.50	7984.26	3.12	18.21			2.22	-3.38	-2.99E-04
20-Jul-95	0.27	0.91	0.13	81.26	91.62	10.36	1091.71	7987.37	3.12	22.35	11.83	1.25	2.22	-19.11	-1.69E-03
21-Jul-95	0.26	0.91	0.02	81.25	91.62	10.37	1091.91	7990.49	3.12	21.53	1.82	0.19	2.22	-10.17	-8.98E-04
22-Jul-95	0.16	0.91	0.00	81.24	91.61	10.37	1091.50	7984.26	-6.24	13.24			2.22	-11.06	-9.77E-04
23-Jul-95	0.19	0.91	0.09	81.23	91.61	10.37	1091.10	7978.02	-6.24	15.72	8.18	0.87	2.22	-4.79	-4.23E-04
24-Jul-95	0.18	0.91	0.14	81.23	91.60	10.38	1090.69	7971.79	-6.23	14.89	12.72	1.35	2.22	1.78	1.58E-04
25-Jul-95	0.27	0.91	0.52	81.22	91.60	10.38	1090.28	7965.56	-6.23	22.32	47.25	5.02	2.22	7.64	6.75E-04
26-Jul-95	0.11	0.91	0.06	81.22	91.59	10.37	1089.88	7959.33	-6.23	9.09	5.45	0.58	2.22	38.39	3.40E-03
27-Jul-95	0.20	0.91	0.00	81.22	91.59	10.37	1089.47	7953.10	-6.23	16.52			2.22	5.38	4.77E-04
28-Jul-95	0.20	0.91	0.10	81.22	91.58	10.36	1089.06	7946.87	-6.22	16.52	9.08	0.97	2.22	-8.08	-7.16E-04
29-Jul-95	0.27	0.91	0.02	81.22	91.59	10.37	1089.54	7954.14	7.26	22.31	1.82	0.19	2.22	-11.52	-1.02E-03
30-Jul-95	0.16	0.91	0.02	81.22	91.59	10.37	1090.01	7961.40	7.27	13.23	1.82	0.19	2.22	-25.35	-2.24E-03
31-Jul-95	0.25	0.91	0.00	81.22	91.60	10.38	1090.49	7968.67	7.27	20.67			2.22	-16.27	-1.44E-03
														Average=	1.76E-04
														Variance	1.64E-05
														Std. Dev.	4.05E-03

Maximum	0.33	0.91	6.51	82.35	91.92	10.43	1113.27	8321.27	117.59	25.74	577.08	62.84	2.68	523.66
Minimum	0.00	0.69	0.00	80.14	90.48	9.21	1010.77	6791.97	-35.83	0.00	0.00	0.00	2.06	-120.90
Average	0.15	0.81	0.14	81.64	91.48	9.84	1082.14	7846.54	3.17	11.08	12.35	1.33	2.35	1.83

Lake Geneva Daily Water Budget (Mean Values)
August 1, 1994 to July 31, 1995

Values in in/yr were calculated using the average lake area.

With negative LEAKAGE values:

Precipitation	12.35	ac-ft/day	49.98	in/yr
Runoff	1.33	ac-ft/day	5.39	in/yr
Surficial Aquifer Inflow	2.35	ac-ft/day	9.50	in/yr
Leakage	1.83	ac-ft/day	7.39	in/yr
Evaporation	11.08	ac-ft/day	44.86	in/yr
Surface Water	0.00	ac-ft/day	0.00	in/yr