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**A THREE-DIMENSIONAL FINITE DIFFERENCE  
GROUND WATER FLOW MODEL  
OF HENDRY COUNTY**

**by**

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## EXECUTIVE SUMMARY

Hendry County, Florida is underlain by two fresh water aquifer systems: the Surficial Aquifer System and the Intermediate Aquifer System. The Surficial Aquifer System is comprised of the water table and lower Tamiami aquifers. The sandstone aquifer is the major producing zone within the Intermediate Aquifer System. Information from a ground water assessment completed by the South Florida Water Management District in 1988 was used to develop a regional three-dimensional ground water flow model.

The Hendry County ground water flow model was developed using the U. S. Geological Survey modular three-dimensional finite-difference ground water flow model, commonly known as MODFLOW. This model was used because it allows a detailed evaluation of ground water flow, it is available in the public domain, it is compatible with most computer systems, and it contains many features which make it easy to use and modify. MODFLOW simulates ground water levels and flow using data describing the aquifers, such as hydraulic conductivity, transmissivity, leakance, and storage. Stress on the aquifers can also be simulated, such as recharge, evapotranspiration, well withdrawals, and interactions with surface water bodies.

The Hendry County ground water flow model contains three layers representing the water table, lower Tamiami, and sandstone aquifers. Confining zones between aquifers are not represented by separate layers within the model. Rather, confining zones are represented by vertical flow terms within the top two layers of the model. The horizontal model grid is composed of 48 rows and 54 columns, with a uniform spacing of one mile.

The model was calibrated by adjusting aquifer parameters to match computed water levels with observed water levels for the period January 1986 through December 1988. Ground water withdrawal information for the calibration period was obtained from individual water use permits for agricultural irrigation issued by the District. The permits supplied information on crop types, acreages, irrigation practices, and wells. This information was used to estimate actual monthly water use during the calibration period. Public supply water use, as reported to the District, was used in the model. Together, agricultural irrigation and public supply account for over 99 percent of the ground water use in Hendry County.

To ensure the best possible accuracy for evaluative or predictive purposes, it is important to test the model's sensitivity to the estimated parameters. The top layer, representing the water table aquifer, is most sensitive to evapotranspiration and recharge rates. The lower layers, representing the lower Tamiami and sandstone aquifer, are somewhat sensitive to the vertical hydraulic conductivity of the confining zones.

Upon completion of the sensitivity analyses, a predictive scenario was evaluated. This run represented all of the water use permitted or proposed as of November 1989, simulating moderately dry conditions (2-in-10 year drought). Results show that water levels within the water table aquifer decline one foot or more over approximately 50% of the modeled area. This regional head decline is a result of the decrease in recharge associated with the simulated drought. Several localized areas show larger head declines due to increased withdrawals. The lower Tamiami aquifer responds to drought in a similar manner. However, head declines due to withdrawals are larger because much more water is pumped from the lower Tamiami

aquifer than the water table aquifer. A regional cone of depression centering on large scale agricultural production is seen in southeastern Hendry County, along with several other similar, but smaller scale impacts scattered through the modeled area. The sandstone aquifer shows the greatest impact with approximately 75% the simulated aquifer area showing water level declines of one foot or more during drought conditions. Areas showing greater impacts due to withdrawals are west of LaBelle and the area where Hendry, Lee, and Collier Counties meet. Because water level declines in the lower aquifers can result in an increase in the amount of leakage from overlying aquifers, the water level declines in the lower Tamiami and sandstone aquifers are causing significant water levels declines in the water table aquifer.

## Recommendations

Strict management of the lower Tamiami aquifer in southeastern Hendry County and the sandstone aquifer throughout the study area is needed because of the projected declines in water levels. Minimum water levels should be established for the lower Tamiami aquifer in southeast Hendry County and the sandstone aquifer throughout the study area. All permitted withdrawals should be regulated to ensure the minimum levels are maintained. Increased monitoring of water levels and withdrawals is recommended for areas where minimum levels are set. Future requests for large scale withdrawals should be closely examined to ensure that the minimum levels can be maintained. The establishment of minimum water levels should be a part of the development of the water supply plan for this area.

Accurate projections of future agricultural water use in Hendry County are essential to the planning process. These projections must include acreages, crop types, and locations likely to be developed, in order to simulate reasonable projections of future water conditions.

The model developed in this study should be used in the evaluation of water use permit applications. Where a finer scale or site specific model is required, the regional model could be used to provide the boundary conditions. Areas where this is necessary include southeast Hendry County and Ft. Denaud (west of LaBelle). The model should continue to be refined and updated whenever additional information becomes available.

Hydrogeologic studies should be undertaken in those areas where existing information is incomplete. These areas include Ft. Denaud in northwest Hendry County and the water table aquifer throughout the study area. This will increase the overall accuracy and confidence level of the model.

Interfaces should be developed with the Lee County model, and the Collier County model currently under development. This will result in a truly regional model that will encompass the entire flow regime for the Surficial Aquifer System and the Intermediate Aquifer System in the lower west coast water supply planning area. The interface with the Lee County model is of particular importance, since the models indicate that much of the flow into the sandstone aquifer in Lee County consists of lateral flow originating in Hendry County. The large withdrawals for agricultural irrigation occurring near the county border may be affecting regional flow patterns in the area.

Interactions between ground and surface water should be investigated. The dense network of small canals found in Hendry County should be examined and their effect on ground water flows quantified and used in the model. This would improve the calibration of the water table aquifer and the overall accuracy of the model.

## TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY .....	i
LIST OF FIGURES .....	v
LIST OF TABLES .....	viii
ACKNOWLEDGEMENTS .....	ix
ABSTRACT .....	x
INTRODUCTION .....	1
Purpose and Scope .....	1
Location of Study Area .....	1
Previous Investigations .....	1
Hydrogeology .....	4
Surficial Aquifer System .....	4
Intermediate Aquifer System .....	6
MODEL DESCRIPTION .....	10
Introduction .....	10
Discretization .....	12
Boundary Conditions .....	12
Hydraulic Characteristics .....	15
Transmissivity .....	15
Specific Yield .....	18
Storage .....	18
Vertical Conductance .....	18
Surface Water Interactions .....	18
Recharge .....	19
Evapotranspiration .....	21
Ground Water Use .....	21
Agricultural .....	23
Public Supply .....	23
Other Ground Water Uses .....	23
CALIBRATION .....	28
Steady State Calibration .....	28
Transient Calibration .....	28
Layer 1 (Water Table Aquifer) .....	33
Layer 2 (Lower Tamiami Aquifer) .....	33
Layer 3 (Sandstone Aquifer) .....	36
Results .....	36
Transient Calibration .....	36
Layer 1 (Water Table Aquifer) .....	36
Layer 2 (Lower Tamiami Aquifer) .....	36
Layer 3 (Sandstone Aquifer) .....	36
Steady State Calibration .....	44
Layer 1 (Water Table Aquifer) .....	44
Layer 2 (Lower Tamiami Aquifer) .....	44
Layer 3 (Sandstone Aquifer) .....	44



## TABLE OF CONTENTS (CONTINUED)

	<u>Page</u>
SENSITIVITY TESTING .....	55
Layer 1 (Water Table Aquifer) .....	60
Layer 2 (Lower Tamiami Aquifer) .....	60
Layer 3 (Sandstone Aquifer) .....	60
PREDICTIVE SCENARIO .....	61
Introduction .....	61
Results .....	61
Layer 1 (Water Table Aquifer) .....	61
Layer 2 (Lower Tamiami Aquifer) .....	61
Layer 3 (Sandstone Aquifer) .....	66
RESULTS AND CONCLUSIONS .....	69
RECOMMENDATIONS .....	71
REFERENCES .....	73
APPENDIX A: Aquifer Parameters .....	75
APPENDIX B: River Package Input Data .....	89
APPENDIX C: Maps of Monthly Rainfall .....	90
APPENDIX D: Evapotranspiration Input Data .....	135
APPENDIX E: Water Use Data .....	139
APPENDIX F: Comparative Hydrographs .....	197

## LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1	Location of Study Area .....	2
2	Study Area .....	3
3	Generalized Hydrogeologic Cross Section of Hendry County .....	5
4	Areal Extent of Unconfined Occurrence of Lower Tamiami Aquifer .....	7
5	Areal Extent of the Sandstone Aquifer .....	8
6	Model Grid .....	13
7	Hydrogeologic Units and Corresponding Model Layers .....	14
8	Cell Types, Layers 1 and 2 .....	16
9	Cell Types, Layer 3 .....	17
10	Cells Containing River Reaches, Layer 1 .....	20
11	Cells Containing Discharging Wells, Layer 1 (Water Table Aquifer) .....	24
12	Cells Containing Discharging Wells, Layer 2 (Lower Tamiami Aquifer) .....	25
13	Cells Containing Discharging Wells, Layer 3 (Sandstone Aquifer) .....	26
14	Observation Wells, Layer 1 (Water Table Aquifer) .....	30
15	Observation Wells, Layer 2 (Lower Tamiami Aquifer) .....	31
16	Observation Wells, Layer 3 (Sandstone Aquifer) .....	32
17	Average Difference Between Observed and Simulated Water Levels, Layer 1 (Water Table Aquifer) .....	34
18	Average Difference Between Observed and Simulated Water Levels, Layer 2 (Lower Tamiami Aquifer) .....	35
19	Average Difference Between Observed and Simulated Water Levels, Layer 3 (Sandstone Aquifer) .....	37
20	Simulated Water Levels, Layer 1 (Water Table Aquifer), April 1988 .....	38

**LIST OF FIGURES  
(CONTINUED)**

<u>Figure</u>		<u>Page</u>
21	Simulated Water Levels, Layer 1 (Water Table Aquifer) October 1988 .....	39
22	Simulated Water Levels, Layer 2 (Lower Tamiami Aquifer) April 1988 .....	40
23	Simulated Water Levels, Layer 2 (Lower Tamiami Aquifer) October 1988 .....	41
24	Simulated Water Levels, Layer 3 (Sandstone Aquifer) April 1988 .....	42
25	Simulated Water Levels, Layer 3 (Sandstone Aquifer) October 1988 .....	43
26	Simulated Steady State Horizontal Flow Vectors, Layer 1 (Water Table Aquifer) .....	45
27	Volumetric Budget, Layer 1 (Water Table Aquifer), Steady State Conditions .....	46
28	Simulated Steady State Horizontal Flow Vectors, Layer 2 (Lower Tamiami Aquifer) .....	47
29	Simulated Steady State Vertical Flow Between Layer 1 (Water Table Aquifer) and Layer 2 (Lower Tamiami Aquifer) ..	48
30	Volumetric Budget, Layer 2 (Lower Tamiami Aquifer), Steady State Conditions .....	49
31	Simulated Steady State Horizontal Flow Vectors, Layer 3 (Sandstone Aquifer) .....	50
32	Simulated Steady State Vertical Flow Between Layer 2 (Lower Tamiami Aquifer) and Layer 3 (Sandstone Aquifer) ....	51
33	Volumetric Budget, Layer 3 (Sandstone Aquifer), Steady State Conditions .....	53
34	Volumetric Budget for Entire Model, Steady State Conditions .	54
35	Steady State Water Levels, Layer 1 (Water Table Aquifer) .....	62
36	Predicted Water Level Decline, Layer 1 (Water Table Aquifer), Steady State Conditions .....	63

**LIST OF FIGURES  
(CONTINUED)**

<u>Figure</u>		<u>Page</u>
37	Steady State Water Levels, Layer 2 (Lower Tamiami Aquifer) .....	64
38	Predicted Water Level Decline, Layer 2 (Lower Tamiami Aquifer), Steady State Conditions .....	65
39	Steady State Water Levels, Layer 3 (Sandstone Aquifer) .....	67
40	Predicted Water Level Decline, Layer 3 (Sandstone Aquifer), Steady State Conditions .....	68

## LIST OF TABLES

<u>Table</u>		<u>Page</u>
1	MODFLOW Modules and Application to the Hendry County Model .....	11
2	Evapotranspiration Extinction Depths .....	22
3	Sensitivity Responses to Changes in Layer 1 .....	56
4	Sensitivity Responses to Changes in Layer 2 .....	57
5	Sensitivity Responses to Changes in Layer 3 .....	58
6	Sensitivity Responses to Changes in Stress .....	59

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## ABSTRACT

Hendry County, Florida, is underlain by two fresh water aquifer systems: the Surficial Aquifer System and the Intermediate Aquifer System. The Surficial Aquifer System is comprised of the water table and lower Tamiami aquifers. The sandstone aquifer is the major producing zone within the Intermediate Aquifer System. A three-dimensional ground water flow model of these aquifers was developed using the U. S. Geological Survey modular finite-difference ground water flow model (MODFLOW). The model consists of three layers representing the water table, lower Tamiami, and sandstone aquifers. Horizontal discretization was accomplished using a grid comprised of 48 rows and 54 columns, with a grid spacing of one mile. Initial aquifer parameters were obtained from a ground water resource assessment study of Hendry County (Smith and Adams, 1988). A transient calibration was performed for a three year period (1986 through 1988) by comparing simulated water levels with observed water levels in an extensive monitoring network. Sensitivity analyses showed that the lower Tamiami and sandstone aquifers are sensitive to changes in vertical hydraulic conductivity, and the water table aquifer is sensitive to changes in recharge and the maximum evapotranspiration rate.

A predictive scenario was evaluated, representing all permitted and proposed water use as of November 1989, simulating a moderately dry period (2-in 10 year drought). Results of the simulation show that the water table aquifer experiences water level declines of one foot or more over 50% of the modeled area. The lower Tamiami aquifer is also showing significant effects of ground water withdrawals, as evidenced by the regional cone of depression that occurs in southeast Hendry County. The sandstone aquifer shows the greatest potential impact from permitted and proposed water withdrawals. The predictive scenario indicates that a decline in water levels of one foot or more will occur over approximately 75% of the areal extent of the sandstone aquifer in the study area, with localized head declines due to withdrawals exceeding 10 feet. Strict water management is recommended in the lower Tamiami aquifer in southeast Hendry County and in the sandstone aquifer throughout Hendry County. This should include the establishment of minimum water levels in the affected areas. Permitted withdrawals should be regulated in order to maintain these levels, which should be developed during the water supply planning process.

## INTRODUCTION

### PURPOSE AND SCOPE

This study was undertaken as part of the South Florida Water Management District's program to develop comprehensive water supply plans. These plans will be based on quantitative assessments of the available water resources combined with estimates of future water use demands. Evaluation of existing water supply problem areas, identification of potential problem areas, and development of management guidelines will be integral parts of a water supply plan.

The purpose of this study was to develop a county wide three-dimensional ground water flow model of the major fresh water aquifer systems in Hendry County. Specific applications of this model will enable the development and evaluation of various ground water elements to be included in the water supply plan for the Hendry County area and the subsequent evaluation of the impacts of proposed ground water uses. The model will also be used to evaluate short term drought management scenarios during declared water shortages.

This report represents the third phase of a three phase ground water resource assessment for Hendry County. The first phase of the Hendry County ground water assessment was completed in 1986 and involved the evaluation of the ground water monitor network, identification of areas of data deficiency, and investigation of land and water use patterns. The results of this study are summarized in a technical memorandum (Smith, Sharp, and Shih, 1988). The second phase of the project included extensive field work to define the extent and occurrence of major aquifer systems, regional ground water flow patterns, water quality trends, and a preliminary assessment of the future development potential of the ground water resources of Hendry County. The results of this work are described in SFWMD Technical Publication 88-12 (Smith and Adams, 1988). Development of the ground water flow model is the final phase of the resource assessment; however the model will be continually refined and updated as it is used in the regulatory and planning processes, and as more data becomes available.

### LOCATION OF STUDY AREA

Hendry County is located in the central portion of south Florida, south of Lake Okeechobee (Figure 1). The study area includes all of Hendry County and a six mile buffer area into the adjacent counties of Charlotte, Lee, Collier, Broward, Palm Beach, and Glades. It lies generally within Townships 42 through 49 South, and Ranges 27 through 35 East, and encompasses approximately 2100 square miles, 1189 of which are in Hendry County (Figure 2).

### PREVIOUS INVESTIGATIONS

Early investigations into the geology of south Florida were made by Matson and Clapp (1909), Matson and Sanford (1913), and Cooke and Mossom (1929). These studies were summarized by Parker and Cooke (1944), and Parker, Ferguson, Love and others (1955). More recent work on the geology of south Florida was done by Missimer (1984).

The stratigraphy of the area was discussed by Puri and Vernon (1964), and Peck (1979). The stratigraphy and paleoecology along the Caloosahatchee River was investigated by DuBar (1958). The Tamiami Formation in Hendry County was



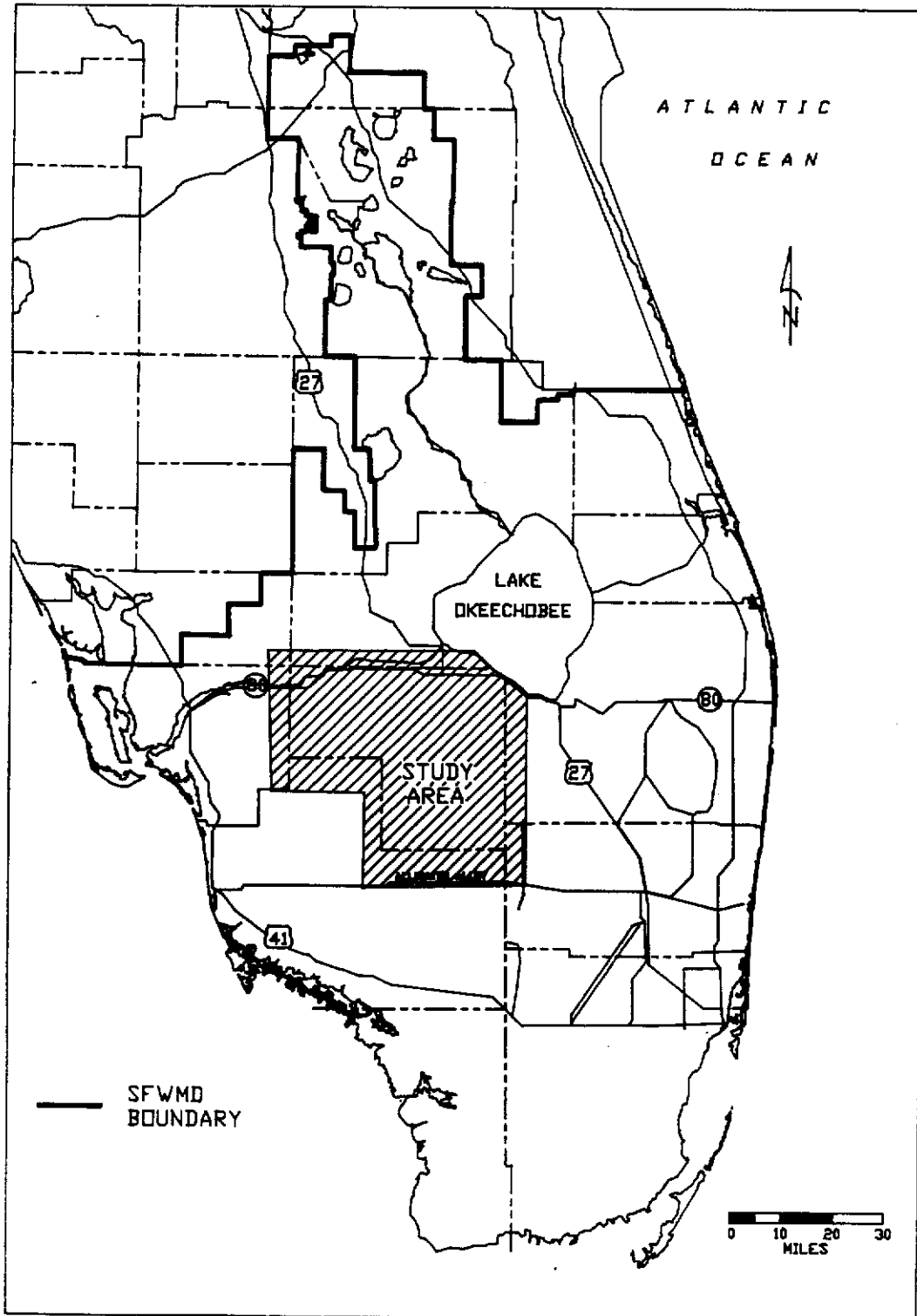


Figure 1. LOCATION OF STUDY AREA

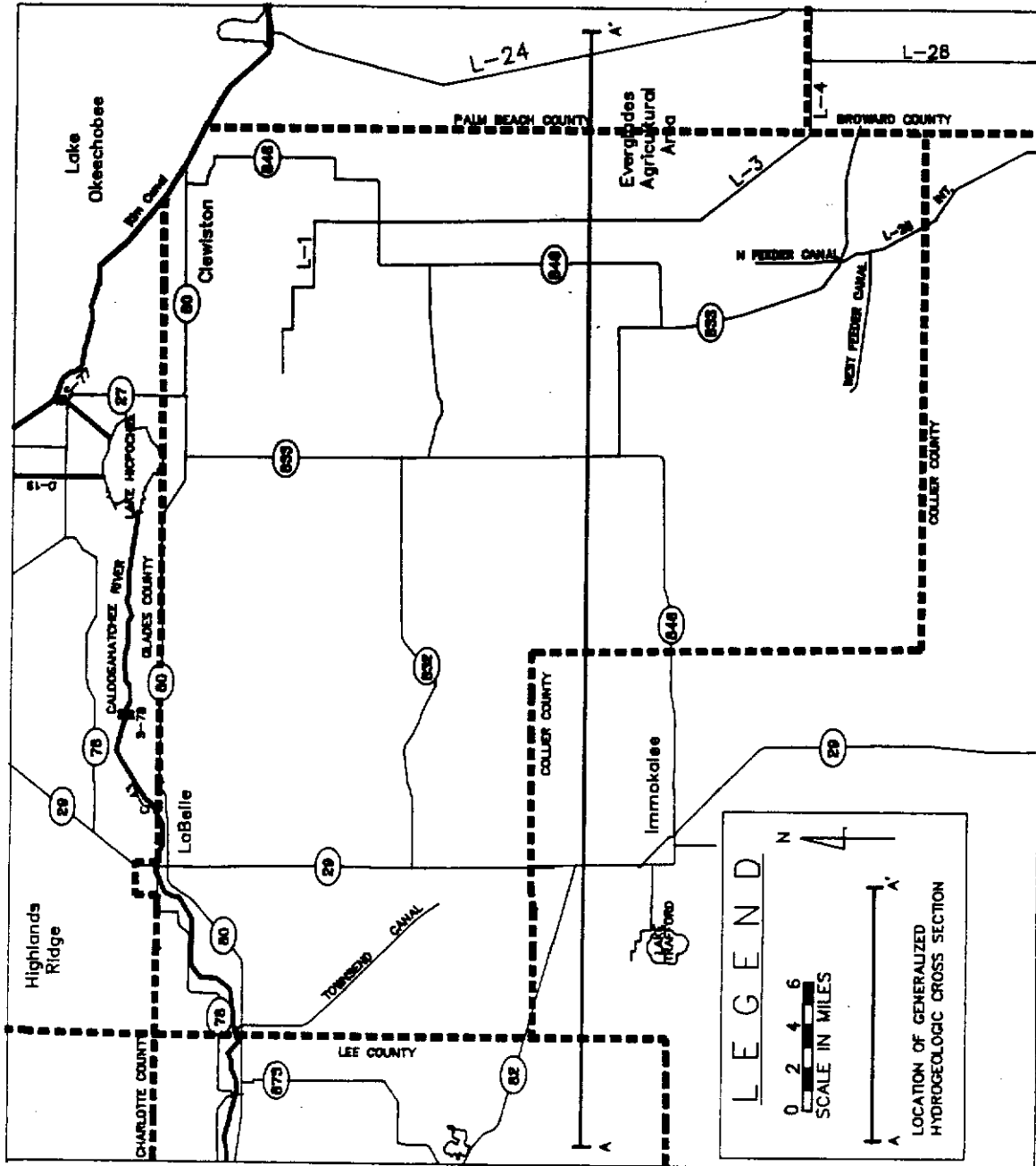


Figure 2. STUDY AREA

investigated by Slater (1978). The lithostratigraphy of the Hawthorn Group was discussed by Scott (1988).

The hydrogeology of the area was investigated by Klein, Schroeder, and Lichtler (1964) and Fish, Causaras, and O'Donnell (1983). The most recent work in Hendry County was done by Smith and Adams (1988). In addition, many site specific reports by various consultants are available. The reader is directed to the bibliography in Smith and Adams (1988) for a more complete list.

Hydrogeologic studies in areas adjacent to Hendry County were done in Lee County by Wedderburn et al. (1982), and James M. Montgomery, Inc. (1988); and in Collier County by Knapp, Burns, and Sharp (1986). Three-dimensional ground water flow models have been developed for Lee County (Bower, Adams, and Restrepo, 1989) and Palm Beach County (Shine, Padgett, and Barfknecht, 1990).

## **HYDROGEOLOGY**

A brief summary of the hydrogeology which supports the model development follows. Readers wishing a more detailed discussion of the hydrogeology of the Hendry County area are referred to Smith and Adams (1988). Hydrostratigraphic nomenclature used in this report is consistent with the 1988 publication, which follow the guidelines set forth by the Southeastern Geological Society Committee on Florida Hydrostratigraphy (SGSCFH, 1986).

Hendry County is underlain by three aquifer systems: the Surficial Aquifer System, the Intermediate Aquifer System, and the Floridan Aquifer System. The model developed for this study is limited to the Surficial Aquifer System and the upper portion of the Intermediate Aquifer System (Figure 3). The Floridan Aquifer System is not used for water supply in Hendry County because of its poor water quality; therefore, it is not discussed in this report.

### **Surficial Aquifer System**

The Surficial Aquifer System consists of the water table aquifer and hydraulically connected units above the top of the first occurrence of laterally extensive and vertically persistent beds of much lower permeability (SGSCFH, 1986). In Hendry County, the Surficial Aquifer System is comprised of the water table aquifer and the lower Tamiami aquifer. Where they both occur, they are separated by leaky semi-confining beds which are collectively referred to as the Tamiami confining zone.

**Water Table Aquifer.** The water table aquifer occurs throughout Hendry County. It is generally 20 to 40 feet thick, although in localized areas around LaBelle and Immokalee it occurs in thicknesses in excess of 80 feet. It is extremely variable in composition and hydraulic properties. Information on the hydraulic properties of the water table aquifer in Hendry County is extremely limited. Reported values of hydraulic conductivity range from approximately 100 feet per day (ft/day) to 3500 ft/day. Because of the large degree of lateral heterogeneity, susceptibility to drought induced stress, availability of other water sources, and potential impacts to wetlands, the water table aquifer is not heavily used in Hendry County. However, some localized use occurs in areas where there is no other viable water source available.

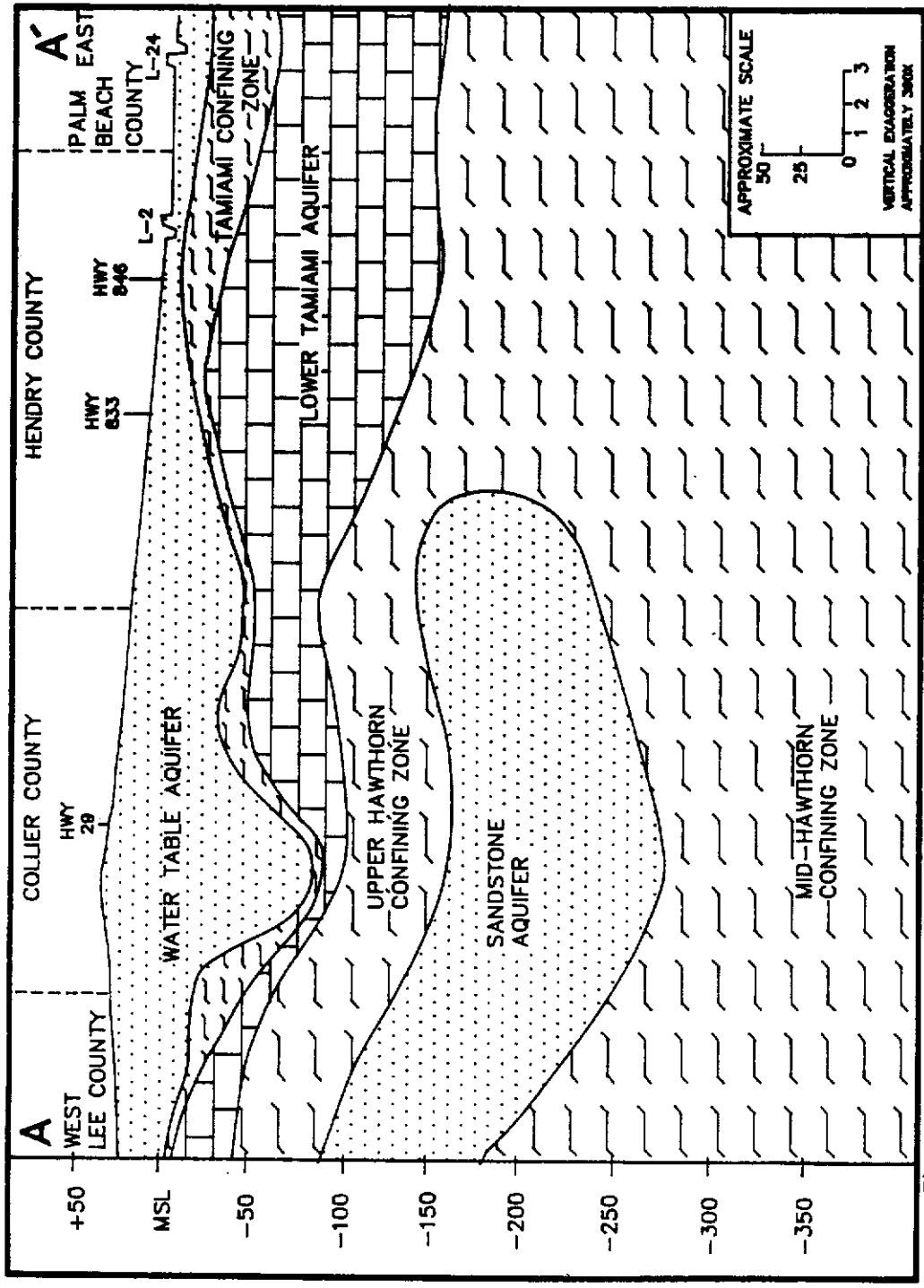


Figure 3. GENERALIZED HYDROGEOLOGIC CROSS SECTION OF HENDRY COUNTY

**Tamiami Confining Zone.** The Tamiami confining zone is a leaky semi-confining zone that separates the water table aquifer from the underlying lower Tamiami aquifer. It is present throughout most of Hendry County and occurs in thicknesses up to 60 feet. However, in some areas of the western portion of the study area, it is very thin and is characterized by high values of vertical hydraulic conductivity. In these areas, it does not form an effective confining layer, and the Surficial Aquifer System behaves as a single unconfined aquifer. These areas generally correspond to the localized thick occurrences of the water table aquifer previously discussed.

**Lower Tamiami Aquifer.** The lower Tamiami aquifer is the major source of ground water for most of Hendry County. It behaves as a semi-confined aquifer except in those areas where the Tamiami confining zone exhibits high values of vertical hydraulic conductivity, as previously discussed.

Reported transmissivities in the lower Tamiami aquifer range from approximately 2800 ft<sup>2</sup>/day to 138,000 ft<sup>2</sup>/day. Generally, the aquifer is the most productive in southeast and east-central Hendry County, with productivity decreasing to the north, west, and south. In the areas where the lower Tamiami aquifer is unconfined, it also exhibits lower thickness and hydraulic conductivity values. The aquifer is not a major water source in these areas (Figure 4).

### **Intermediate Aquifer System**

The Intermediate Aquifer System in southwest Florida consists of the upper Hawthorn confining zone, the sandstone aquifer, the mid-Hawthorn confining zone, the mid-Hawthorn aquifer, and the lower Hawthorn confining zone. Together, these units act to confine the underlying Floridan Aquifer System.

**Upper Hawthorn Confining Zone.** The upper Hawthorn confining zone is a term used by Wedderburn et al. (1982) to describe a zone of low permeability in the uppermost part of the Hawthorn Group in Lee County. Smith and Adams (1988) extended this term into Hendry County to describe the zone of low permeability that forms the bottom of the Surficial Aquifer System and retards the vertical flow of water into the underlying aquifers of the Intermediate Aquifer System. The upper Hawthorn confining zone in the study area ranges in thickness from 10 feet near Immokalee to 260 feet southeast of LaBelle.

**Sandstone Aquifer.** The sandstone aquifer occurs only in the western portion of the study area (Figure 5). It generally occurs as two distinct lithologic zones - an upper clastic zone and a lower carbonate zone (Smith and Adams, 1988). In many locations, the two lithologic zones exhibit good hydraulic connection and act as a single semi-confined aquifer. The sandstone aquifer varies in thickness in the study area between 160 feet in southeastern Lee County to zero throughout eastern Hendry County. It is the major source of ground water in western Hendry County due to the low yields of the water table and lower Tamiami aquifers in the area. Reported values of transmissivity in the sandstone aquifer range from approximately 160 ft<sup>2</sup>/day to 40,000 ft<sup>2</sup>/day.

Smith and Adams (1988) reported the occurrence of an unnamed white limestone aquifer that occurs in Glades County northwest of LaBelle. Based on the limited information that exists, it is believed that this unit may be an extension of the sandstone aquifer; it is treated as such in this report.

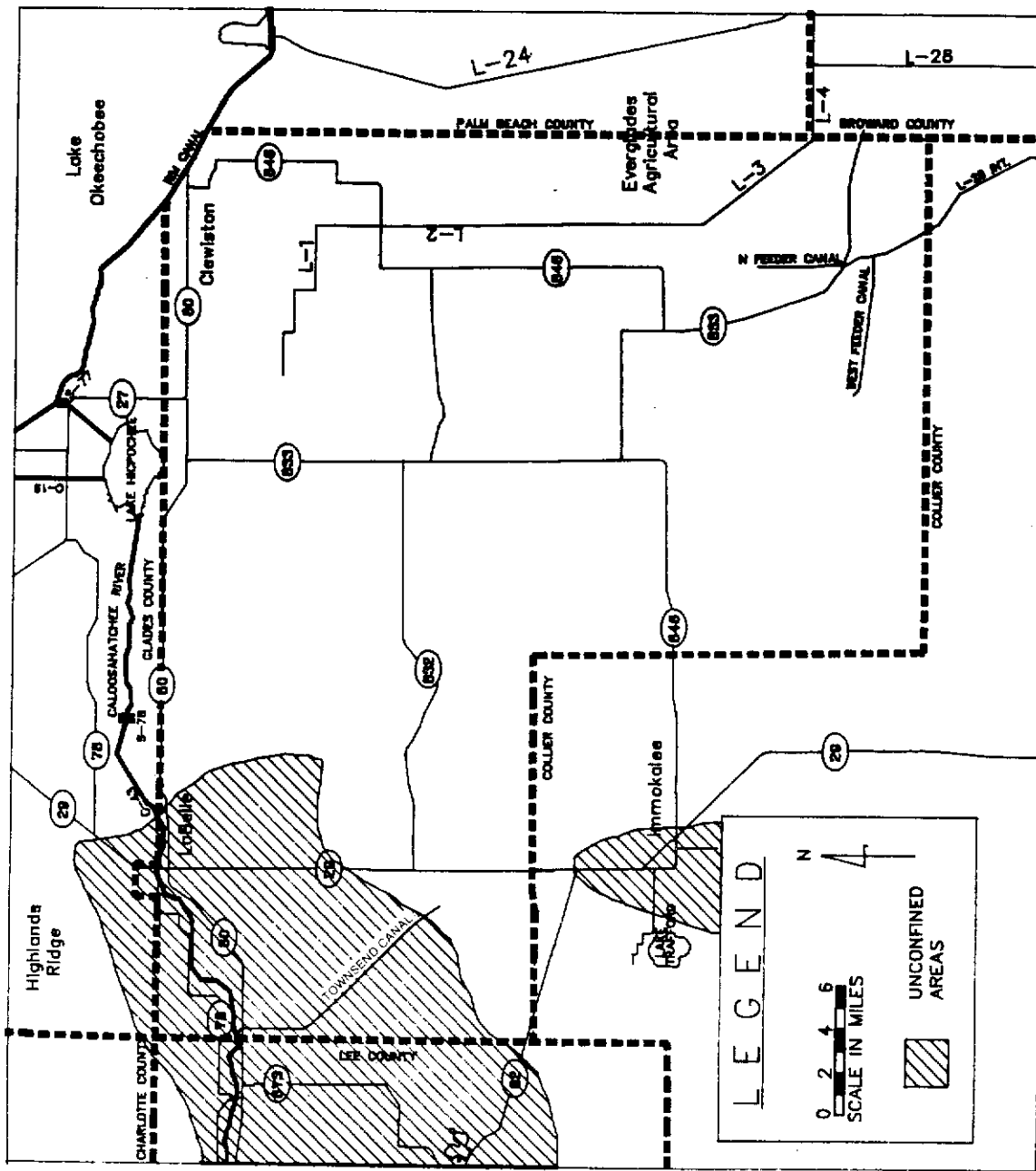


Figure 4. AREAL EXTENT OF UNCONFINED OCCURRENCE OF LOWER TAMIAMI AQUIFER

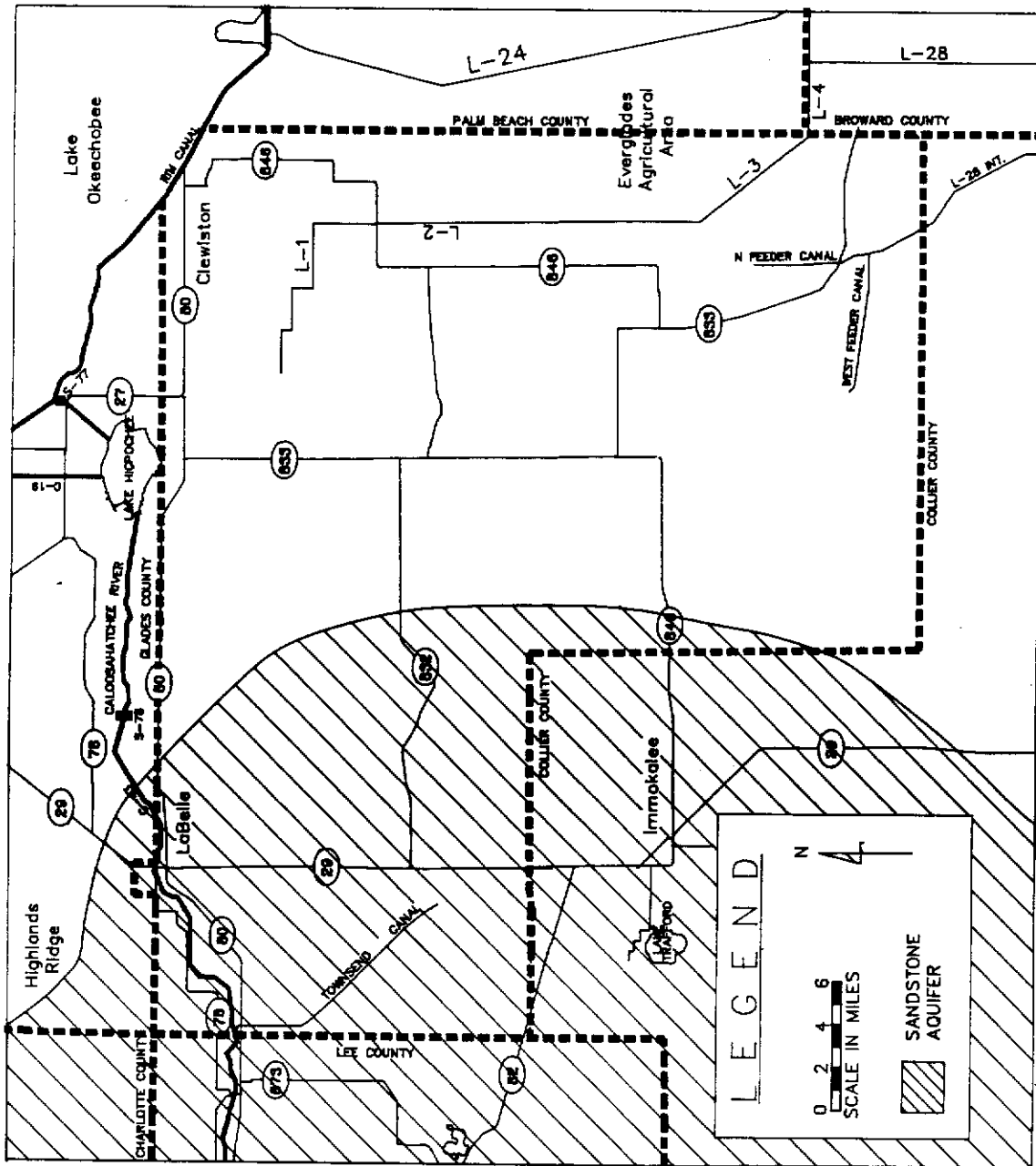


Figure 5. AREAL EXTENT OF THE SANDSTONE AQUIFER

**Mid-Hawthorn Confining Zone.** The mid-Hawthorn confining zone underlies the sandstone aquifer. In those areas where the sandstone aquifer does not occur, the mid-Hawthorn and upper Hawthorn confining zones occur merge into one unit. The mid-Hawthorn confining zone is a relatively thick heterogeneous mixture of clayey dolosilts exhibiting very low values of hydraulic conductivity (Knapp et al., 1986).

**Mid-Hawthorn Aquifer.** The mid-Hawthorn aquifer is not significantly developed in Hendry County. In those areas where it does occur, poor water quality and very low yields limit its use as a water source. Existing data indicate that no significant vertical flow occurs between the mid-Hawthorn aquifer and shallower units. As a result, the mid-Hawthorn aquifer is not included in the ground water flow model.



## MODEL DESCRIPTION

### INTRODUCTION

The model used in this study is the U. S. Geological Survey modular three-dimensional finite-difference ground water flow model (McDonald and Harbaugh, 1988), commonly known as MODFLOW. This model was selected for the following reasons:

1. It is available in the public domain,
2. It is compatible with most computers with only minor modification,
3. The modular structure of the code and its excellent documentation allow easy modification of the code and the addition of new modules for specialty applications,
4. MODFLOW allows great flexibility of data file structure and management; this facilitates the employment of and interaction with other software for data manipulation,
5. The cell-by-cell flow feature of the code can be used to:
  - A. Evaluate in detail, flow and head changes associated with various withdrawal scenarios, and
  - B. Generate boundary conditions for higher-resolution models within the regional flow model.

The MODFLOW code contains modules which simulate recharge, evapotranspiration, rivers, drains, wells, and other sources and sinks of water external to the model. Three iterative solution schemes are available for simulating flow problems: slice successive over relaxation (SSOR), strongly implicit procedure (SIP), and the preconditioned conjugate gradient (PCG) method (Kuiper, 1987). SSOR is the better solution method for some strongly layered conditions. However, it is not as direct as SIP, therefore it requires more time to arrive at a solution. PCG is frequently faster than SIP or SSOR for complex flow systems. Both SSOR and SIP were evaluated in the Hendry County model. SIP proved to be more efficient than SSOR in arriving at a solution, while SSOR was more stable than SIP during runs simulating drought conditions. Solutions generated by either method show no significant differences in head distribution. Table 1 summarizes the modules and their application to the Hendry County model.

Three types of boundary conditions are available: specified head, specified flux, and head dependent flux. Specified head boundaries, also referred to as constant head, maintain the same user-specified head level throughout the simulation. Specified flux boundaries can be simulated through the use of external source terms in the model. No-flow boundaries are a type of specified flux boundary. Head dependent flux boundaries, as the name implies, generate a flux dependent on the head in the cell and a user specified head assigned to the external source. All types of boundary conditions can be set anywhere within a model grid. A no-flow boundary is implicit along the outer edges and bottom of a model grid.

TABLE 1  
MODFLOW MODULES AND APPLICATION TO THE  
HENDRY COUNTY MODEL

MODFLOW MODULE	FUNCTION	USE IN MODEL
Basic	Model Administration	Used
Block Centered Flow	Computation of Aquifer Parameter Input Sets	Used
Well	Simulates a source/sink to the model that is not affected by aquifer head	Used to simulate pumpage
Drain	Simulates discharge from model dependant on aquifer head	Not Used
River	Simulates effects of river leakage. May recharge or drain model depending on head differences	Used to simulate surface water interactions
ET	Simulates discharge through evapotranspiration	Used
General Head Boundary	Simulates a source/sink at rates depending on head differences bwt. source/sink and aquifer	Not Used
Recharge	Simulates recharge to model from infiltration of rainfall	Used
SIP	Solves finite difference equations using the Strongly Implicit Procedure	Used
SSOR	Solves finite difference equations using the Slice Successive Over Relaxation Method	Used
PCG	Solves finite difference equations using the Preconceived Conjugate Gradient Method	Not Used
Output Cntrl.	Specifies output format	Used
Observation Nodes	Generates a file of computed heads for selected nodes	Used to generate convergence maps and hydrographs

## DISCRETIZATION

The study area was discretized into a horizontal grid comprised of cells measuring one square mile each, assembled into a grid of 48 rows and 54 columns (Figure 6). The origin of the model grid was set to correspond as closely as possible with the government survey grid, with each model cell representing approximately one section of land. However, variations in the survey grid made this difficult.

MODFLOW offers two options for vertical discretization. In a fully three-dimensional model, the confining zones are represented in the model as individual layers. Values of transmissivity, storage, and vertical hydraulic conductivity for the confining zone are required for this approach. A fully three-dimensional model would more accurately simulate flow conditions where horizontal flow in the confining zone is an important part of the flow regime. In a quasi-three-dimensional model, the confining zones are not represented as individual layers, but as vertical conductance terms ( $V_{cont}$ ) specified for the model layers representing aquifers. Within the study area, the values of hydraulic conductivity exhibited by the aquifers are several orders of magnitude greater than those in the confining zones. Therefore, it can be assumed that on the regional scale of the model, flow in the aquifers is primarily horizontal, and flow across the confining zones is primarily vertical, and the quasi-three-dimensional approach is a good approximation of the ground water flow regime in Hendry County.

The Hendry County model contains three layers (Figure 7). Layer 1 represents the water table aquifer, layer 2 represents the lower Tamiami aquifer, and layer 3 represents the sandstone aquifer. While the sandstone aquifer occurs as two distinct lithologic zones, existing data indicates that it acts as a single, semi-confined aquifer. Therefore, it was represented as one layer in the model. The Tamiami confining zone is represented as vertical conductance terms in layer one, and the upper Hawthorn confining zone is represented as vertical conductance terms in layer two. The top of the mid-Hawthorn confining zone was simulated by the no-flow boundary implicit at the bottom of the model grid. This was based on lithologic and hydrogeologic data that indicate that no significant vertical flow takes place between the mid-Hawthorn confining zone and shallower units.

## BOUNDARY CONDITIONS

MODFLOW allows the user to set several types of boundary conditions; no-flow, specified head and specified flux boundaries are commonly used types. No-flow boundaries are used where the ground water flow regime is such that flow across a boundary is not expected to occur. Specified head was chosen for the model boundaries in Hendry County where flow is expected to occur because:

1. The specified head condition allows the model to compute fluxes for a variety of ground water flow configurations, whereas the specified flux condition requires the user to estimate fluxes for a single ground water flow condition, and
2. The specified head condition is established only once for a model run in a file designated solely for that purpose, while the specified flux condition requires the user to set the fluxes for each stress period in a file used for other purposes. The specified head option greatly simplifies file management in a model of this size.

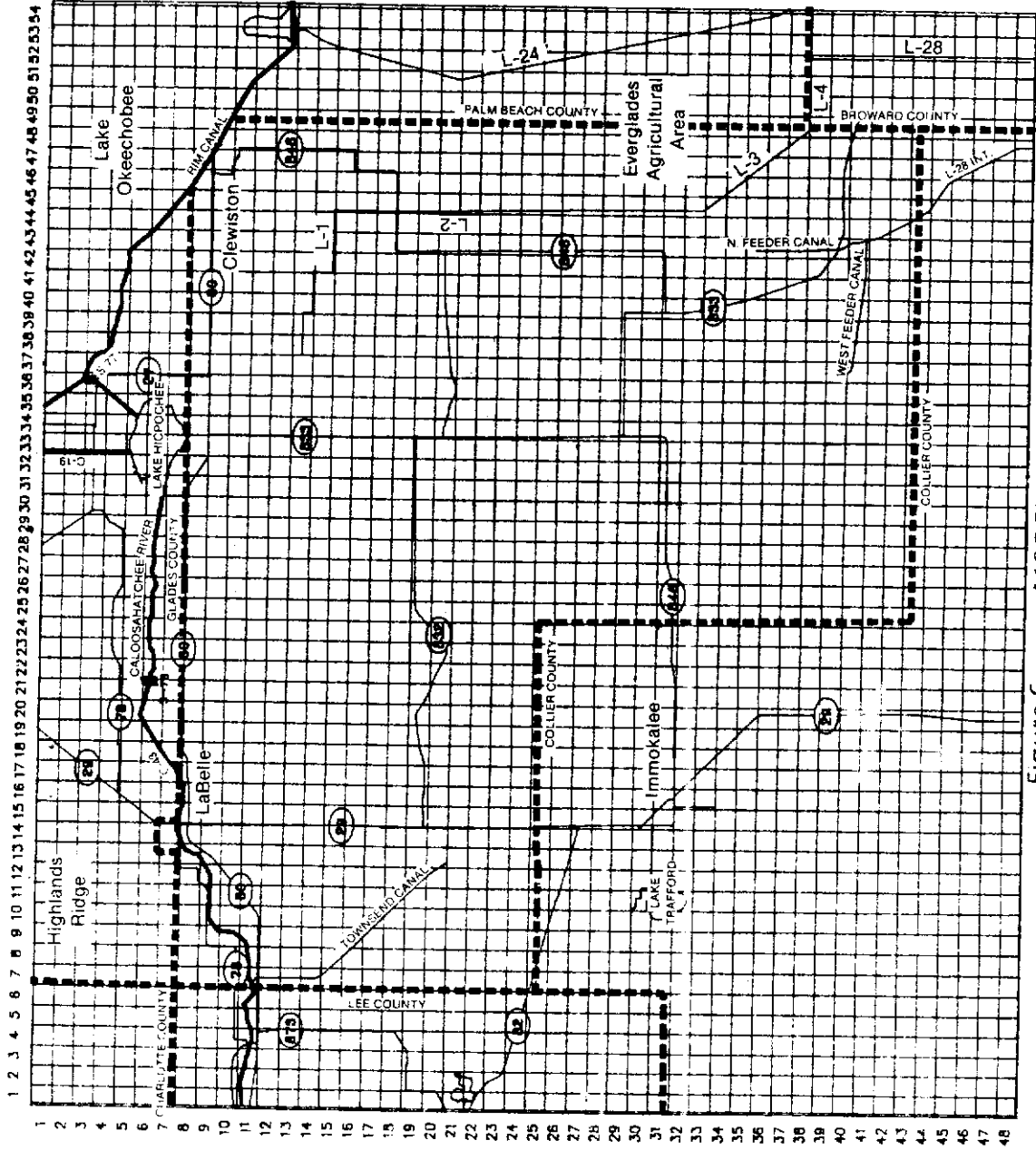


Figure 6. MODEL GRID

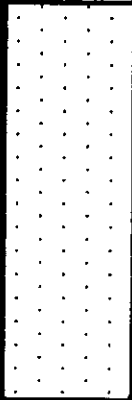
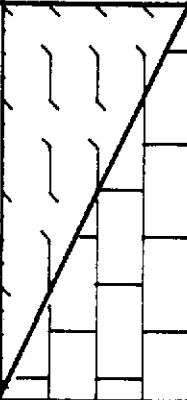
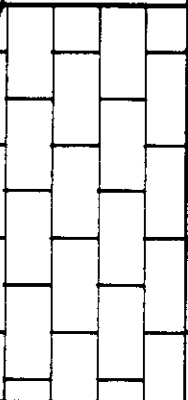
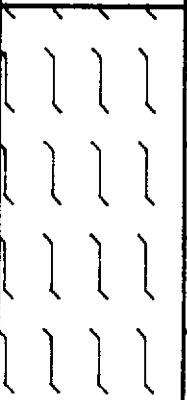
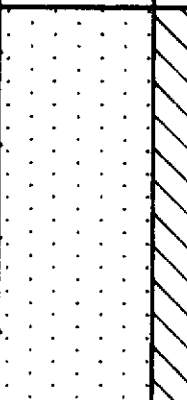

AQUIFER SYSTEM		HYDROGEOLOGIC UNIT	MODEL LAYER
Surficial Aquifer System		Water Table Aquifer	Layer 1
		Tamiami Confining Zone	Represented by Vertical Conductance Terms between layers 1 & 2
		Lower Tamiami Aquifer	Layer 2
Intermediate Aquifer System		Upper Hawthorn Confining Zone	Represented by Vertical Conductance Terms between layers 2 & 3
		Sandstone Aquifer	Layer 3
		Mid-Hawthorn Confining Zone	Not Represented in Model

Figure 7 HYDROGEOLOGIC UNITS AND CORRESPONDING MODEL LAYERS

A potential problem in the use of specified head boundaries is that the model may overestimate the flow into the model if steep ground water gradients (such as those around a pumping well) approach the boundary. Most of the large withdrawals are located such that the associated drawdowns do not reach the model boundaries, therefore any overestimation of flow into the model is assumed to be insignificant. This assumption was tested during sensitivity analysis of the model.

In layers 1 and 2, representing the water table aquifer and the lower Tamiami aquifer, the boundaries consisted of specified head cells set six miles outside the county border except along Lake Okeechobee, where specified head cells were set along the rim canal (Figure 8). Six miles was chosen assuming that this distance was great enough to minimize any boundary effects in Hendry County. This assumption was tested during sensitivity analysis of the model. In layer 3, representing the sandstone aquifer, boundary conditions are set similar to layers 1 and 2, except for a no-flow boundary set at the easternmost extent of the sandstone aquifer (Figure 9). A no-flow boundary was chosen here because lithologic and hydrogeologic data indicate that the aquifer pinches out, and potentiometric surface maps (Smith and Adams, 1988) show that the principle flow in the sandstone aquifer occurs parallel to its eastern boundary. Therefore it is assumed that no significant flow occurs across the boundary.

## HYDRAULIC CHARACTERISTICS

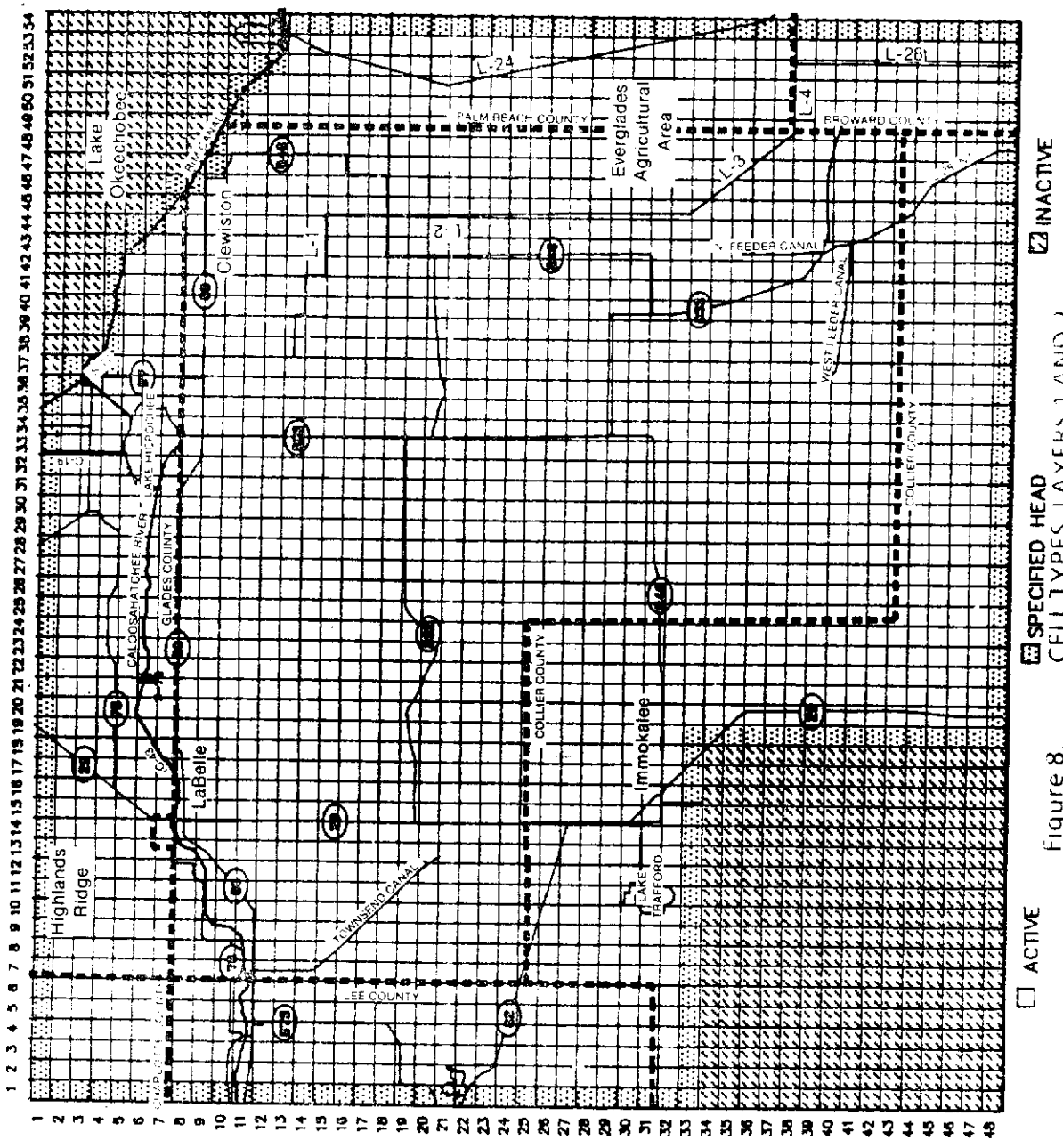
All data describing aquifer parameters, thicknesses, tops, bottoms, etc., are from Smith and Adams (1988), except when stated otherwise. This data is presented in Appendix A.

### Transmissivity

Layer 1 (Water Table Aquifer). MODFLOW calculates the transmissivity of unconfined aquifers by multiplying the hydraulic conductivity by the saturated thickness of the aquifer. Initial saturated thickness is calculated from the starting head and aquifer bottom data, both of which are required input for an unconfined aquifer. Head changes throughout the simulation result in changes in the calculated transmissivity in an unconfined aquifer. When the simulated head in a cell drops to a level at or below the aquifer bottom elevation, the transmissivity of the cell becomes zero, resulting in the cell "going dry" and becoming inactive for the remainder of the simulation. This situation does not occur in the calibrated model or any of the runs simulating drought conditions.

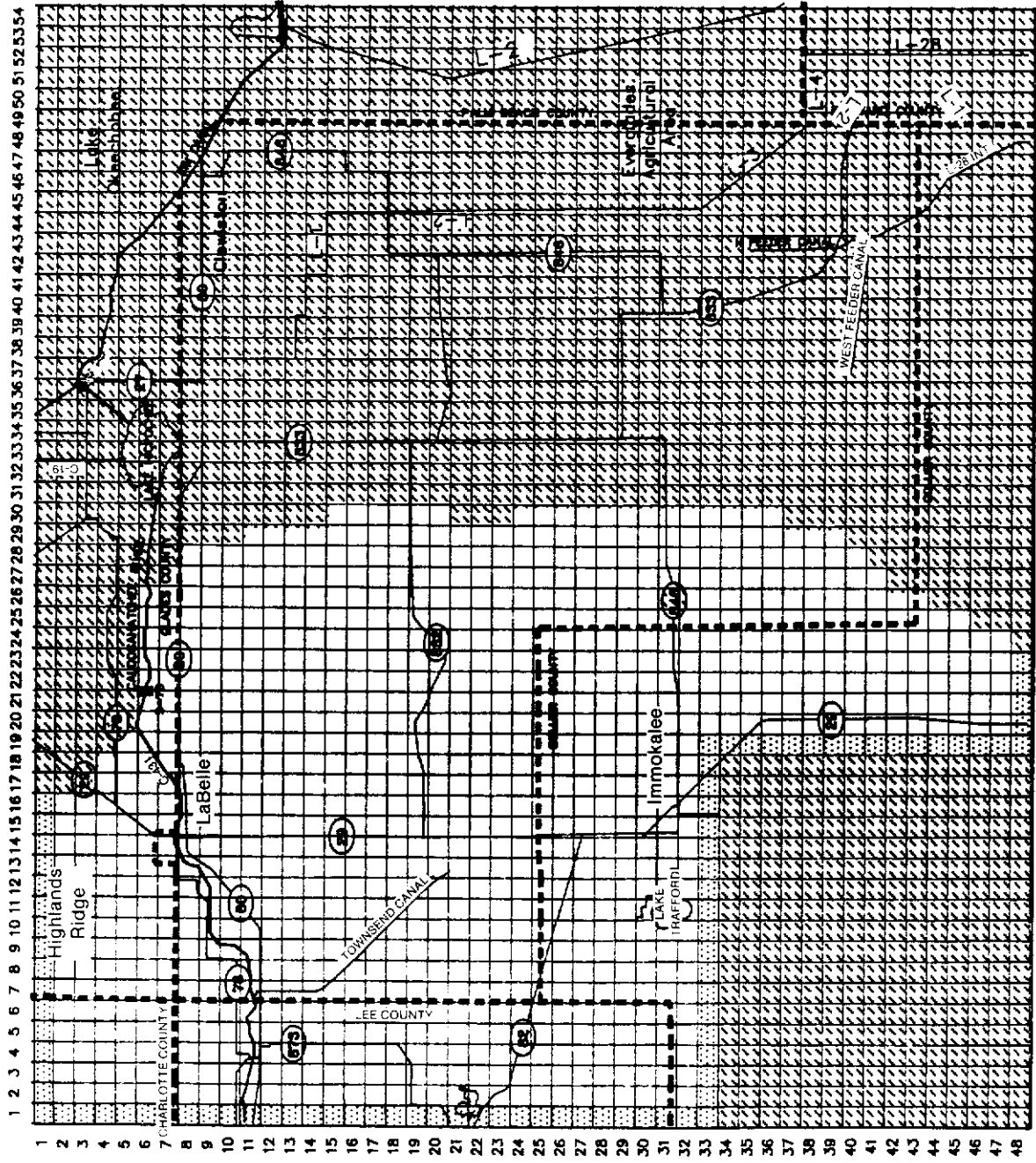
Little data exists on the hydraulic conductivity of the water table aquifer in Hendry County. However, existing data ranges between 100 ft/day and 3500 ft/day, with most values being less than 800 ft/day. The distribution of hydraulic conductivity was based on lithologic and hydraulic descriptions of well cuttings from Smith and Adams (1988). Assigned values of hydraulic conductivity ranged from 100 ft/day for fine sand to 1000 ft/day for solutioned limestone. The bottom of layer 1 was based on data from Smith and Adams (1988).

Layer 2 (Lower Tamiami Aquifer). The transmissivity grid for layer 2 (lower Tamiami aquifer) was developed by regionalization of the transmissivity values reported in Smith and Adams (1988). The regionalization was accomplished using a kriging interpolation technique, and resulted in a range of transmissivity from 9544 ft<sup>2</sup>/day to 113,600 ft<sup>2</sup>/day.



ACTIVE  
 SPECIFIED HEAD CELL TYPES, LAYERS 1 AND 2  
 INACTIVE

Figure 8.



ACTIVE     
  SPECIFIED HEAD     
  INACTIVE

Figure 9. CELL TYPES, LAYER 3



**Layer 3 (Sandstone Aquifer).** The transmissivity grid for layer 3 (sandstone aquifer) was developed using the same procedure described for layer 2 (lower Tamiami aquifer). However, the grid resulting from the kriging algorithm did not accurately represent the sandstone aquifer in eastern Hendry County, where it does not occur (Figure 5). The grid was modified in these areas to more accurately simulate the easternmost extent of the aquifer. Resulting values of transmissivity representing the sandstone aquifer ranged from 390 ft<sup>2</sup>/day to 16,600 ft<sup>2</sup>/day.

### **Specific Yield**

Data on specific yield of the water table aquifer in Hendry County is very limited. Therefore, specific yield for layer 1 (water table aquifer) was set at 0.2 (Fetter, 1980, Driscoll, 1986), which represents the average value for the type of sediments that comprise the water table aquifer.

### **Storage**

The storage coefficient grids for layer 2 (lower Tamiami aquifer) and layer 3 (sandstone aquifer) were developed from the aquifer test data reported in Smith and Adams (1988). Resulting values for the storage coefficient in layer 2 (lower Tamiami aquifer) ranged from 0.0001 to 0.0006. Storage coefficient values for layer 3 (sandstone aquifer) ranged from 0.00008 to 0.0004.

### **Vertical Conductance**

**Tamiami Confining Zone.** Vertical flow in the Tamiami confining zone is a function of the vertical conductance term ( $V_{cont}$ ) entered in layer 1, and the head difference between layer 1 (water table aquifer) and layer 2 (lower Tamiami aquifer). Values of  $V_{cont}$  were obtained by dividing vertical hydraulic conductivities by the thickness of the confining zone. In those areas where the Surficial Aquifer System behaves as a single unconfined aquifer, the Tamiami confining zone is characterized by thin occurrences, high values of vertical hydraulic conductivity, or both. The resulting high values of  $V_{cont}$  cause layer 2 to react to stress in a similar manner as layer 1 in these areas. Reported values of vertical hydraulic conductivity of the Tamiami confining zone range from 0.01 ft/day to 1 ft/day. Reported thicknesses of the Tamiami confining zone range from 13 feet to 66 feet. The resulting values of  $V_{cont}$  range from 0.0000068 day<sup>-1</sup> to 0.075 day<sup>-1</sup>.

**Upper Hawthorn Confining Zone.** The  $V_{cont}$  grid representing the upper Hawthorn confining zone was developed in the same manner as the  $V_{cont}$  grid representing the Tamiami confining zone. Reported values of vertical hydraulic conductivity of the upper Hawthorn confining zone range from 0.000007 ft/day to 0.56 ft/day. Reported thicknesses of the upper Hawthorn confining zone range from 15 feet to 260 feet. Resulting values of  $V_{cont}$  range from 0.00000014 day<sup>-1</sup> to 0.0053 day<sup>-1</sup>.

## **SURFACE WATER INTERACTIONS**

The river module of MODFLOW was used to simulate the interaction of ground water and surface water in distinct water bodies. The simulated flow between ground water and surface water is controlled by the river bottom sediment hydraulic conductance, river stage, aquifer head, and elevation of the river bottom. Flow can occur both into and out of the river, depending on the direction of the gradient between river stage and aquifer head. When the aquifer head is higher than the river

stage, flow is from the aquifer into the river, and conversely, when the river stage is higher than the aquifer head, flow is from the river into the aquifer. The rate of flow into or out of the river is determined by the difference between river stage and aquifer head, and is proportional to the conductance of the river bed. If the aquifer head falls below the bottom of the river, flow into the aquifer occurs at a rate equal to the difference between the river stage and river bottom elevation, and is proportional to the conductance of the river bed. Further reductions in aquifer head produce no increase in flow into the aquifer. River bed conductance for a cell is obtained by multiplying the hydraulic conductivity of the river bottom sediments by the wetted perimeter and the length of the river reach that occurs in the cell, and dividing by the thickness of the river bed sediments. MODFLOW assumes that the hydraulic conductivity of the river bottom and river channel sides is the same. In south Florida, this assumption may not be valid due to accumulation of fine sediments on the bottom of the channel which can significantly reduce flow. In this case, seepage through the sides of the channel may account for the majority of flow. This situation can be approximated by assigning different values of hydraulic conductivity to the bottom and sides of the river channel when calculating the river bed conductance term. The values of riverbed hydraulic conductivity used in the model ranged between 0.001 ft/day and 0.1 ft/day.

Only those surface water bodies with reliable information on widths, depths, and stages were simulated in the Hendry County model. They included the Caloosahatchee River (C-43), C-19, the rim canal surrounding Lake Okeechobee, the Miami Canal (L-23, 24, and 25), L-1, L-2, L-3, L-4, L-28 interceptor canal, north feeder canal, west feeder canal, the Townsend Canal, and Lake Trafford. Bottom elevations, profiles, and configuration of most canals were obtained from District records and aerial photographs. Bottom elevations for the Caloosahatchee River were obtained from U. S. Army Corps of Engineers soundings. District stage data were used to calculate average wetted perimeters. Cells containing river reaches are shown in Figure 10. Model input data for the river module is presented in Appendix B.

## RECHARGE

Recharge resulting from precipitation was calculated using a method discussed in Bower et al. (1990). Recharge is calculated as a function of interception, depression storage loss, and surface drainage. In determining recharge from precipitation in Hendry County, it was assumed that there was only one precipitation event per rainy day. Interception and depression storage are satisfied early in an event, so large portions of many small events are intercepted or stored in small depressions (Linsley et al., 1982).

Interception is the amount of precipitation which wets and adheres to above ground objects until it returned to the atmosphere through evaporation (Viessman, et al., 1977). The amount of precipitation intercepted is a function of the storm character, season, and species, age, and density of the vegetation. Since Hendry County is predominantly agricultural, it was assumed that variations in these factors would be negligible in a regional model. Therefore, a uniform factor of 0.8 for interception (80% not intercepted) was used throughout the model.

The precipitation that reaches the ground may infiltrate, flow over the surface, or become trapped in small depressions from which the only escape is evaporation or infiltration. The maximum depression storage loss for impervious surfaces on a 1% slope is 0.11 inches. Since almost all of the modeled area exhibits slopes of less than

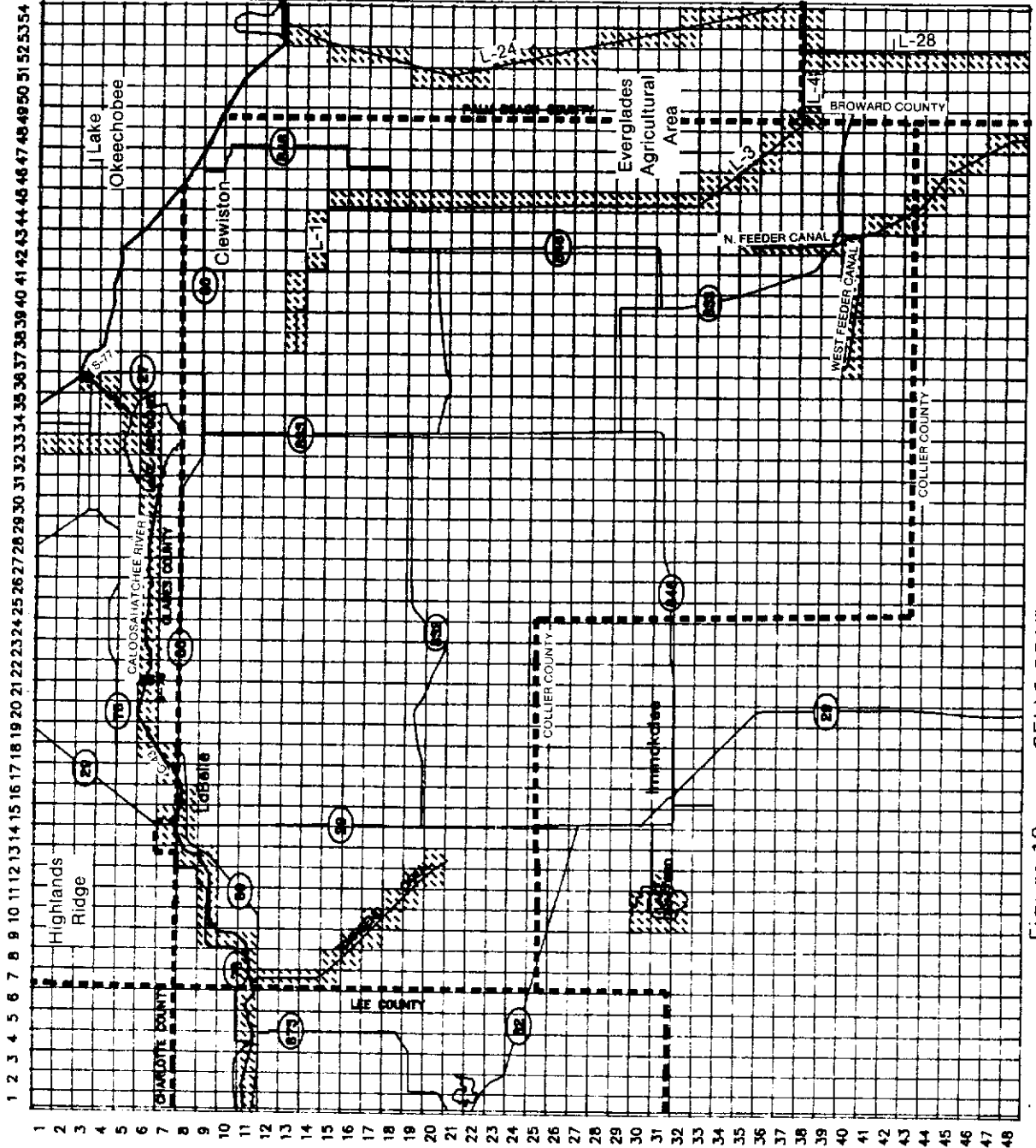


Figure 10. CELLS CONTAINING RIVER REACHES, LAYER 1

1%, the storage loss figure of 0.11 inches is assumed to be a valid maximum for the entire modeled area.

For permeable soil conditions (such as those found throughout Hendry County), infiltration normally occurs at a much faster rate than evaporation. Therefore, it was assumed that all of the water stored in depressions would infiltrate. To accomplish this, the value of instantaneous hydraulic conductivity was set to 10 ft/day, and the vertical hydraulic conductivity of the soil zone was set to 0.01 of the horizontal hydraulic conductivity of the water table aquifer. This resulted in an almost instantaneous infiltration of a depression storage of 0.11 inches. Readers desiring a more detailed discussion of the method used to calculate recharge are directed to Bower et al. (1990).

Surface drainage for south Florida conditions can be estimated as a function of the net precipitation and a coefficient relating the potential for runoff to surface drainage. Since Hendry County is extremely flat, it is assumed that these losses will be minor, and the coefficient was set to 0.01.

Use of this method resulted in a nearly uniform ratio of recharge to precipitation of 0.79. Monthly rainfall data was obtained from 45 rainfall stations located in and around the study area. The data was regionalized using a kriging interpolation technique, which produced a rainfall value for each cell. These values were multiplied by 0.79 to obtain a recharge value for each cell. Maps of the monthly rainfall distribution and locations of rainfall stations are presented in Appendix C.

## EVAPOTRANSPIRATION

MODFLOW simulates evapotranspiration as a linear function, with the maximum rate occurring at a specified surface, decreasing to zero at a user specified extinction depth. The maximum evapotranspiration rate was set to the recorded monthly pan evaporation rate at stations located in Clewiston, Lehigh Acres, and Hurricane Gate 1, which is located at the outlet of Lake Okeechobee to the Caloosahatchee River. Since evaporation data is available from only three stations located in the northern portion of the modeled area and the evaporation rates at each station were similar, data from the three stations were averaged, and a uniform rate was applied throughout the model.

The maximum evapotranspiration rate was set to occur at land surface. Extinction depths were established for each cell based on the land uses occurring within the cell. Land use types and corresponding extinction depths used in the model are listed in Table 2. The area of each land use occurring in a cell was totalled, and a weighted average was used to determine the extinction depth for each cell. Model input data for the evapotranspiration module is presented in Appendix D.

## GROUND WATER USE

Water use figures for the model were determined using data from individual water use permits issued by the District. Individual water use permits are required if the average daily water use equals or exceeds 100,000 gallons per day (gpd). An individual water use permit is also required of smaller uses (average daily use exceeding 10,000 gpd) in Reduced Threshold Areas (RTA). The southwest corner of Glades County, the northwest corner of Hendry County, and all of Lee County are designated RTA's. The District also issues general water use permits to all uses less

TABLE 2  
EVAPOTRANSPIRATION EXTINCTION DEPTHS  
(Modified from Florida Irrigation Guide (SCS 1982))

CROP TYPE	EXTINCTION DEPTH (Feet Below Land surface)
Small vegetables	0.5 - 2
Urban Landscape	2-6
Sugar Cane	3
Pine wetlands	1-3
Cypress wetlands	1-8
Pasture	2-6
Citrus	3-5
Forested uplands	1.5-3

than 100,000 gallons per day, with the exception of single family homes, duplexes, and water used strictly for fire-fighting (SFWMD, 1985).

General water use permits were not included in the determination of water use for the model because the total amount covered in general permits is insignificant when compared to individual permits. However, all legal uses of water, no matter how small, are important from a management standpoint because they are protected by the District's water use rules from adverse impacts caused by other water users. Therefore, impacts to the smaller users can effect larger users, requiring reduced withdrawals or mitigation of the adverse impacts. This can be of critical importance during the management of competing uses.

### **Agricultural**

Agricultural water use accounts for over 99% of the permitted ground water use in Hendry County (Smith and Adams, 1988). Records of water withdrawn generally do not exist for agricultural uses. Therefore, agricultural water use was estimated. The irrigation water requirements of different crops was estimated using a method described by the U. S. Soil Conservation Service (USDA, 1970). This method uses the modified Blaney-Criddle formula to estimate the water requirements of various crops. Factors such as crop type, soil type, air temperature, daylight hours, effective rainfall, and irrigation system efficiency are used to calculate the irrigation requirements of different crops found throughout the modeled area.

Data on all agricultural water uses with individual water use permits was assembled into a spreadsheet. This information included crop types, acreage, irrigation system data, well information, and soil types. Precipitation data from the LaBelle station was used to determine effective rainfall. The irrigation requirements for each permitted use were estimated for each month of the calibration period (January 1986 through December 1988). The monthly irrigation requirement for each permitted use was distributed among the permitted withdrawal facilities in proportion to their pump capacities. Individual wells were assigned to the proper model cell and then all the well withdrawals within a cell were summed to give a single withdrawal rate for that cell for a given month. Agricultural water use data is presented in Appendix E. Figures 11, 12, and 13 show the distribution of cells with well withdrawals simulated for layer 1 (water table aquifer), layer 2 (lower Tamiami aquifer), and layer 3 (sandstone aquifer), respectively.

### **Public Supply**

There are five users of ground water for public supply in the study area with individual water use permits: LaBelle, Immokalee, Port LaBelle, Hendry County Department of Corrections, and a campground/trailer park. Withdrawal records are available for all of these except the Department of Corrections; their public supply use is combined with a much larger agricultural use. Public supply withdrawals were assigned to the proper cell and added to the agricultural withdrawal data file. Information on public supply ground water use is presented in Appendix E.

### **Other Ground Water Uses**

Most of the other uses of ground water in Hendry County can be assigned to one of three types: rural self-supplied, industrial, and mining-dewatering. The mining-dewatering uses are short-term uses which require on-site impoundments to store withdrawn water. The only consumptive use in these operations is water lost to

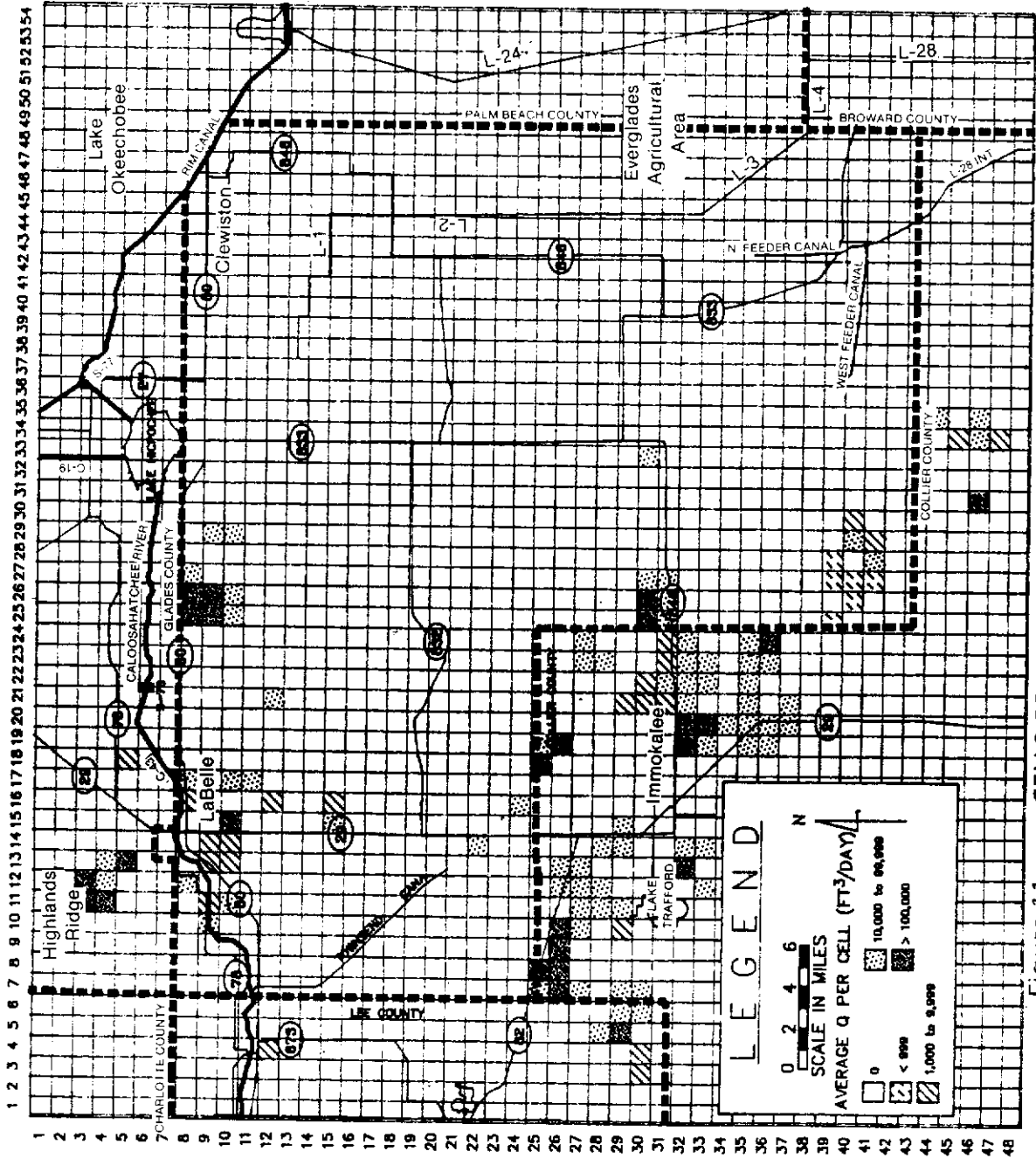


Figure 11. CELLS CONTAINING DISCHARGING WELLS, LAYER 1 (WATER TABLE AQUIFER)

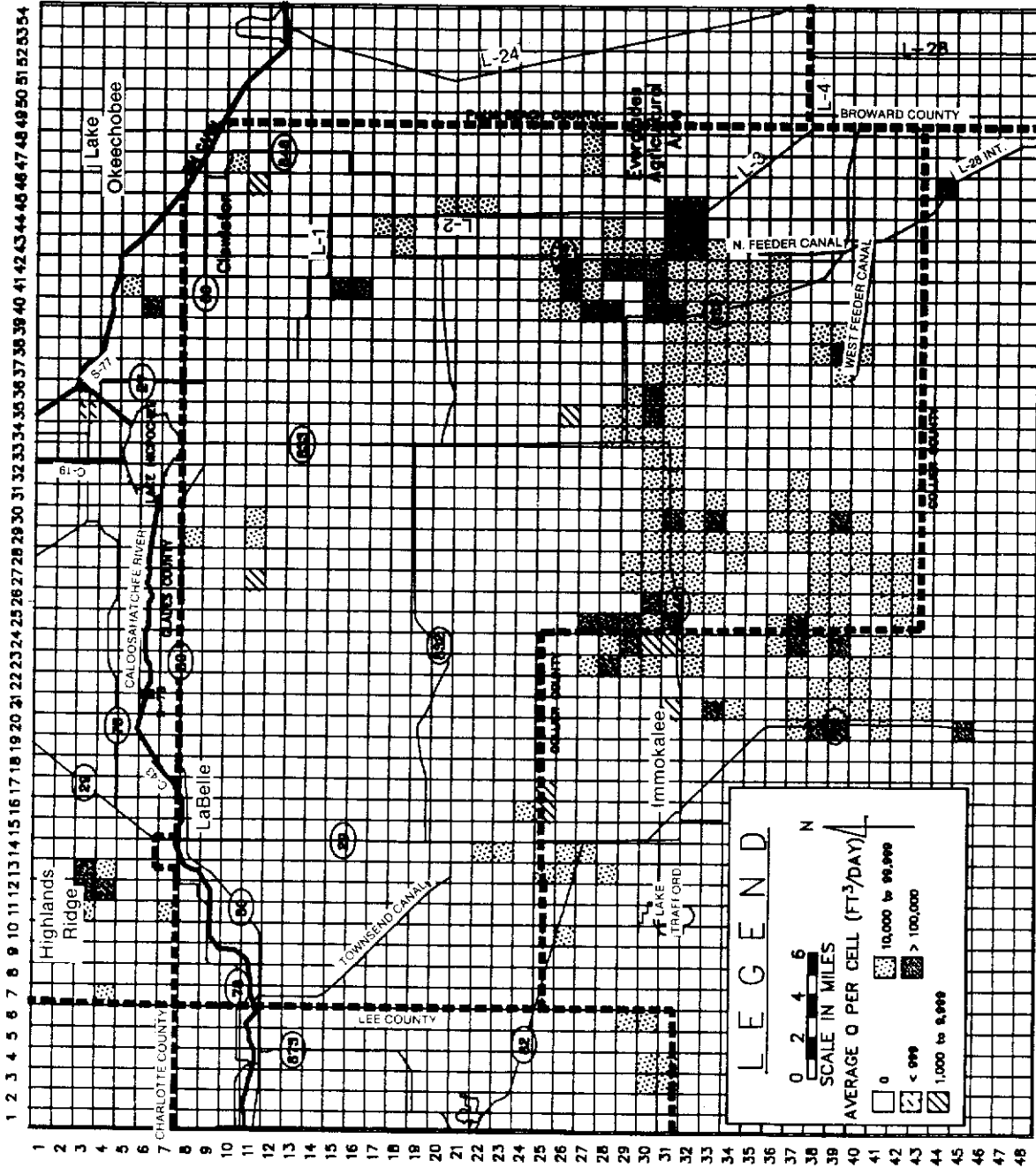


Figure 12. CELLS CONTAINING DISCHARGING WELLS, LAYER 2 (LOWER TAMIAMI AQUIFER)



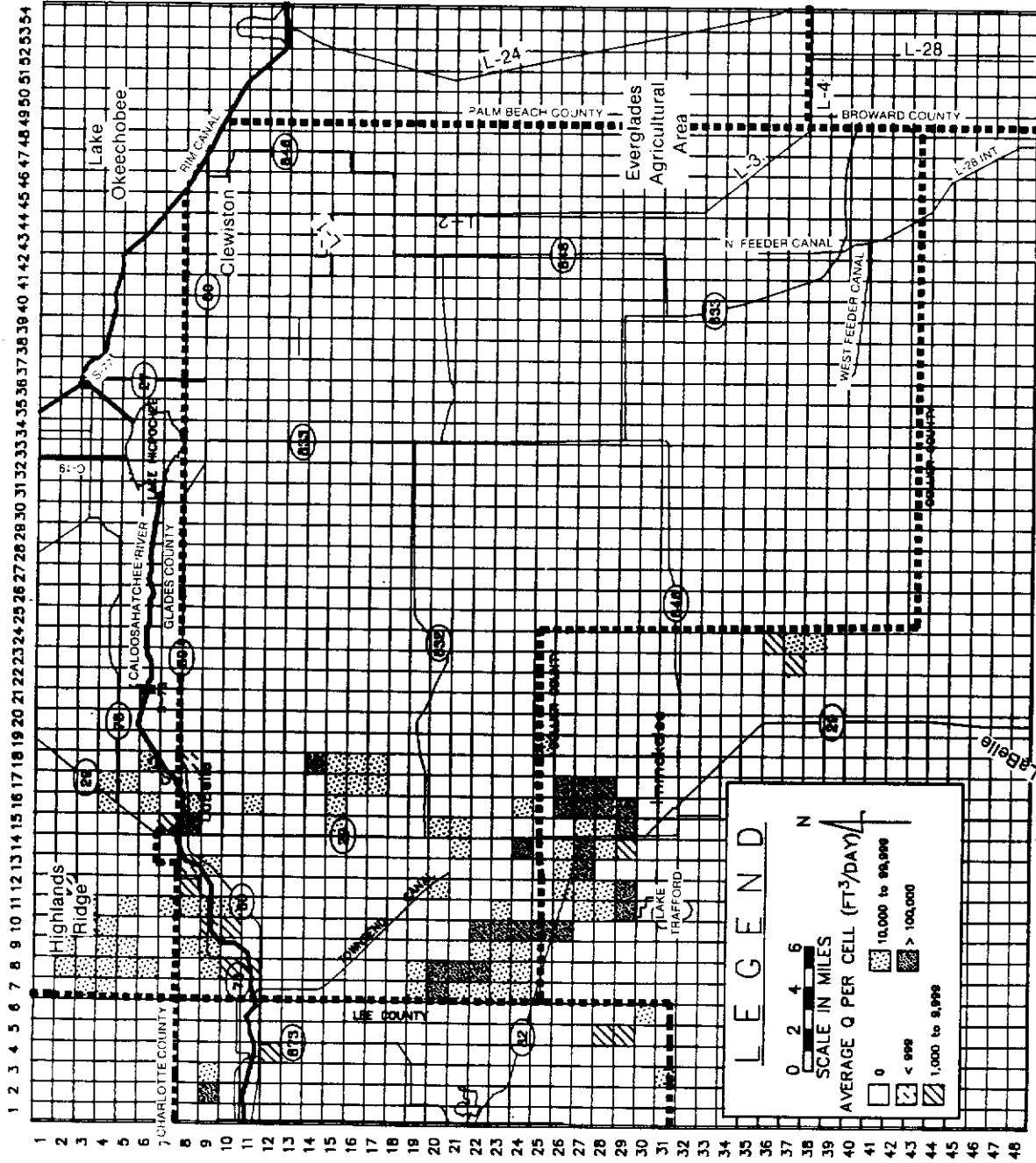


Figure 13. CELLS CONTAINING DISCHARGING WELLS, LAYER 3 (SANDSTONE AQUIFER)

evaporation, which is insignificant for a regional model with a coarse grid. Therefore, mining-dewatering uses were not simulated in the model. Rural self-supplied water use in Hendry County was estimated at 1.9 million gallons per day (mgd) by Leach (1980). Leach (1984) also projected rural self-supplied water use at 3.39 mgd in the year 2000. This amount is approximately 0.01% of the permitted ground water use in Hendry County, and is considered insignificant for purposes of this study. Therefore, rural self-supplied water use was not simulated in the model. There are several industrial uses of ground water in Hendry County, mainly small citrus processing plants and air conditioning uses. Permitted industrial ground water use in Hendry County total 8.6 million gallons per month, or 0.03% of all ground water use (Smith and Adams, 1988). Industrial water use is also widely distributed throughout the modeled area. Therefore, industrial water use was not simulated in the model.

## CALIBRATION

The Hendry County model was calibrated to both steady state and transient conditions. Locations of the observation wells used in the calibration process are shown in Figures 14, 15, and 16. The calibration period was January 1986 through December 1988. This period was chosen because it is the most recent period represented by ample water level observations. An in-depth analysis and discussion of the water level data from the monitor network can be found in Smith and Adams (1988). A multi-year period was chosen so that the effect of annual variations in canal stage, evapotranspiration, irrigation, and seasonal rainfall could be seen.

### STEADY STATE CALIBRATION

The steady state calibration was done in two parts. Initial steady state runs served to make the first adjustments to the aquifer parameters used in the model. Average values of recharge, evapotranspiration, pumpage, and surface water stage elevations were used. These average values were calculated from the monthly values within the calibration period. Head distributions resulting from these runs were compared to water levels in observation wells averaged over the calibration period. The adjusted aquifer parameter data sets were then used in the transient calibration runs, where they were refined further. Finally, the steady state model was re-run using the data sets from the transient calibration to obtain a final steady state run. This final steady state run provided much of the information used to describe the ground water flow regimes in Hendry County, and to act as the base case for most of the sensitivity analyses and predictive scenarios.

### TRANSIENT CALIBRATION

The transient runs comprised 36 stress periods of one month each. Each stress period contained one time step. The model was also run using five time steps per stress period to determine if the number of time steps in a stress period affected the solution. The maximum head difference was 0.01 feet, and differences in the volumetric budget were insignificant. Therefore, to maximize computer utilization, the model was run using one time step per stress period.

Starting heads in each layer were calculated from water level data obtained from USGS monitor wells in December 1985, which is representative of a moderately stressed condition. The data was regionalized using a kriging interpolation technique, which provided a head for every cell.

It was attempted to calibrate so that agreement between observed water levels in monitor wells and simulated water levels in the cells which represent the location of those wells, averaged over the calibration period, were generally within the following ranges:

Layer 1 (water table aquifer)	+/- 2 feet
Layer 2 (lower Tamiami aquifer)	+/- 3 feet
Layer 3 (sandstone aquifer)	+/- 4 feet

This is the same procedure used to calibrate the Lee County model (Bower et al., 1990). The procedure was assumed to be valid for the Hendry County model because the hydrogeology of the two counties is similar, and they are within the same regional flow system. Tolerance is increased with depth for the following reasons:

1. In the water table aquifer, small changes in water levels reflect potentially large impacts, particularly to wetlands, and
2. The aquifer parameters typical of the deeper semi-confined aquifers in the area cause the heads within these aquifers to fluctuate more in response to stress when compared to unconfined aquifers.

Comparative hydrographs for observed and simulated water levels were generated for those cells that correspond to the locations of USGS monitor wells. These were used to aid in interpretation of the numerous model runs, particularly how the simulated water levels changed over time in response to varying stresses. These hydrographs are presented in Appendix F.

Agreement of simulated water levels with observed water levels can be affected by the following conditions:

1. MODFLOW simulates well withdrawals from a cell as a single stress located at the node, or center of the cell. In reality, the area represented by a cell may contain many pumping wells. This situation is common throughout the Hendry County model, due to the size of the cells. Combining all the well withdrawals located within a cell and locating the total withdrawal at the center of the cell is not a completely accurate simulation. In addition, the computed head in a cell represents the average of all heads within the cell. In reality, the head will vary throughout the area represented by a cell in response to the actual stresses. In areas of higher ground water gradients, such as those caused by intensive well withdrawals, water levels throughout a cell can vary significantly from the average. If a cell contains both a monitor well and intensive well withdrawals, or a monitor well is located in a cell adjacent to a cell or cells containing intensive well withdrawals, or if a monitor well is not located near the center of the corresponding cell, the agreement of simulated water levels with observed levels can be significantly affected. This situation is referred to as cell-wide averaging, and occurs at several locations in the Hendry County model.
2. The model was run using one month stress periods, and the simulated heads represent end of the month levels. Observed water levels were taken on various days throughout a given month. The discrepancy caused by this situation can be minimized by averaging the difference between observed and simulated heads over the calibration period when comparing the results.
3. Most of the rainfall in the study area occurs as intense short term events over relatively small areas. Ground water levels respond almost immediately to these events. Most of the observation wells are located a significant distance from a rainfall station, so an intense rainfall event causing water level fluctuations at a given well may not be represented in the rainfall data. In addition, the short duration of these storms is masked by using monthly stress periods. The discrepancy caused by these phenomena can also be minimized by averaging the difference between observed and simulated heads over the calibration period when comparing the results.
4. Inspection of aerial photographs reveals that Hendry County has a dense network of canals, ranging in width from several feet to 400 feet. Only those canals with reliable data on depths, profiles, configurations, and stage, were







included in the model. Errors can occur if an observation well is located near a canal that is not represented in the model, and water levels in the canal are maintained at a higher or lower levels than the adjacent ground water levels. It is not clear how this situation affects the overall calibration of the model. An in depth study to determine the effects of this situation is beyond the scope of this project. Investigation and analysis of ground water - surface water interactions in Hendry County is recommended.

Initially, the model was run with the input data sets as discussed in the Model Description section of this report. Modifications to these data sets necessary to achieve calibration are discussed in the following sections.

#### **Layer 1 (Water Table Aquifer)**

No changes were made to the hydraulic conductivity or specific yield values during the calibration process. Vertical conductance (Vcont) between layer 1 and layer 2 was varied in order to change the head distributions in both layers. The final distribution of Vcont ranged from 0.0006 day<sup>-1</sup> to 0.059 day<sup>-1</sup>, which falls within the range of values obtained from aquifer test data. Final values of Vcont were multiplied by the thickness of the confining zone to ensure that the corresponding values of vertical hydraulic conductivity remained reasonable. The final Vcont array used in the calibration of the model is presented in Appendix A.

Figure 17 illustrates the agreement between simulated heads in layer 1 and observed water levels in observation wells in the water table aquifer. Of the 36 observation wells in this layer, 19 did not fall within the specified tolerance range ( $\pm 2$  feet). Of these, nine were only slightly outside the range (errors less than 10 per cent of the total range of tolerance), which was considered to be an insignificant error. Of the remaining ten wells that did not fall within the tolerance range, five wells are influenced by surface water bodies (HE-339, HE-857, HE-858, HE-862, and C-1071), three wells are influenced by intense well withdrawals (C-462, C-532, and C-1078), and one well is influenced by its proximity to specified head cells on two sides (C-986). The remaining well that did not fall within the specified tolerance range (HE-856) has an average difference between observed and simulated water levels of 3.1 feet.

#### **Layer 2 (Lower Tamiami Aquifer)**

No changes were made to the transmissivity or storage values during the calibration process. The vertical conductance between layer 2 and layer 3 was altered to change the head distribution in both layers. Changes were made in the same way as they were when the Vcont values between layers 1 and 2 were changed. Final values of Vcont ranged from 0.0000044 day<sup>-1</sup> to 0.0016 day<sup>-1</sup>, which are within the range of reported values obtained from aquifer tests. The final Vcont array used in the calibration of the model is presented in Appendix A.

Agreement between simulated heads in layer 2 and observed water levels in monitor wells in the lower Tamiami aquifer are shown in Figure 18. Of the 14 observation wells in this aquifer, two wells did not fall within the specified tolerance range ( $\pm 3$  feet). Well HE-1075 is located in the Everglades Agricultural Area, and is influenced by canals not simulated in the model. Well HE-861 is surrounded by fields that, based on inspection of aerial photographs, appear to have a surface water management system. These fields probably undergo both flood irrigation from surface water sources, and drainage. It is possible that the water management



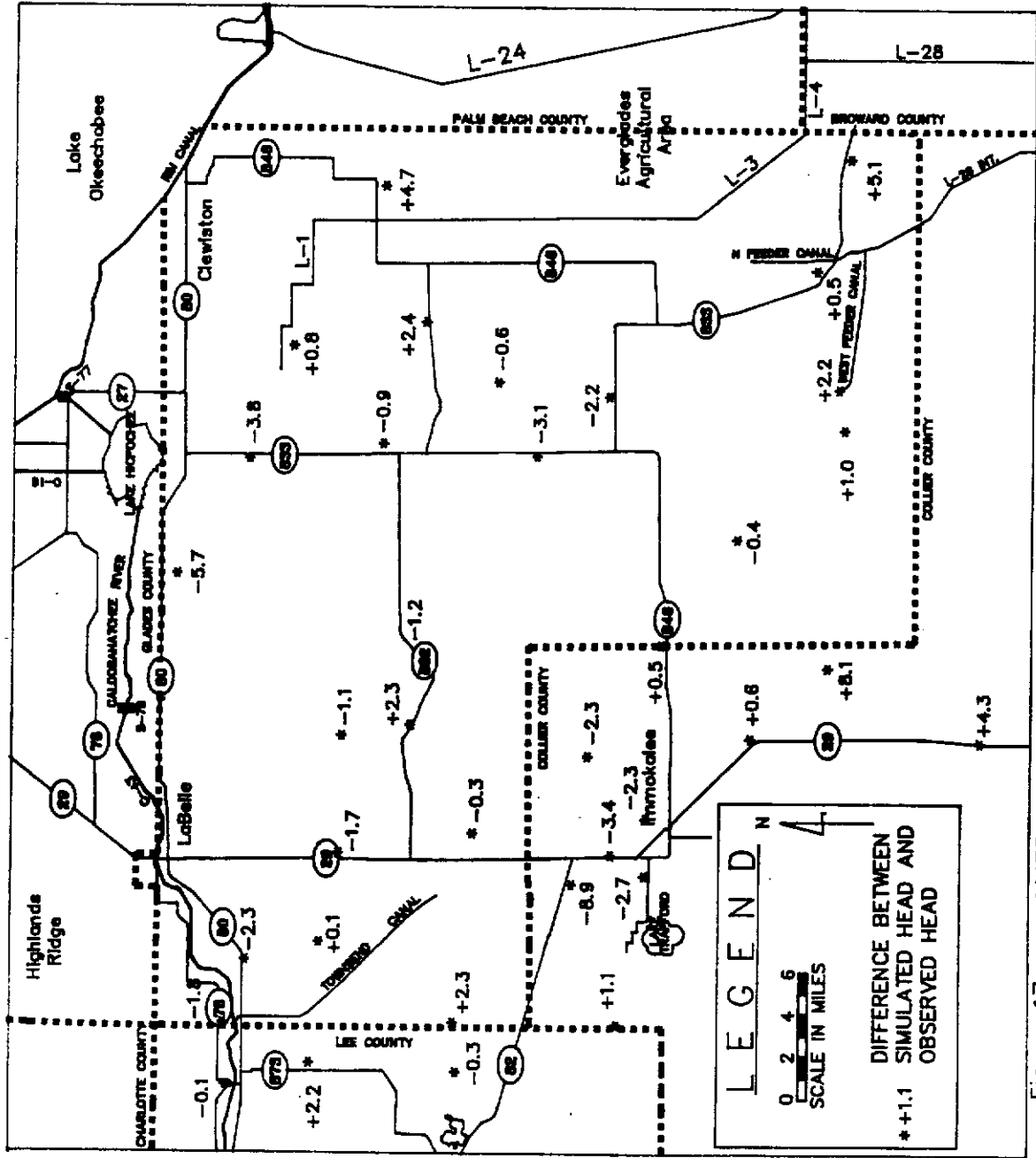


Figure 17. AVERAGE DIFFERENCE BETWEEN OBSERVED AND SIMULATED WATER LEVELS, LAYER 1 (WATER TABLE AQUIFER)

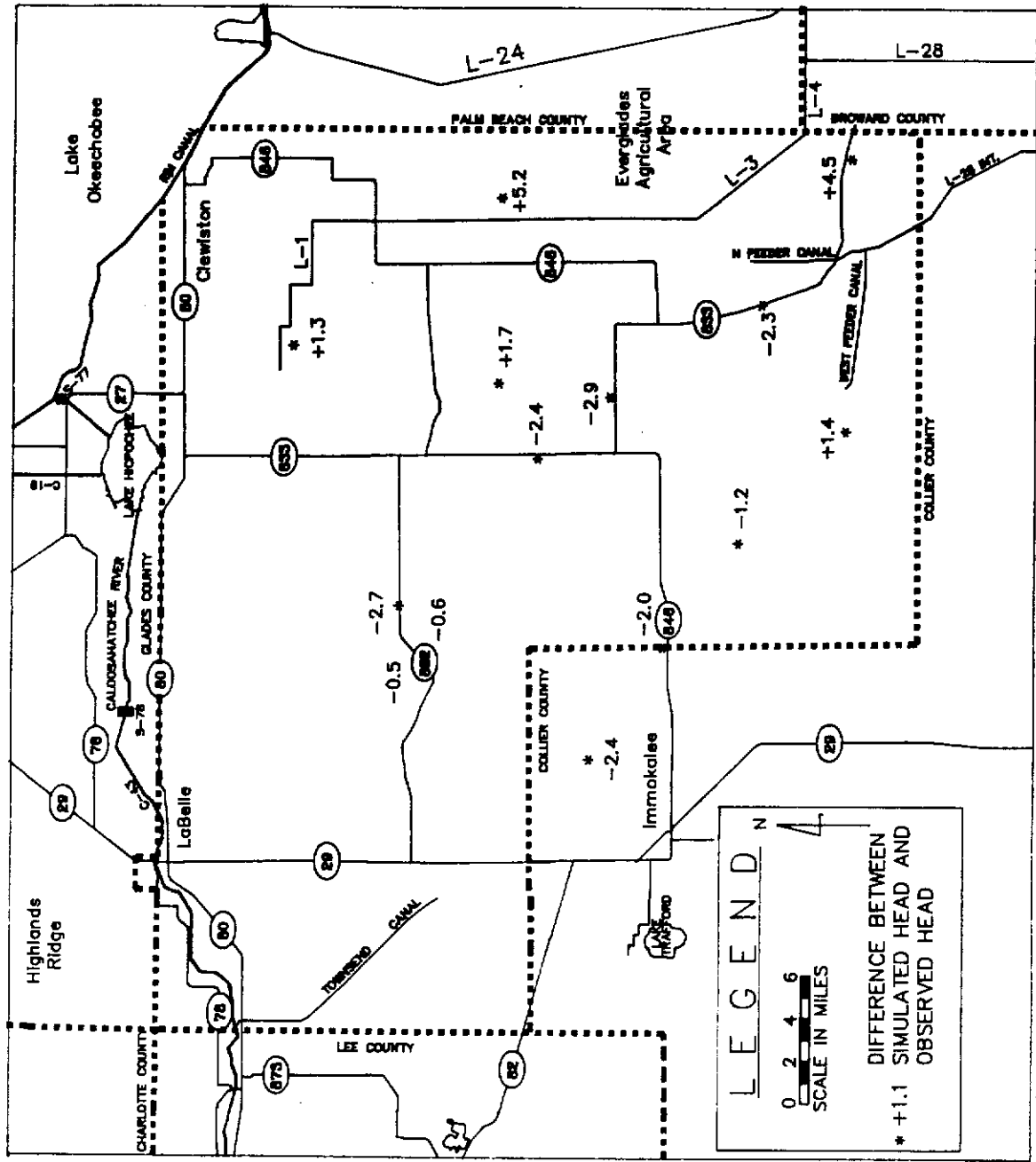


Figure 18. AVERAGE DIFFERENCE BETWEEN OBSERVED AND SIMULATED WATER LEVELS, LAYER 2 (LOWER TAMIAMI AQUIFER)

practices around both of these wells effect the ground water levels, which in turn may influence the rate at which leakage through the Tamiami confining zone takes place. Since surface water management systems were not simulated in the model, this may be a potential source of error.

### **Layer 3 (Sandstone Aquifer)**

No changes were made to the transmissivity or storage values during the calibration process. Changes in the head distribution in this layer during calibration were caused by altering the Vcont array between layers 2 and 3.

Agreement between simulated heads in layer 3 and observed water levels in observation wells in the sandstone aquifer are shown in Figure 19. Of the 20 observation wells in this aquifer, two wells did not fall into the specified tolerance range (+/- 4 feet). Well L-2186 has only nine observed water levels randomly scattered throughout the calibration period; therefore, the observed data was determined to be unreliable. Well L-731 exhibits an extremely wide range of water level fluctuation (approaching 29 feet), and its water levels are significantly lower than several nearby wells. In addition, it is located in an area of intense withdrawals, therefore it was assumed that this well is subject to cell-wide averaging.

## **RESULTS**

### **Transient Calibration**

**Layer 1 (Water Table Aquifer).** Figures 20 and 21 show the simulated head distributions in April 1988 (end of wet season) and October 1988 (end of dry season) in layer 1 (water table aquifer). Generally, the highest water levels occur north of Immokalee, and water flows radially away from this area. The lowest levels occur along the Caloosahatchee River where the ground water discharges into the river, and in the Everglades Agricultural Area in eastern Hendry County. It can be seen that there is little seasonal head fluctuation. Most of this seasonal fluctuation takes place near concentrated withdrawals. The simulated head distributions are consistent with the water levels found in Smith and Adams (1988).

**Layer 2 (Lower Tamiami Aquifer).** Figures 22 and 23 show simulated head distributions in layer 2 (lower Tamiami aquifer) in April and October 1988. Comparison to figures 20 and 21 show the general head distributions, and therefore the regional flow patterns, to be similar to the water table aquifer. However, heads in the lower Tamiami aquifer are slightly lower than those in the water table aquifer, and seasonal fluctuations are more apparent. Larger, more intensive water uses are seen as large cones of depression on these maps. A regional cone of depression caused by concentrated withdrawals for agricultural irrigation occurs in southeastern Hendry County.

**Layer 3 (Sandstone Aquifer).** Figures 24 and 25 show the head distributions in the sandstone aquifer in April and October 1988. Due to its low values of hydraulic conductivity and thin occurrence, the effect of pumpage from the sandstone aquifer produces deep cones of depression of limited areal extent. Seasonal fluctuations are also more apparent, particularly near the withdrawals.

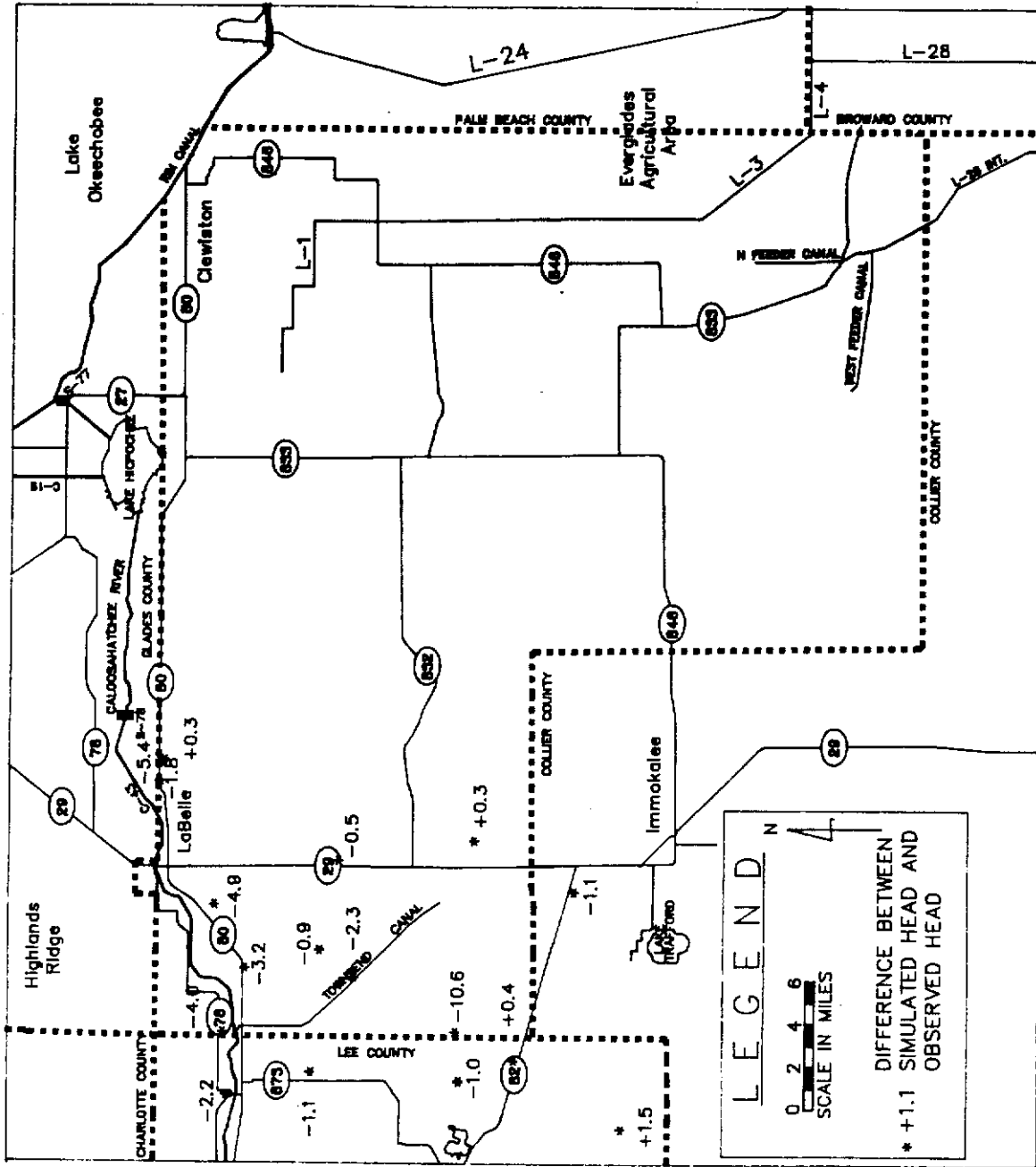


Figure 19. AVERAGE DIFFERENCE BETWEEN OBSERVED AND SIMULATED WATER LEVELS, LAYER 3 (SANDSTONE AQUIFER)

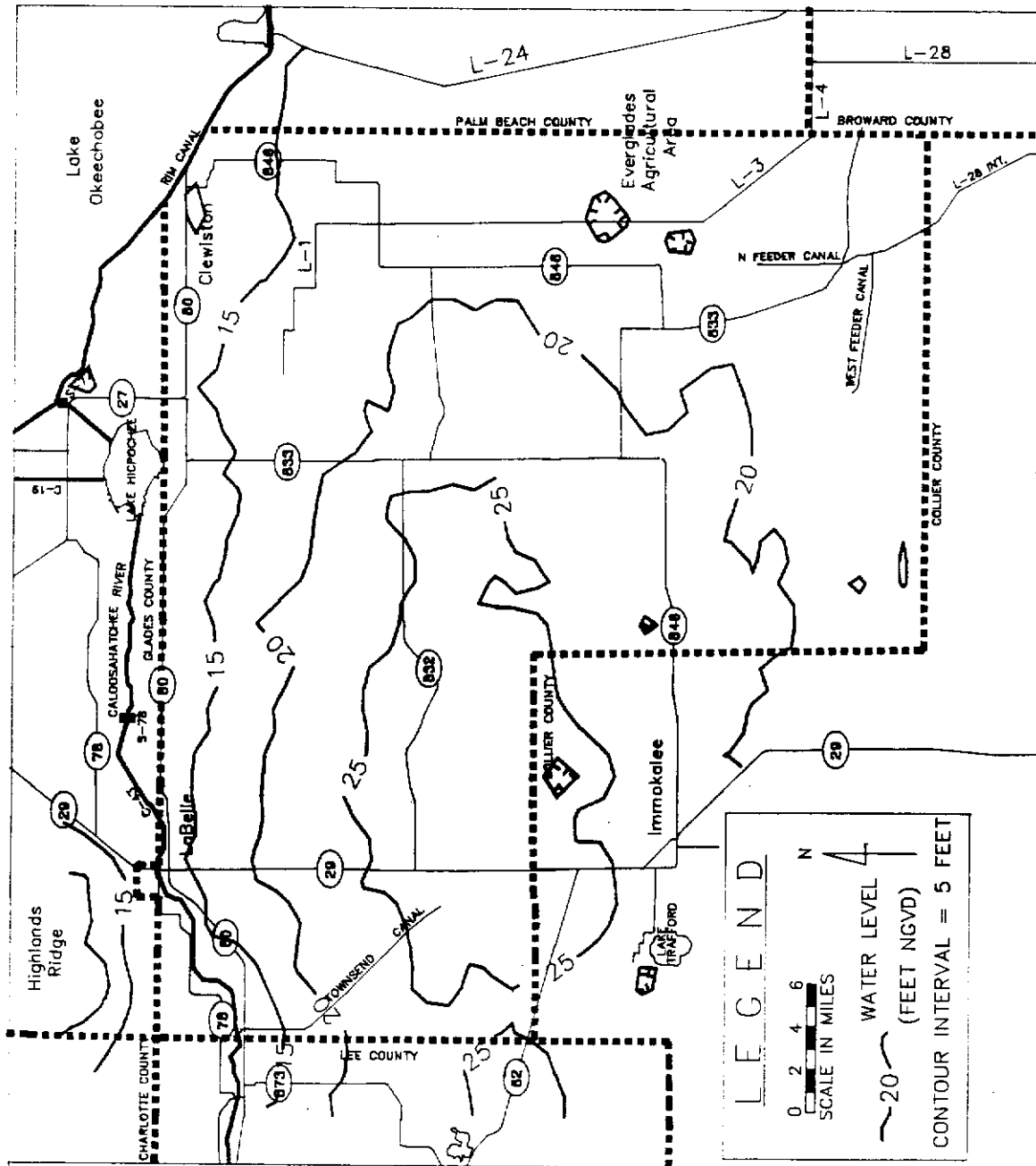


Figure 20. SIMULATED WATER LEVELS, LAYER 1 (WATER TABLE AQUIFER), APRIL 1988

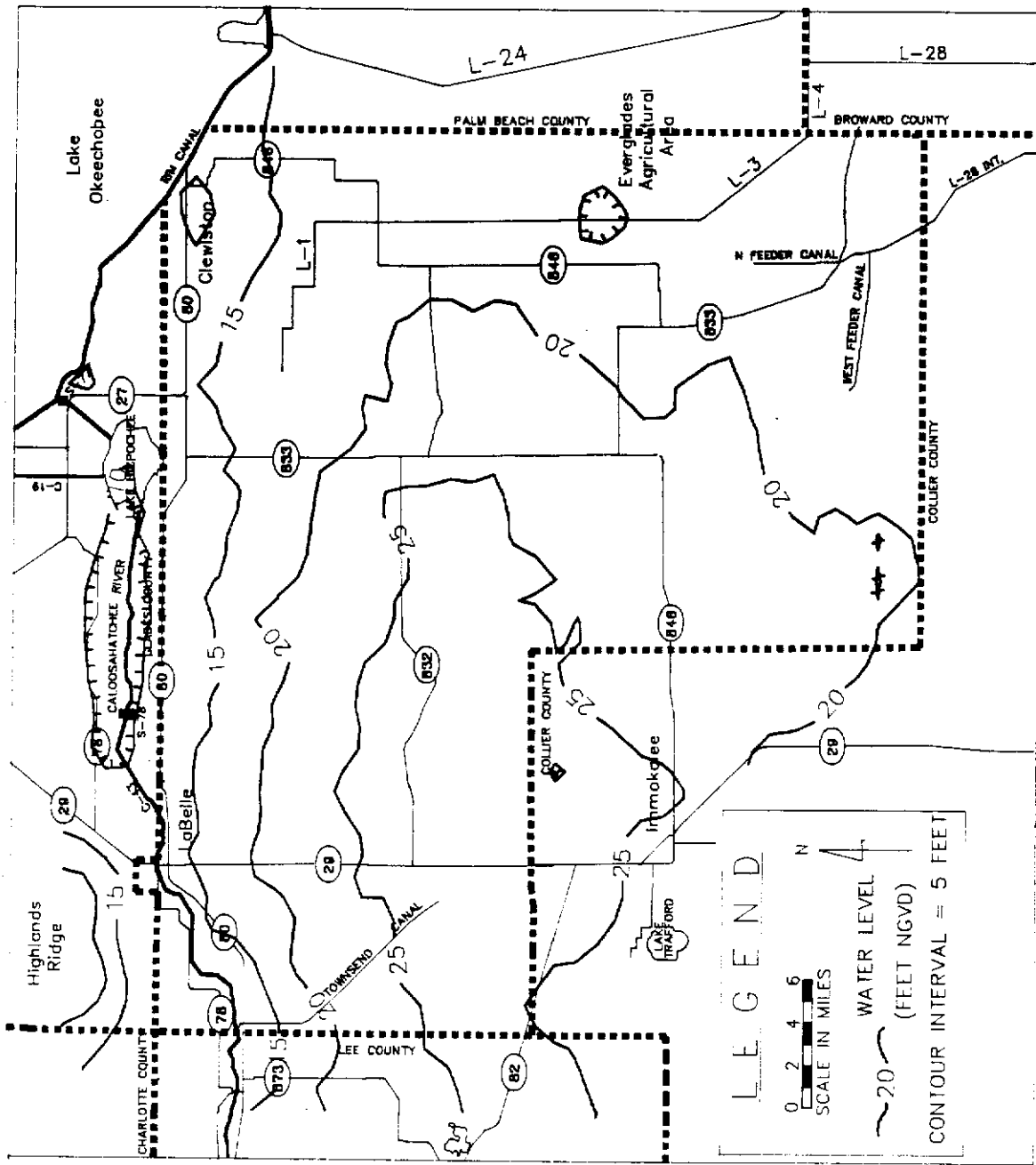


Figure 21. SIMULATED WATER LEVELS, LAYER 1 (WATER TABLE AQUIFER), OCTOBER 1988

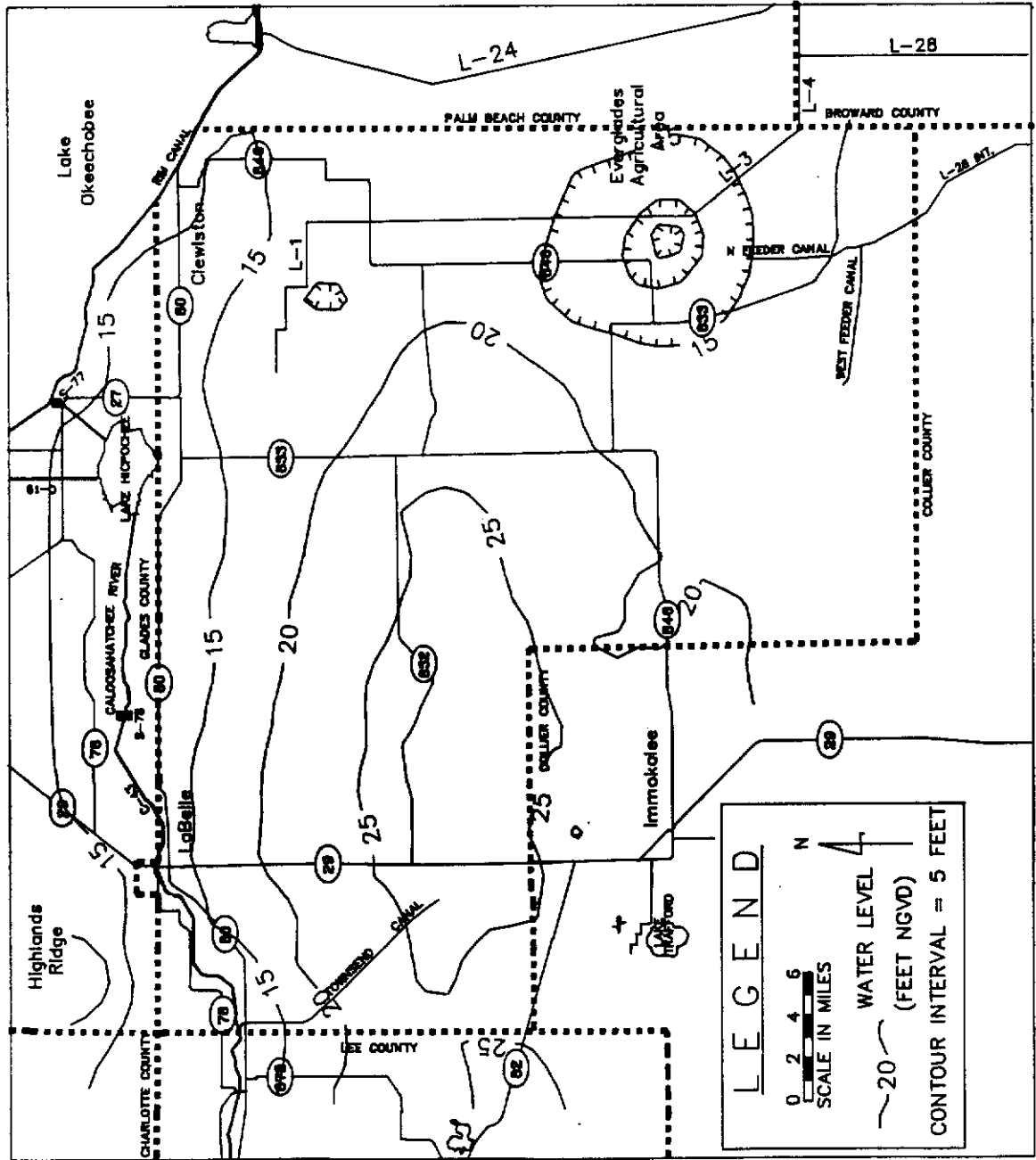


Figure 22. SIMULATED WATER LEVELS, LAYER 2 (LOWER TAMAMI AQUIFER), APRIL 1988

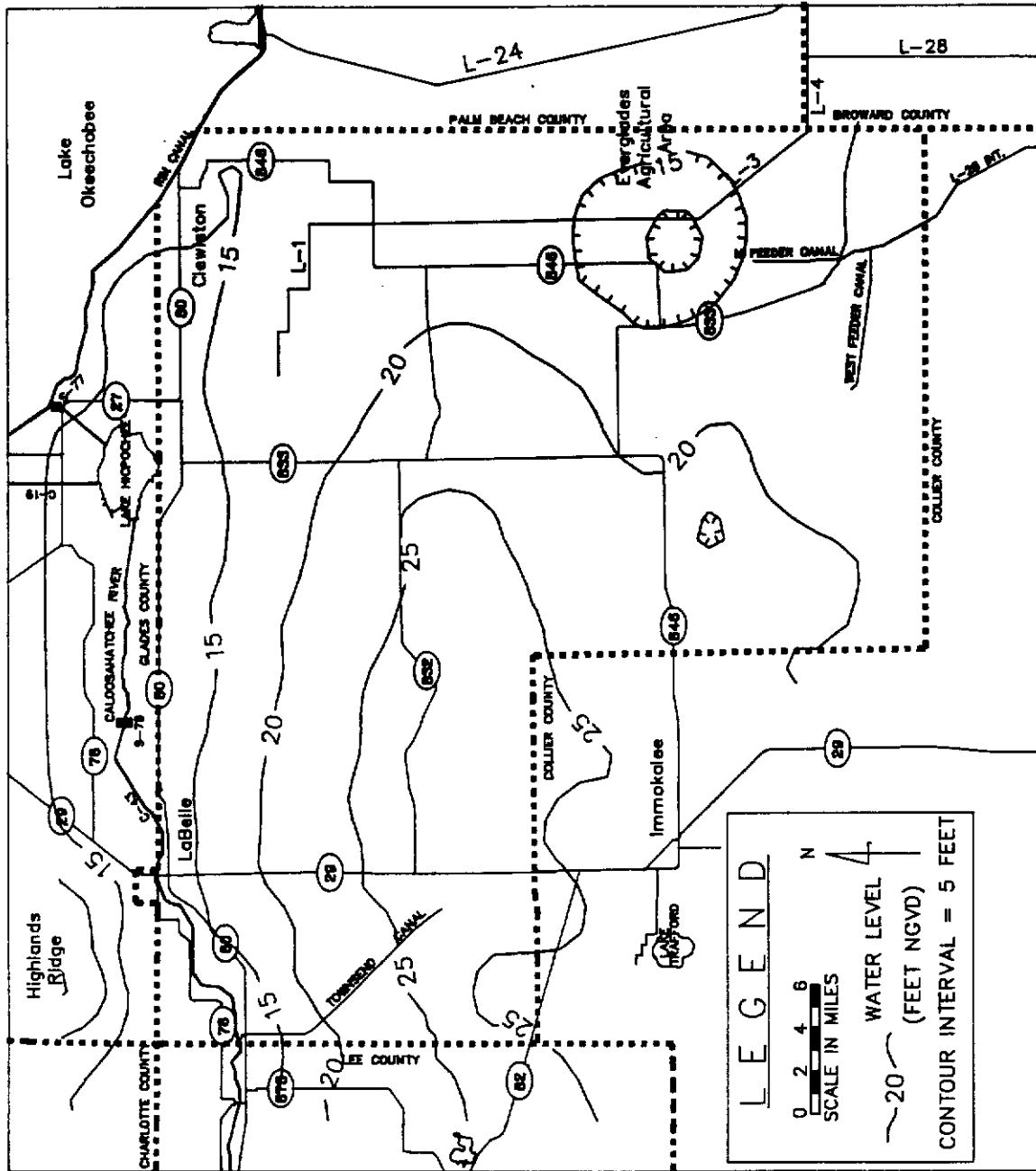


Figure 23. SIMULATED WATER LEVELS, LAYER 2 (LOWER TAMIAMI AQUIFER), OCTOBER 1988



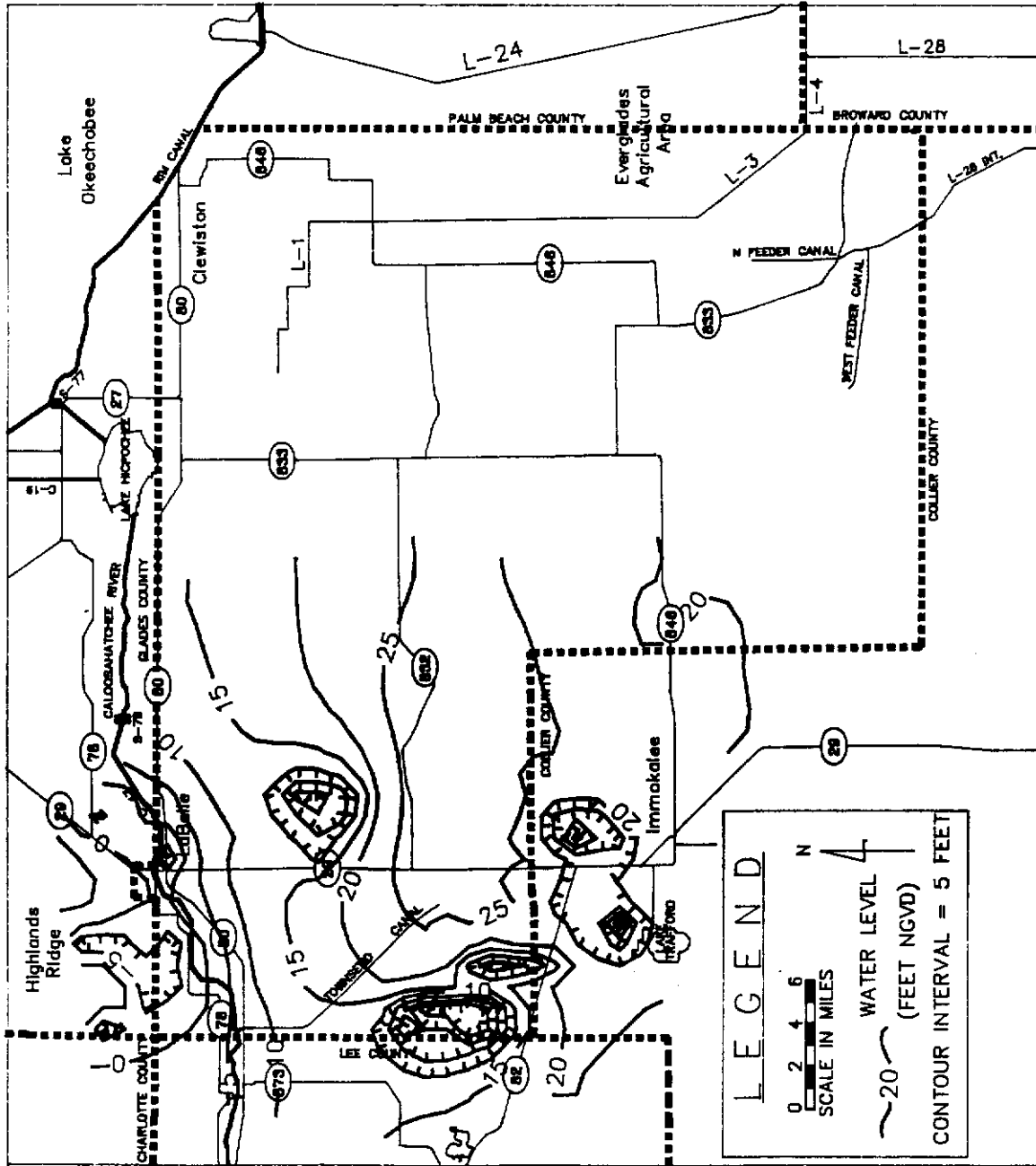


Figure 24. SIMULATED WATER LEVELS, LAYER 3 (SANDSTONE AQUIFER), APRIL 1988

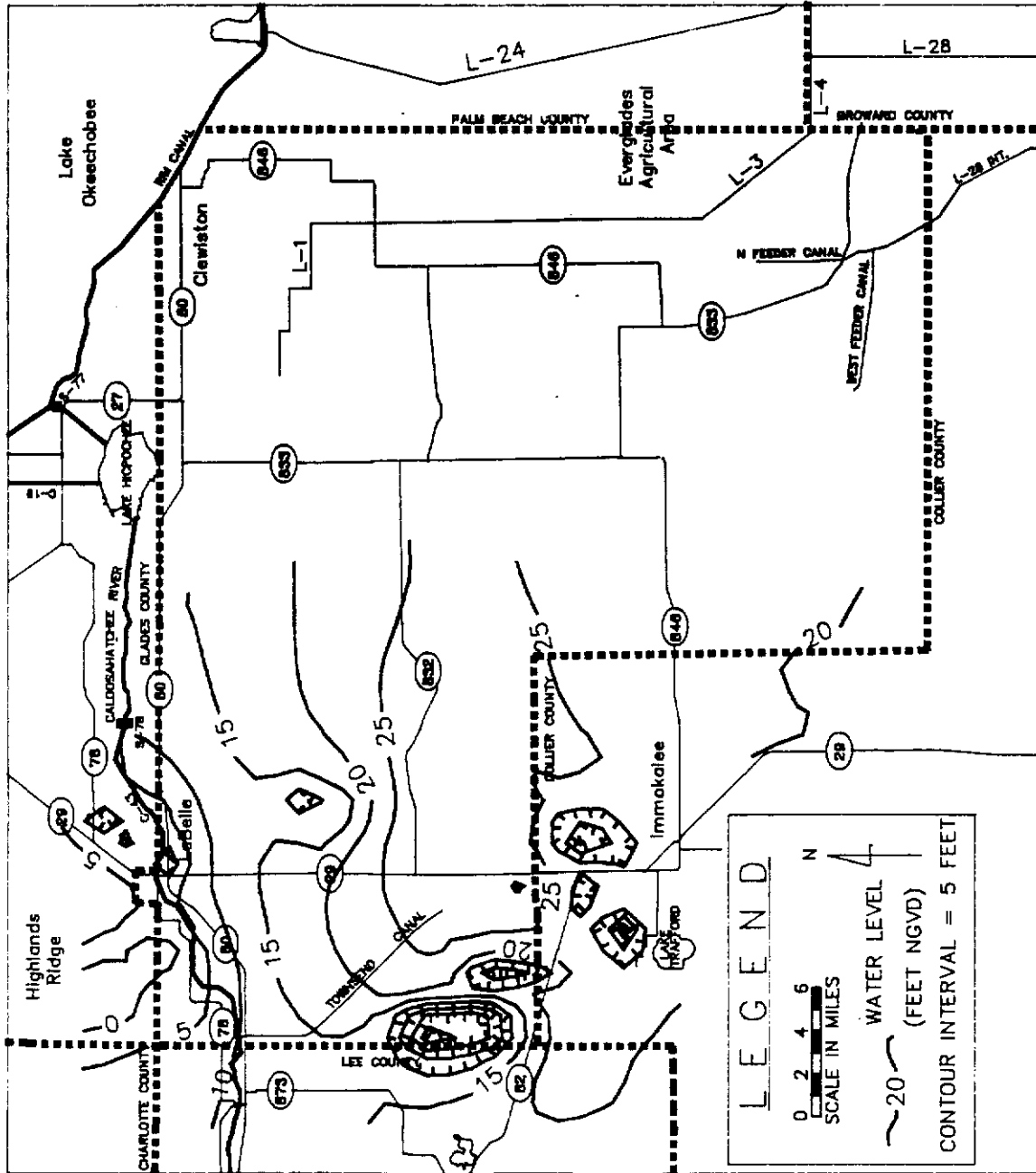


Figure 25. SIMULATED WATER LEVELS, LAYER 3 (SANDSTONE AQUIFER), OCTOBER 1988

## Steady State

As previously stated, a final steady state run was completed using the aquifer parameter data used in the final transient calibration. Recharge, well withdrawals, evapotranspiration, and surface water stage levels were averaged over the three year calibration period. Data from this steady state run was used to provide information to describe the ground water flow regimes in Hendry County and to act as the base case for most of the sensitivity analyses and predictive scenarios.

**Layer 1 (Water Table Aquifer).** Figure 26 shows the direction and magnitude of simulated horizontal flow in the water table aquifer. Each arrow represents the flow from an individual cell. The majority of the larger flow vectors are associated with intensive ground water use or interactions with surface water bodies.

An analysis of the volumetric budget for layer 1 (water table aquifer) is shown in Figure 27. The majority of flow into this layer (96.2%) is derived from recharge (rainfall), 3.7% is upward leakage from layer 2, and 0.1% is from the specified head cells. Of the total flow out of layer 1, 87.1% is evapotranspiration, 7.0% is leakage to layer 2 (lower Tamiami aquifer), 1.5% is well pumpage, 0.7% is river leakage, and the remaining 3.7% is flow to the specified head cells, representing flow out of the modeled area, mainly to Lee and Collier Counties.

**Layer 2 (Lower Tamiami Aquifer).** Figure 28 shows the magnitude and direction of simulated horizontal flow in layer 2. The regional cone of depression in southeastern Hendry County is quite apparent as it influences regional flow patterns at distances up to 11 miles. This area can also be seen in Figure 29, which is a representation of the simulated vertical flow between the lower Tamiami aquifer from the overlying water table aquifer. The cone of depression in the lower Tamiami aquifer caused by the heavy pumpage in southeastern Hendry County induces a greater amount of leakage into the aquifer. Areas of high leakage in the western portion of the study area are also a result of withdrawals from the lower Tamiami aquifer, or are caused by withdrawals from the underlying sandstone aquifer.

Figure 30 illustrates the volumetric budget for layer 2 (lower Tamiami aquifer). Approximately 68.2% of the total inflow to this layer is recharge from the water table aquifer, 31.5% is from the specified head cells, and 0.3% is from upward leakage from the sandstone aquifer. The flow from the specified head cells represents flow into the modeled area from Glades County, and from Collier County south of Immokalee. Of the total outflows, 35.8% is upward leakage to the water table aquifer, 31.8% is to wells, 19.8% is downward leakage to the sandstone aquifer, and 12.6% is to the specified head cells. The upward leakage occurs mainly in the areas of western Hendry County where the Tamiami confining zone exhibits high values of vertical hydraulic conductivity. In these areas, the two model layers tend to act as if simulating a single, unconfined aquifer. Therefore, water is exchanged freely between the two layers. Flow to the specified head cells represents horizontal flow out of the modeled area, mainly to Lee and Collier counties.

**Layer 3 (Sandstone Aquifer)** Figure 31 shows the magnitude and direction of simulated horizontal flow in the sandstone aquifer. It can be seen that the effect of large withdrawals generally extend over a distance of two to three miles, as opposed to the eleven mile distance seen in the lower Tamiami aquifer. Figure 32 illustrates the simulated leakage into the sandstone aquifer from the overlying aquifers. It is clear that most of the large values of leakage correspond to areas of heavy

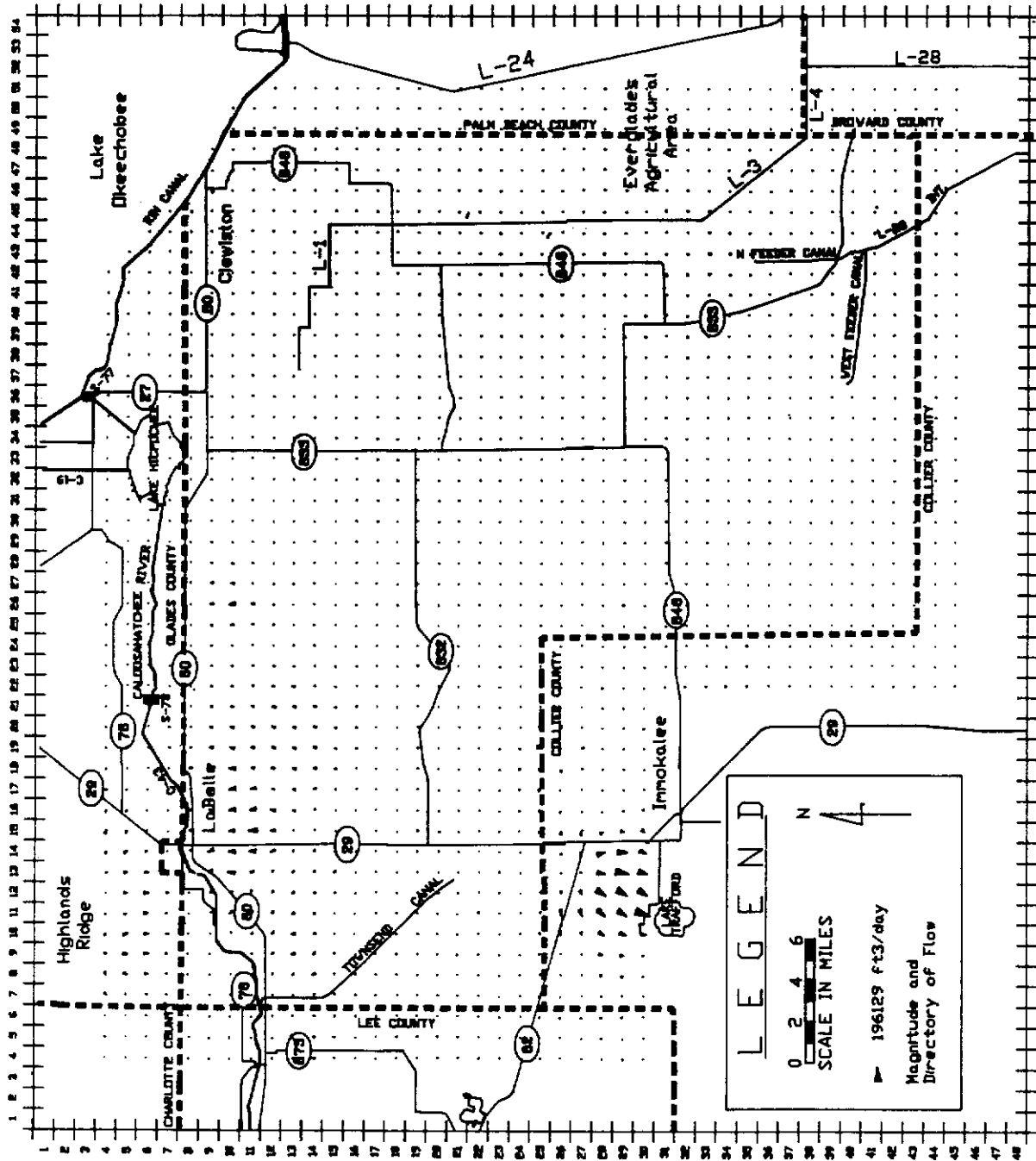


Figure 26. SIMULATED STEADY STATE HORIZONTAL FLOW VECTORS, LAYER 1 (WATER TABLE AQUIFER)

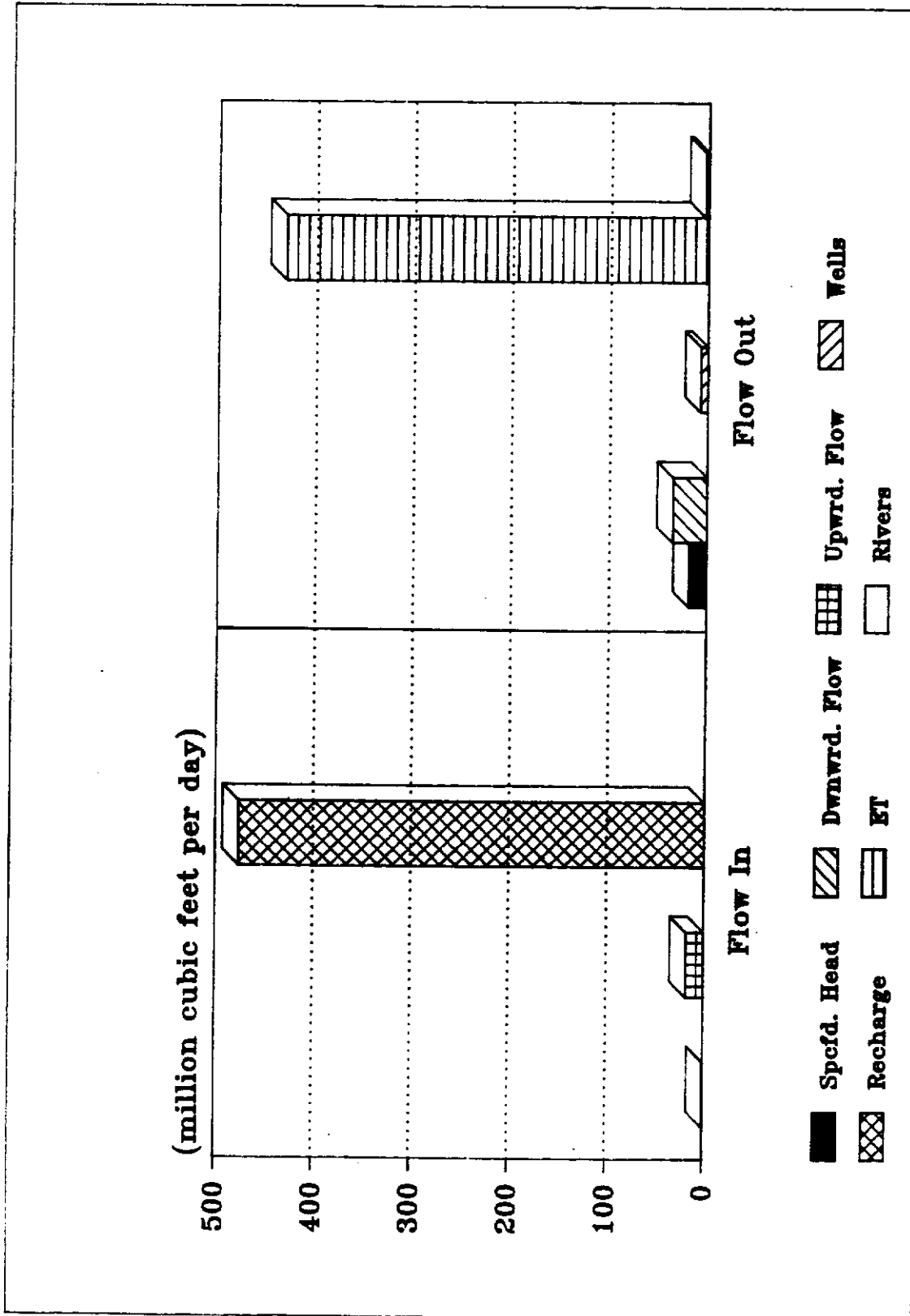


Figure 27. VOLUMETRIC BUDGET, LAYER 1 (WATER TABLE AQUIFER), STEADY STATE CONDITIONS

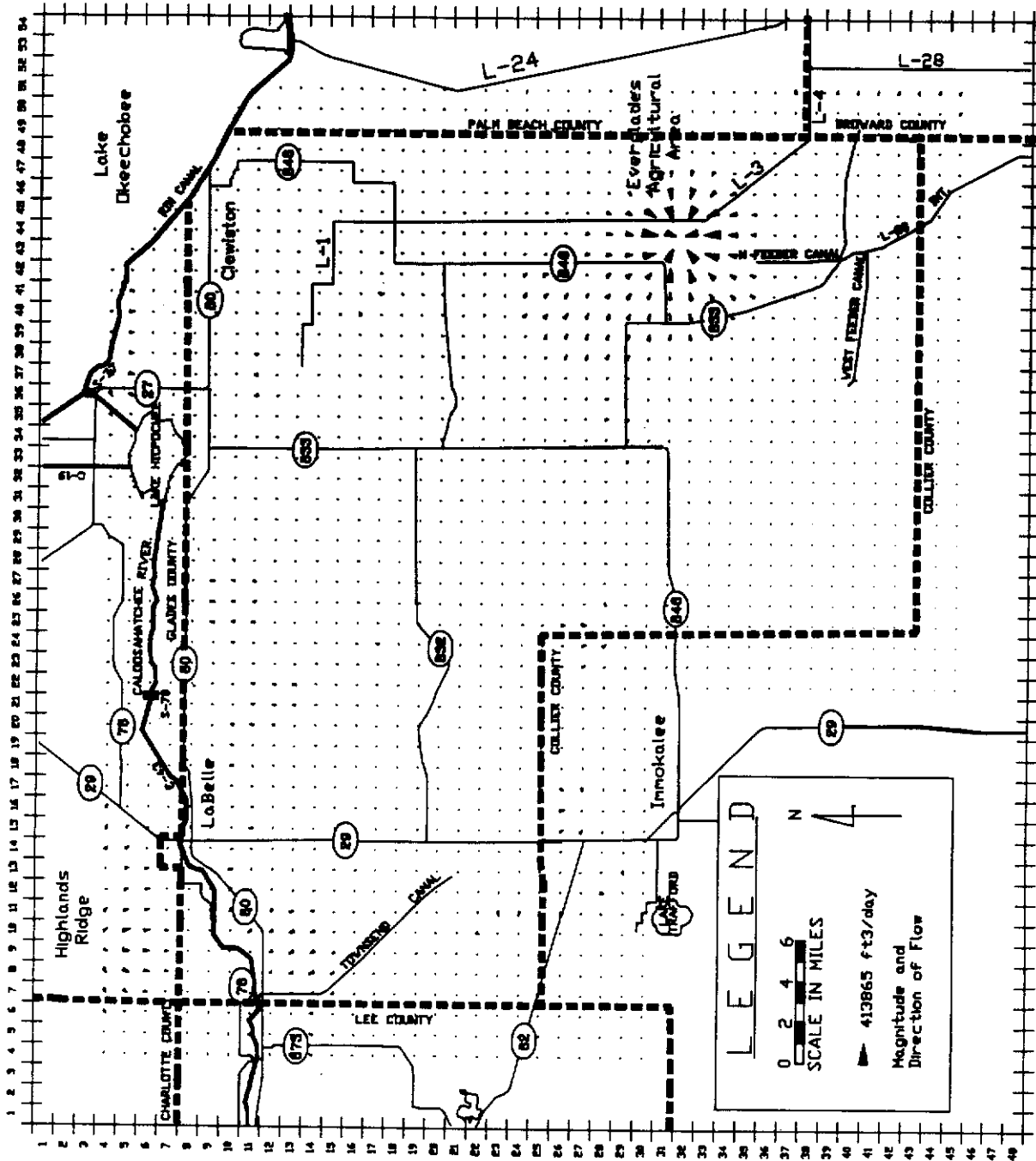


Figure 28. SIMULATED STEADY STATE HORIZONTAL FLOW VECTORS, LAYER 2 (LOWER TAMIAMI AQUIFER)

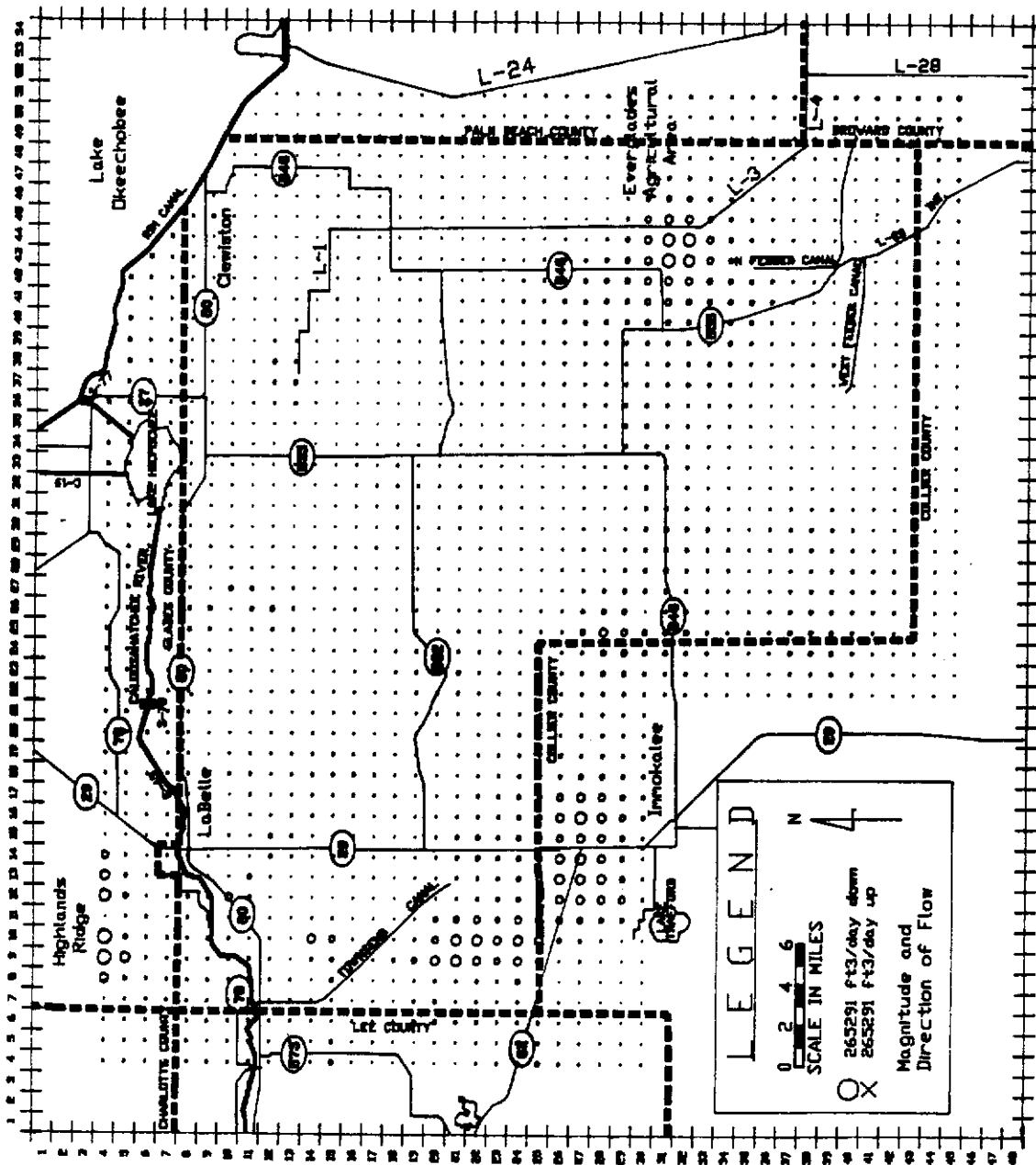


Figure 29. SIMULATED STEADY STATE VERTICAL FLOW BETWEEN LAYER 1 (WATER TABLE AQUIFER) AND LAYER 2 (LOWER TAMIAMI AQUIFER)

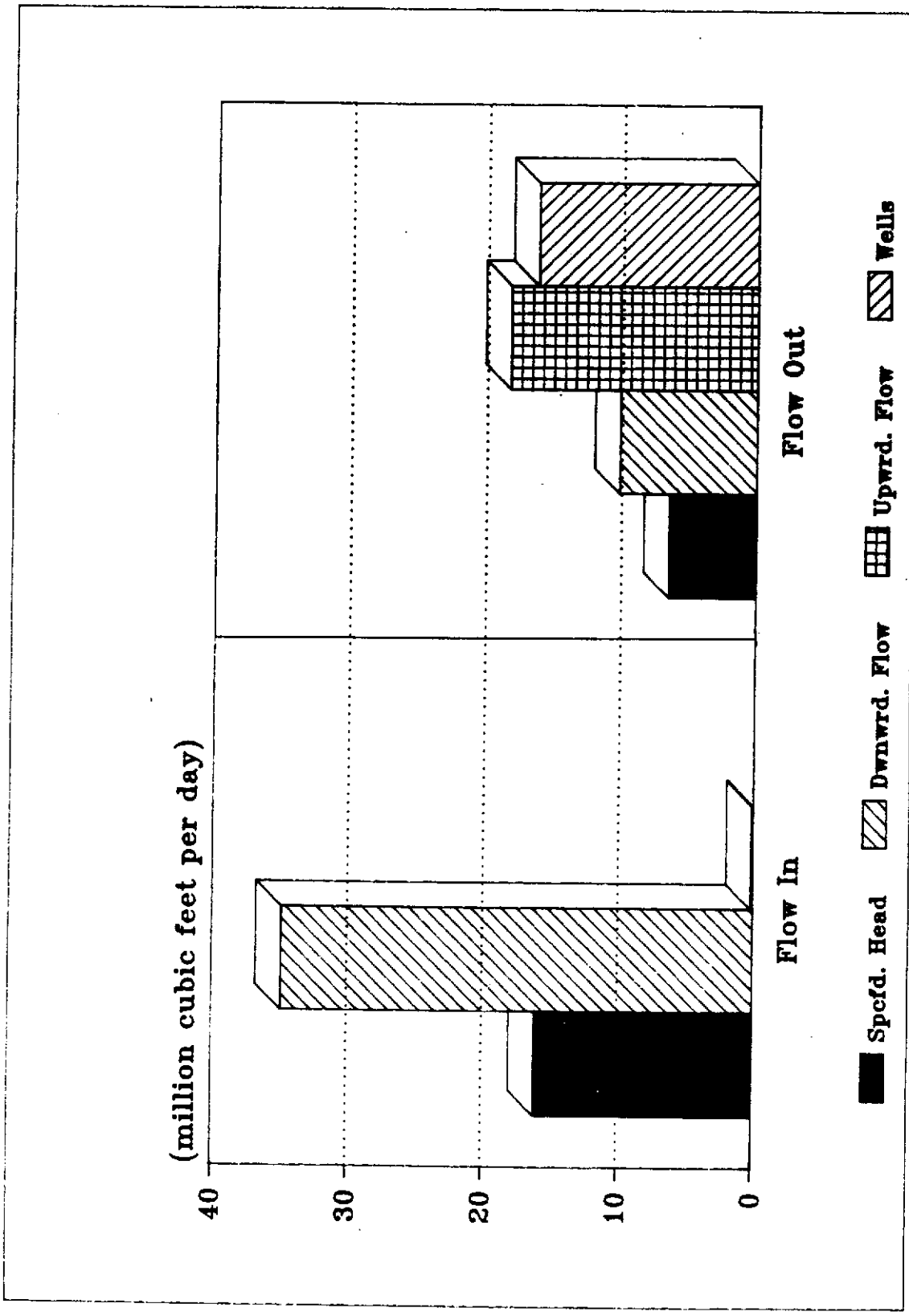


Figure 30. VOLUMETRIC BUDGET, LAYER 2 (LOWER TAMIAMI AQUIFER), STEADY STATE CONDITIONS



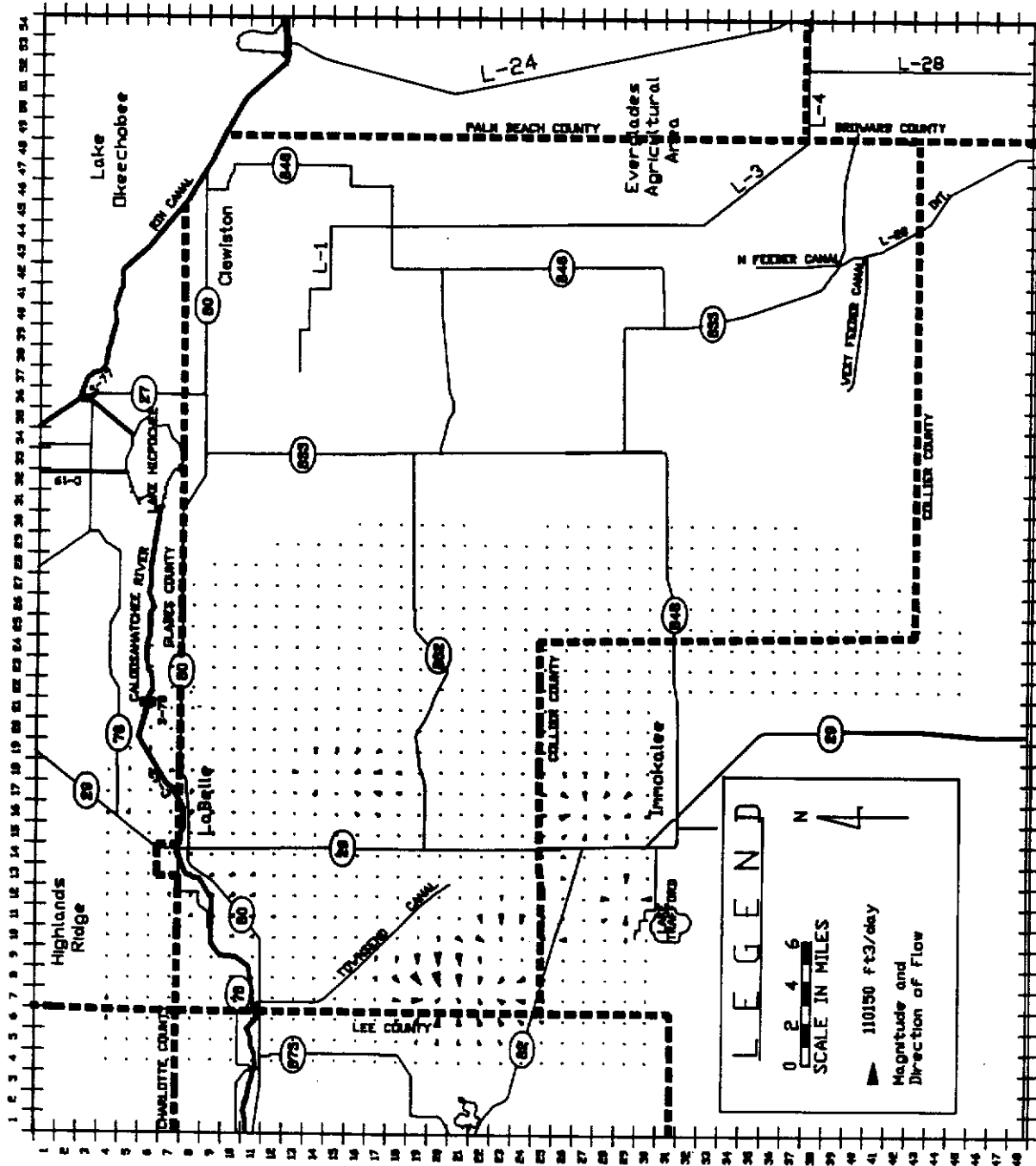


Figure 31. SIMULATED STEADY STATE HORIZONTAL FLOW VECTORS, LAYER 3 (SANDSTONE AQUIFER)

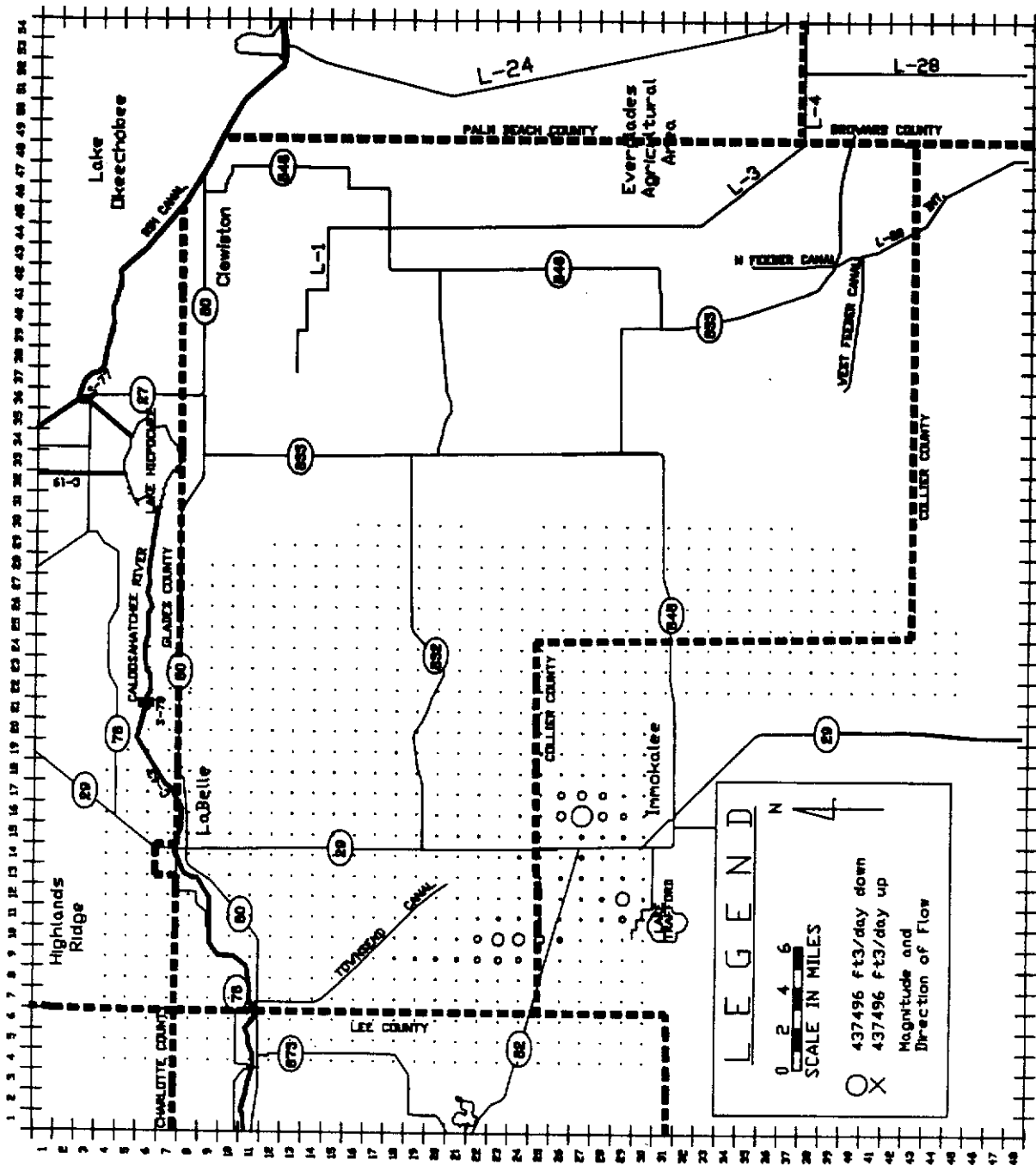


Figure 32. SIMULATED STEADY STATE VERTICAL FLOW BETWEEN LAYER 2 (LOWER TAMIAMI AQUIFER) AND LAYER 3 (SANDSTONE AQUIFER)

withdrawal from the sandstone aquifer. However, recharge to the sandstone aquifer from overlying layers occur throughout its extent.

The volumetric budget for layer 3 (sandstone aquifer) is illustrated in Figure 33. Almost all of the inflow to the sandstone aquifer (98.0%) is recharge from above. The remaining 2.0% comes from the specified head cells. Of the total outflow, 79.1% is to wells, 19.7% is to specified head cells, and 1.2% is upward leakage to the lower Tamiami aquifer. The outflow to the specified head cells represents horizontal flow out of the modeled area, mainly to Lee and Collier counties.

Figure 34 is a combined volumetric budget for all of the modeled area. Total inflow consists of 96.6% recharge (rainfall), and 3.4% flow from specified head boundaries (flow from outside the modeled area). Total outflow consists of 87.5% evapotranspiration, 6.4% to wells, 5.4% to specified head boundaries (flow out of the modeled area), and 0.7% discharge to surface water bodies.

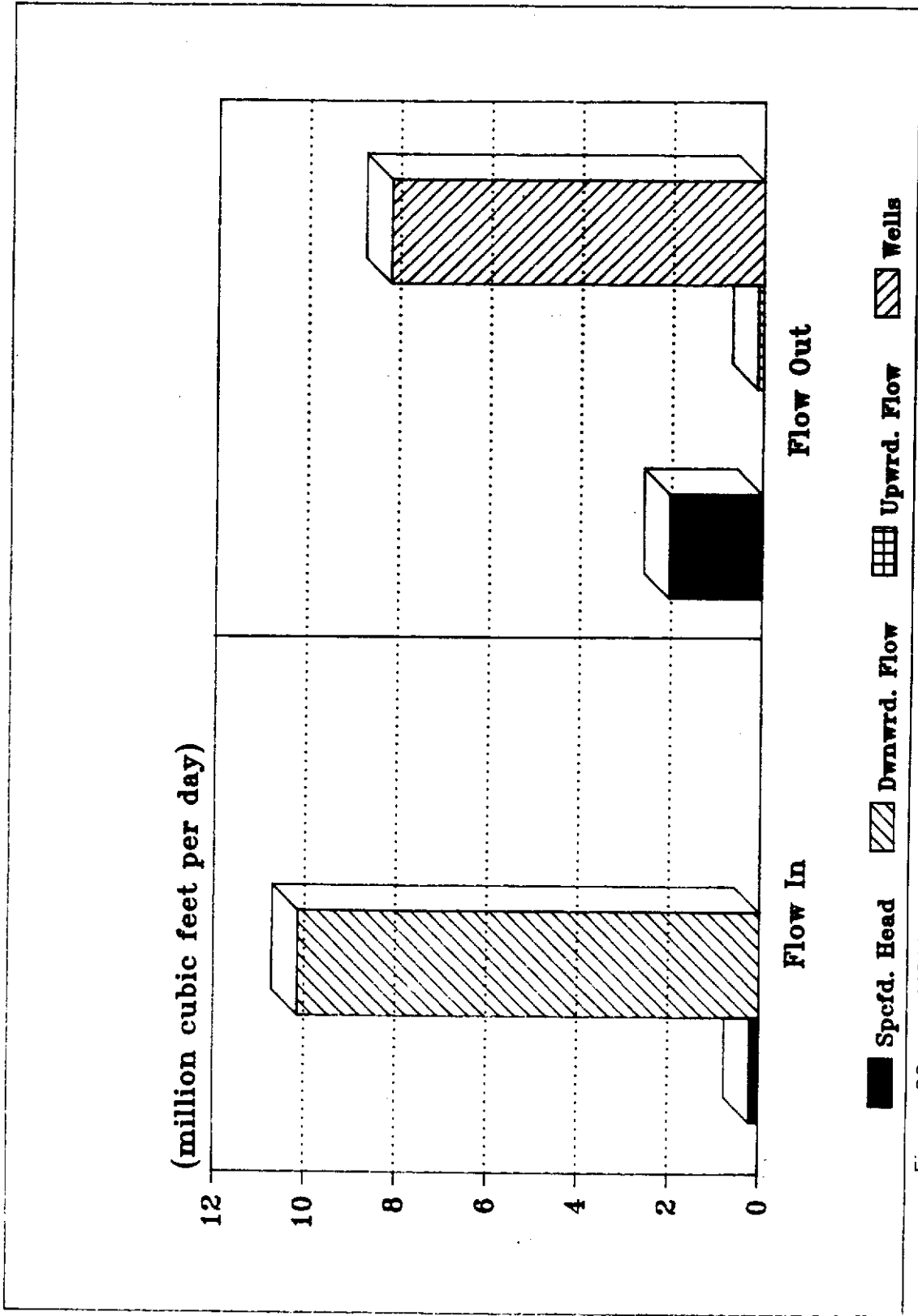


Figure 33. VOLUMETRIC BUDGET, LAYER 3 (SANDSTONE AQUIFER), STEADY STATE CONDITIONS

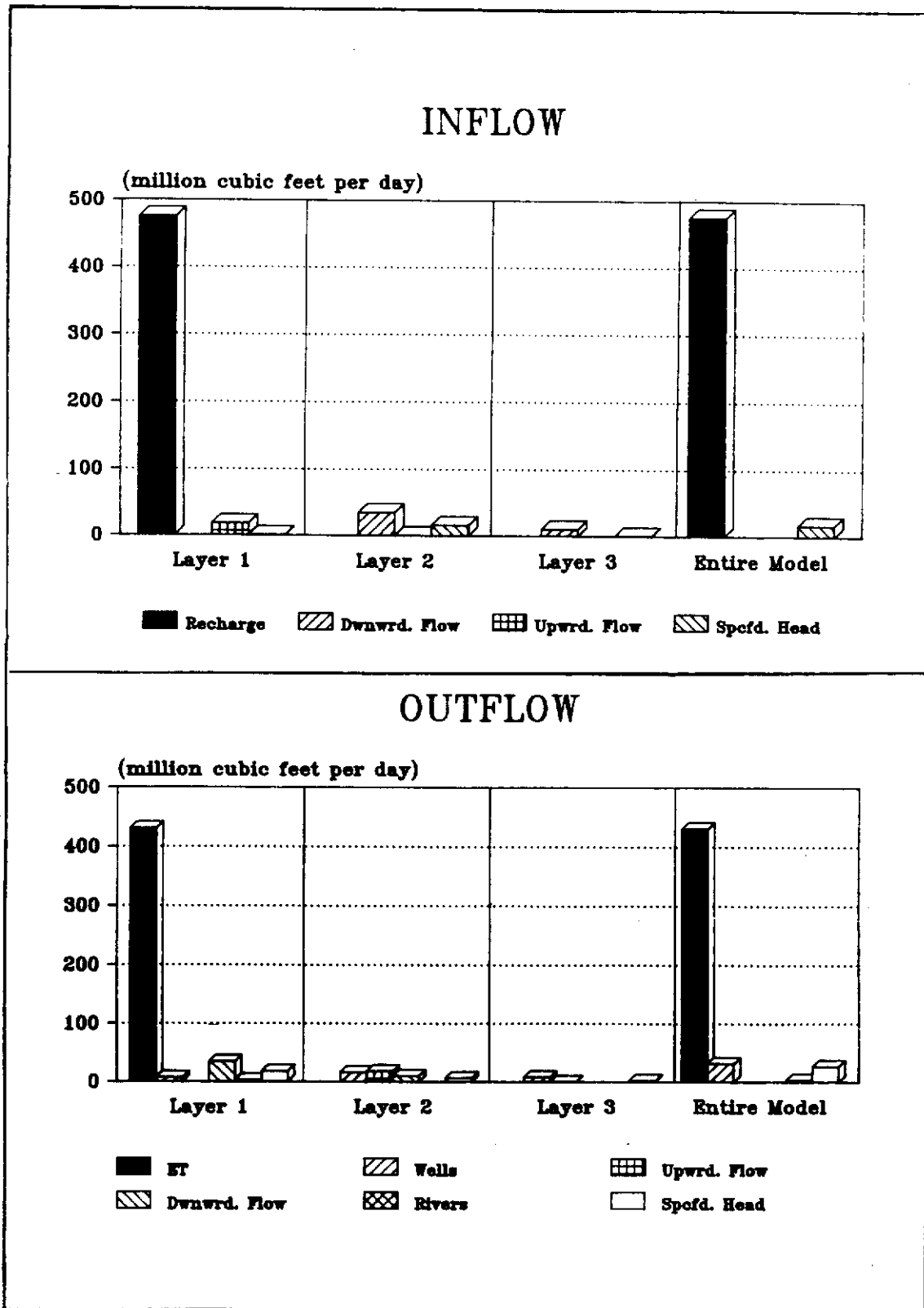


Figure 34. VOLUMETRIC BUDGET FOR ENTIRE MODEL, STEADY STATE CONDITIONS

## SENSITIVITY TESTING

The model was tested to check its sensitivity to changes in the boundary conditions, aquifer parameters, and stresses. Boundary conditions were tested two ways: by moving the boundaries farther away from the center of the model, and by substituting specified flux boundaries for the specified head boundaries. The specified head cells were moved out from the center of the model a distance of approximately four miles by expanding the grid spacing of rows 1, 2, 3, 46, 48, and 48; and columns 1, 2, 3, 52, 53, and 54. The model was run using steady state conditions and this grid configuration, and the resulting heads at the Hendry County boundary were compared to the steady state calibration run. No significant differences in heads were found. Specified flux boundaries were simulated using the following procedure. First, all specified head cells were converted to active cells. Then, the flow was calculated between each of these cells and the cell immediately adjacent towards the center of the model, using the starting heads (December 1985) and the calibrated aquifer parameters. These fluxes were assigned to the proper cells and added to the well file. The model was run for steady state conditions, and both heads and volumetric budgets were compared. No significant difference in heads in Hendry County were found. Significant head differences resulting from the two types of boundary conditions are limited to a range of two cells from the location of the specified head boundary. Analysis of the volumetric budget showed that some overestimation of flow into the model resulted from the use of specified head boundaries, however the overall effects on the model are minimal. In the types of uses planned for this model, the specified head boundaries are not expected to be a problem. However, in those cases where it appears that a specified flux boundary will give a more conservative solution, it is recommended that specified flux boundaries be substituted.

Aquifer parameters were tested by altering the following parameters: Layer 1 conductivity and river bed conductance,  $V_{cont}$  between layers 1 and 2, layer 2 transmissivity,  $V_{cont}$  between layers 2 and 3, and layer 3 transmissivity. The sensitivity of the model to these parameters was tested by doubling, then halving each parameter, one at a time. It was assumed that testing this range of values would bracket the range of uncertainty for each parameter. This may not be true for the  $V_{cont}$  data, but changes in the  $V_{cont}$  values greater than the stated range resulted in the model becoming unstable. Head changes in each layer were examined to determine the relative sensitivity. The results of these tests are presented in Tables 3, 4, and 5. The model was tested for its sensitivity to the following stresses: recharge, maximum evapotranspiration rate, and evapotranspiration extinction depth. Recharge and ET rates were increased and decreased by 10%, and the ET extinction depth was raised and lowered by one foot. It was assumed that testing this range of values for the various stresses would bracket the range of uncertainty. Results of these sensitivity tests are presented in Table 6.

The strongly implicit procedure (SIP) was the solution method used in the calibration process. Overall, it resulted in a stable solution in an average of 14 iterations. However, when severe drought scenarios were tested, the model became unstable and would not converge. Therefore, the slice-successive over relaxation (SSOR) method was tested. Using the calibrated data, SSOR would reach a solution in 31 iterations. The maximum head difference between solutions generated by the two methods was 0.01 feet, which was considered insignificant. SSOR provided a stable solution for the drought scenarios.

TABLE 3  
 SENSITIVITY RESPONSES TO CHANGES IN LAYER 1  
 (Head Changes in Feet)

	MAXIMUM HEAD INCREASE	MINIMUM HEAD INCREASE	AVERAGE HEAD CHANGE	STD. DEV.
<u>Change in Layer 1</u>				
Conductivity Doubled	.99	-1.58	-.08	.26
Conductivity Halved	1.22	-.91	-.06	.18
Vcont Doubled	.65	-.66	.005	.10
Vcont Halved	.66	-.84	.007	.12
Riv. Cond. Doubled	.33	-.19	-.0007	.04
Riv. Cond. Halved	.01	-.69	-.01	.05
<u>Change in Underlying Layer 2</u>				
Conductivity Doubled	.98	-1.47	-.05	.19
Conductivity Halved	1.12	-.45	.04	.12
Vcont Doubled	1.92	-.73	.16	.30
Vcont Halved	-2.63	-.59	-.29	.49
Riv. Cond. Doubled	.23	-.10	-.001	.03
Riv. Cond. Halved	.01	-.69	-.01	.04
<u>Change in Underlying Layer 3</u>				
Conductivity Doubled	.20	-.48	-.02	.07
Conductivity Halved	.38	-.09	.01	.04
Vcont Doubled	1.12	-.49	.05	.15
Vcont Halved	.32	1.74	-.10	.26
Riv. Cond. Doubled	.08	-.06	-.002	.009
Riv. Cond. Halved	.03	-.07	.001	.006

TABLE 4  
 SENSITIVITY RESPONSES TO CHANGES IN LAYER 2  
 (Head Changes in Feet)

	MAXIMUM HEAD INCREASE	MINIMUM HEAD INCREASE	AVERAGE HEAD CHANGE	STD. DEV.
<u>Change in Layer 2</u>				
Transmissivity Doubled	3.74	-1.13	.14	.70
Transmissivity Halved	1.49	-5.40	-.06	.51
Vcont Doubled	.12	-.40	.005	.03
Vcont Halved	.50	-.18	.006	.03
<u>Change in Overlying Layer 1</u>				
Transmissivity Doubled	3.31	-.88	.16	.57
Transmissivity Halved	1.46	-2.44	-.07	.34
Vcont Doubled	.06	-.12	-.004	.02
Vcont Halved	.16	-.07	.004	.02
<u>Change in Underlying Layer 3</u>				
Transmissivity Doubled	1.09	-.50	.06	.23
Transmissivity Halved	.39	-1.11	.03	.14
Vcont Doubled	6.83	-.48	.50	1.12
Vcont Halved	4.82	-9.30	-.73	1.52



TABLE 5  
 SENSITIVITY RESPONSES TO CHANGES IN LAYER 3  
 (Head Changes in Feet)

	MAXIMUM HEAD INCREASE	MINIMUM HEAD INCREASE	AVERAGE HEAD CHANGE	STD. DEV.
<u>Change in Layer 3</u>				
Transmissivity Doubled	10.47	-2.20	.11	.95
Transmissivity Halved	5.04	-9.76	-.09	1.07
<u>Change in Overlying Layer 1</u>				
Transmissivity Doubled	.13	-.16	-.004	.02
Transmissivity Halved	.09	-.11	.002	.02
<u>Change in Overlying Layer 2</u>				
Transmissivity Doubled	.57	-.45	-.01	.05
Transmissivity Halved	.28	-.46	.007	.04

TABLE 6  
SENSITIVITY RESPONSES TO CHANGES IN STRESS  
(Head Changes in Feet)

	MAXIMUM HEAD INCREASE	MINIMUM HEAD INCREASE	AVERAGE HEAD CHANGE	STD. DEV.
<u>Change in Layer 1</u>				
Recharge at 110%	3.11	0	.43	.45
Recharge at 90%	0	-1.42	-.33	.22
Max. ET Rate at 110%	0	-1.56	-.27	.21
Max ET Rate at 90%	3.93	0	.47	.60
ET ext. depth at 4 ft.	.61	0	.19	.14
ET ext. depth at 6 ft.	0	-.58	-.18	.13
<u>Change in Layer 2</u>				
Recharge at 110%	3.09	0	.40	.44
Recharge at 90%	0	-1.39	-.31	.21
Max ET Rate at 110%	0	-1.39	-.31	.21
Max ET Rate at 90%	3.90	0	.49	.57
ET ext. depth at 4 ft.	.53	0	.17	.12
ET ext. depth at 6 ft.	0	-.49	-.17	.12
<u>Change in Layer 3</u>				
Recharge at 110%	1.09	0	.17	.25
Recharge at 90%	0	-.56	-.13	.81
Max ET Rate at 110%	0	-.45	-.11	.15
Max ET Rate at 90%	1.36	0	.18	.29
ET ext. depth at 4 ft.	.48	0	.08	.12
ET ext. depth at 6 ft.	0	-.48	-.08	.12

### **Layer 1 (Water Table Aquifer)**

Generally, simulated water levels in layer 1 were not sensitive to changes in aquifer parameters. Changing the hydraulic conductivity caused some changes in head levels near areas where withdrawals occur, but these changes are localized. Layers 2 and 3 react to changes in the aquifer parameters in layer 1 in a similar manner. As expected, simulated water levels in layer 1 are sensitive to changes in stress. This layer is most sensitive to recharge, followed by the ET rate, and ET extinction depth. Layers 2 and 3 react to changes in stresses in a similar manner.

### **Layer 2 (Lower Tamiami Aquifer)**

Simulated heads in layer 2 are also insensitive to changes in aquifer parameters, with the exception of  $V_{cont}$  between layers 1 and 2. Doubling this parameter resulted in a maximum rise in simulated head of 3.79 feet (in a heavily pumped area), but on average the heads did not significantly change. However, when the layer 1  $V_{cont}$  was halved, the average simulated head dropped almost 0.2 feet. This is expected, as leakage from layer 1 is the major source of flow into layer 2.

### **Layer 3 (Sandstone Aquifer)**

Simulated heads in layer 3 are sensitive to changes in  $V_{cont}$  between layers 2 and 3, and only slightly sensitive to changes in the layer 3 transmissivity. Doubling transmissivity resulted in a maximum rise in head of 10.47 feet, with an average rise of 0.12 feet, while halving transmissivity caused simulated head to decline a maximum of 9.76 feet, with an average decline of 0.06 feet. The largest changes in heads are near areas of large withdrawals. Layer 3 is slightly more sensitive to changes in transmissivity than layer 2 because it has lower transmissivity values.

Simulated heads in layer 3 are most sensitive to changes in  $V_{cont}$  between layers 2 and 3. Doubling this parameter resulted in a maximum rise in simulated head of 6.83 feet, with an average rise of 0.47 feet. Halving the layer 2  $V_{cont}$  resulted in a maximum decline in simulated head of 9.28 feet, with an average decline of 0.88 feet. This is expected, as leakage from the layer 2 accounts for 98% of the inflow to layer 3.

## PREDICTIVE SCENARIO

### INTRODUCTION

One steady state predictive scenario was evaluated. For this run, the following changes were made from the final calibration data:

1. Recharge was set to the amount expected in a 2-in-10 year drought event (rainfall approximately 80% of average),
2. The pumpage file was modified to represent the additional irrigation requirements during the 2-in-10 year drought, and
3. All proposed wells and crops requested in water use permits issued through November 1989 were represented in this scenario. Projected demands for public water supply were also included.

### RESULTS

The simulated head and head declines discussed in this section are the average for a given model cell. Actual head decline caused by the simulated drought may be greater or lesser due to the effects of cell-wide averaging.

#### Layer 1 (Water Table Aquifer)

Figure 35 shows the water levels within layer 1 (water table aquifer) for average conditions. Figure 36 shows the predicted decline in simulated water levels expected in a 2-in-10 year drought. It can be seen that approximately 50% of the water table aquifer within the modeled area will undergo a simulated head decline of one foot or more. This is a regional effect of the decreased amount of recharge during the drought. There are several localized areas showing greater simulated head declines, all as a result of well withdrawals. The area in southeast Hendry County showing four feet of head decline is a result of increased withdrawals in the lower Tamiami aquifer. This causes a corresponding increase in the leakage from the water table aquifer into the lower Tamiami aquifer. The area northwest of Immokalee showing a simulated head decline of three feet is caused by increased withdrawals in both the water table and sandstone aquifers. The same is true for the area west of LaBelle that exhibits a simulated head decline of four feet. The area of simulated head decline of one foot that extends south into central Hendry County is caused by increased withdrawals from the water table aquifer just south of the Hendry County - Glades County border, and a proposed agricultural withdrawal from the lower Tamiami aquifer north of highway 832. Simulated water level declines in excess of one foot may impact the water levels and hydroperiods of some wetlands.

#### Layer 2 (Lower Tamiami Aquifer)

Figure 37 shows the simulated head distribution within layer 2 (lower Tamiami aquifer) for average conditions. Figure 38 shows the predicted decline in simulated head expected in a 2-in-10 year drought. As with layer 1 (water table aquifer), approximately 50% of the lower Tamiami aquifer in the modeled area shows a simulated head decline of one foot or more as a result of a decrease in the recharge rate. In addition, three localized areas show a larger simulated head decline. The first is a large area corresponding to the intense water withdrawals for agricultural

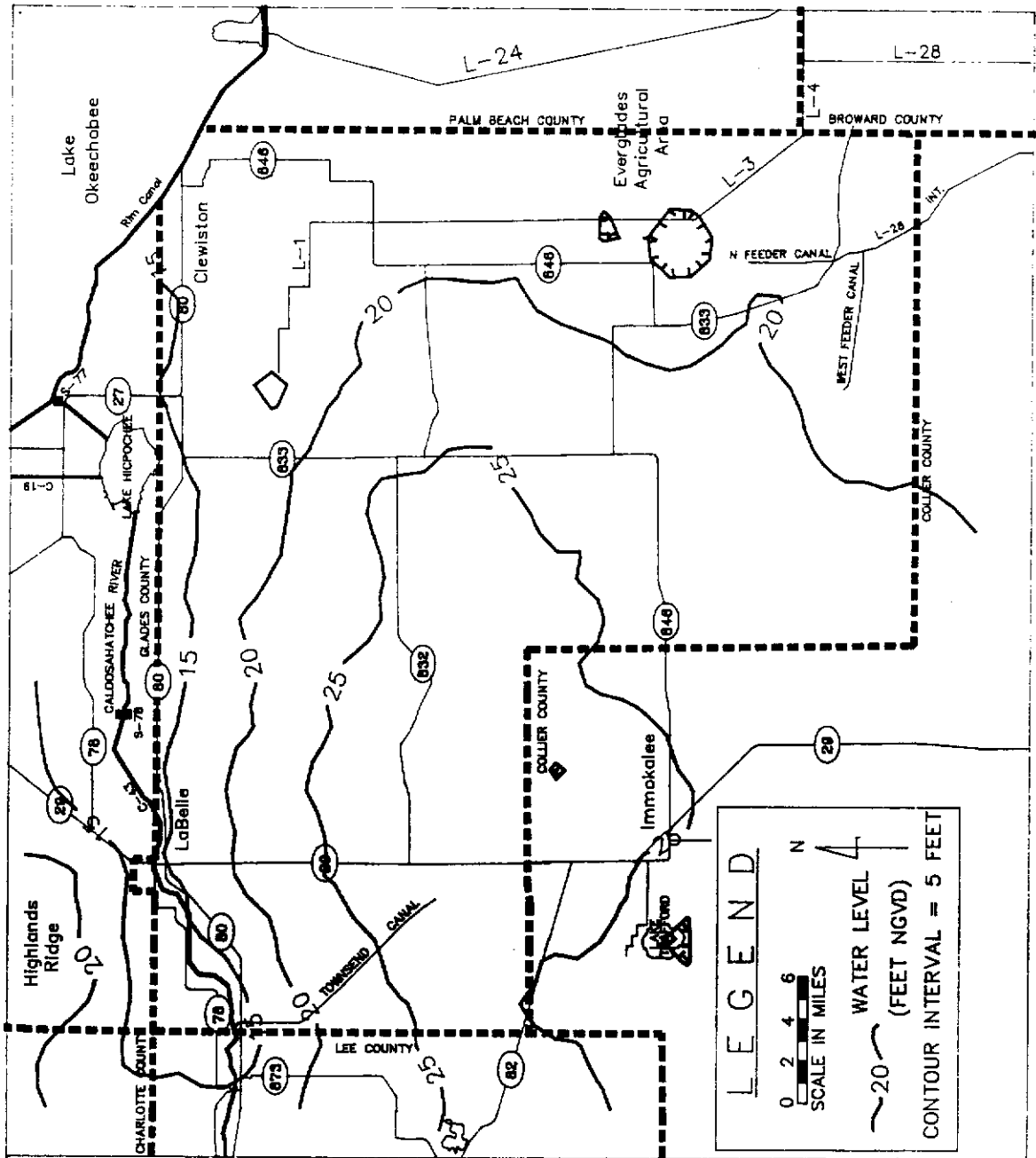


Figure 35. STEADY STATE WATER LEVELS, LAYER 1 (WATER TABLE AQUIFER)

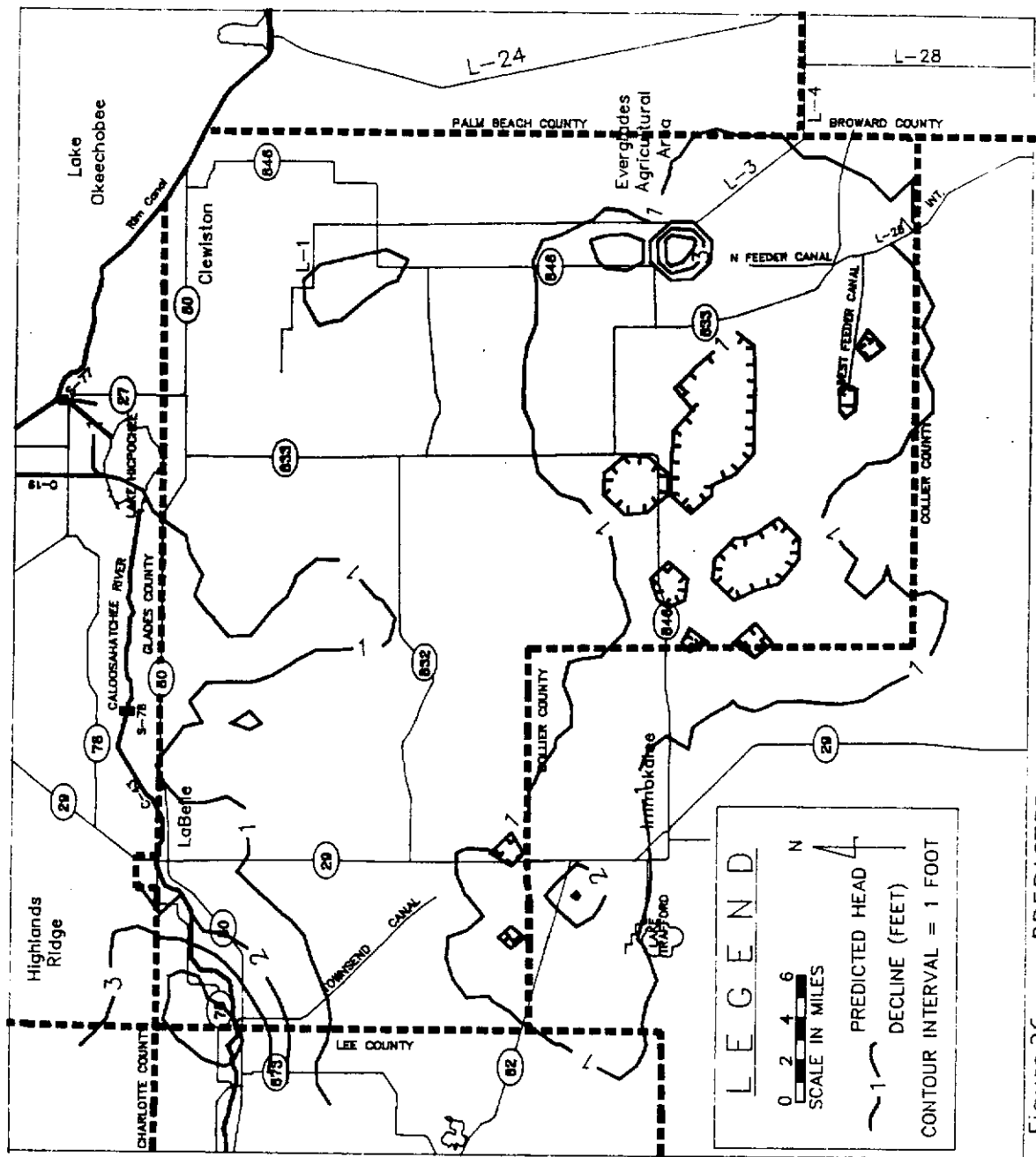


Figure 36. PREDICTED WATER LEVEL DECLINE, LAYER 1 (WATER TABLE AQUIFER), STEADY STATE CONDITIONS

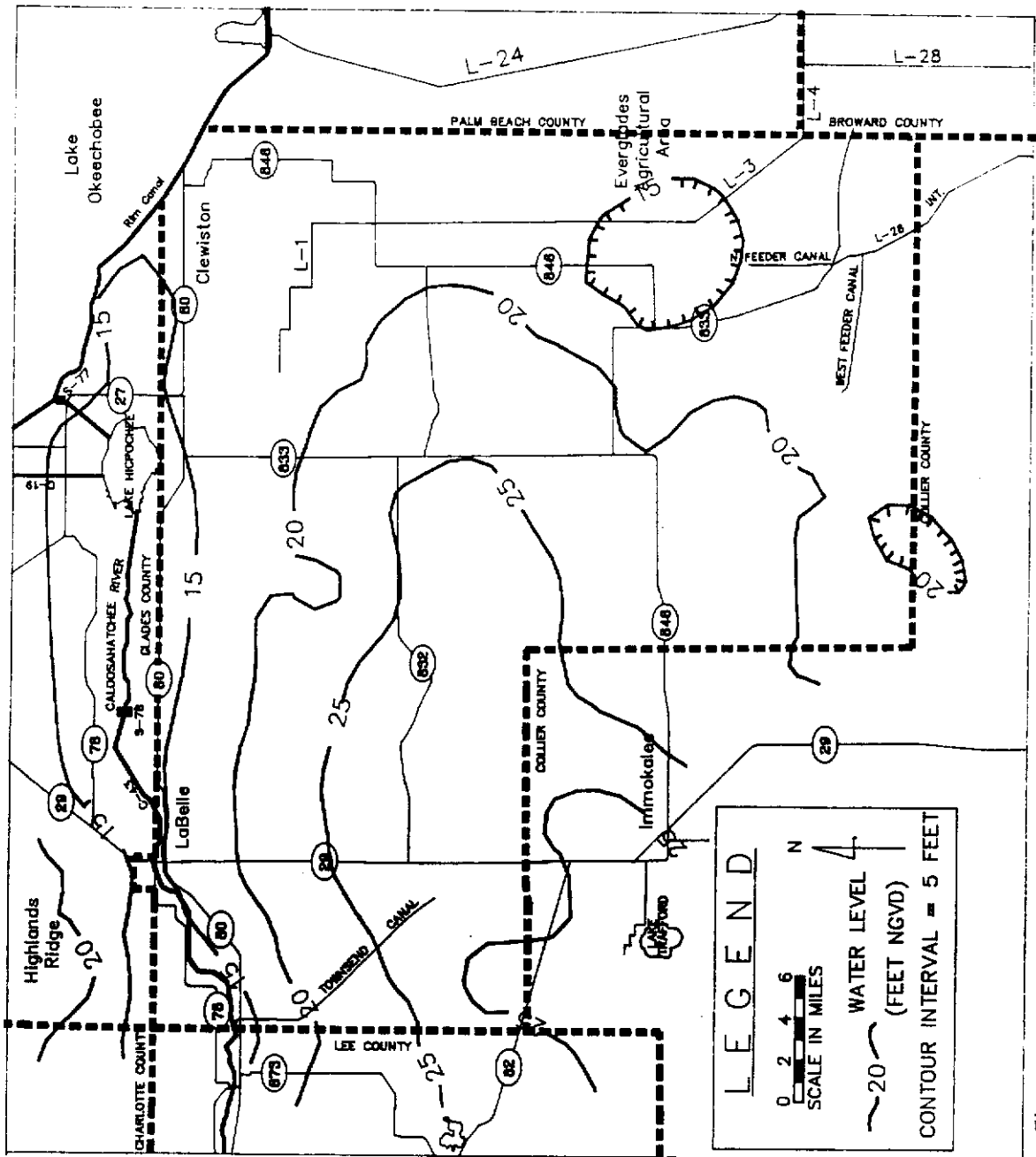


Figure 37. STEADY STATE WATER LEVELS, LAYER 2 (LOWER TAMIAMI AQUIFER)

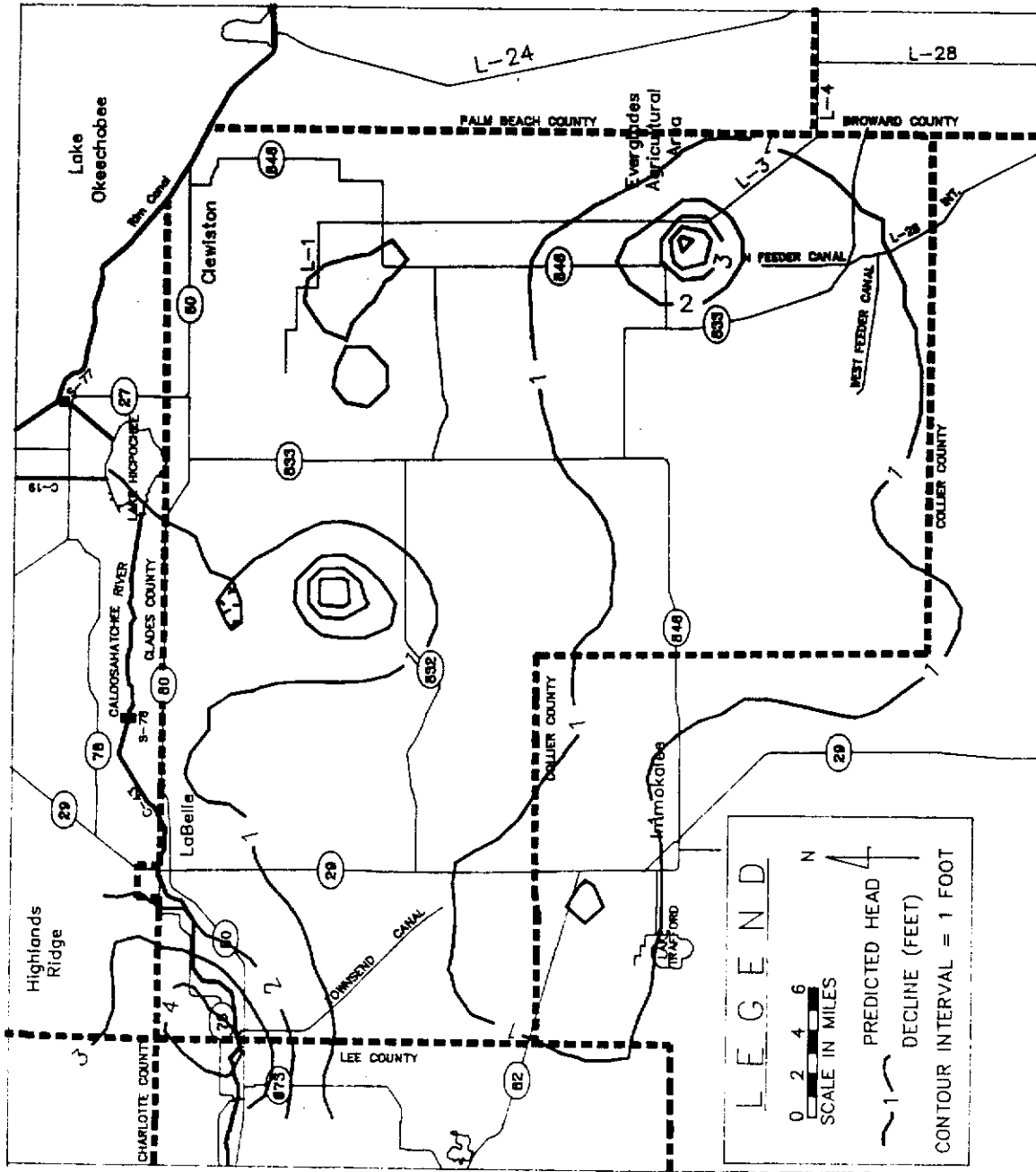


Figure 38. PREDICTED WATER LEVEL DECLINE, LAYER 2 (LOWER TAMIAMI AQUIFER), STEADY STATE CONDITIONS



irrigation in southeast Hendry County. Expected head declines are in excess of four feet. The second area is in central Hendry County, and is a result of a proposed large scale agricultural operation. The third area is west of LaBelle and is a result of increased withdrawals in the underlying sandstone aquifer causing an increase in the amount of leakage from the water table and lower Tamiami aquifers into the sandstone aquifer. All of these simulated head declines may be reaching levels where they will affect adjacent users, particularly those with wells equipped with centrifugal pumps.

### **Layer 3 (Sandstone Aquifer)**

Figure 39 shows the simulated head distribution within layer 3 (sandstone aquifer) for average conditions. Figure 40 shows the predicted decline in simulated head expected in a 2-in-10 year drought. As expected, cones of depression around intense water uses deepen, some in excess of 10 feet. In addition, predicted head declines greater than one foot cover more than 75% of the sandstone aquifer within the modeled area. The predicted declines are significant because they are at levels which are beginning to affect the overlying aquifers by inducing greater amounts of leakage, and thereby affecting heads in the overlying aquifers. Layer 3 (sandstone aquifer) shows greater impacts to well withdrawals than the shallower aquifers because it exhibits lower values of transmissivity and storage, and because well withdrawals account for almost 80% of the flow out of the sandstone aquifer.

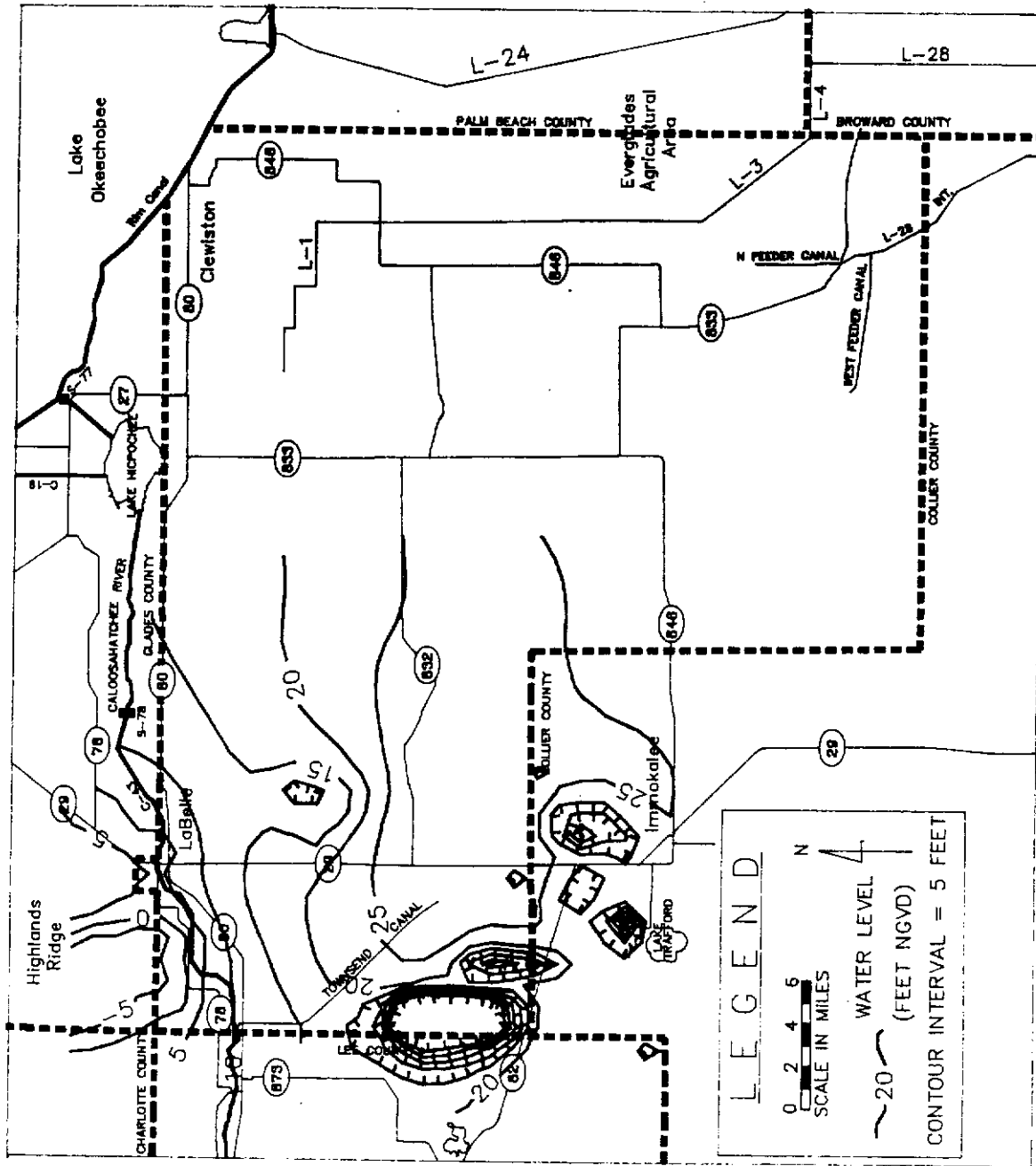


Figure 39. STEADY STATE WATER LEVELS, LAYER 3 (SANDSTONE AQUIFER)

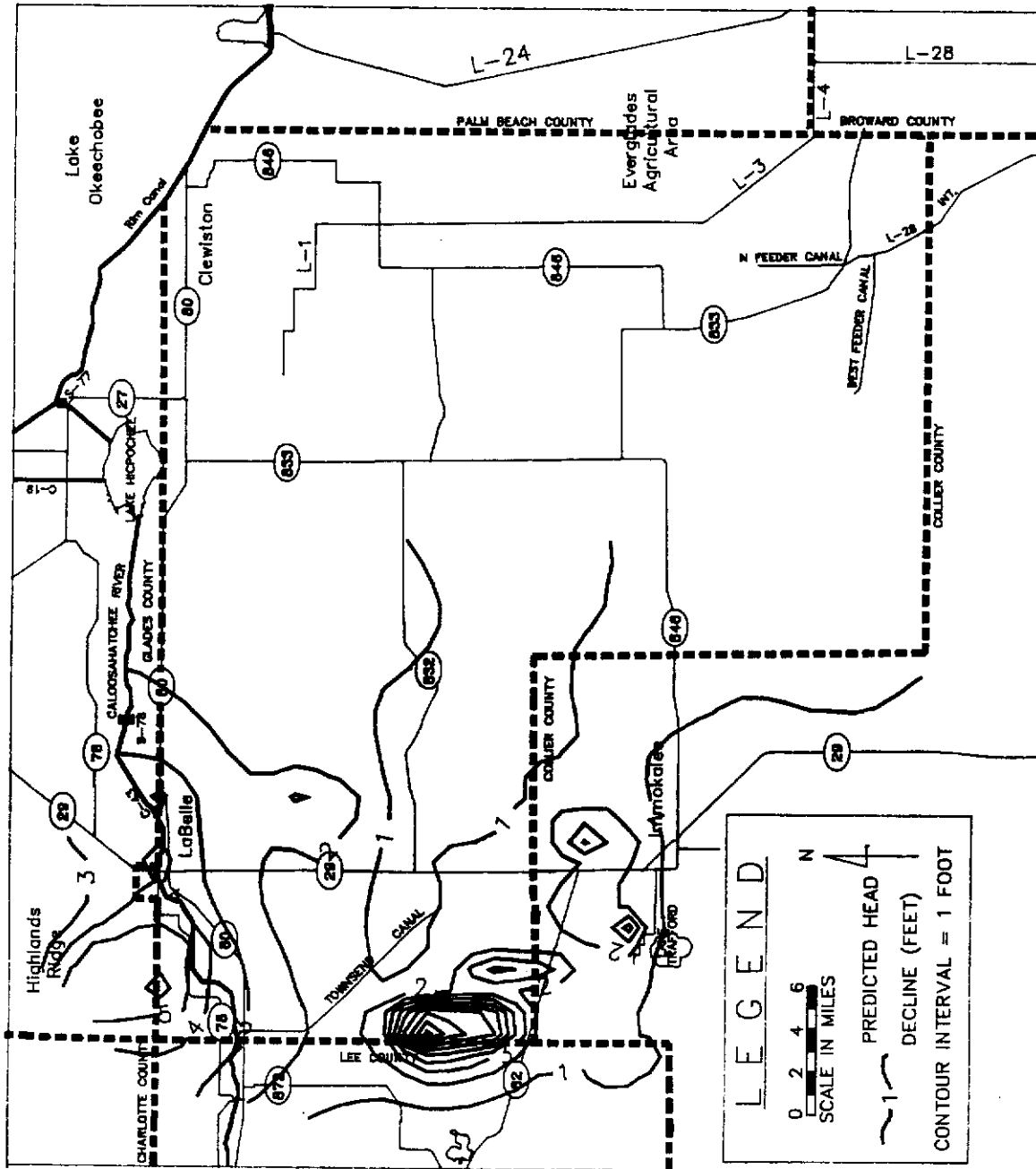


Figure 40. PREDICTED WATER LEVEL DECLINE, LAYER 3 (SANDSTONE AQUIFER), STEADY STATE CONDITIONS

## RESULTS AND CONCLUSIONS

1. The most important source of recharge to the Surficial Aquifer System and Intermediate Aquifer System in Hendry County is rainfall. Under average conditions for the three year period 1986 through 1988, approximately 96% of the recharge in the study area was provided by rainfall. The remaining 4% came from ground water flow into the modeled area, primarily from Glades and Collier Counties.
2. Evapotranspiration accounts for the majority of outflow from the modeled area (approximately 87%). The remaining outflow is comprised of well withdrawals (7%), ground water flow out of the modeled area, primarily to Lee and Collier Counties (5%), and discharge to surface water bodies (less than 1%).
3. The water table aquifer is not significantly impacted on a regional basis by water use under average conditions. However, in southeastern Hendry County a localized area of significant impact occurs as a result of well withdrawals in the underlying lower Tamiami aquifer. The increased leakage through the Tamiami confining zone caused by these withdrawals results in lower water levels in the water table aquifer.

During simulations of moderate drought conditions (2-in 10 year drought), the water table aquifer begins to show some signs of stress. Regional water level declines of one foot or more cover approximately 50% of the aquifer in the modeled area. This regional decline is caused by a decrease in recharge due to the drought. In addition, several localized areas of water level decline due to well withdrawals in the water table or underlying aquifers appear. Simulated water level decline in these areas exceeds four feet. The affected areas are in southeastern Hendry County, northwest of Immokalee, and west of LaBelle. The simulated water level declines are enough to cause significant impacts to wetlands.

4. The model suggests that the lower Tamiami aquifer is beginning to show major impacts as a result of well withdrawals during average conditions. There is a regional cone of depression caused by agricultural irrigation in southeastern Hendry County. These withdrawals are influencing simulated regional flow patterns at distances up to eleven miles. Simulated water level declines range between ten and fifteen feet. However, as a result of cell-wide averaging, drawdowns at individual wells in the area may be much larger, and may be approaching the top of the aquifer. Other areas showing similar impacts, but on a smaller scale, are located near the north end of the L-1 canal, north-central Hendry County, the extreme southern portion of Hendry County, and along highway 82 near the Hendry County - Collier County - Lee County border. The lower Tamiami aquifer is also impacted by well withdrawals in the underlying sandstone aquifer in the area where Hendry, Lee, and Collier Counties meet.

During simulations of moderate drought conditions (2-in 10 year drought), the lower Tamiami aquifer shows signs of increasing stress. Regional water level declines of one foot or more cover approximately 50% of the aquifer in the modeled area. As with the water table aquifer, the regional decline is caused by a decrease in recharge due to the drought. In addition, several localized areas of water level decline (in excess of four feet due to well withdrawals from the lower Tamiami or underlying aquifers) appear throughout the county. For example,

the area in southeast Hendry County is a result of increased withdrawals for agricultural irrigation. The area in north central Hendry County is caused by a proposed agricultural operation. The area west of LaBelle is probably a result of decreased recharge and increased withdrawals on the underlying sandstone aquifer.

5. The model suggests that the sandstone aquifer is heavily impacted by current well withdrawals, which account for approximately 80% of the flow out of the aquifer within the study area during average conditions. Because of the hydraulic properties of the sandstone aquifer, cones of depression that form around pumped wells are deeper and exhibit a smaller areal extent than cones typically found in the lower Tamiami aquifer. The most significant cone of depression is located where Hendry, Lee and Collier Counties converge, where the cones from two large withdrawals are beginning to merge into one larger cone. A significant impacted area also occurs west of LaBelle, where the sandstone aquifer is characterized by very low values of transmissivity. Withdrawals from the sandstone aquifer also affecting water levels in the overlying aquifers. During simulations of moderate drought conditions (2-in 10 year drought), the sandstone aquifer shows the most stress of all the modeled aquifers. Regional water level declines of one foot or more cover more than 75% of the aquifer in the modeled area. Simulated head declines due to increased withdrawals exceed 10 feet in areas of heavy withdrawals for agricultural irrigation.

In the area west of LaBelle, domestic wells with centrifugal pumps are impacted during drought conditions. The model indicates that water levels in this area are five to ten feet below sea level during the simulated drought. Since land surface averages 20 feet above sea level, the resulting depth to water distance of 25 to 30 feet is at or beyond the lift capability of centrifugal pumps. Actual depth to water distances will vary depending on actual land surface elevations and head differences resulting from cell-wide averaging.

6. Agricultural irrigation accounts for over 99% of the ground water withdrawals in Hendry County. However, data on actual amounts withdrawn is almost nonexistent. Actual water use data would increase confidence in the calibration of the model, particularly in areas in heavy ground water use. In addition, accurate projections of future agricultural water use will be necessary for the development of a water supply plan for the area including Hendry County.
7. The model in its present configuration is not accurate in assessing impacts on a small scale, due to the regional nature of the model grid. As a result, small scale impacts on adjacent users or small wetland areas may be overlooked due to cell-wide averaging. Improved grid resolution is needed to better assess these small scale impacts. Specific areas of concern include southeast Hendry County (in and around the regional cone of depression), west of LaBelle (Ft. Denaud and Muse areas), and the area where Hendry, Lee, and Collier Counties meet.
8. The model was difficult to calibrate within the specified constraints in several localized areas. Probable reasons are cell-wide averaging or uncertainty in aquifer parameters or stress rates. Future revisions to the model should be concentrated in these areas to improve the confidence level of the model.

## RECOMMENDATIONS

1. Strict management of the sandstone aquifer in Hendry County is needed in light of the projected declines in water levels. Minimum water levels should be established for the sandstone aquifer, and all permitted withdrawals should be managed in order to maintain these levels. Increased monitoring of water levels and water withdrawals are needed to ensure that the minimum levels are maintained. This can be accomplished through the regulatory process. Setting of minimum levels should be included in the development of the water supply plan for this area.
2. The lower Tamiami aquifer in southeastern Hendry County is also significantly impacted by existing withdrawals. Minimum water levels should be established for the lower Tamiami aquifer in this area. Permitted withdrawals should be managed in order to maintain these levels. Increased monitoring of water levels, both in the lower Tamiami and water table aquifers, is needed to ensure that the minimum levels are maintained. Withdrawals should also be monitored. This can be accomplished through the regulatory process. Setting of minimum levels should be included in the development of the water supply plan for this area.
3. The model should be used in the evaluation of water use permits, and in regional planning projects. Where a finer scale site specific model is required, the regional model could be used to provide the boundary conditions. The model should continue to be refined and updated whenever additional data becomes available. In doing this, emphasis should be placed on the parameters to which the model is most sensitive, including vertical conductance of the confining zone and evapotranspiration. Specific areas of concern are southeast Hendry County, the area west of LaBelle, and the area where Hendry, Lee, and Collier Counties meet.
4. Accurate projections of agricultural ground water use in Hendry County is essential to the planning process. These projections must include acreages, crop types, and locations likely to be developed, in order to supply reasonable projections of water conditions. This should be included in the development of the water supply plan for this area.
5. More monitor wells should be constructed, particularly in the lower Tamiami and sandstone aquifers, in areas of intense withdrawal and areas of lower confidence in the calibration of the model. These wells should be added to the USGS monitor network for long term data collection. This will provide additional data for the refined calibration of updated models.
6. An interface should be developed with the Lee County model, and the Collier County model currently under development. This will result in a truly regional model that will encompass the entire flow regime for the Surficial Aquifer System and the Intermediate Aquifer System in the lower west coast planning area. The interface with the Lee County model is of particular importance since the models indicate that much of the flow into the sandstone aquifer in Lee County consists of lateral flow originating in Hendry County.

7. Interactions between ground water and surface water should be investigated. The network of small canals found in Hendry County should be examined, their effects on ground water flows quantified, and input to the model for evaluation. This could improve the calibration of the water table aquifer.

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**APPENDIX A**  
**AQUIFER PARAMETERS**

## LIST OF FIGURES - APPENDIX A

<u>Figure</u>		<u>Page</u>
A-1	Bottom of Layer 1 (Water Table Aquifer) .....	77
A-2	Hydraulic Conductivity, Layer 1 (Water Table Aquifer) .....	78
A-3	Thickness of the Tamiami Confining Zone .....	79
A-4	Vertical Hydraulic Conductivity of the Tamiami Confining Zone .....	80
A-5	V <sub>cont</sub> , Bottom of Layer 1 .....	81
A-6	Storage Coefficient, Layer 2 (Lower Tamiami Aquifer) .....	82
A-7	Transmissivity, Layer 2 (Lower Tamiami Aquifer) .....	83
A-8	Thickness of the Upper Hawthorn Confining Zone .....	84
A-9	Vertical Hydraulic Conductivity of the Upper Hawthorn Confining Zone .....	85
A-10	V <sub>cont</sub> , Bottom of Layer 2 .....	86
A-11	Storage Coefficient, Layer 3 (Sandstone Aquifer) .....	87
A-12	Transmissivity, Layer 3 (Sandstone Aquifer) .....	88

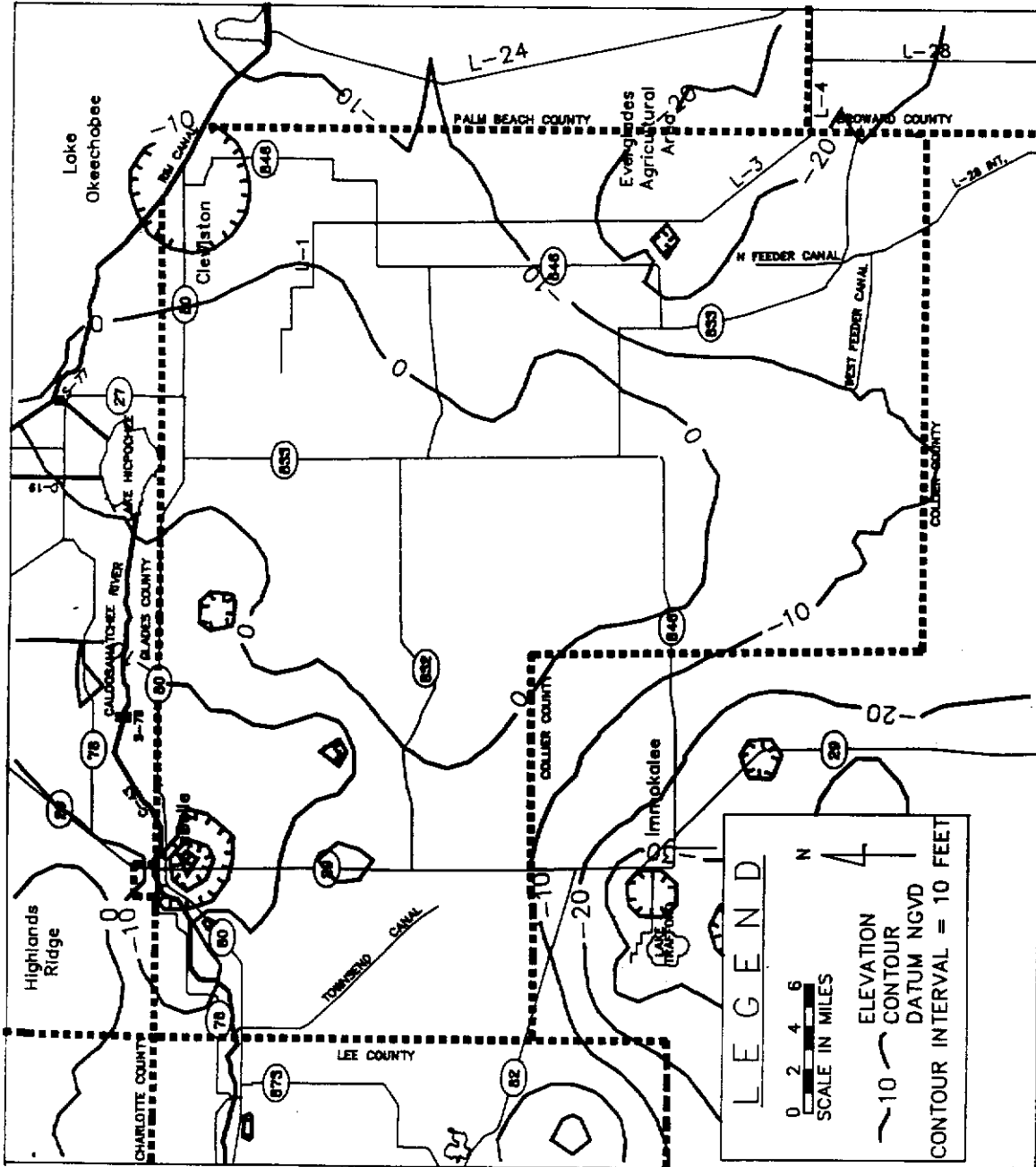


Figure A-1. BOTTOM OF LAYER 1 (WATER TABLE AQUIFER)

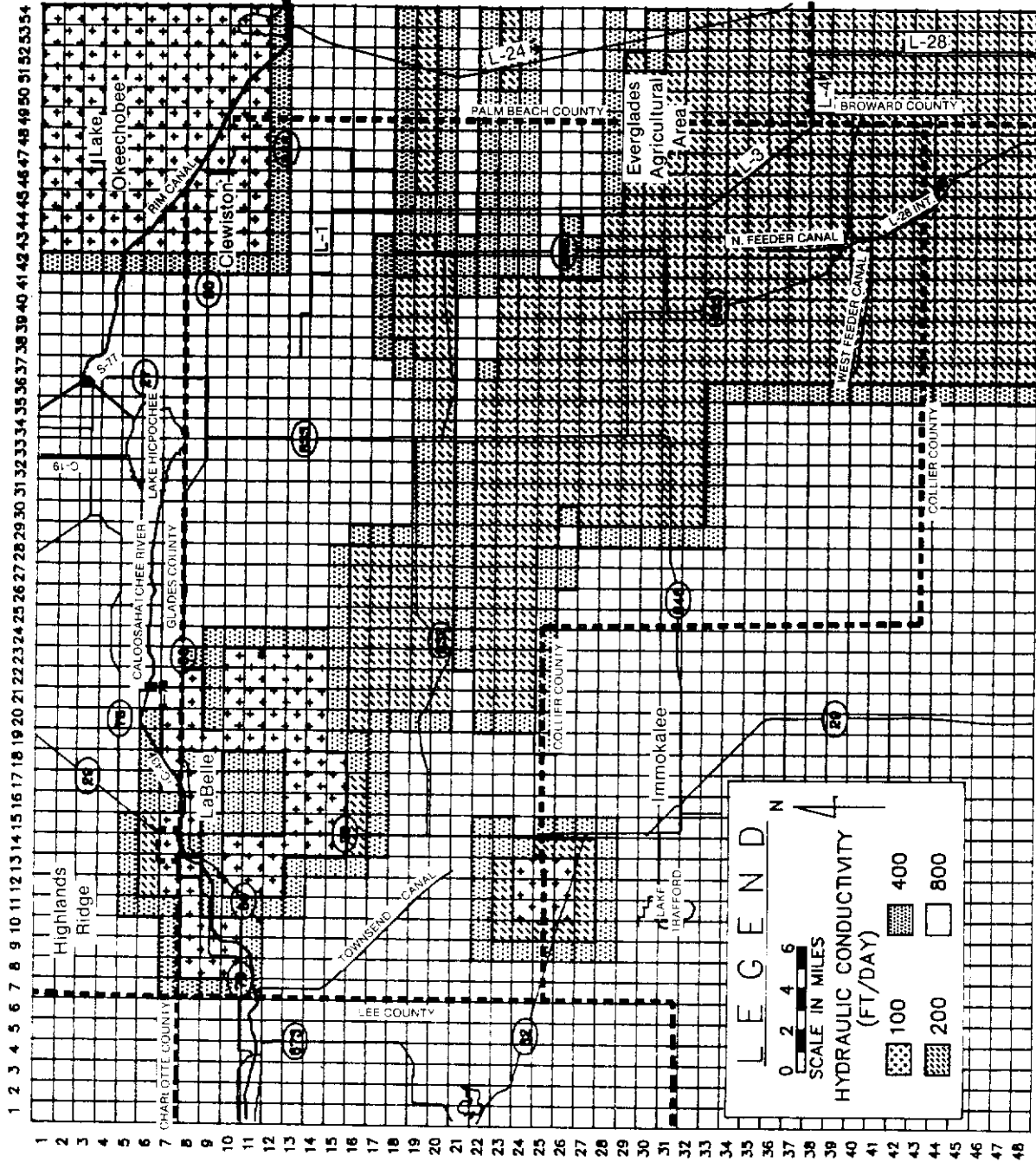


Figure A-2. HYDRAULIC CONDUCTIVITY, LAYER 1 (WATER TABLE AQUIFER)

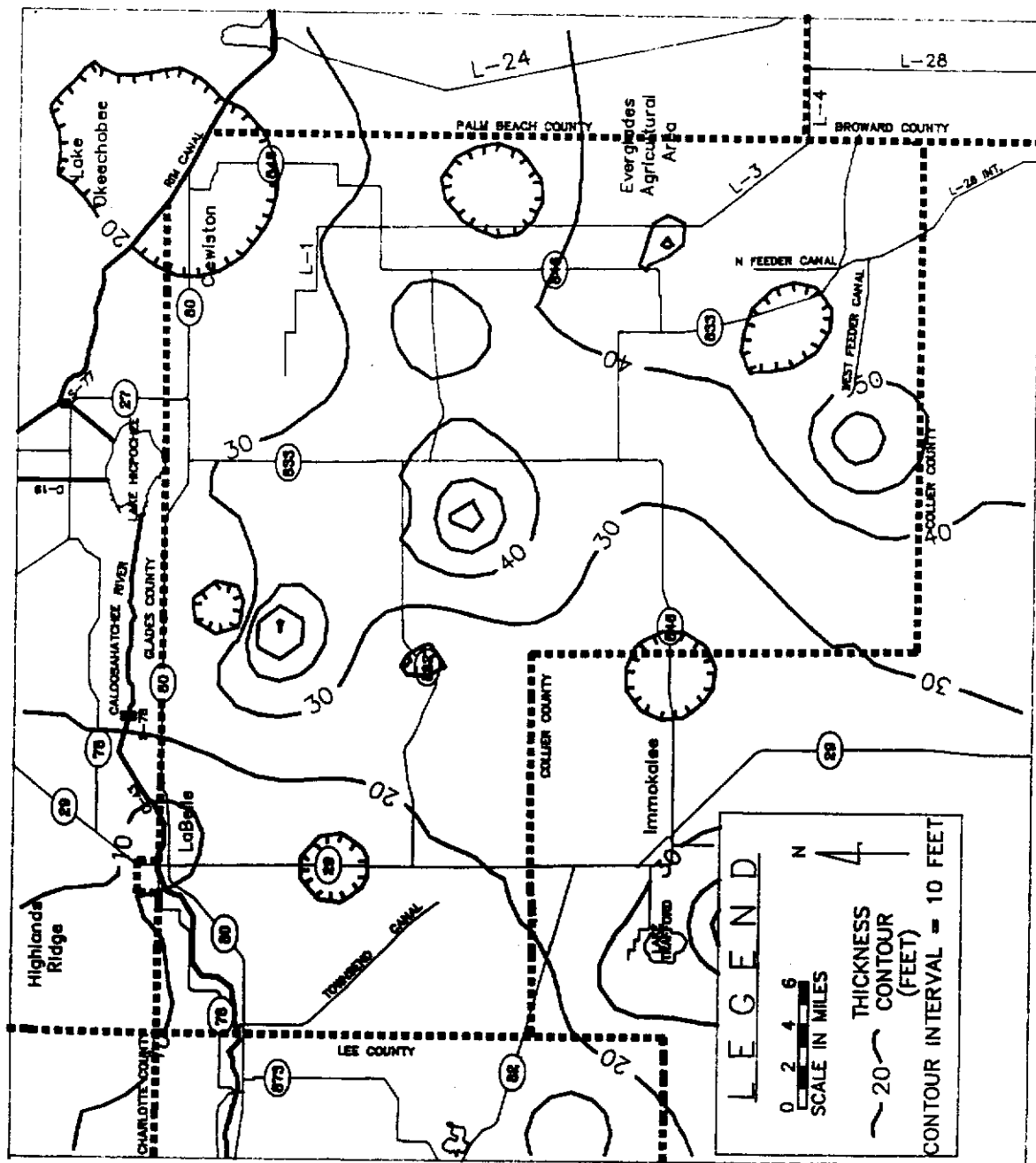


Figure A-3. THICKNESS OF THE TAMIAMI CONFINING ZONE

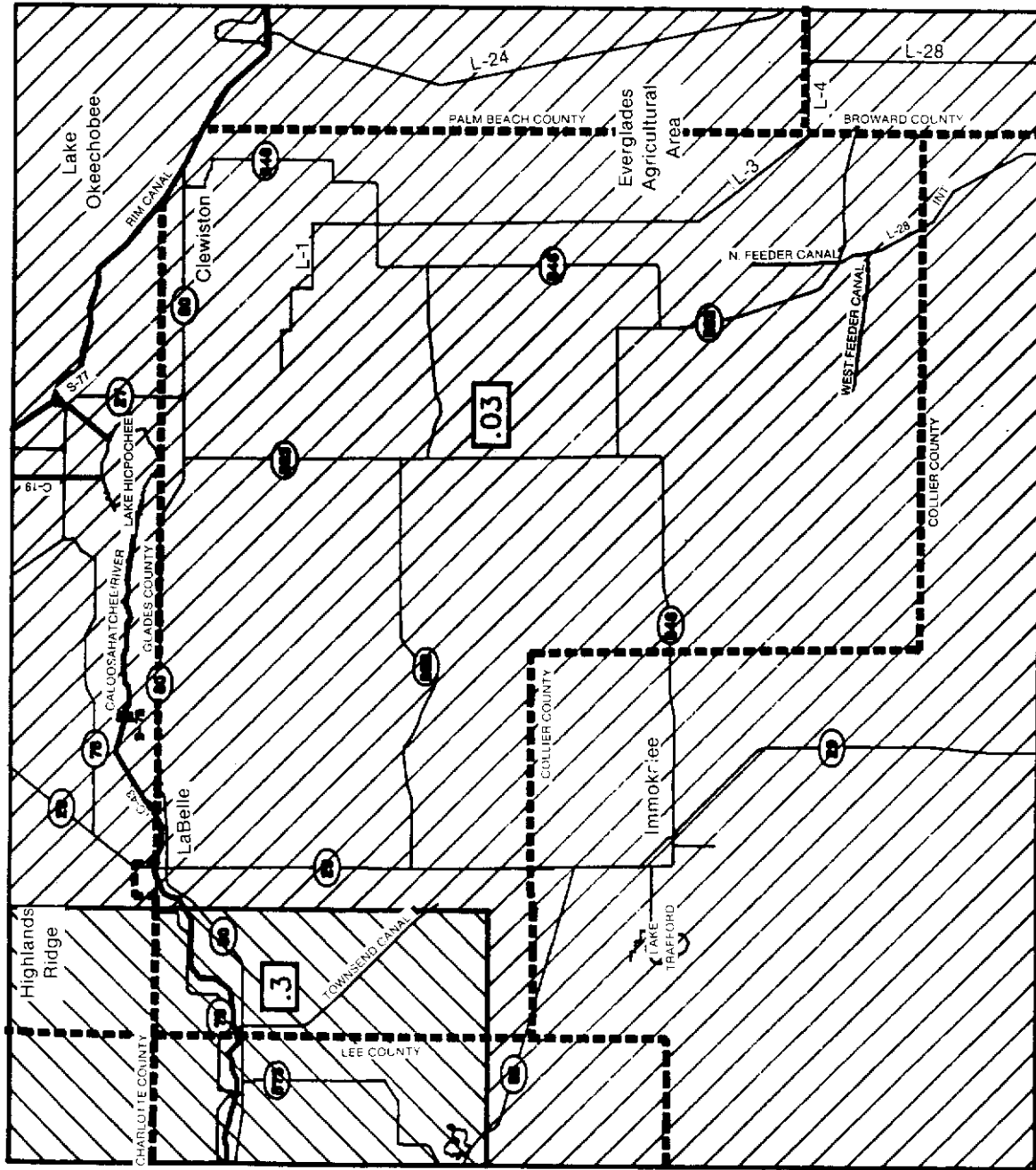


Figure A-4. VERTICAL HYDRAULIC CONDUCTIVITY OF THE TAMIAMI CONFINING ZONE

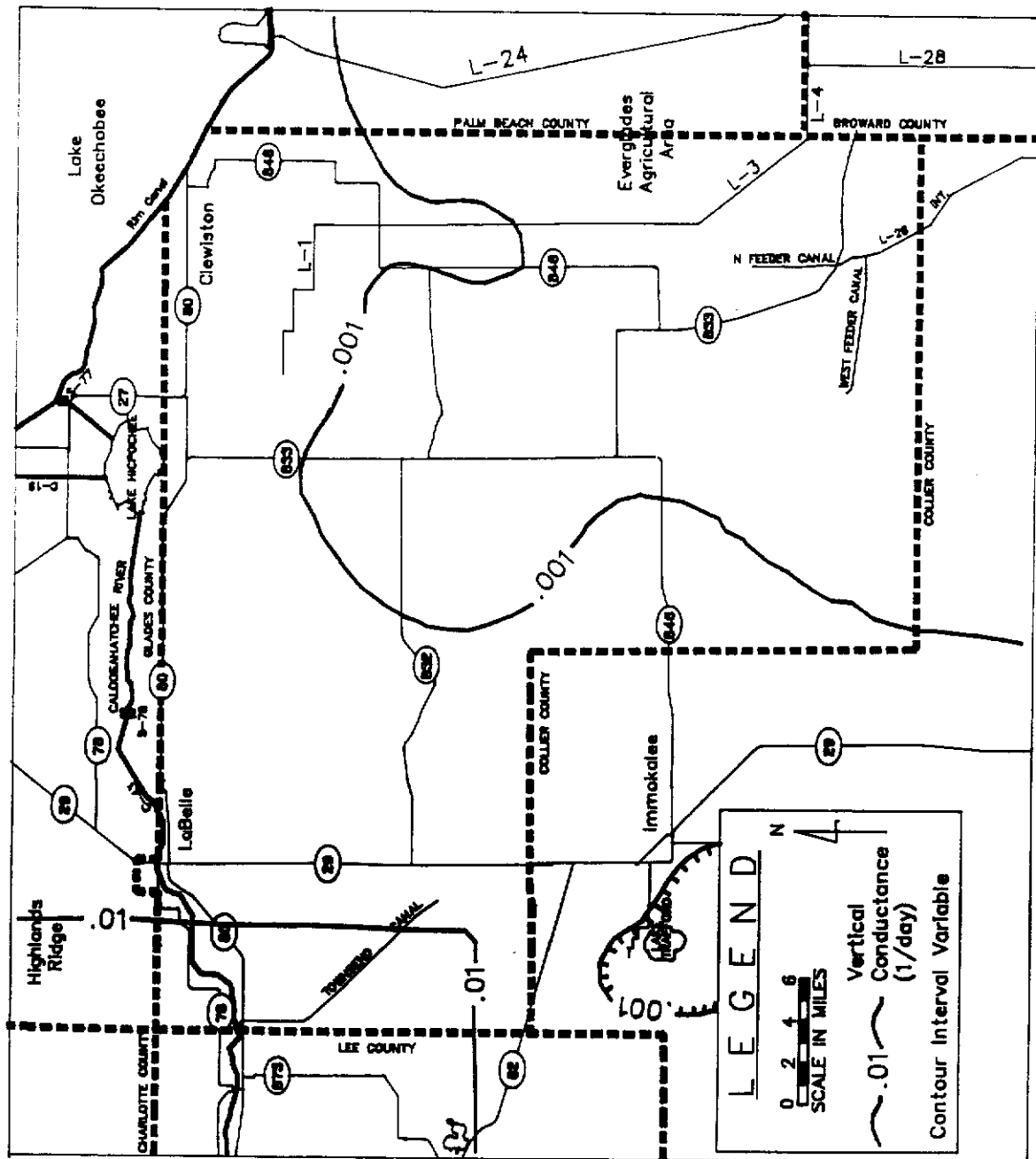


Figure A-5. Vcont, BOTTOM OF LAYER 1



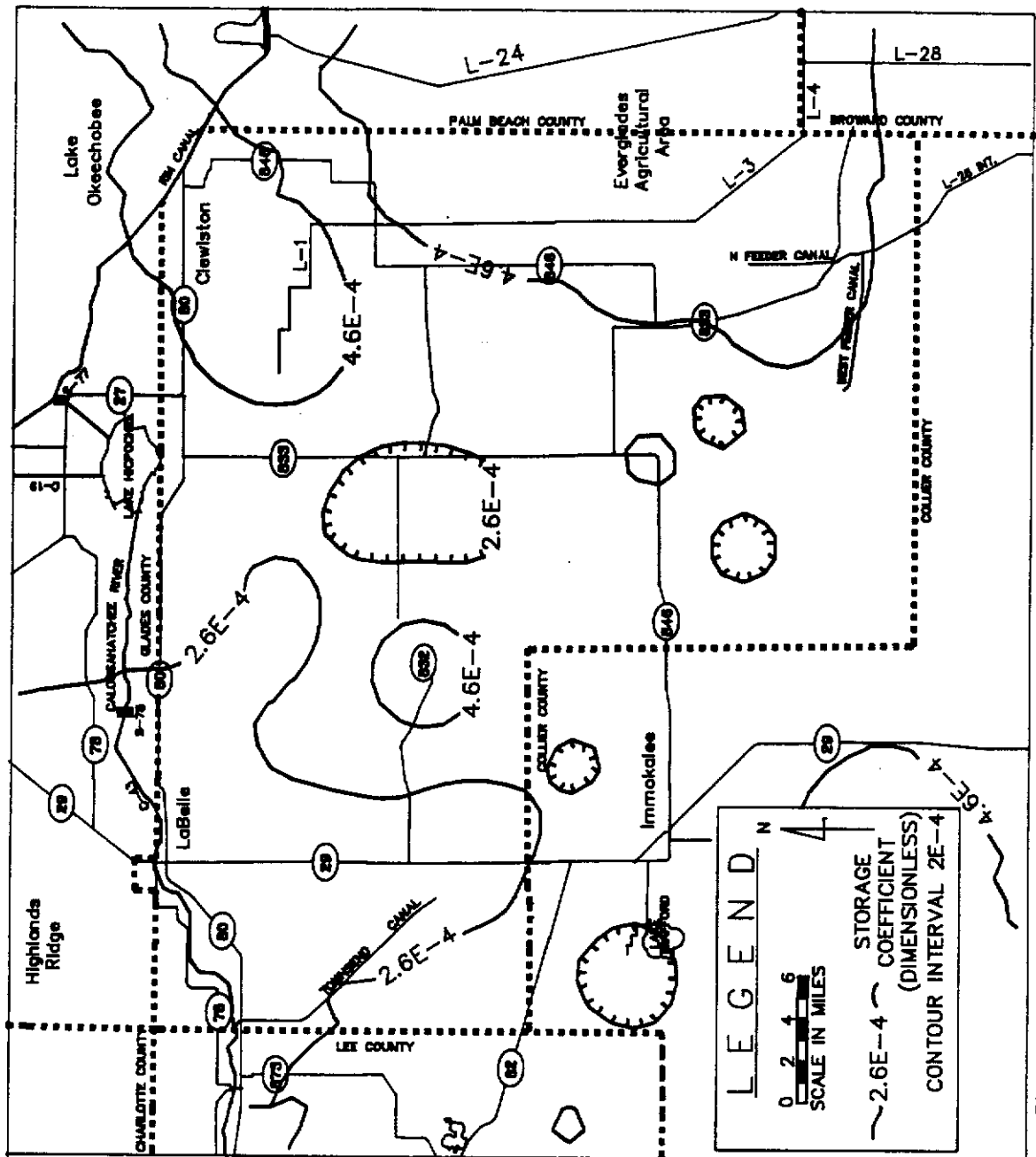


Figure A-6. STORAGE COEFFICIENT, LAYER 2 (LOWER TAMIAMI AQUIFER)

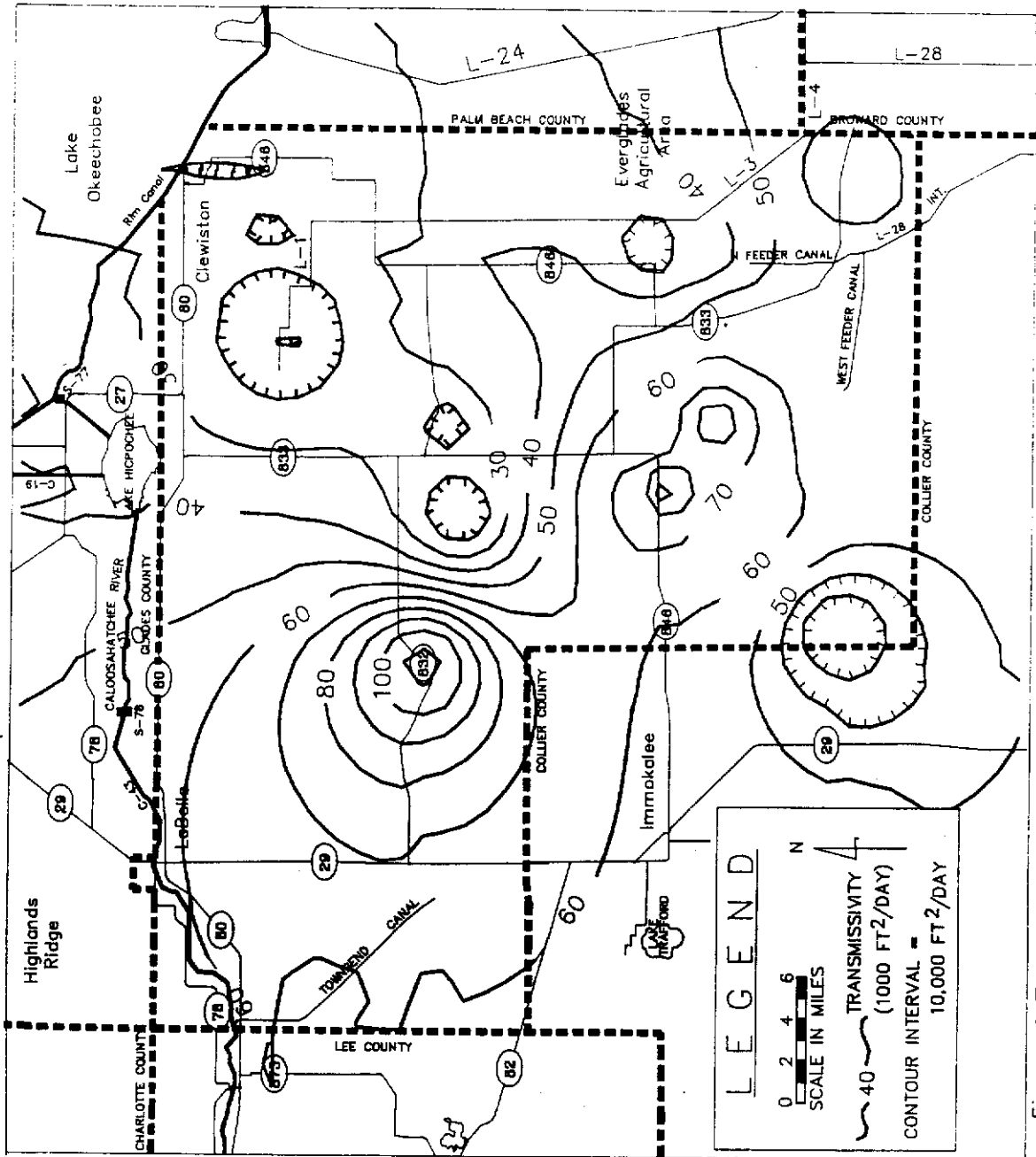


Figure A-7. TRANSMISSIVITY, LAYER 2 (LOWER TAMIAMI AQUIFER)

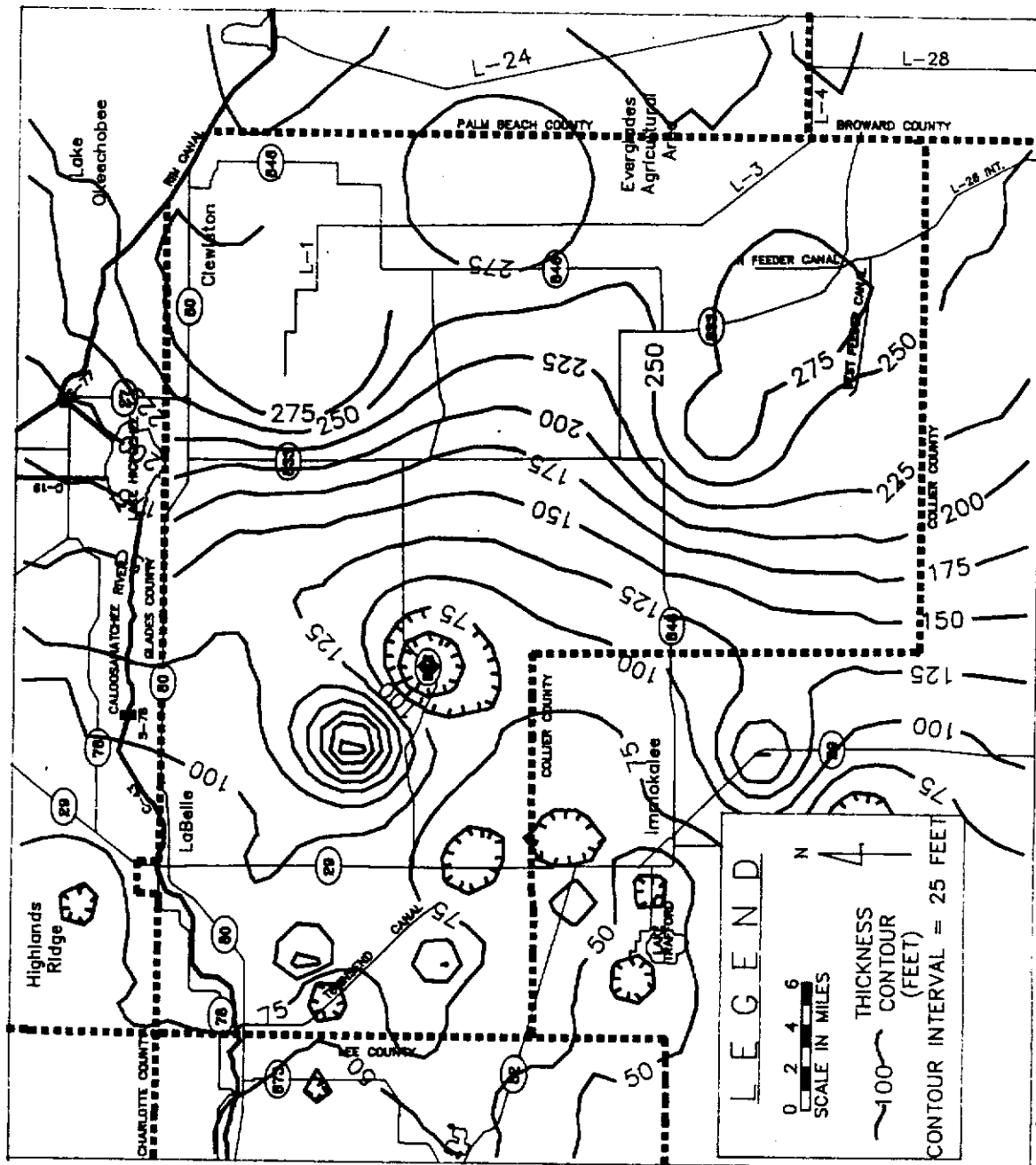


Figure A-8. THICKNESS OF THE UPPER HAWTHORN CONFINING ZONE

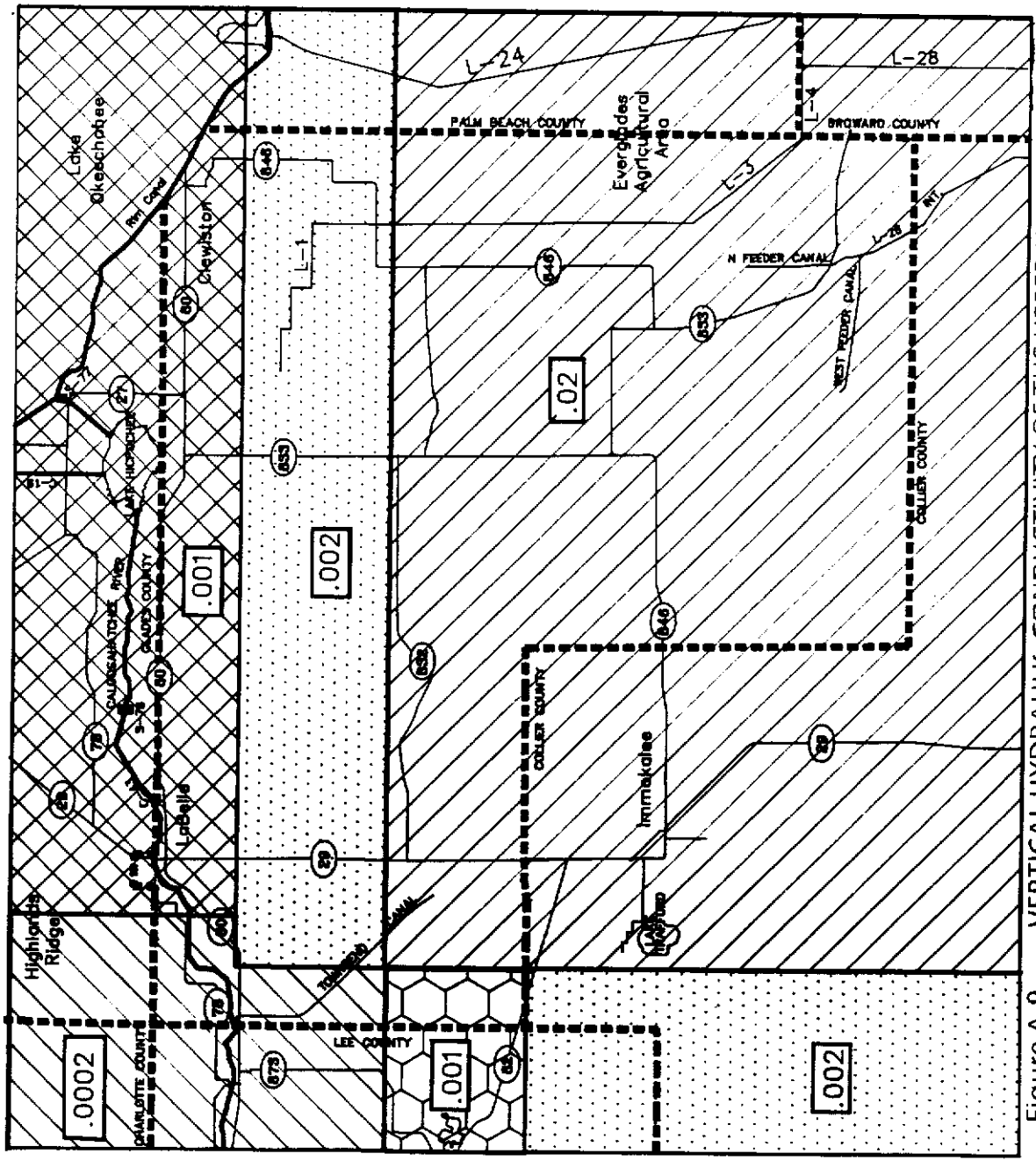


Figure A-9. VERTICAL HYDRAULIC CONDUCTIVITY OF THE UPPER HAWTHORN CONFINING ZONE

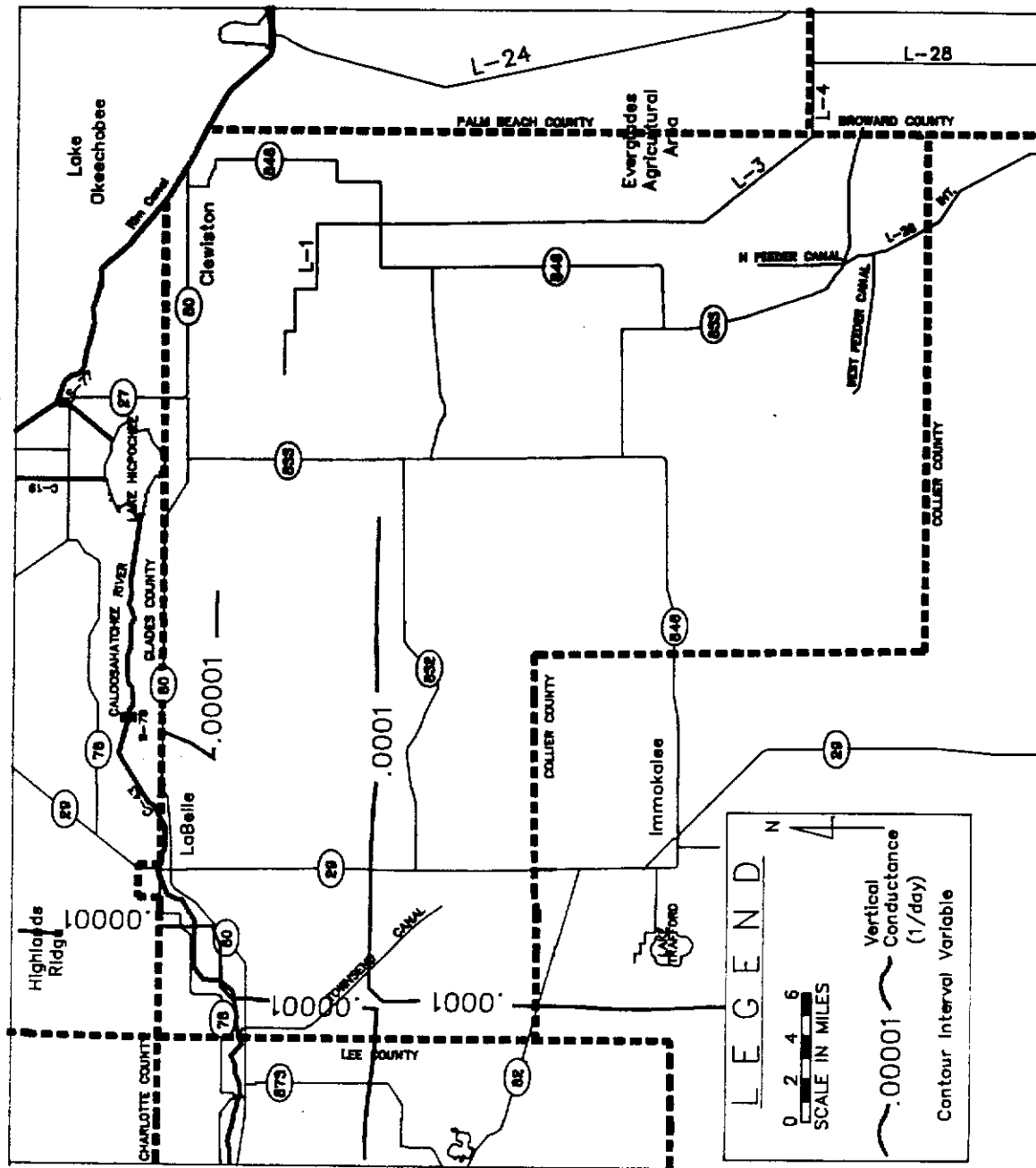


Figure A-10. Vcont, BOTTOM OF LAYER 2

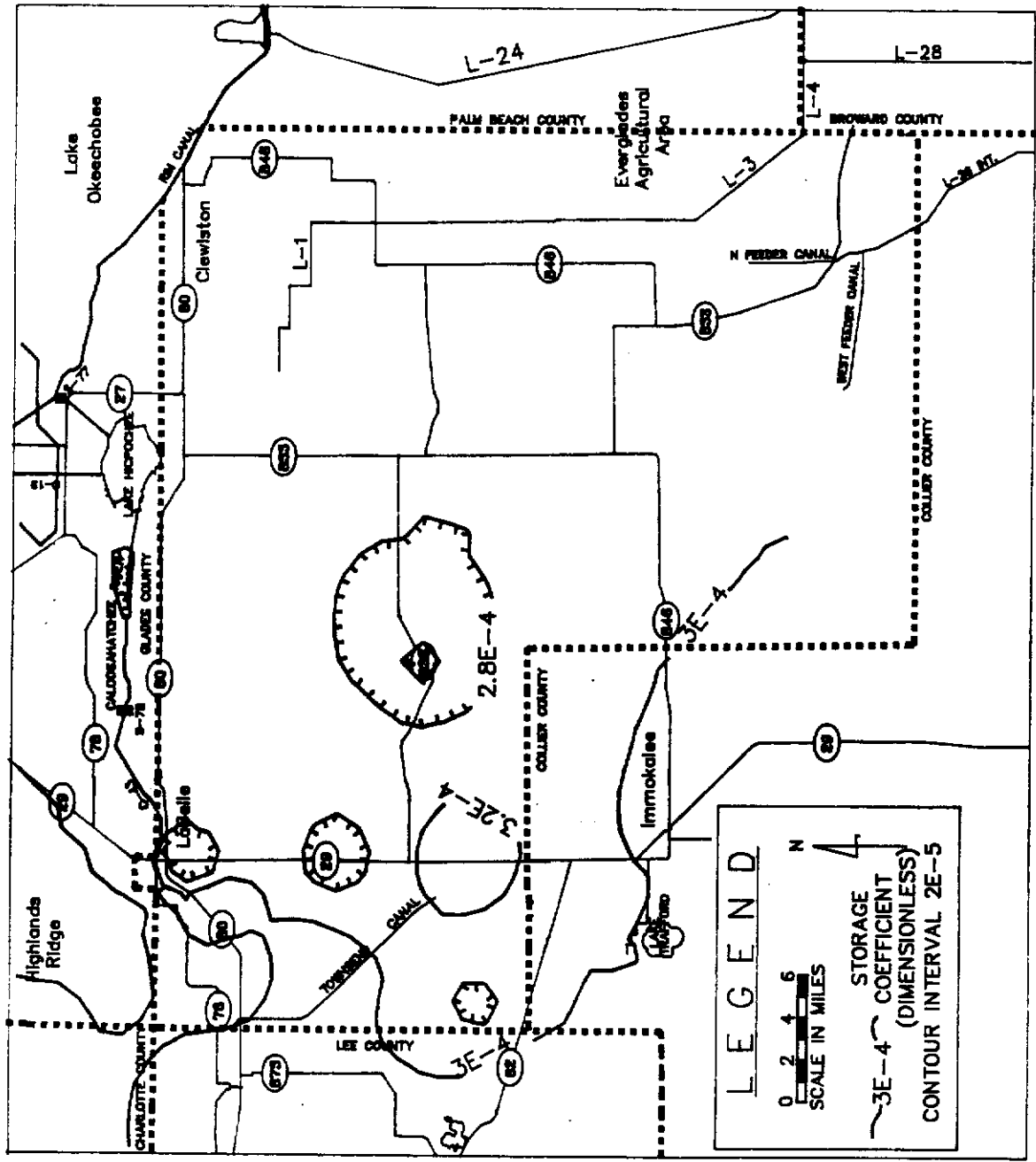


Figure A-11. STORAGE COEFFICIENT, LAYER 3 (SANDSTONE AQUIFER)

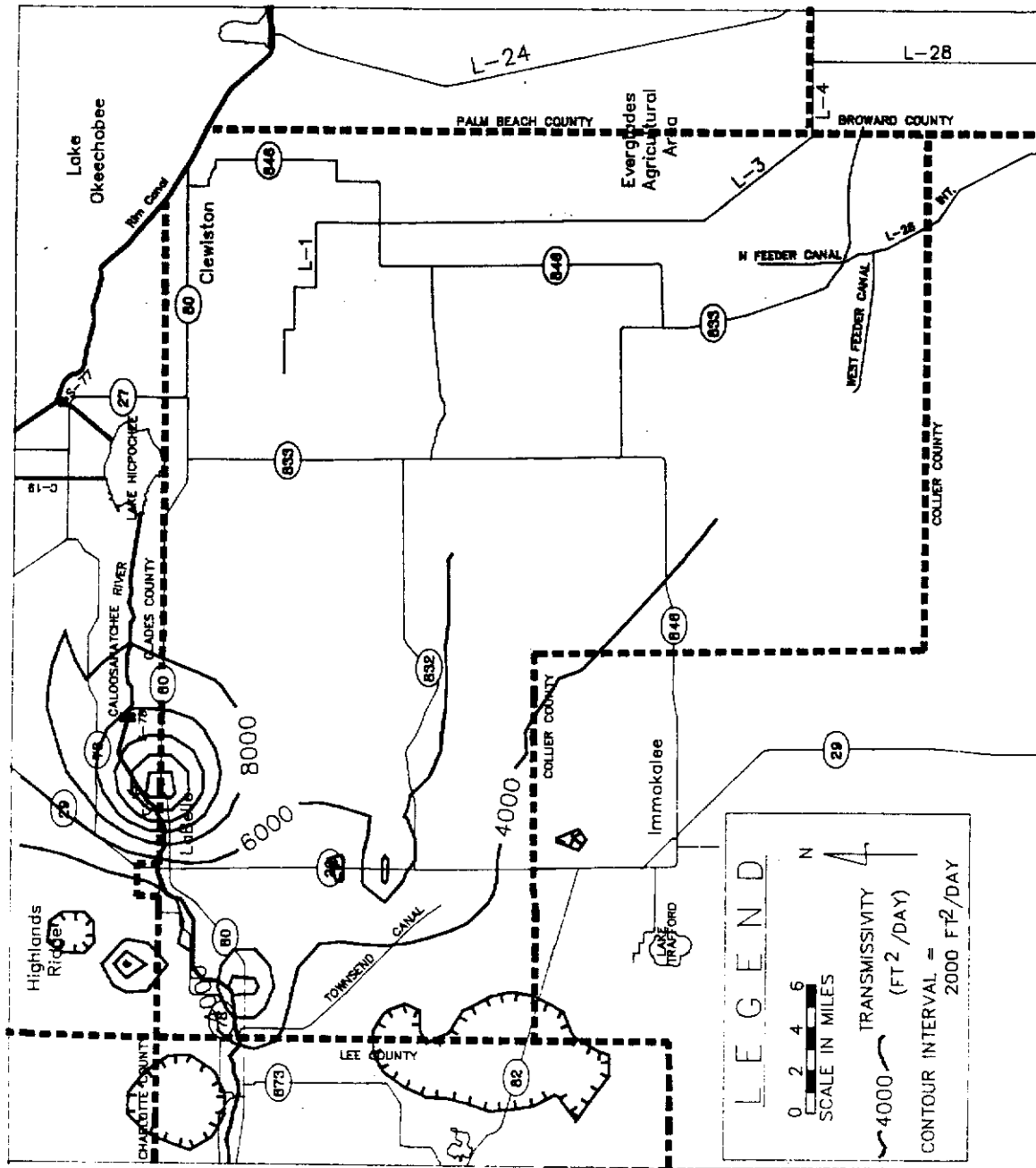


Figure A-12. TRANSMISSIVITY, LAYER 3 (SANDSTONE AQUIFER)

**APPENDIX B**  
**RIVER PACKAGE INPUT DATA**



## RIVER PACKAGE DATA

<u>Layer</u>	<u>Row</u>	<u>Column</u>	<u>Average Stage*</u>	<u>River Bed Conductance**</u>	<u>River Bottom Elevation (ft. NGVD)</u>
1	13	38	12.83	175.83	0
1	13	39	12.83	175.83	0
1	13	40	12.83	263.74	0
1	13	41	12.83	175.83	0
1	14	42	12.83	351.65	0
1	14	43	12.83	234.43	0
1	14	44	12.83	410.26	0
1	15	45	12.71	410.26	0
1	16	45	12.71	410.26	0
1	17	45	12.71	410.26	0
1	18	45	12.71	410.26	0
1	19	45	12.71	410.26	0
1	20	45	12.71	410.26	0
1	21	45	12.71	410.26	0
1	22	45	12.71	410.26	0
1	23	45	12.71	410.26	0
1	24	45	12.71	410.26	0
1	25	45	12.71	410.26	0
1	26	45	12.71	410.26	0
1	27	45	12.71	410.26	0
1	28	45	12.71	410.26	0
1	29	45	12.71	410.26	0
1	30	45	12.71	410.26	0
1	31	45	12.71	410.26	0
1	32	45	12.71	410.26	0
1	33	45	12.71	470.64	0
1	33	46	12.71	93.24	0
1	34	46	12.71	609.17	0
1	35	46	12.71	93.24	0
1	35	47	12.71	515.93	0
1	36	47	12.71	234.43	0
1	36	48	12.71	375.18	0
1	37	48	12.71	375.18	0
1	37	49	12.71	187.37	0
1	38	49	11.19	308.02	0
1	38	50	11.19	439.56	0
1	38	51	11.19	439.56	0
1	38	52	11.19	439.56	0

\* Average monthly stage (1986-1988) used in steady state runs. Actual monthly values were use in transient runs.

\*\* River bed conductance for each cell is calculated as the product of the average wetted perimeter of the river, the length of the river reach in a cell, and the hydraulic conductivity of the river bed; divided by the thickness of the river bed.

## RIVER PACKAGE DATA

<u>Layer</u>	<u>Row</u>	<u>Column</u>	<u>Average Stage*</u>	<u>River Bed Conductance**</u>	<u>River Bottom Elevation (ft. NGVD)</u>
1	38	53	11.19	439.56	0
1	38	54	11.19	439.56	0
1	13	53	10.96	709.40	0
1	14	53	10.96	709.40	0
1	15	52	10.96	451.77	0
1	16	52	10.96	644.69	0
1	17	52	10.96	644.69	0
1	18	52	10.96	644.69	0
1	19	51	10.96	644.69	0
1	20	51	10.96	644.69	0
1	21	51	10.96	644.69	0
1	22	51	10.96	644.69	0
1	23	52	10.96	579.69	0
1	24	52	10.96	644.69	0
1	25	52	10.96	644.69	0
1	26	52	10.96	644.69	0
1	27	52	10.96	644.69	0
1	28	53	10.96	644.69	0
1	29	53	10.96	644.69	0
1	30	53	10.96	644.69	0
1	31	53	10.96	644.69	0
1	32	53	10.96	257.63	0
1	32	54	10.96	387.06	0
1	33	54	10.96	644.69	0
1	34	54	10.96	644.69	0
1	35	54	10.96	644.69	0
1	36	54	10.96	387.06	0
1	37	54	10.96	387.06	0
1	38	52	10.81	439.56	0
1	39	52	10.81	439.56	0
1	40	52	10.81	439.56	0
1	41	52	10.81	439.56	0
1	42	52	10.81	439.56	0
1	43	52	10.81	439.56	0
1	44	52	10.81	439.56	0
1	45	52	10.81	439.56	0
1	46	52	10.81	439.56	0
1	47	52	10.81	439.56	0

\* Average monthly stage (1986-1988) used in steady state runs. Actual monthly values were use in transient runs.

\*\* River bed conductance for each cell is calculated as the product of the average wetted perimeter of the river, the length of the river reach in a cell, and the hydraulic conductivity of the river bed; divided by the thickness of the river bed.

## RIVER PACKAGE DATA

<u>Layer</u>	<u>Row</u>	<u>Column</u>	<u>Average Stage*</u>	<u>River Bed Conductance**</u>	<u>River Bottom Elevation (ft. NGVD)</u>
1	35	43	14.63	351.65	0
1	36	43	14.63	703.30	0
1	37	43	14.63	703.30	0
1	38	43	14.63	703.30	0
1	39	43	14.63	773.89	0
1	40	43	14.63	1353.87	0
1	41	43	14.63	234.21	0
1	41	44	14.63	351.87	0
1	42	44	14.63	644.91	0
1	43	44	14.63	177.60	0
1	43	45	14.63	579.98	0
1	44	45	14.63	351.19	0
1	44	46	14.63	644.91	0
1	45	46	14.63	175.38	0
1	45	47	14.63	468.98	0
1	46	47	14.63	644.91	0
1	47	47	14.63	66.60	0
1	47	48	14.63	586.08	0
1	40	37	14.63	515.87	0
1	40	38	14.63	644.69	0
1	40	39	14.63	644.69	0
1	40	40	14.63	644.69	0
1	40	41	14.63	644.69	0
1	40	42	14.63	7.33	0
1	11	2	3.22	2579.64	-10
1	11	3	3.22	2579.64	-10
1	11	4	3.22	2579.64	-10
1	11	5	3.22	2597.64	-10
1	11	6	3.22	2814.96	-10
1	11	7	3.22	2499.72	-10
1	11	8	3.22	2353.20	-10
1	11	9	3.22	1875.90	-10
1	10	9	3.22	2579.64	-10
1	9	9	3.22	710.40	-10
1	9	10	3.22	2814.96	-10
1	9	11	3.22	2353.20	-10
1	9	12	3.22	2814.96	-10
1	9	13	3.22	1172.16	-10

\* Average monthly stage (1986-1988) used in steady state runs. Actual monthly values were use in transient runs.

\*\* River bed conductance for each cell is calculated as the product of the average wetted perimeter of the river, the length of the river reach in a cell, and the hydraulic conductivity of the river bed; divided by the thickness of the river bed.

### RIVER PACKAGE DATA

<u>Layer</u>	<u>Row</u>	<u>Column</u>	<u>Average Stage*</u>	<u>River Bed Conductance**</u>	<u>River Bottom Elevation (ft. NGVD)</u>
1	8	13	3.22	2814.96	-10
1	8	14	3.22	936.84	-10
1	7	14	3.22	140.74	-10
1	7	15	3.22	1875.90	-10
1	8	15	3.22	710.40	-10
1	8	16	3.22	2579.64	-10
1	7	17	3.22	2353.20	-10
1	7	18	3.22	1875.90	-10
1	6	18	3.22	936.84	-10
1	6	19	3.22	2814.96	-10
1	6	20	3.22	2579.64	-10
1	6	21	3.22	2353.20	-10
1	6	22	11.21	2353.20	-5
1	6	23	11.21	2579.64	-5
1	6	24	11.21	2353.20	-5
1	6	25	11.21	2353.20	-5
1	6	26	11.21	2579.64	-5
1	6	27	11.21	2579.64	-5
1	6	28	11.21	2353.20	-5
1	6	29	11.21	2353.20	-5
1	6	30	11.21	2353.20	-5
1	6	31	11.21	2353.20	-5
1	6	32	11.21	2353.20	-5
1	6	33	11.21	2353.20	-5
1	6	34	11.21	2353.20	-5
1	5	33	11.21	2353.20	-5
1	5	34	11.21	2353.20	-5
1	5	35	11.21	2353.20	-5
1	2	33	11.21	2353.32	-5
1	3	33	11.21	2353.32	-5
1	4	33	11.21	2353.32	-5
1	5	33	11.21	2344.32	-5
1	4	35	11.21	2353.20	-5
1	4	36	11.21	444.00	-5
1	3	36	11.21	281.50	-5
1	12	7	3.63	351.65	-5
1	13	7	3.63	351.65	-4
1	14	7	3.63	470.64	-3

\* Average monthly stage (1986-1988) used in steady state runs. Actual monthly values were use in transient runs.

\*\* River bed conductance for each cell is calculated as the product of the average wetted perimeter of the river, the length of the river reach in a cell, and the hydraulic conductivity of the river bed; divided by the thickness of the river bed.

RIVER PACKAGE DATA

<u>Layer</u>	<u>Row</u>	<u>Column</u>	<u>Average Stage*</u>	<u>River Bed Conductance**</u>	<u>River Bottom Elevation (ft. NGVD)</u>
1	15	7	3.63	2353.20	-2
1	15	8	3.63	234.43	-1
1	16	8	3.63	218.50	0
1	16	9	3.63	328.56	1
1	17	9	3.63	328.56	2
1	17	10	3.63	328.56	3
1	18	10	3.63	284.16	4
1	18	11	3.63	375.18	5
1	19	11	3.63	284.16	6
1	19	12	3.63	328.56	7
1	20	12	3.63	375.18	8
1	20	13	3.63	239.76	9
1	31	10	19.96	4107.00	10
1	31	11	19.96	2.55E+06	10
1	32	10	19.96	8.14E+06	10
1	32	11	19.96	2.11E+07	10
1	32	12	19.96	2.89E+07	10
1	33	11	19.96	2.11E+07	10
1	33	12	19.96	77478.00	10

\* Average monthly stage (1986-1988) used in steady state runs. Actual monthly values were use in transient runs.

\*\* River bed conductance for each cell is calculated as the product of the average wetted perimeter of the river, the length of the river reach in a cell, and the hydraulic conductivity of the river bed; divided by the thickness of the river bed.

**APPENDIX C**  
**MAPS OF MONTHLY RAINFALL**

LIST OF FIGURES - APPENDIX C

<u>Figure</u>		<u>Page</u>
C-1	Rainfall, January 1986 .....	98
C-2	Rainfall, February 1986 .....	99
C-3	Rainfall, March 1986 .....	100
C-4	Rainfall, April 1986 .....	101
C-5	Rainfall, May 1986 .....	102
C-6	Rainfall, June 1986 .....	103
C-7	Rainfall, July 1986 .....	104
C-8	Rainfall, August 1986 .....	105
C-9	Rainfall, September 1986 .....	106
C-10	Rainfall, October 1986 .....	107
C-11	Rainfall, November 1986 .....	108
C-12	Rainfall, December 1986 .....	109
C-13	Rainfall, January 1987 .....	110
C-14	Rainfall, February 1987 .....	111
C-15	Rainfall, March 1987 .....	112
C-16	Rainfall, April 1987 .....	113
C-17	Rainfall, May 1987 .....	114
C-18	Rainfall, June 1987 .....	115
C-19	Rainfall, July 1987 .....	116
C-20	Rainfall, August 1987 .....	117
C-21	Rainfall, September 1987 .....	118
C-22	Rainfall, October 1987 .....	119
C-23	Rainfall, November 1987 .....	120
C-24	Rainfall, December 1987 .....	121
C-25	Rainfall, January 1988 .....	122

**LIST OF FIGURES - APPENDIX C  
(CONTINUED)**

<u>Figure</u>		<u>Page</u>
C-26	Rainfall, February 1988 .....	123
C-27	Rainfall, March 1988 .....	124
C-28	Rainfall, April 1988 .....	125
C-29	Rainfall, May 1988 .....	126
C-30	Rainfall, June 1988 .....	127
C-31	Rainfall, July 1988 .....	128
C-32	Rainfall, August 1988 .....	129
C-33	Rainfall, September 1988 .....	130
C-34	Rainfall, October 1988 .....	131
C-35	Rainfall, November 1988 .....	132
C-36	Rainfall, December 1988 .....	133



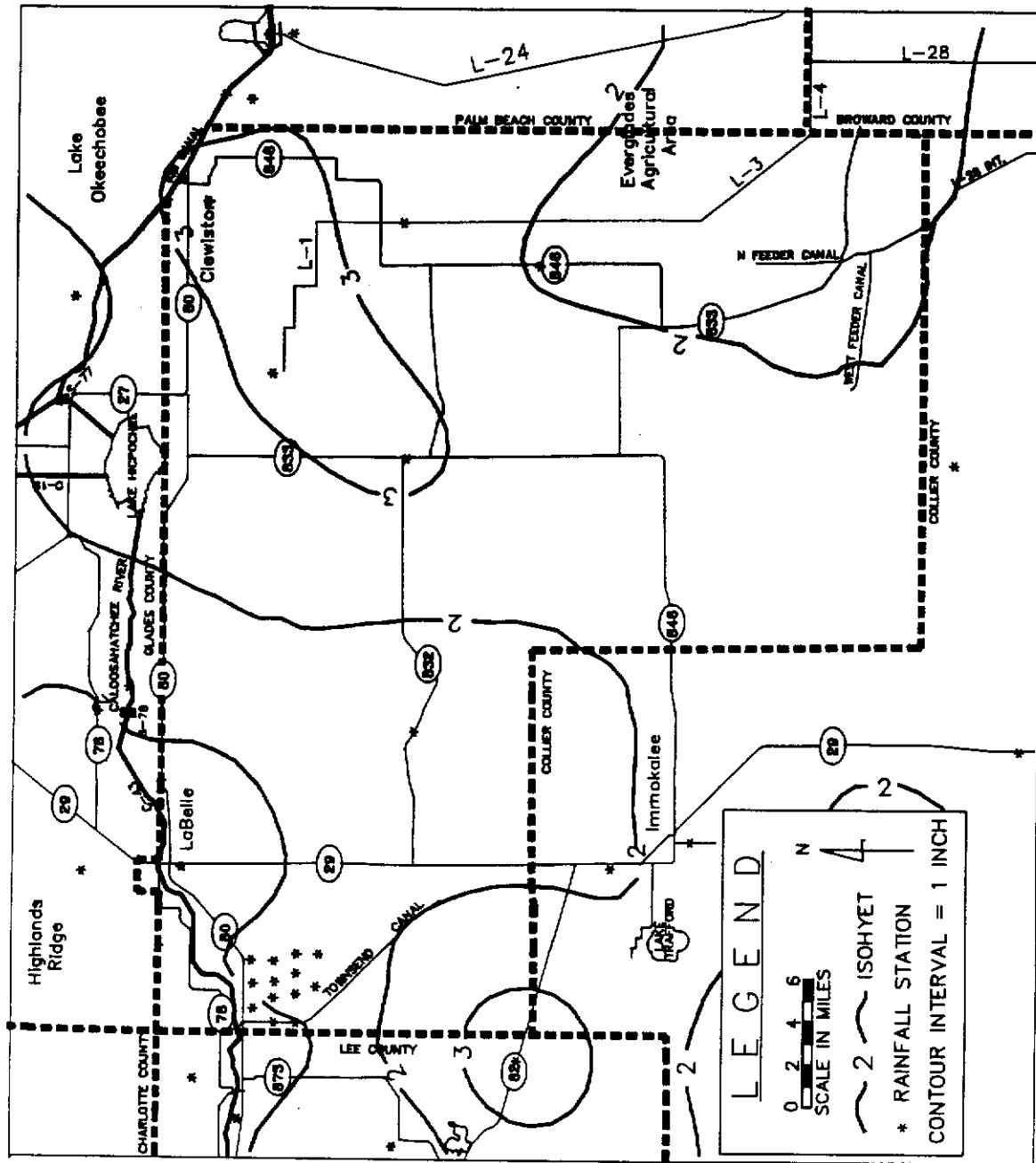


Figure C-1. RAINFALL, JANUARY 1986

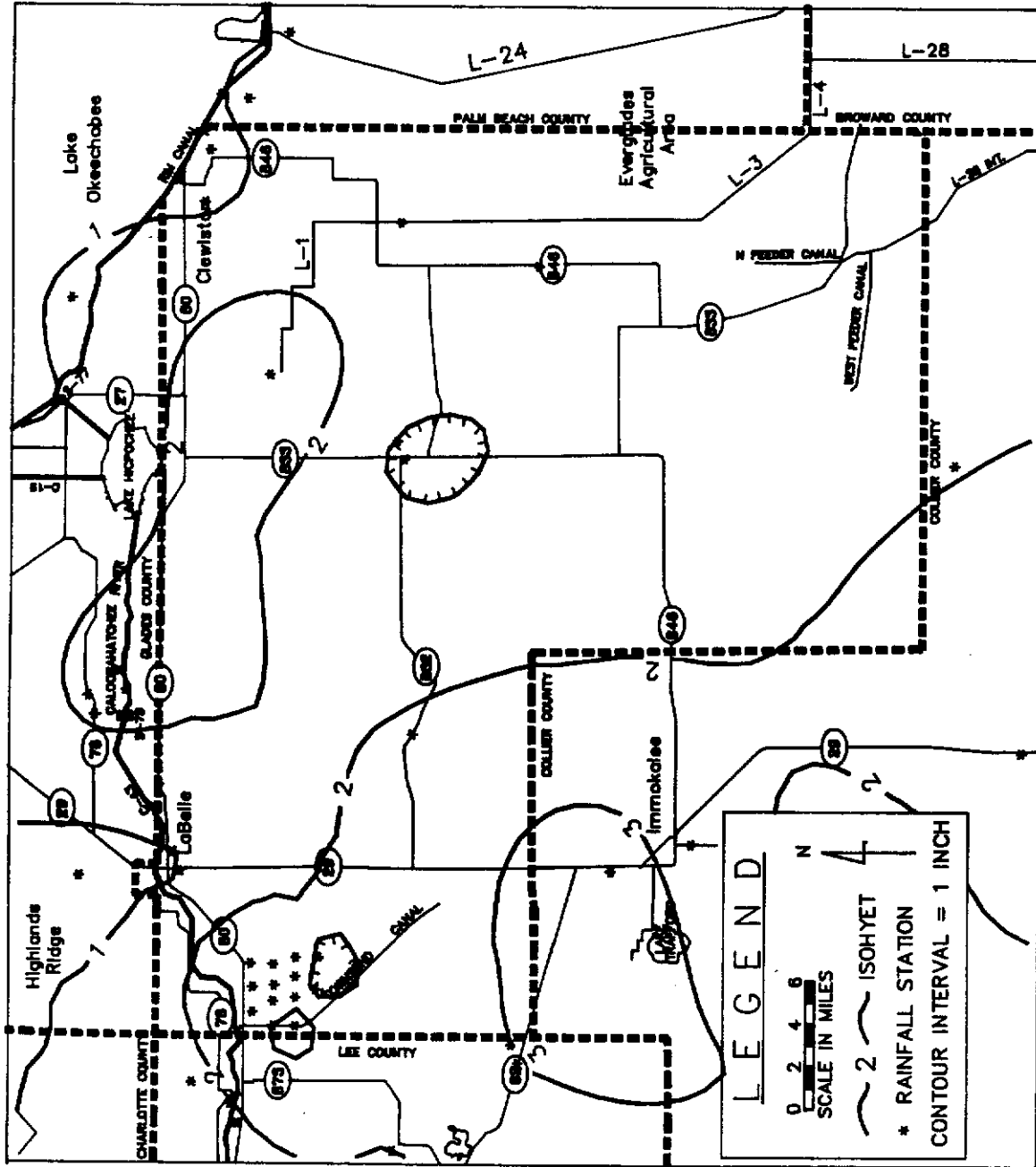


Figure C-2. RAINFALL, FEBRUARY 1986

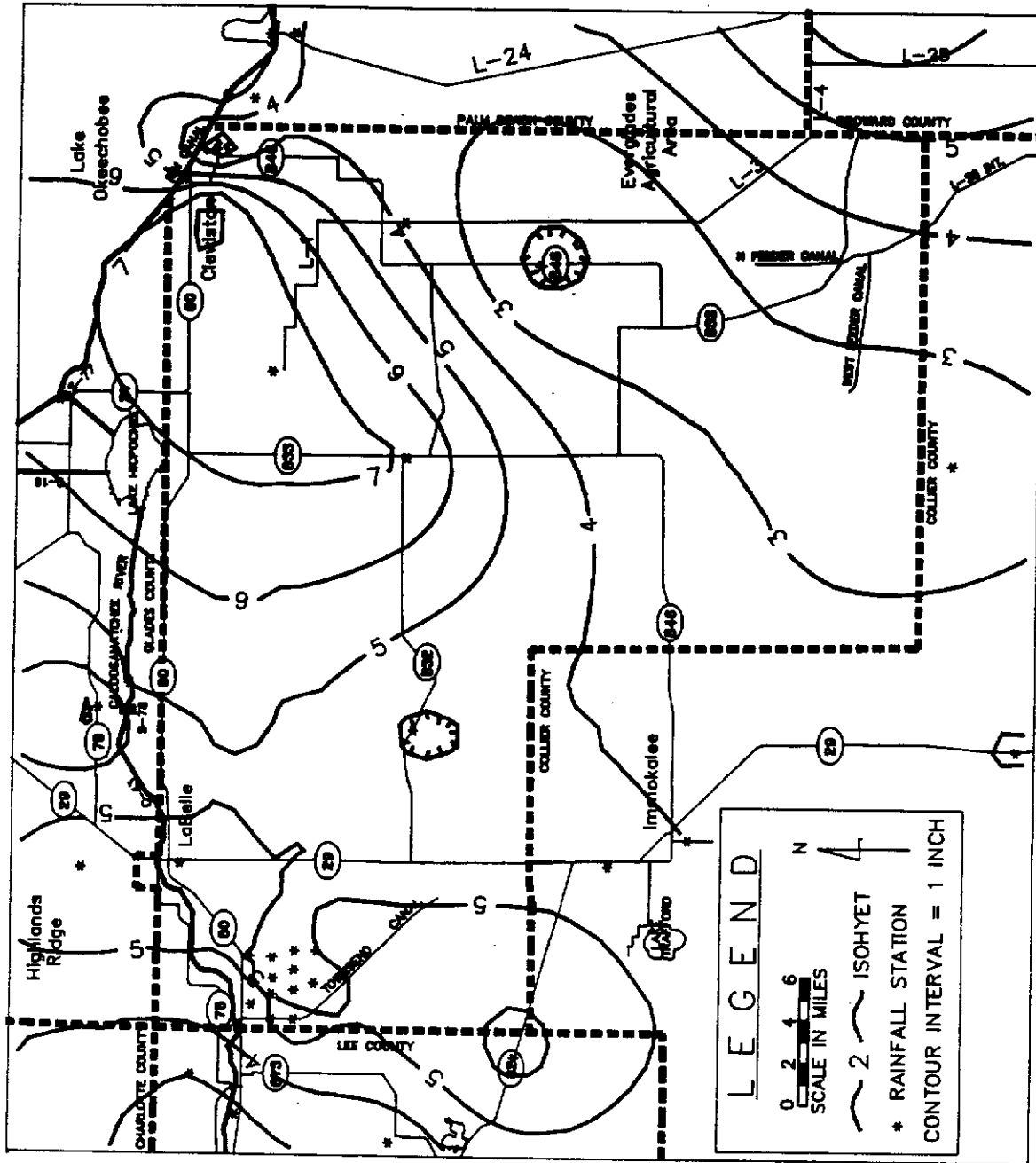


Figure C-3. RAINFALL, MARCH 1986

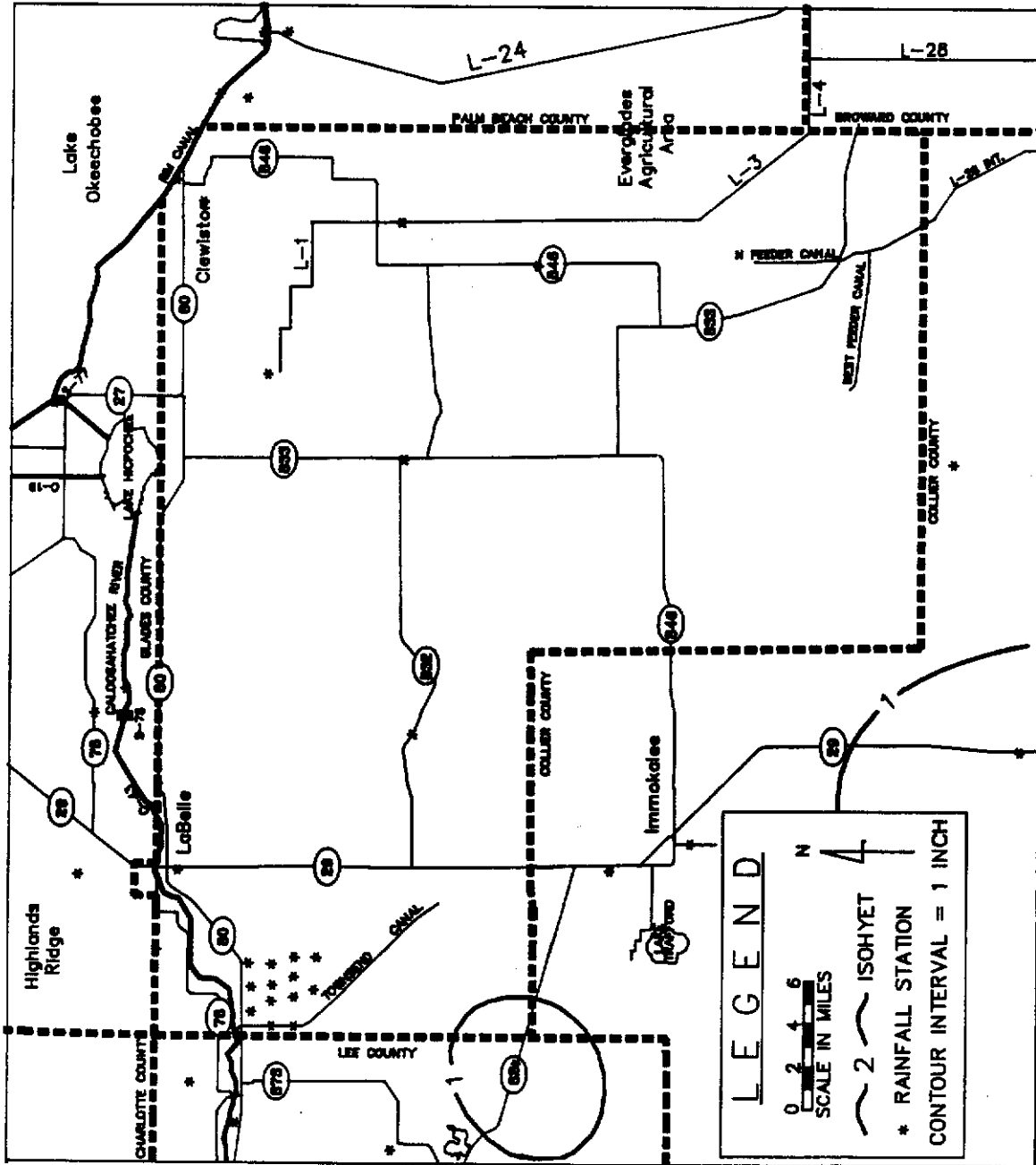


Figure C-4. RAINFALL, APRIL 1986

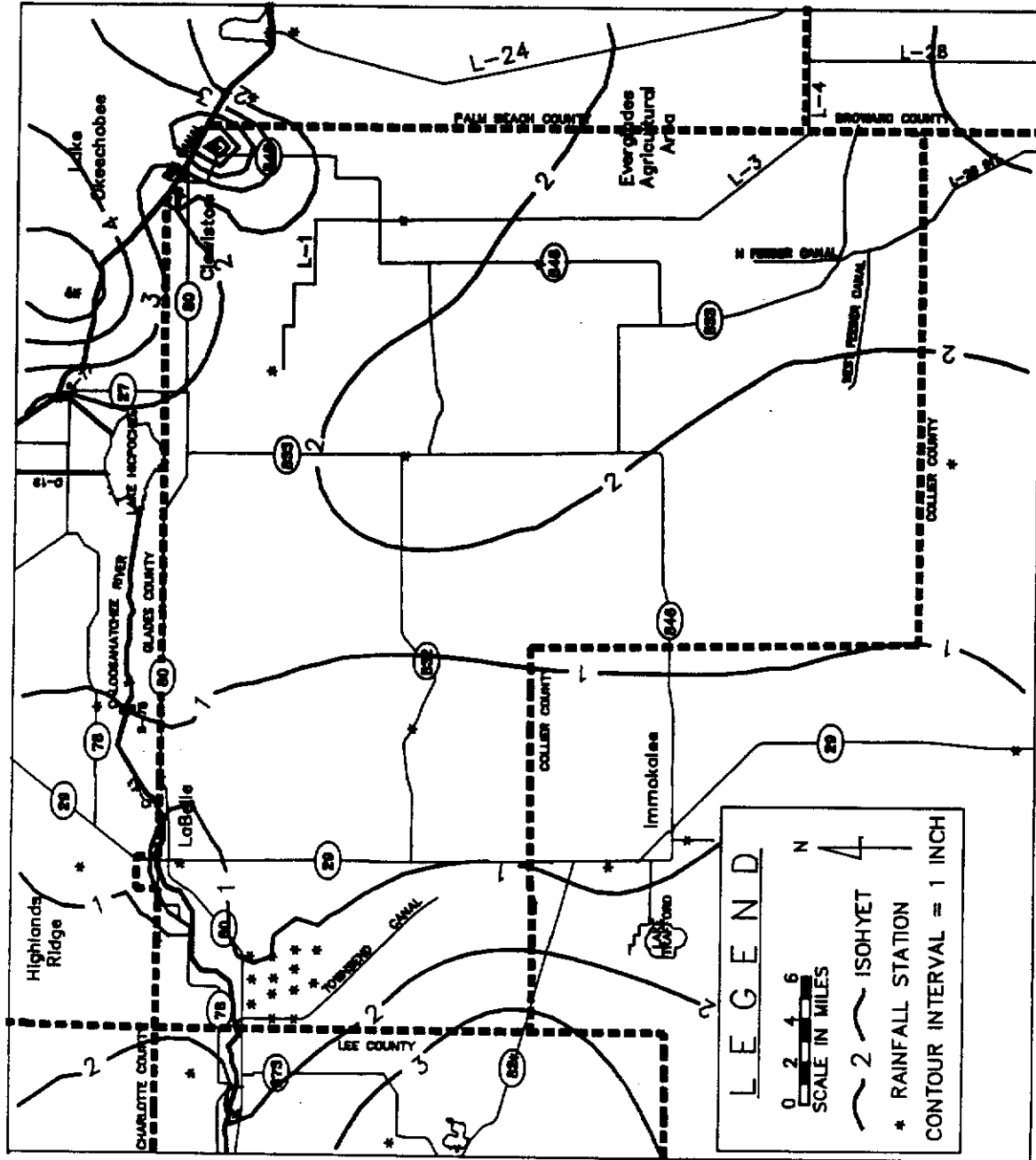


Figure C-5: RAINFALL, MAY 1986

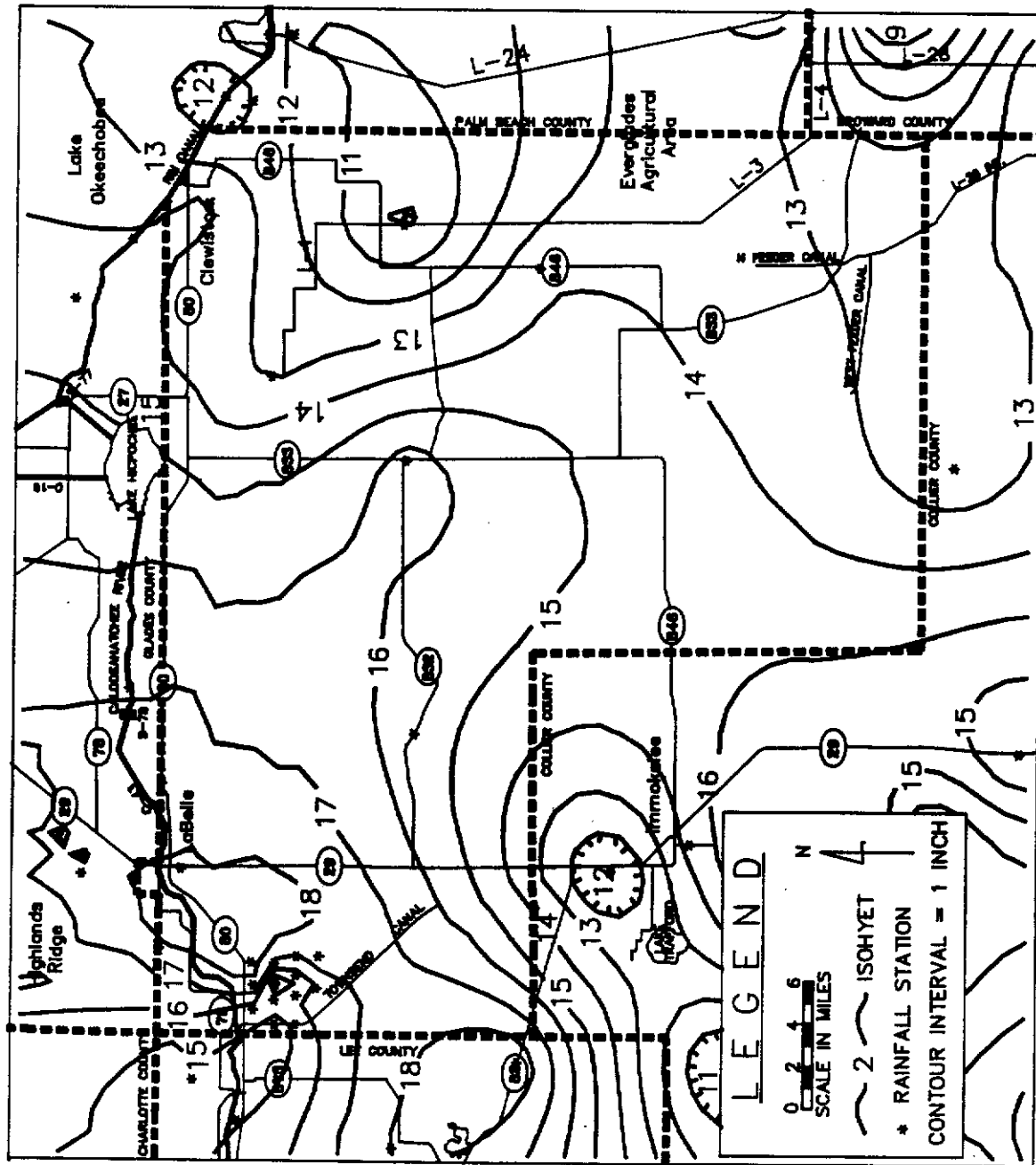


Figure C-6. RAINFALL, JUNE 1986

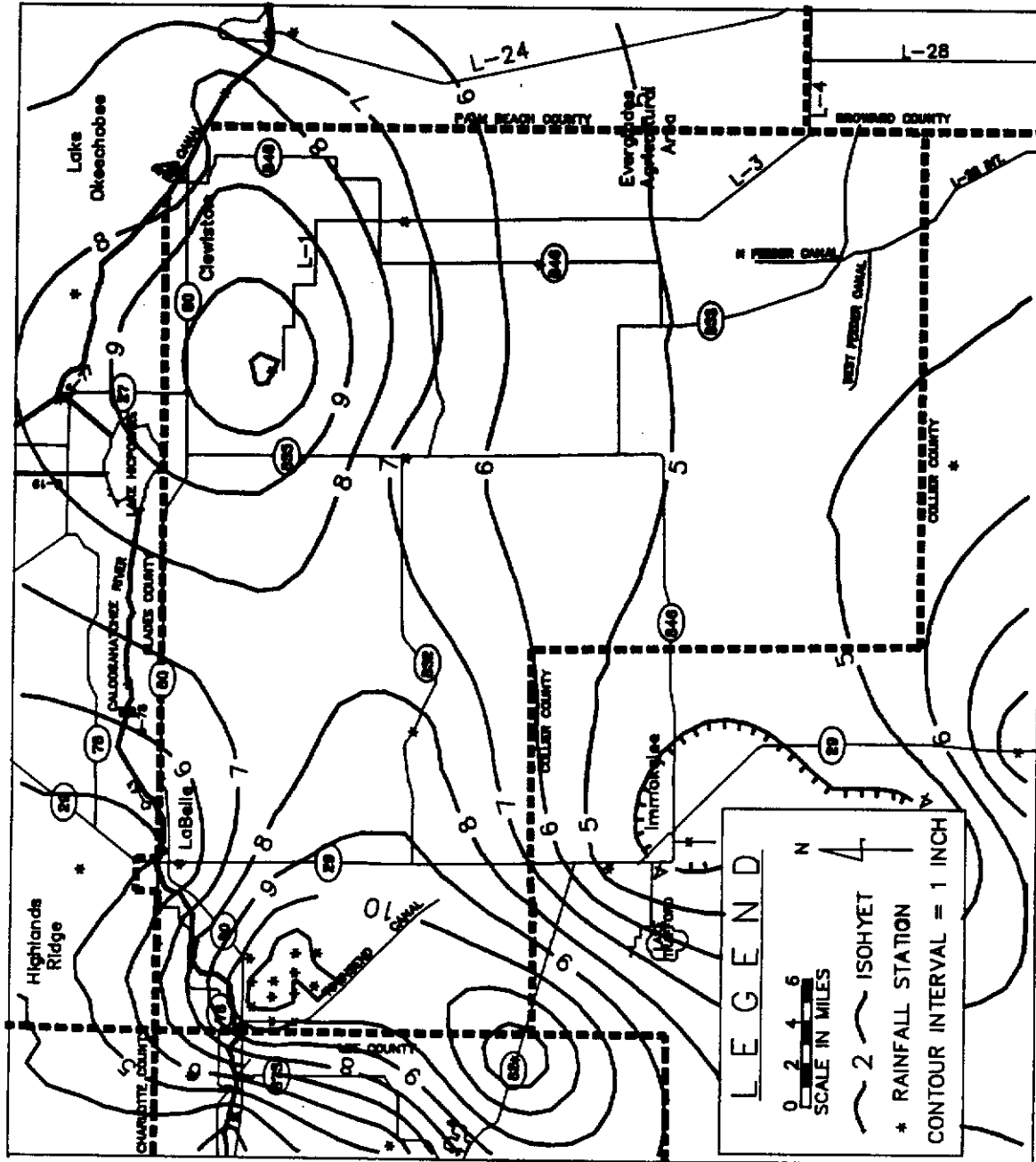


Figure C-7. RAINFALL, JULY 1986

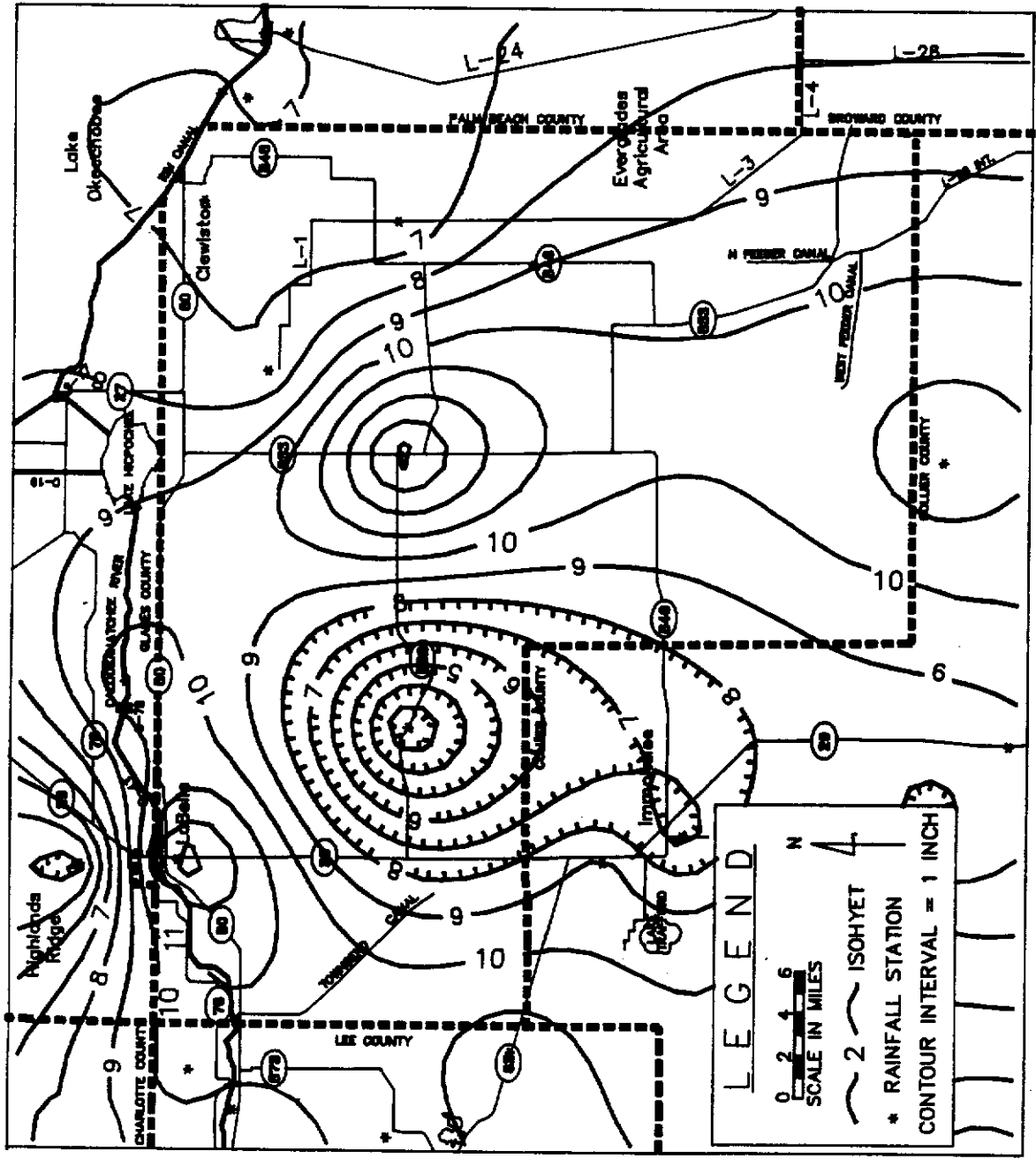


Figure C-8. RAINFALL, AUGUST 1986



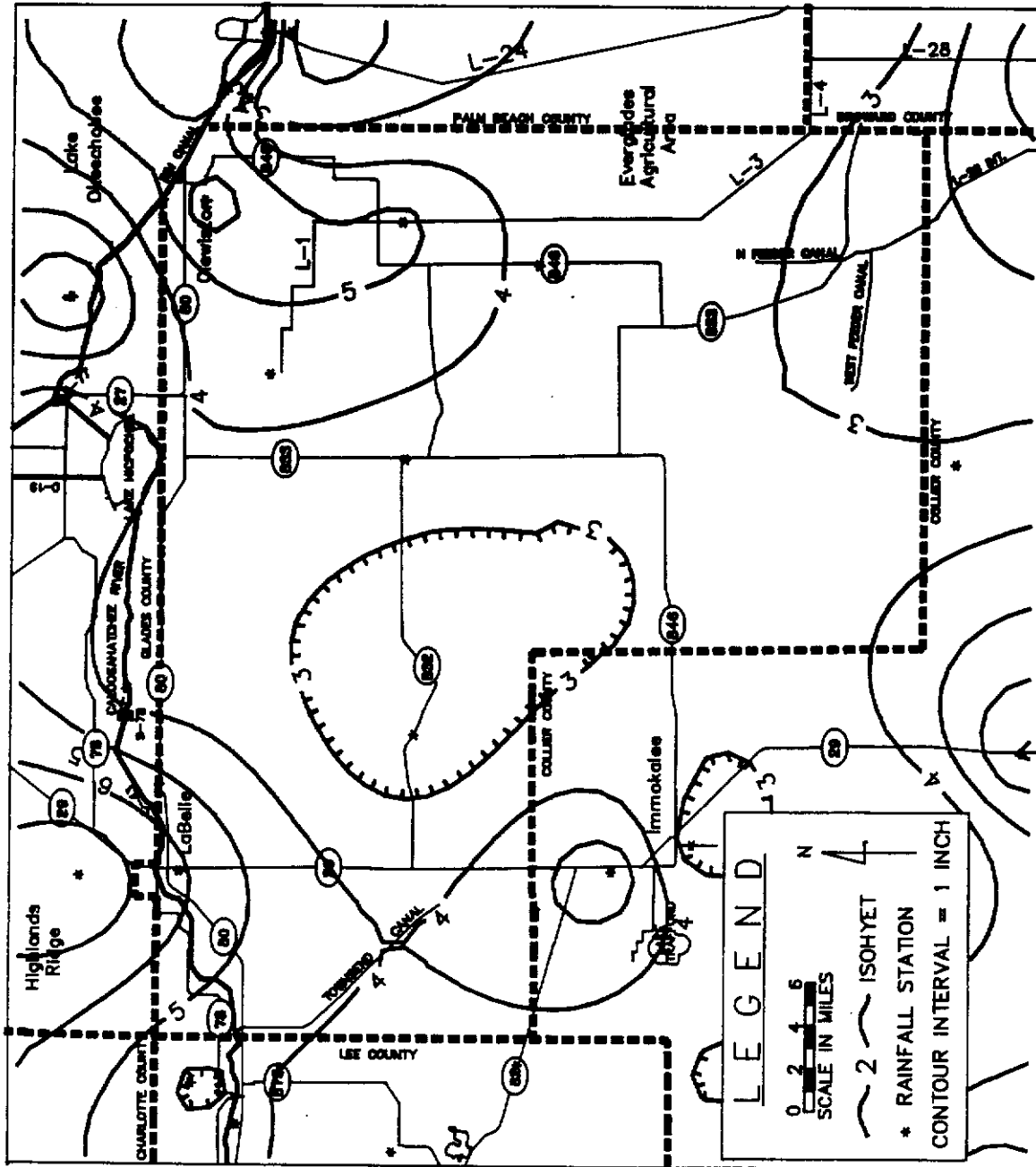


Figure C-9. RAINFALL, SEPTEMBER 1986

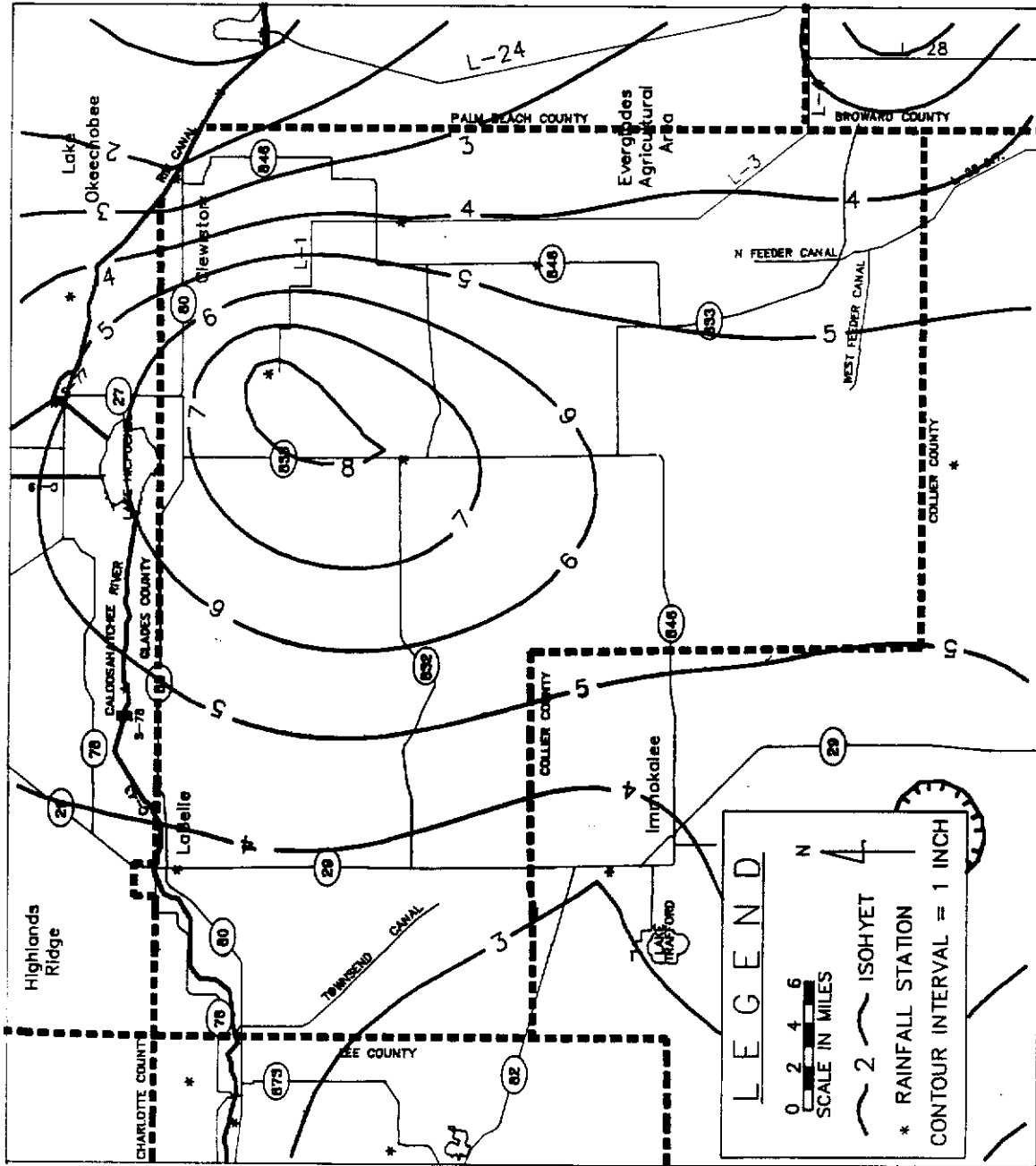


Figure C-10. RAINFALL, OCTOBER 1986

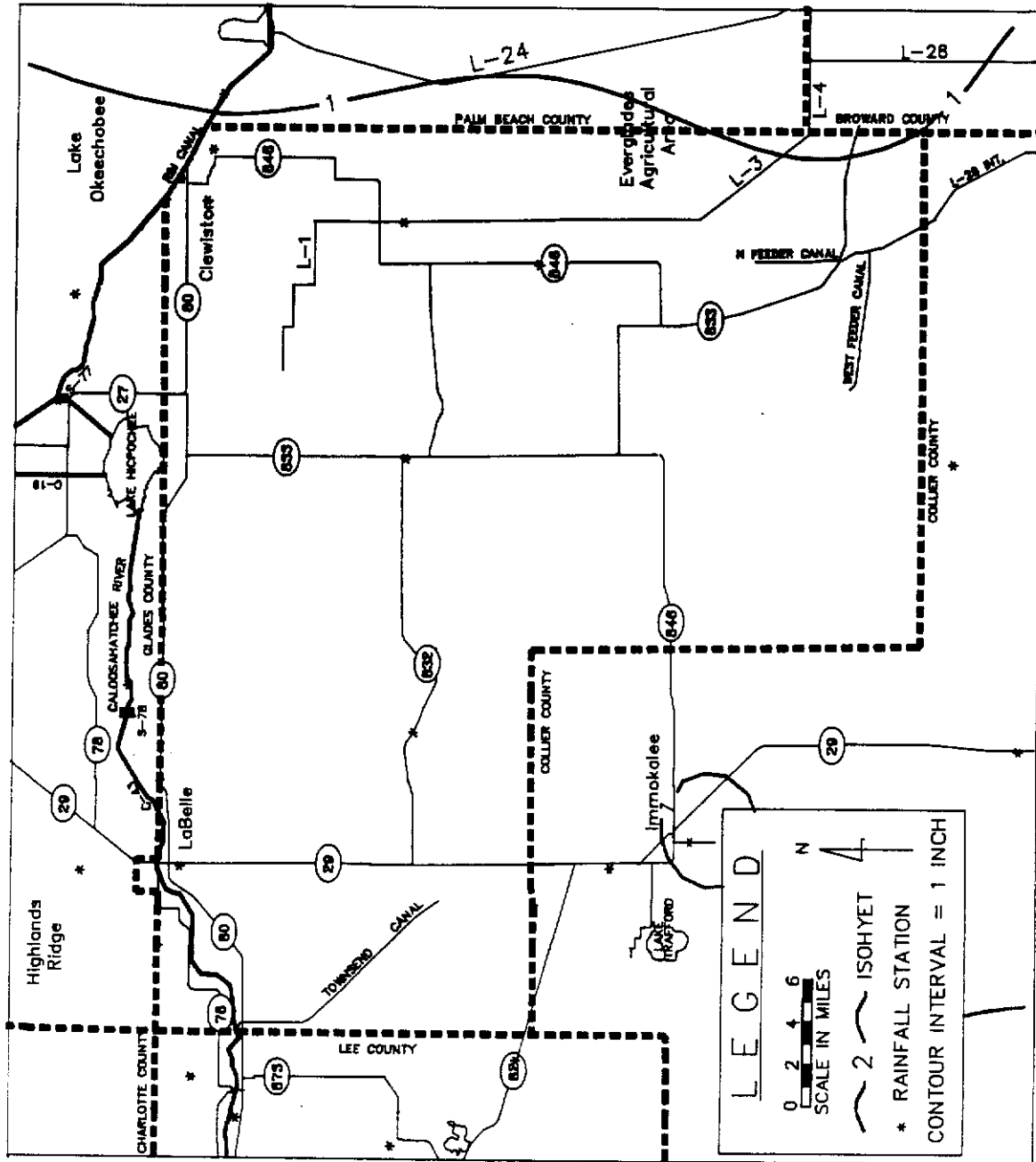


Figure C-11. RAINFALL, NOVEMBER 1986

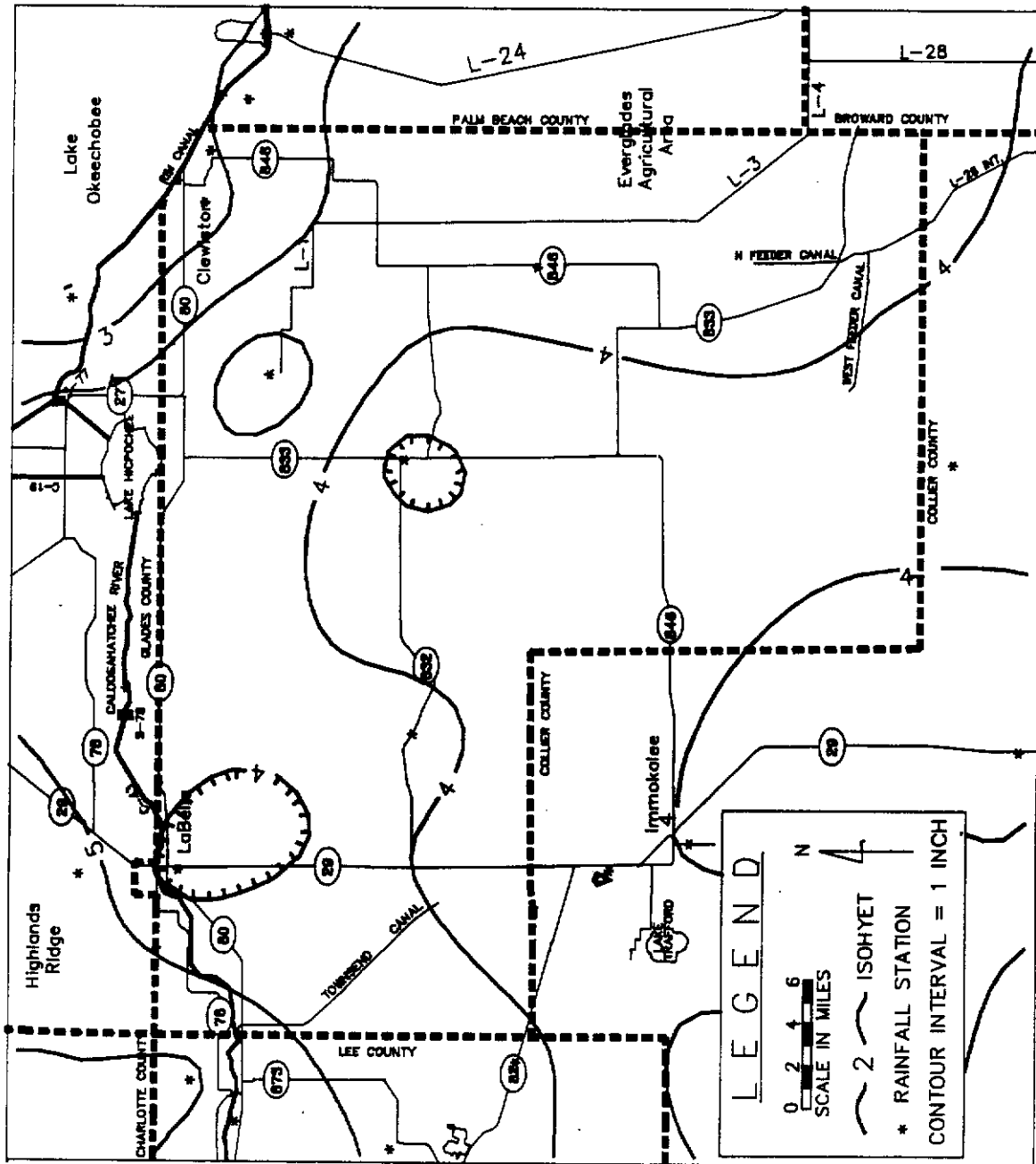


Figure C-12. RAINFALL, DECEMBER 1986

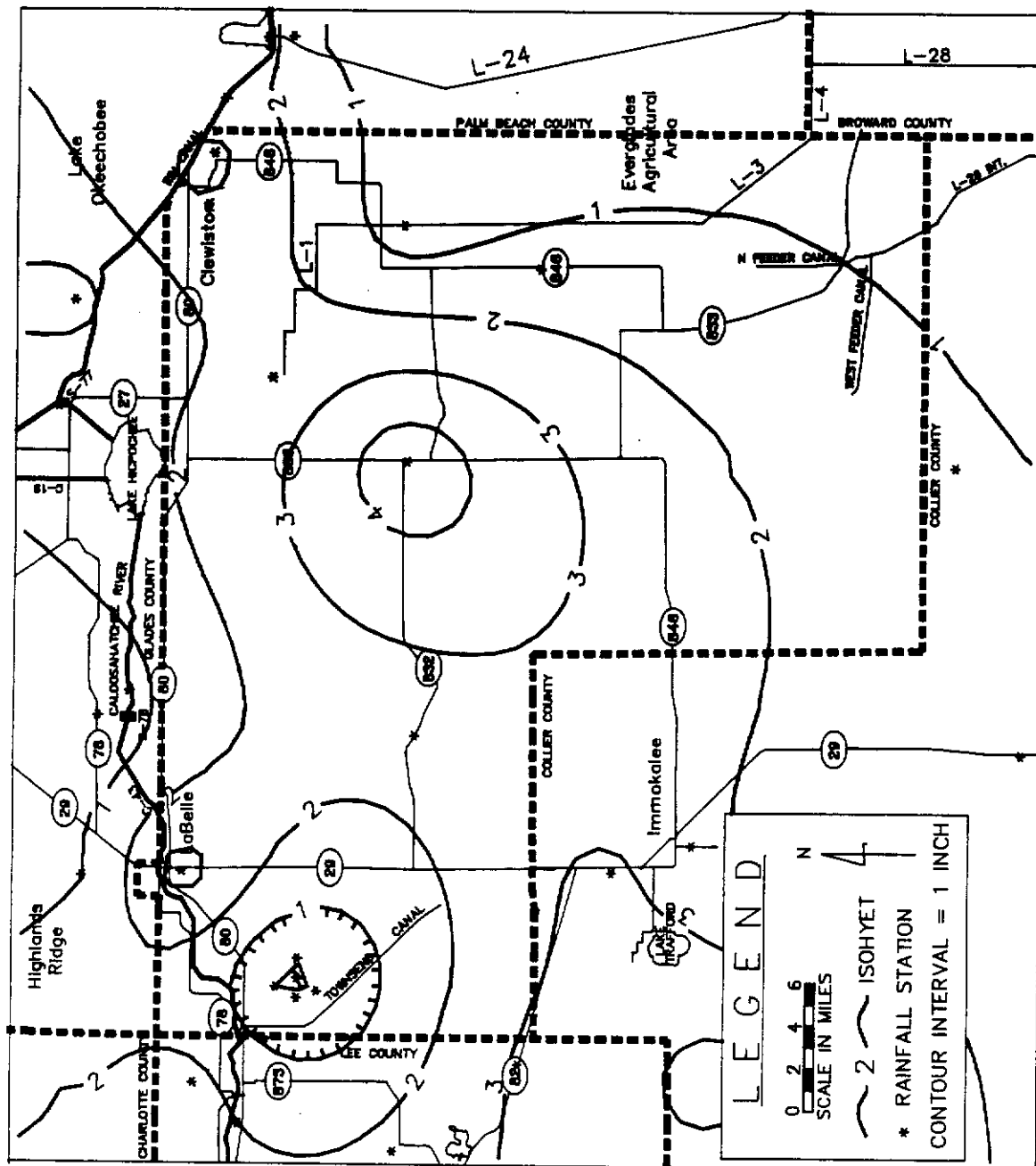


Figure C-13. RAINFALL, JANUARY 1987

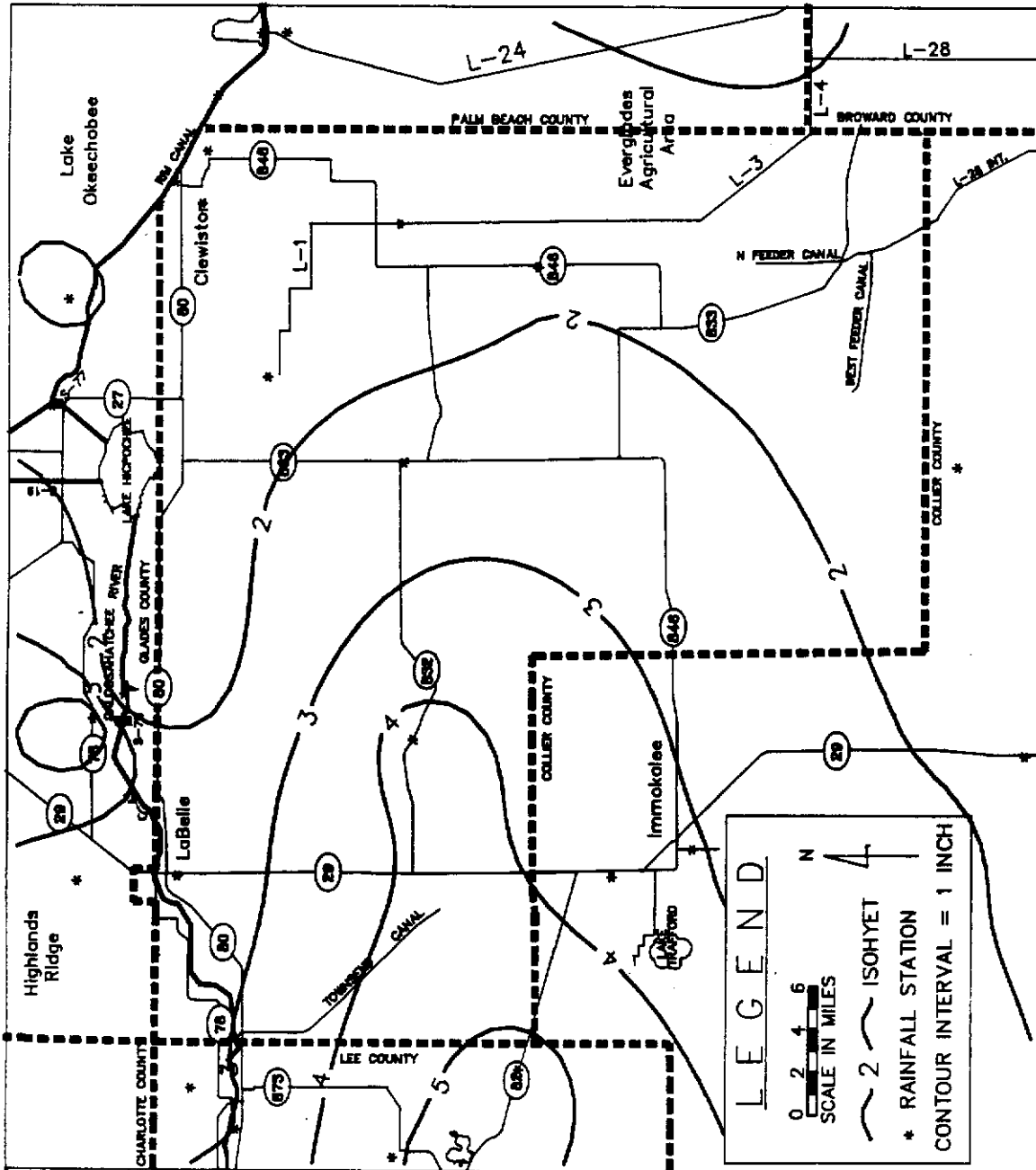


Figure C-14. RAINFALL, FEBRUARY 1987

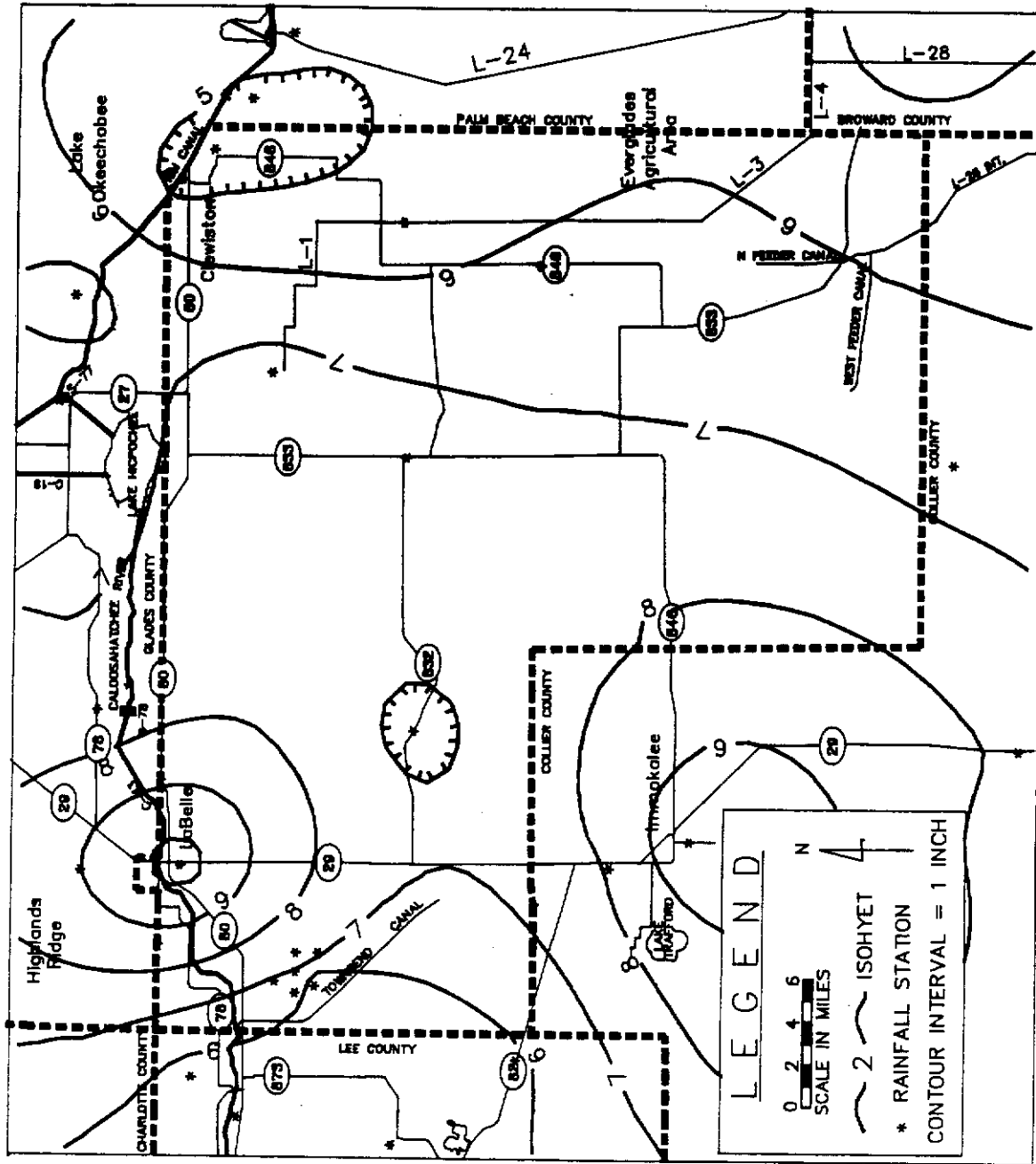


Figure C-15. RAINFALL, MARCH 1987

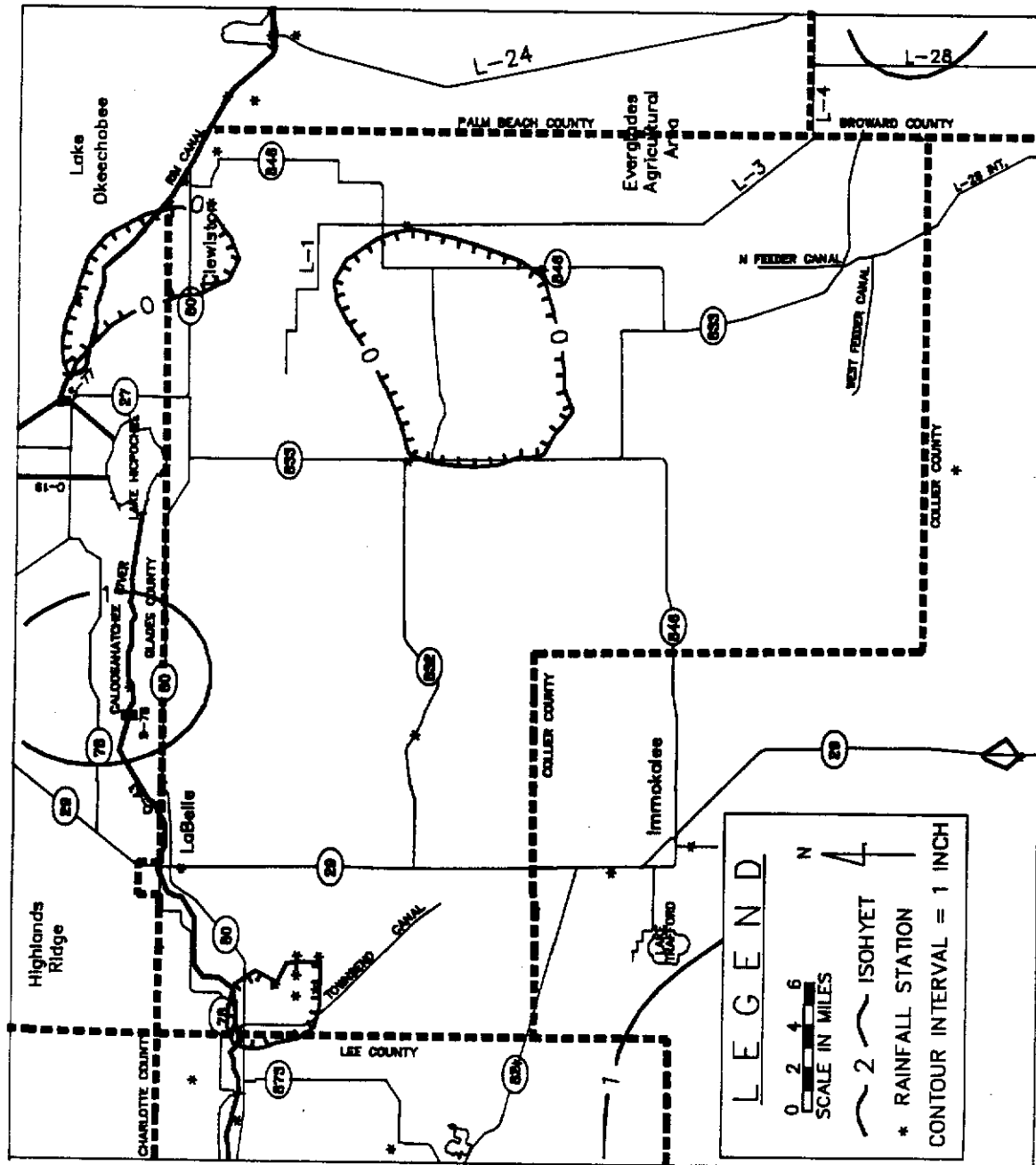


Figure C-16. RAINFALL, APRIL 1987



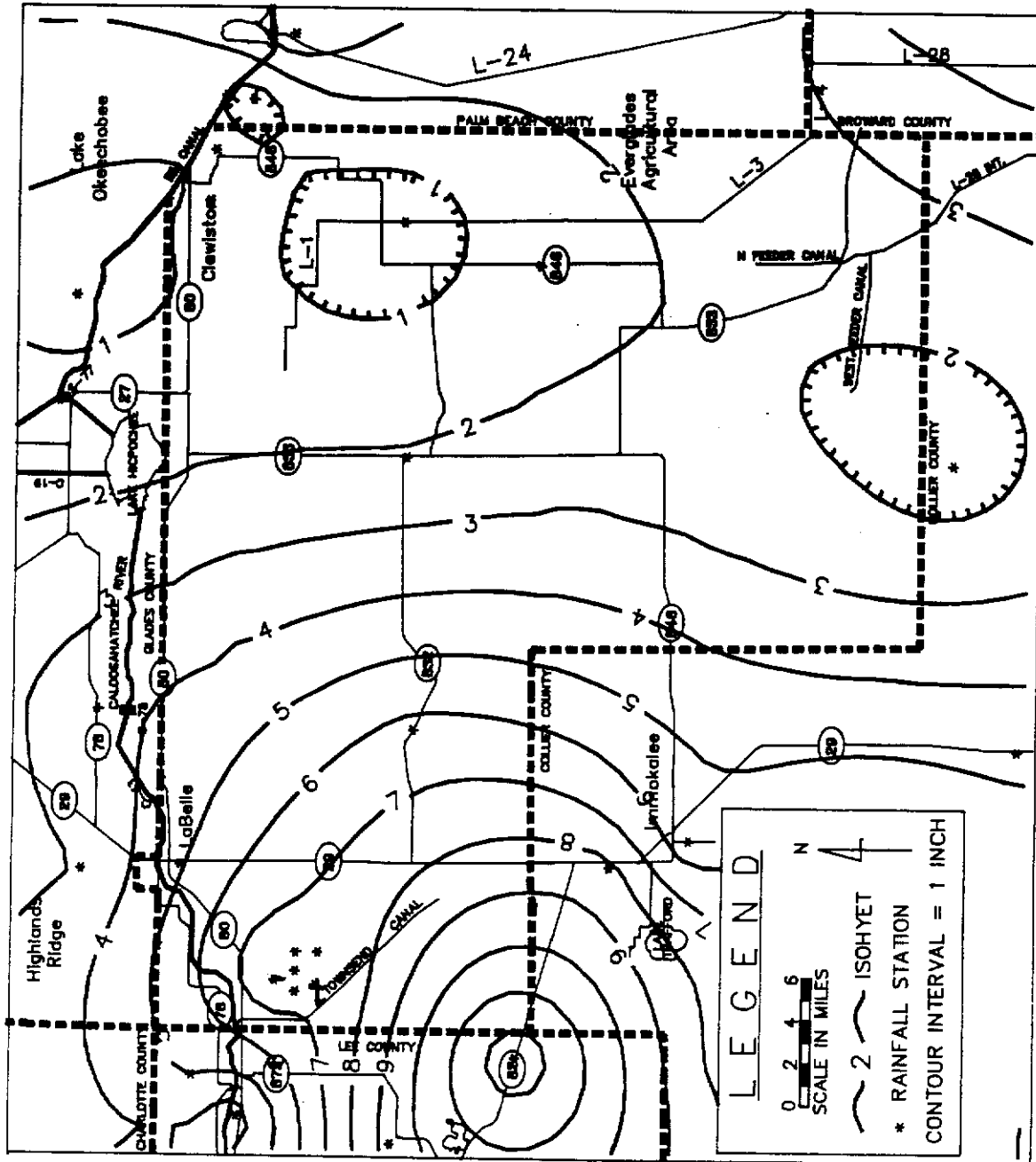


Figure C-17. RAINFALL, MAY 1987

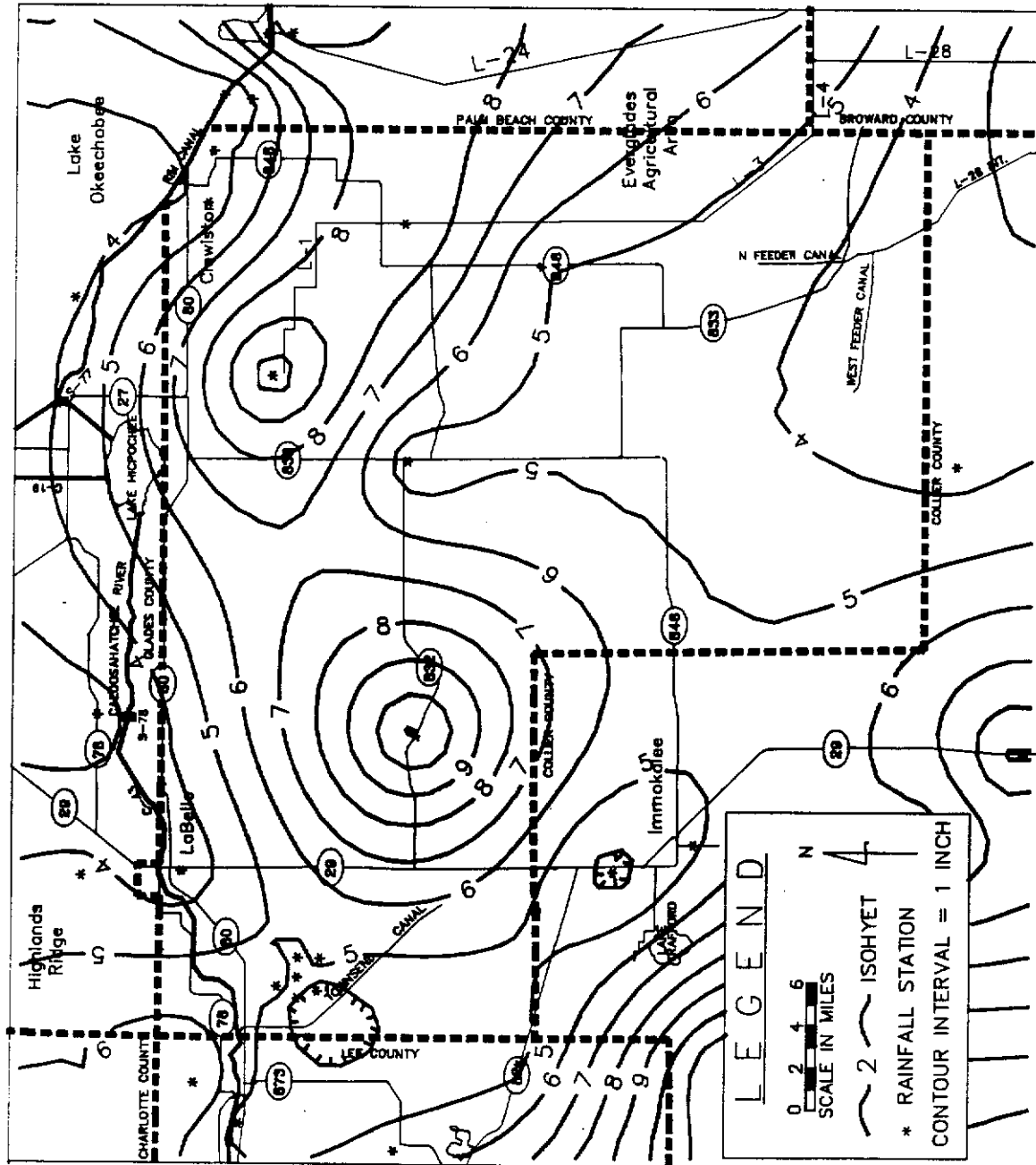


Figure C-18. RAINFALL, JUNE 1987

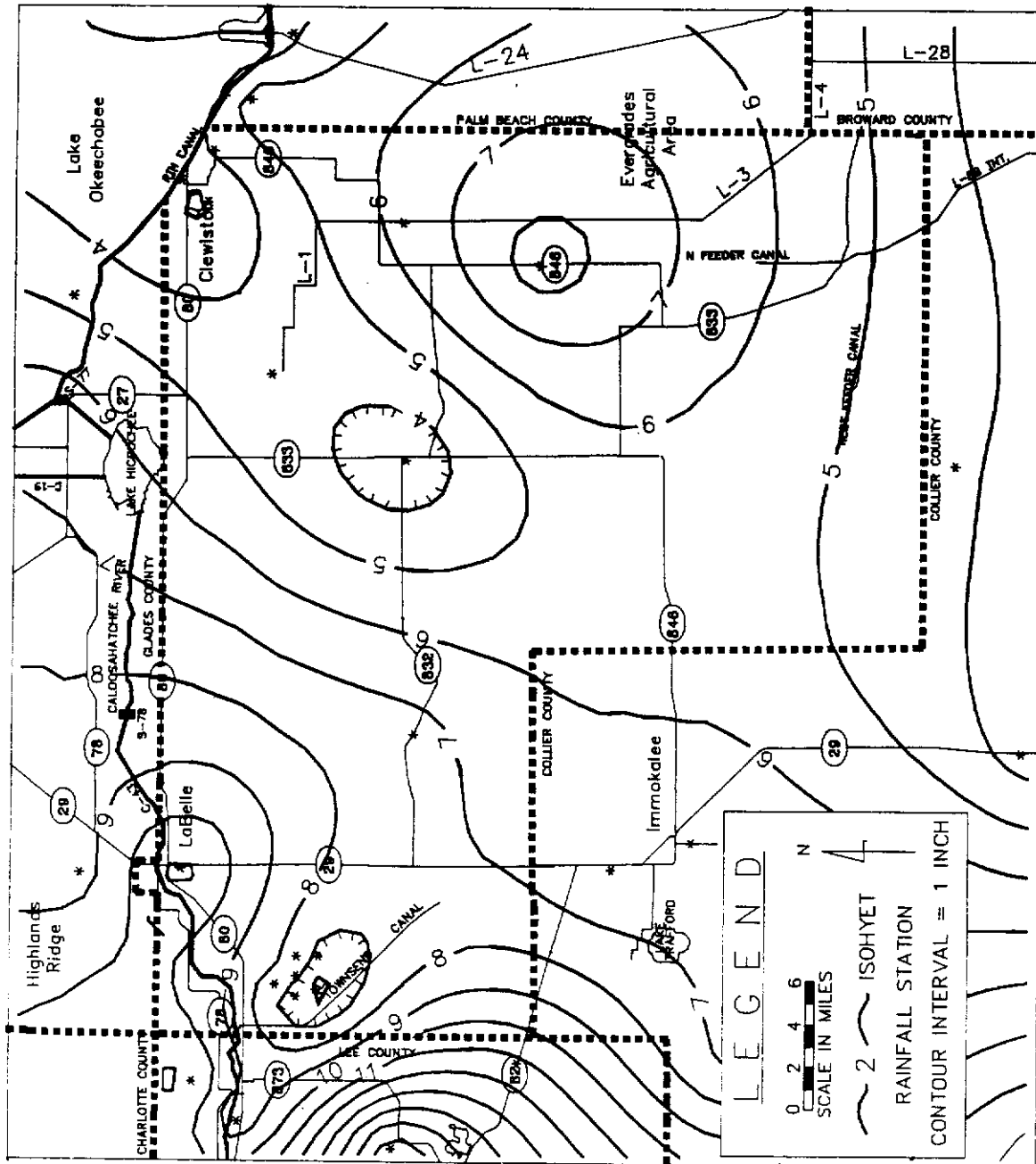


Figure C-19. RAINFALL, JULY 1987

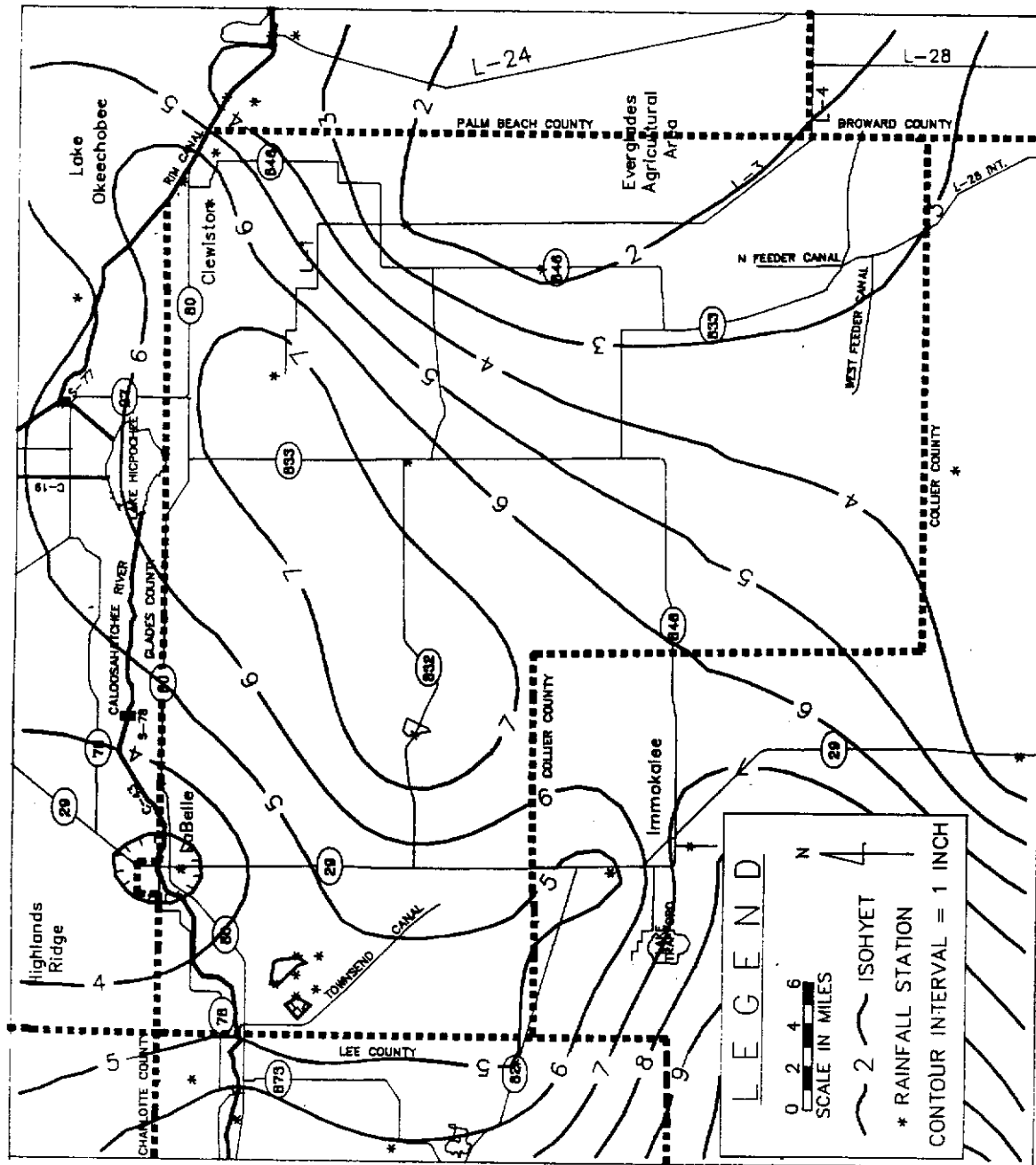


Figure C-20. RAINFALL, AUGUST 1987

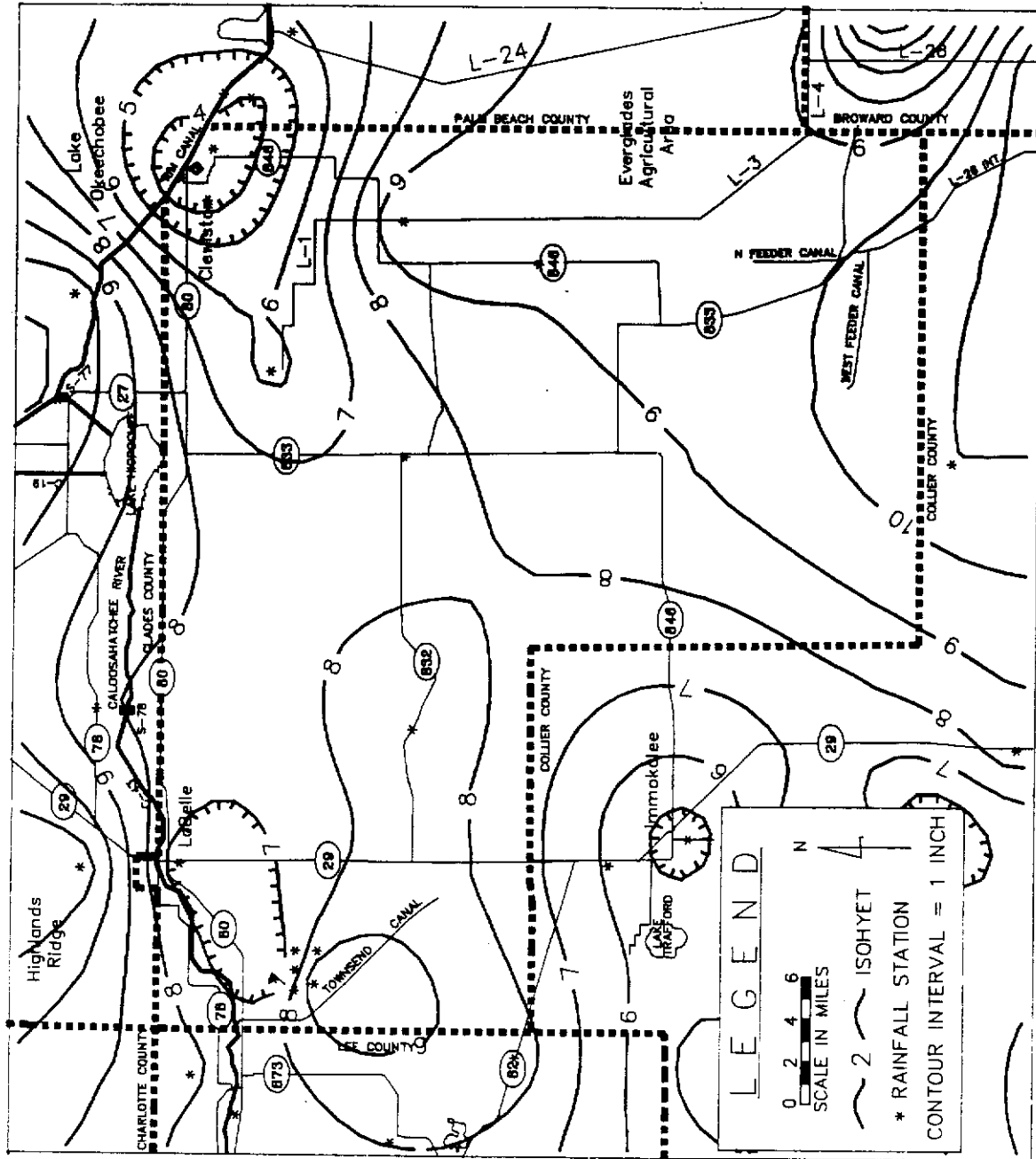


Figure C-21. RAINFALL, SEPTEMBER 1987

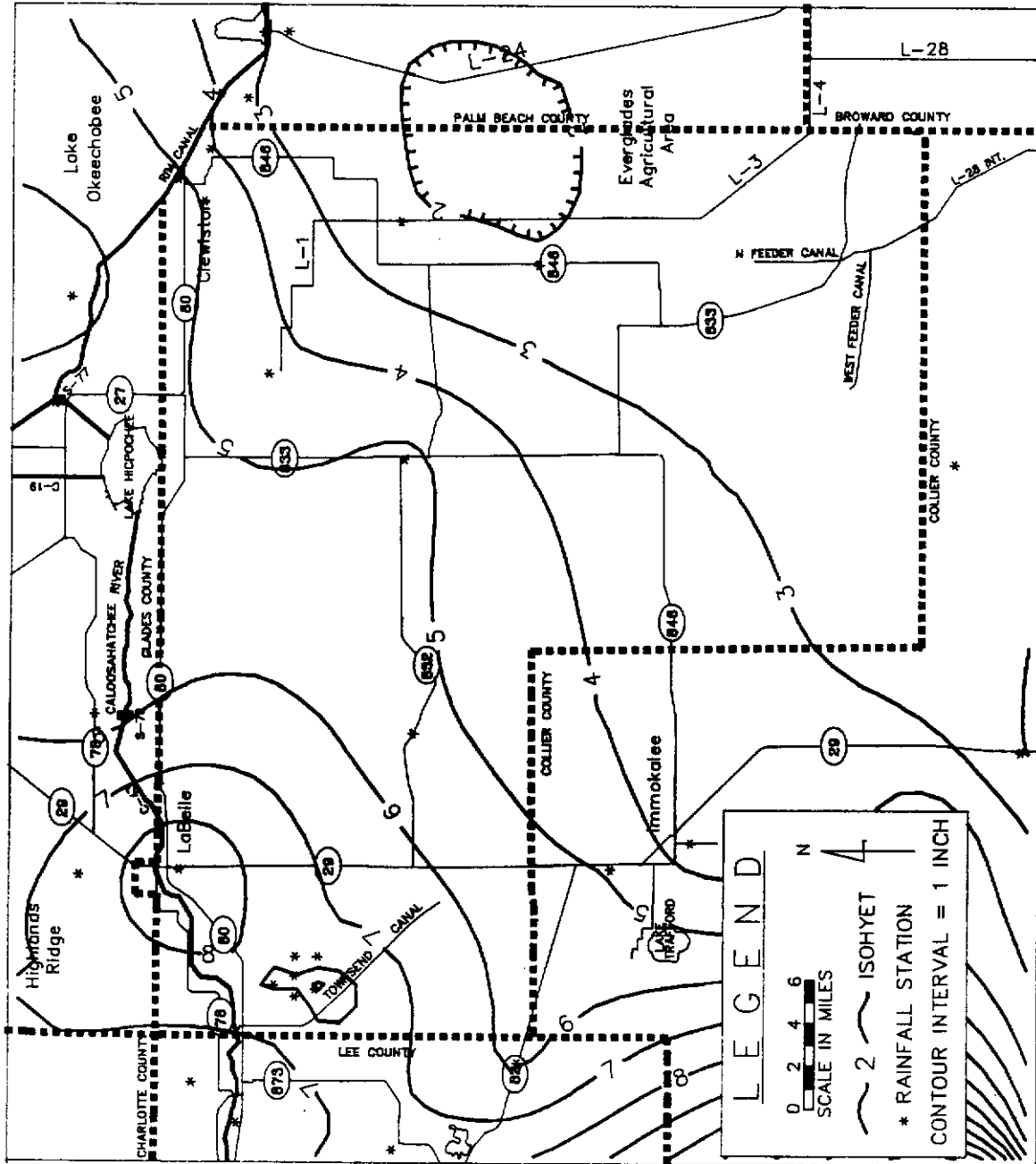


Figure C-22. RAINFALL, OCTOBER 1987

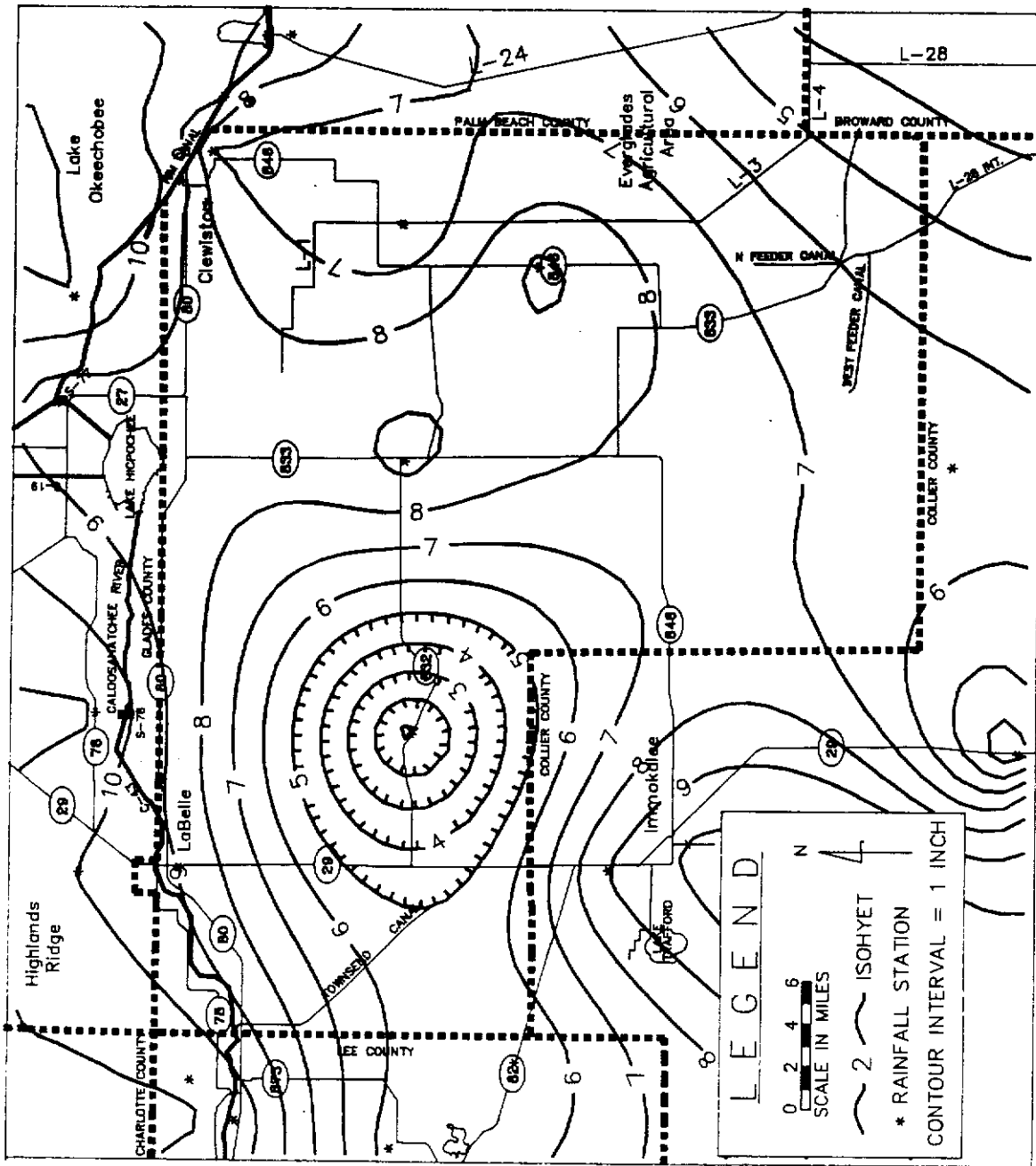


Figure C-23. RAINFALL, NOVEMBER 1987

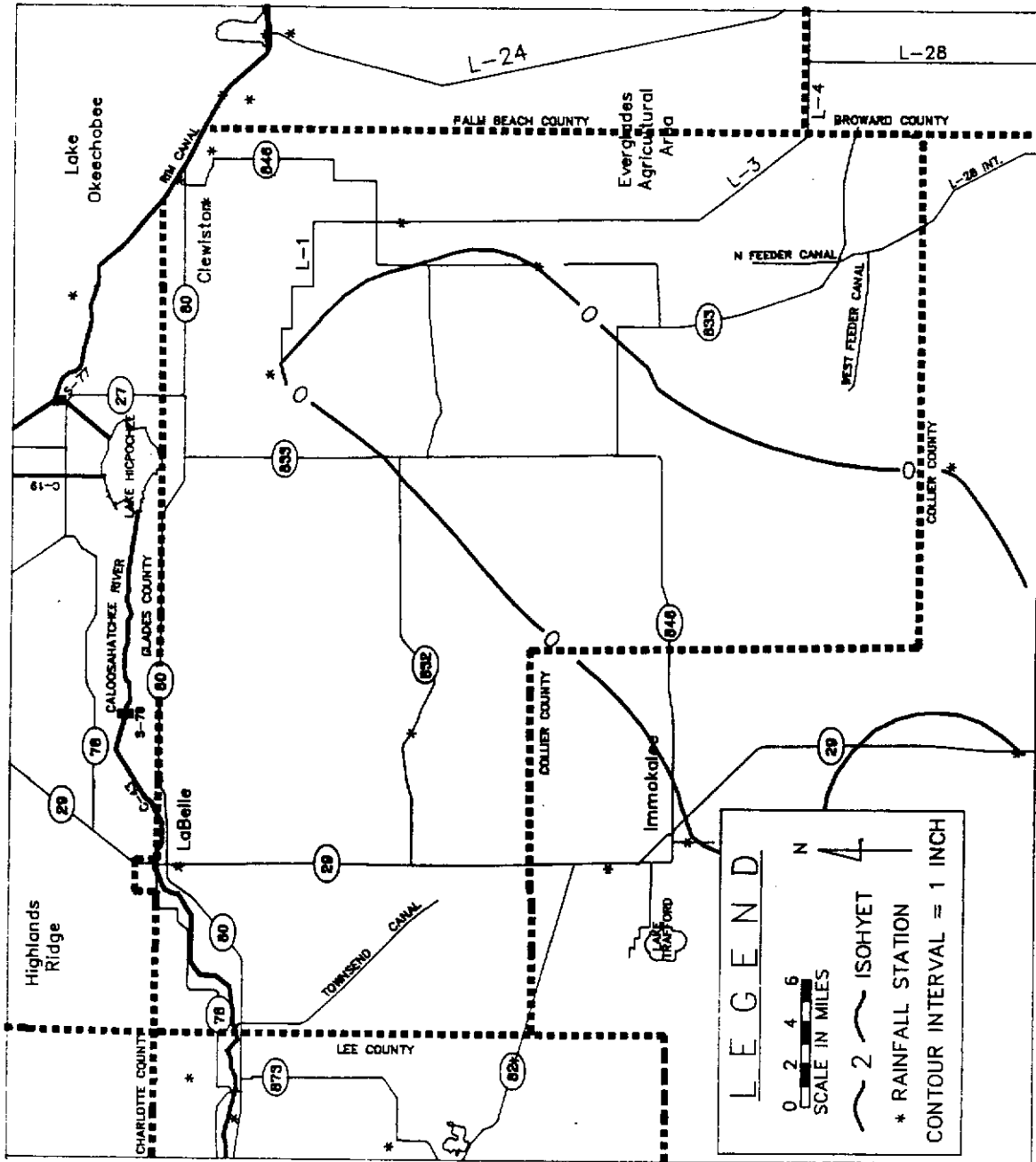


Figure C-24. RAINFALL, DECEMBER 1987



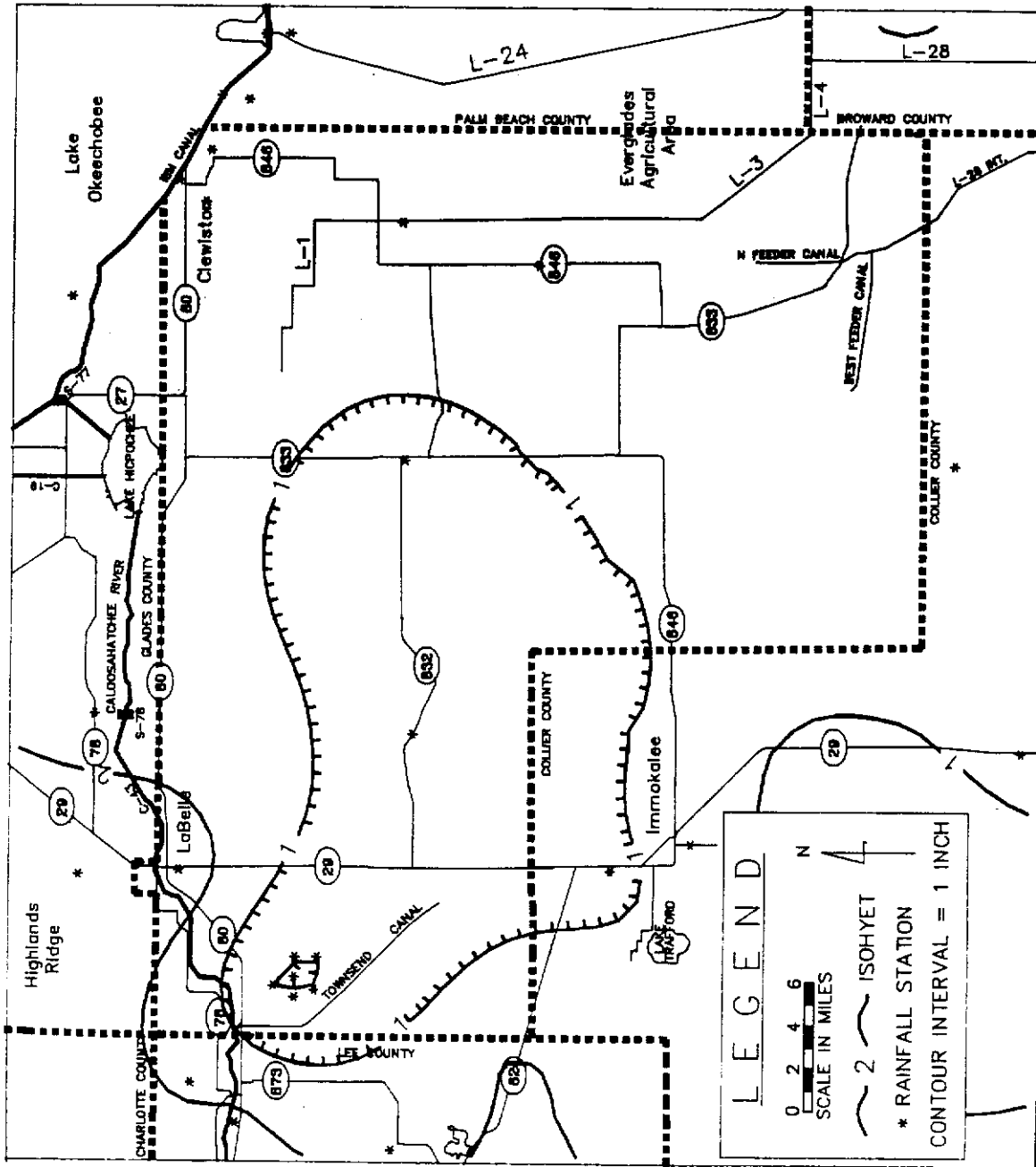


Figure C-25. RAINFALL, JANUARY 1988

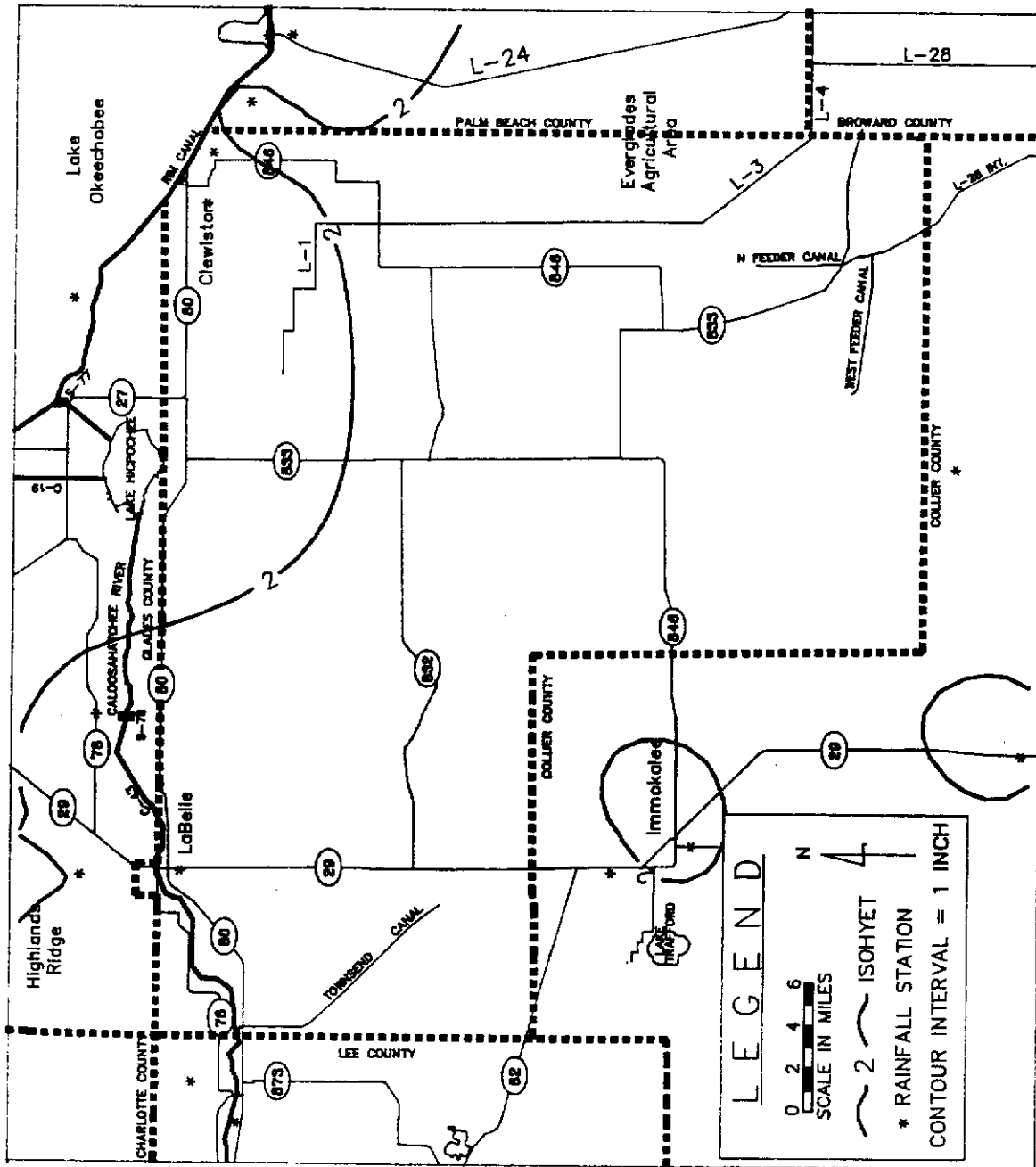


Figure C-26. RAINFALL, FEBRUARY 1988

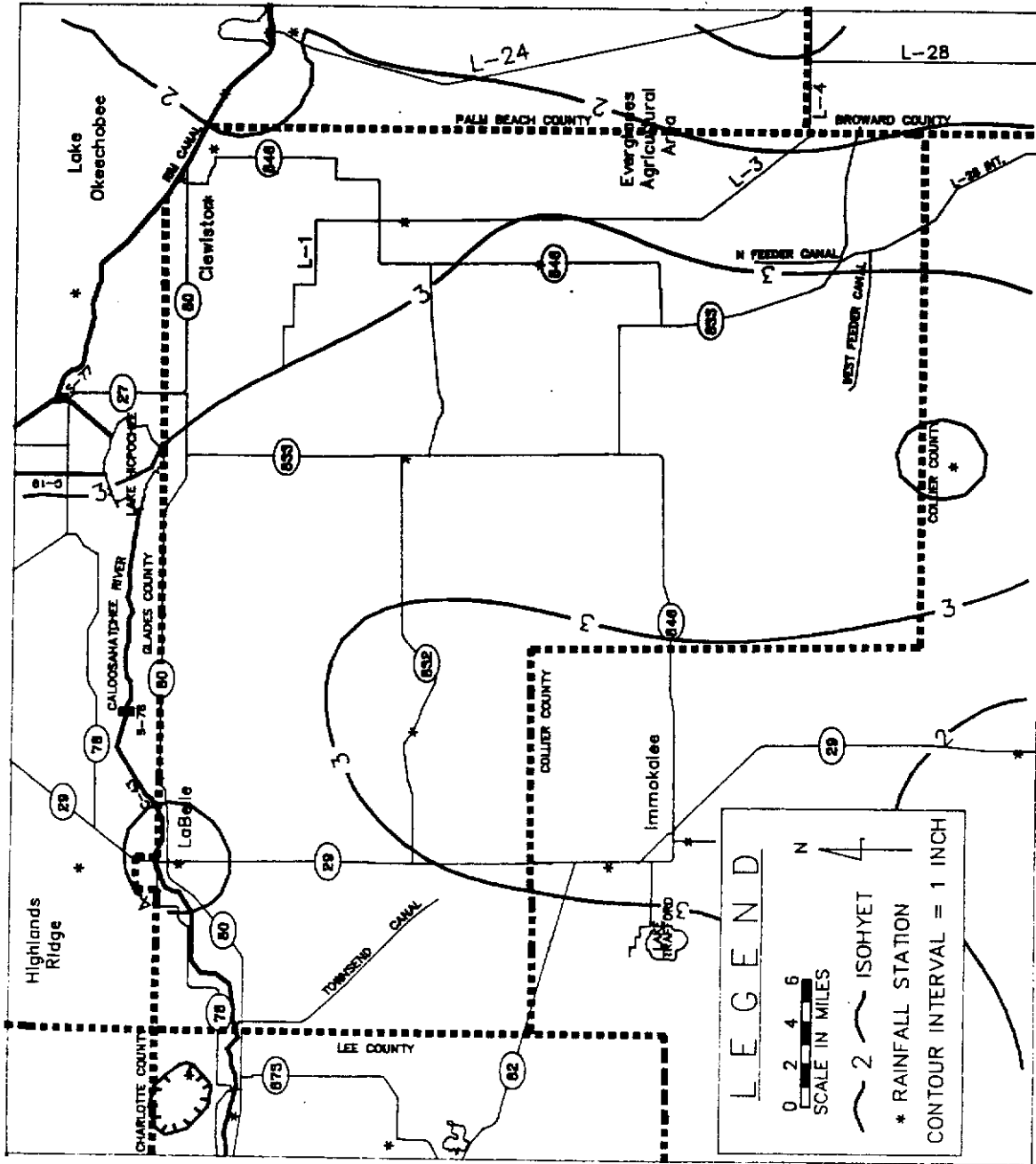


Figure C-27. RAINFALL, MARCH 1988

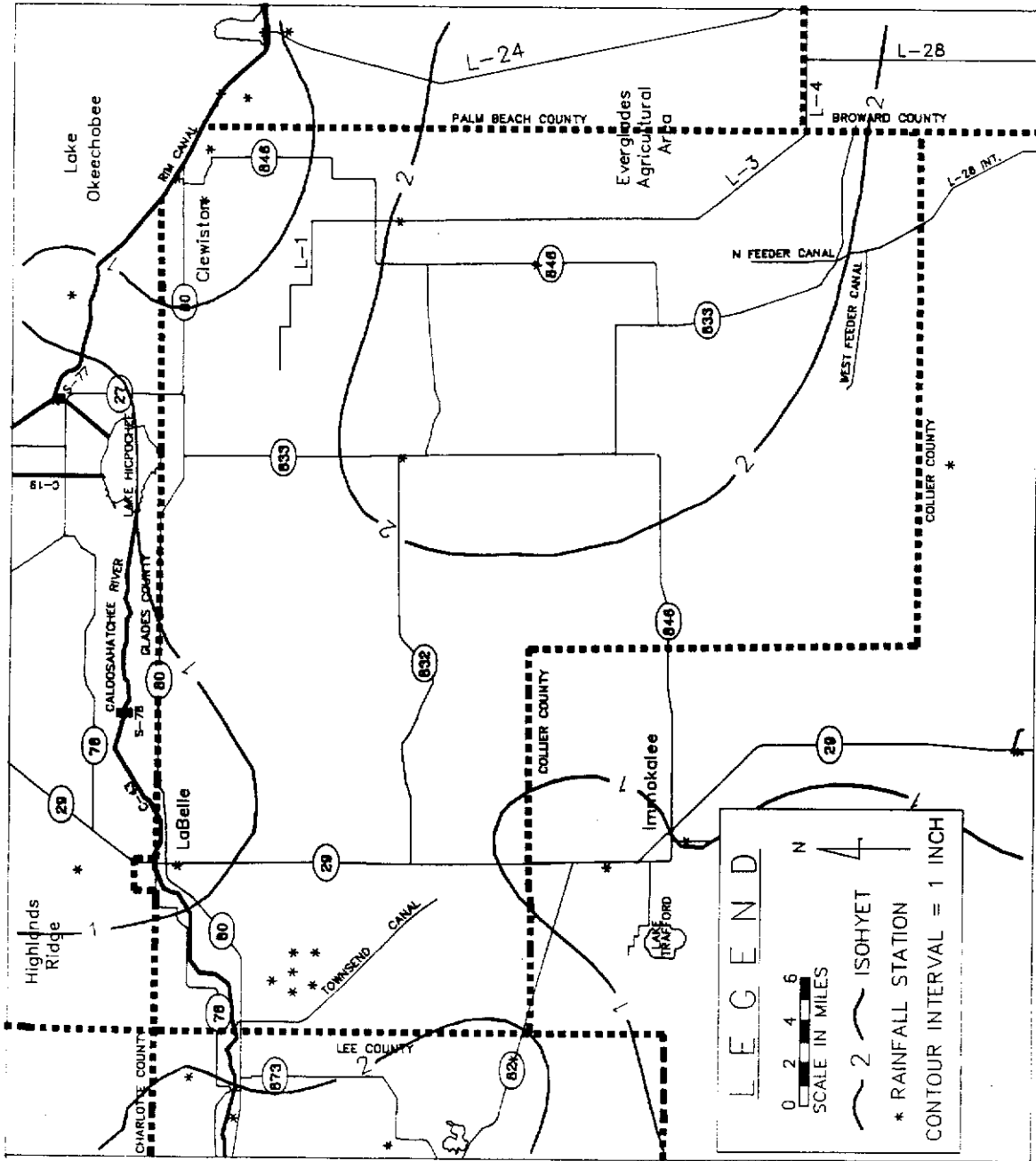


Figure C-28. RAINFALL, APRIL 1988

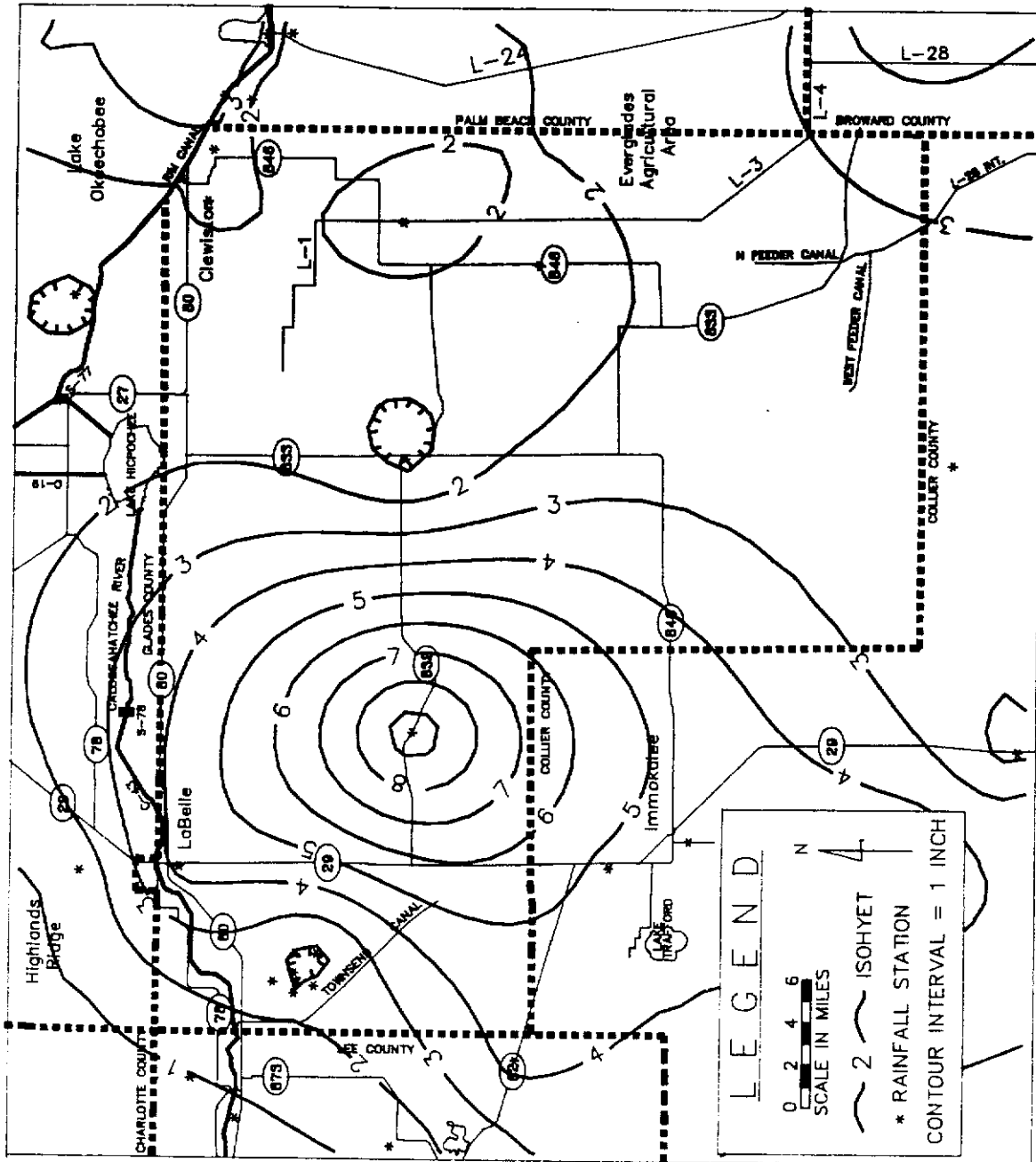


Figure C-29. RAINFALL, MAY 1988

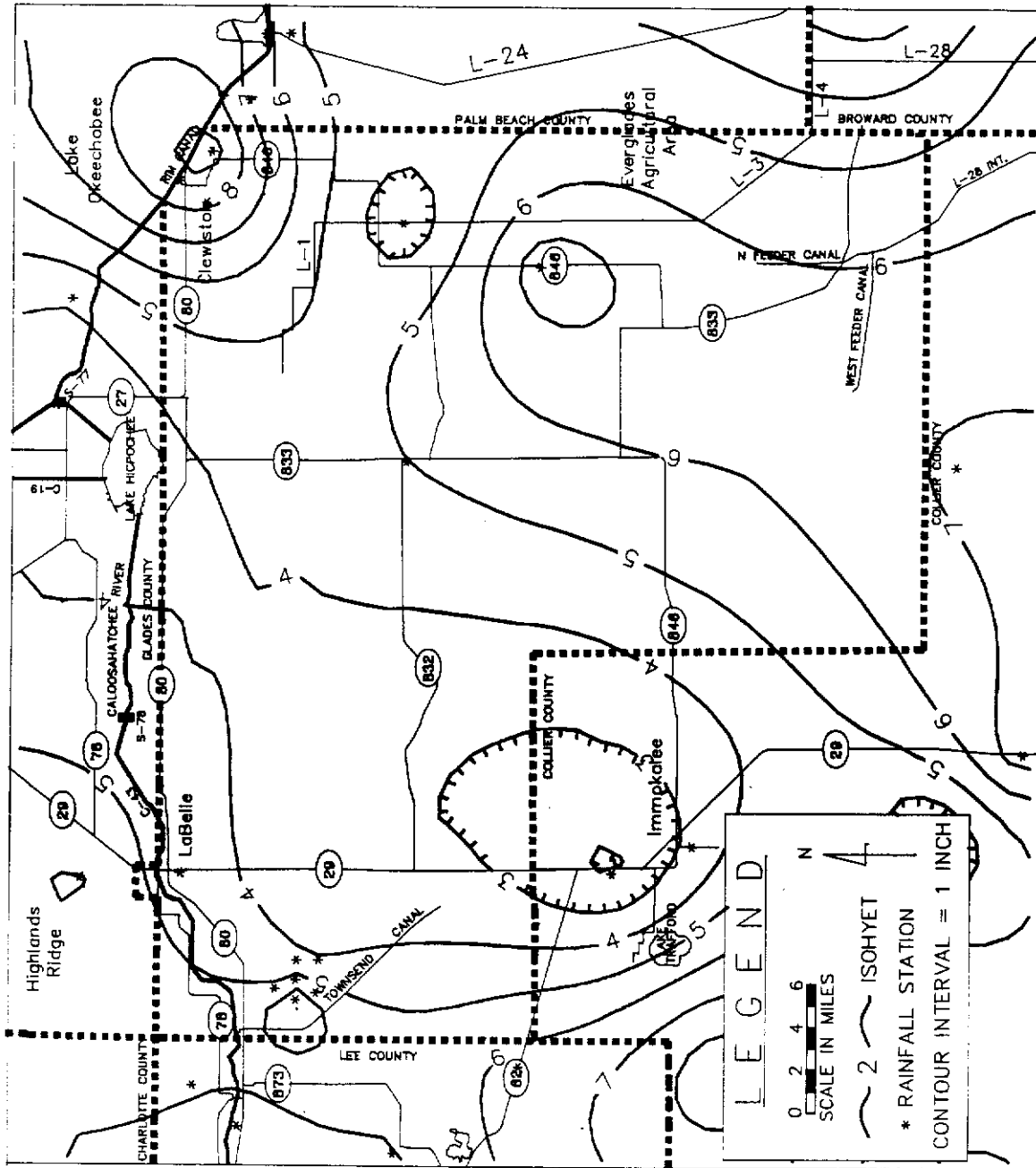


Figure C-30. RAINFALL, JUNE 1988

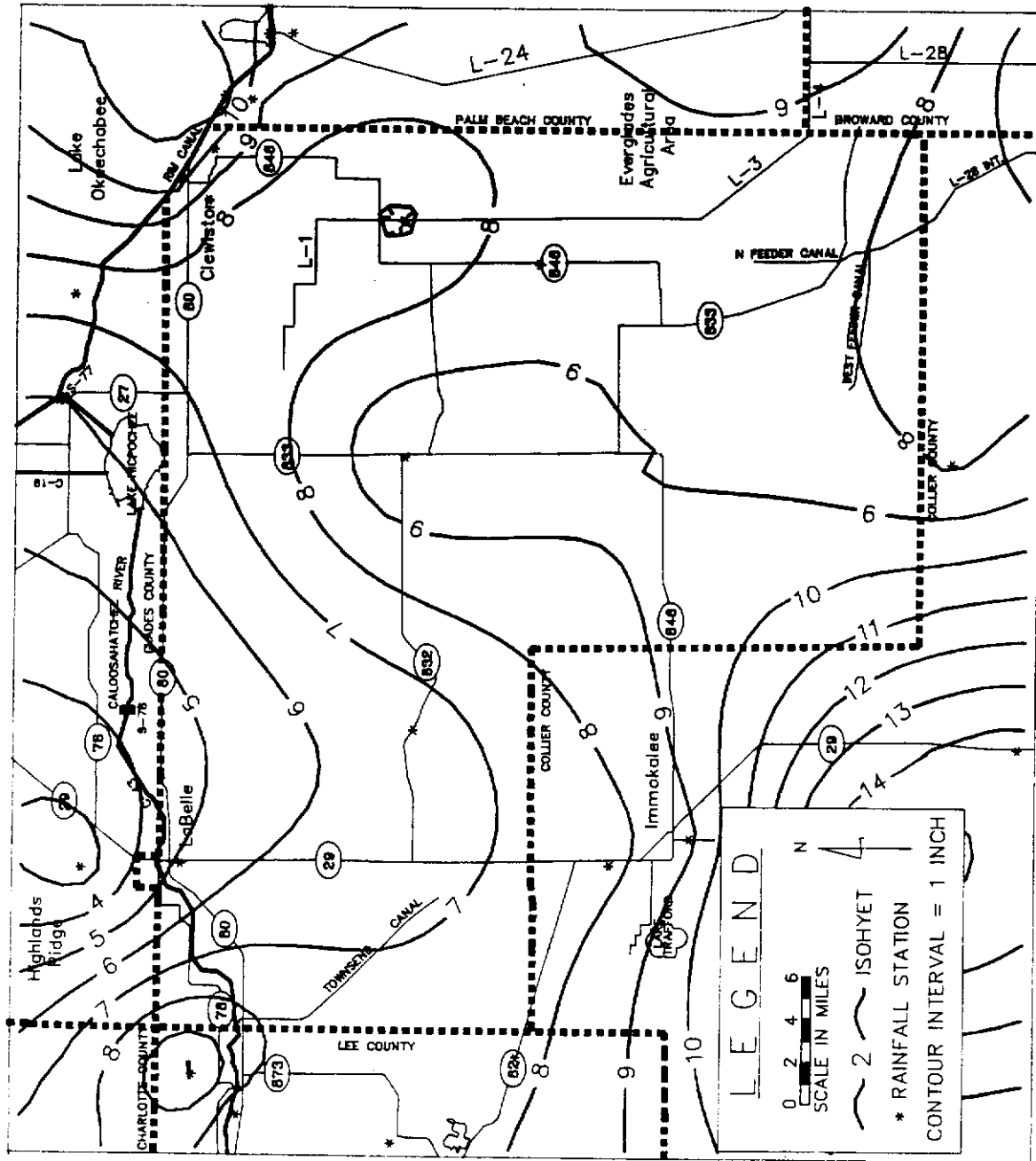


Figure C-31. RAINFALL, JULY 1988

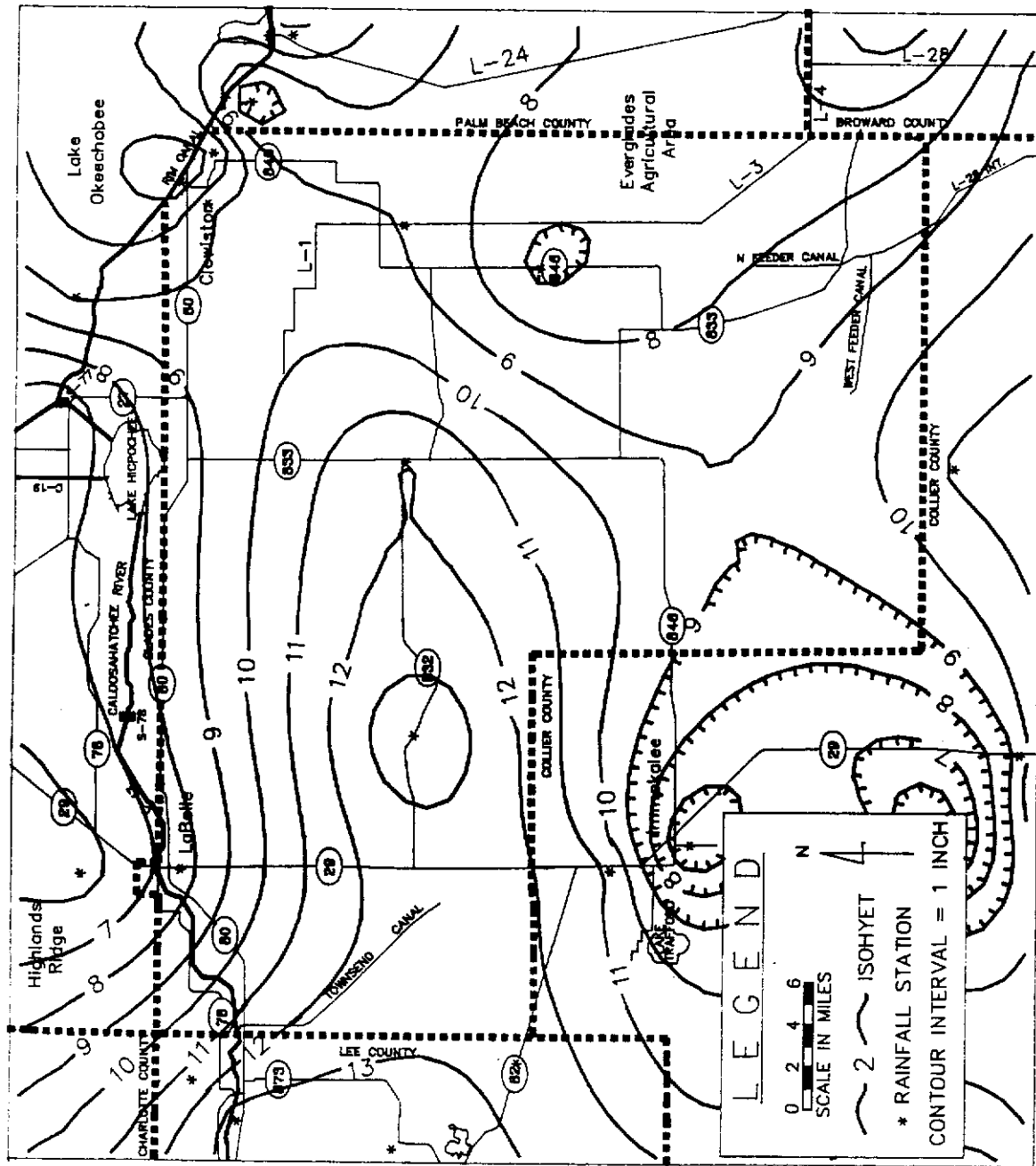


Figure C-32. RAINFALL, AUGUST 1988



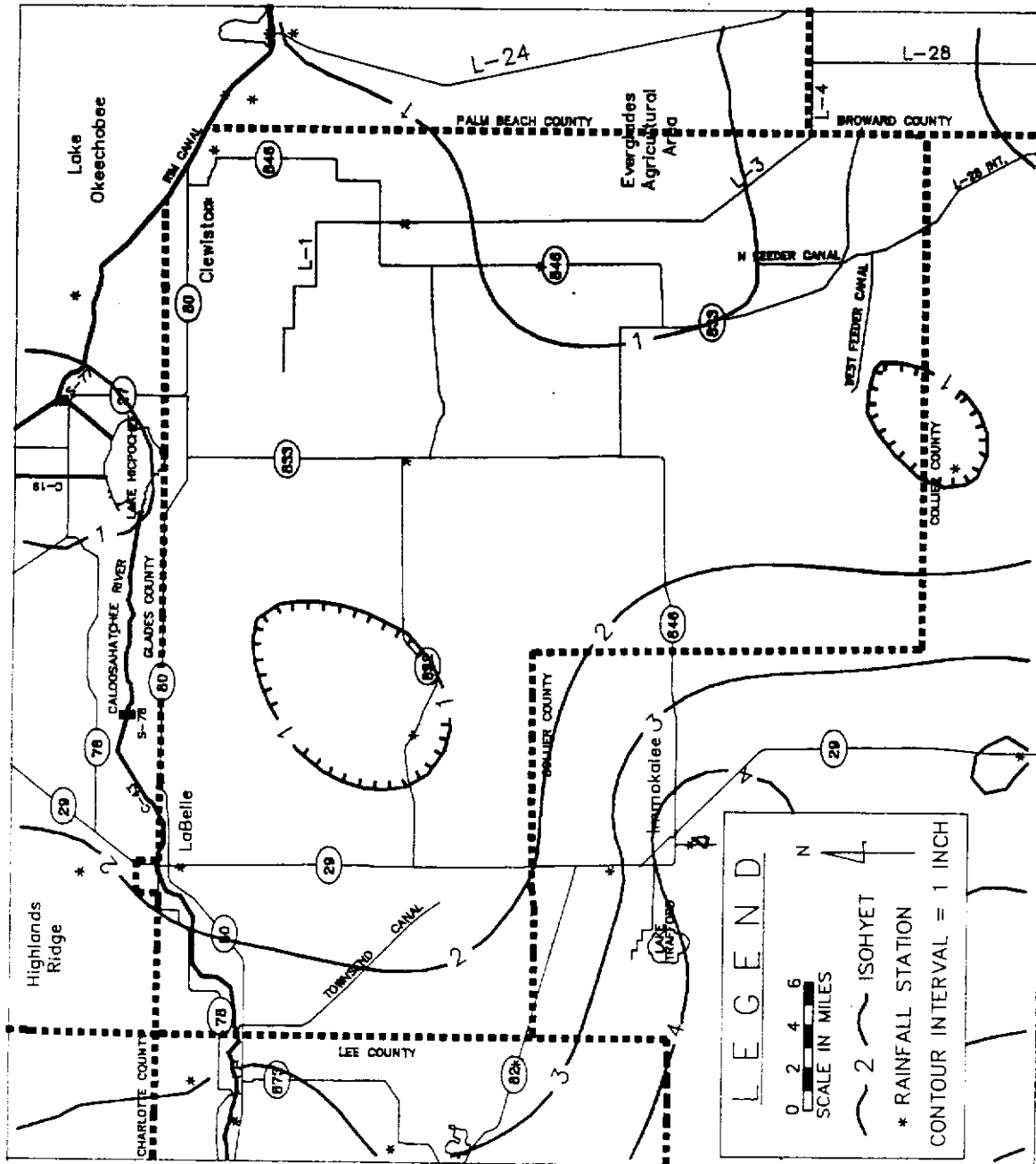


Figure C-33. RAINFALL, SEPTEMBER 1988

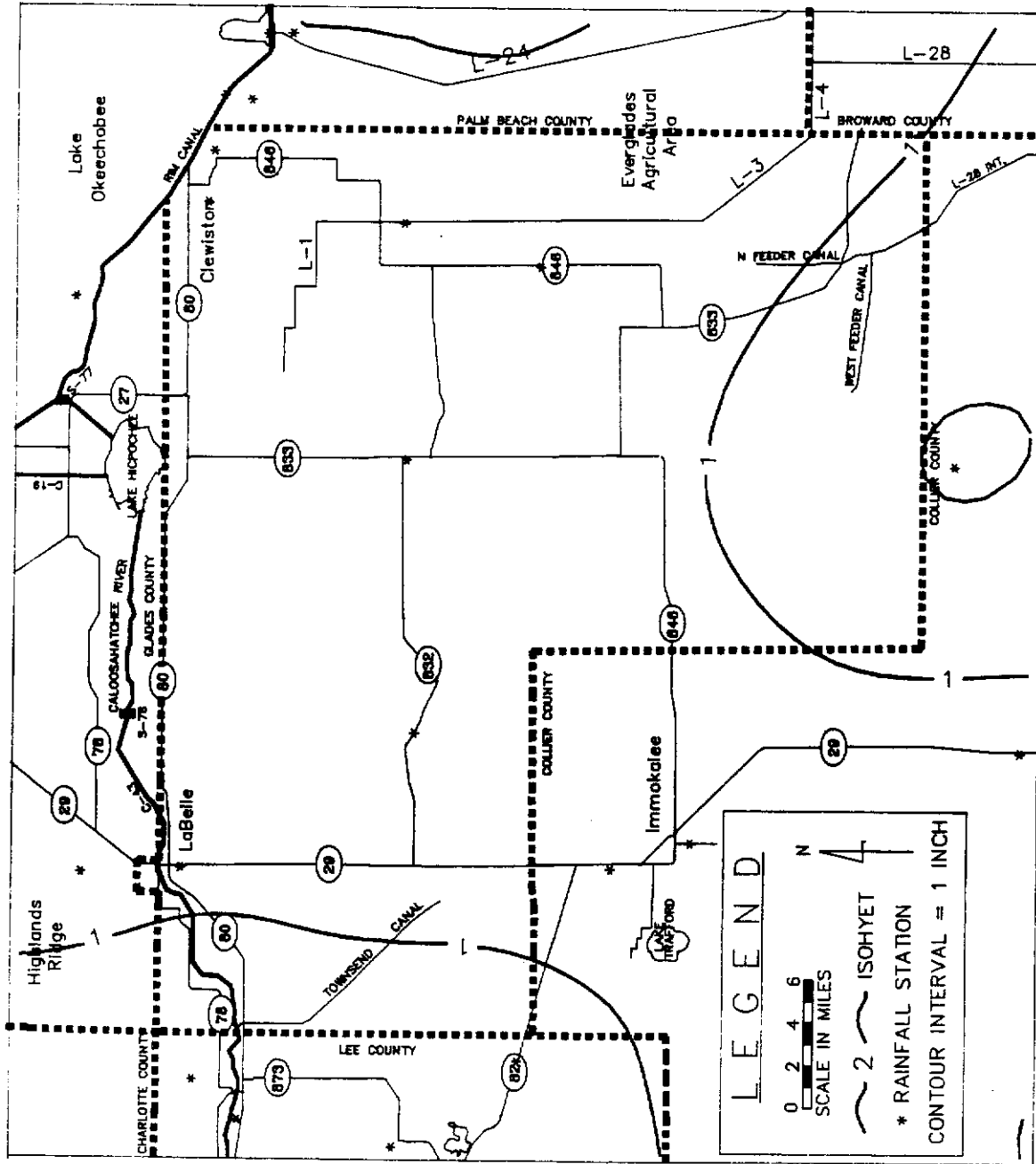


Figure C-34. RAINFALL, OCTOBER 1988

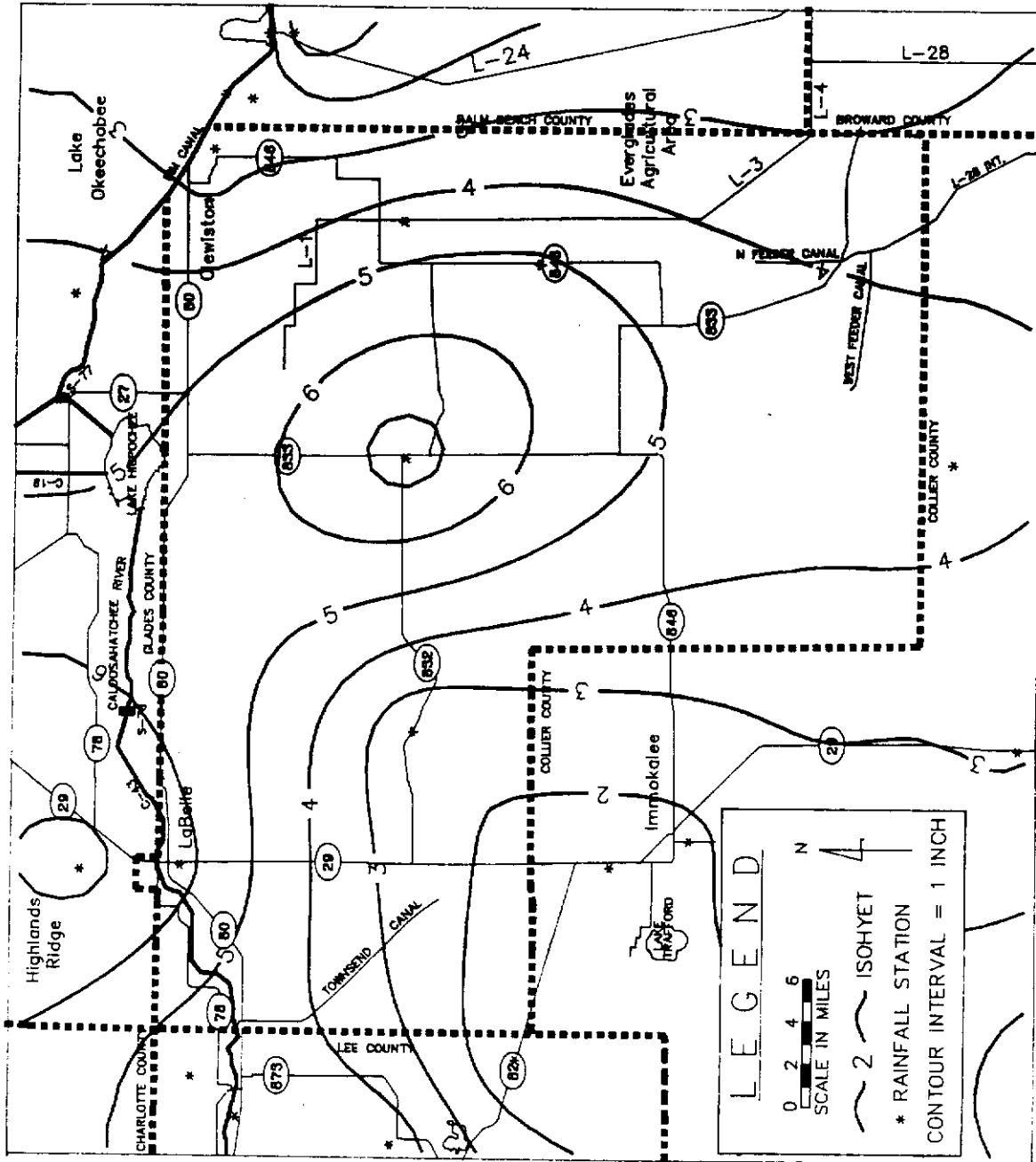


Figure C-35. RAINFALL, NOVEMBER 1988

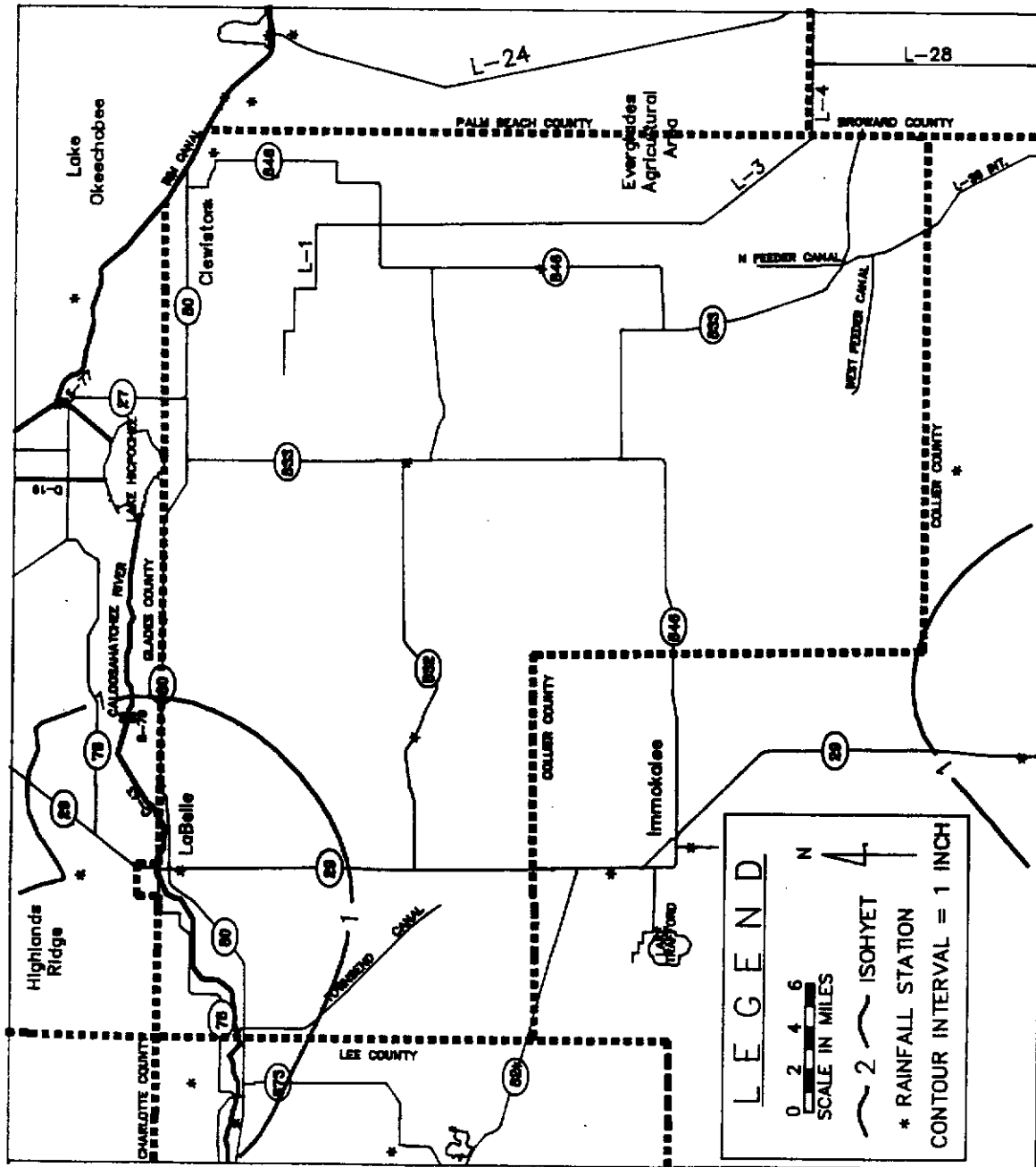


Figure C-36. RAINFALL, DECEMBER 1988

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**APPENDIX D**  
**EVAPOTRANSPIRATION INPUT DATA**

LIST OF FIGURES - APPENDIX D

<u>Figure</u>		<u>Page</u>
D-1	Evapotranspiration Extinction Depth .....	138

## EVAPOTRANSPIRATION DATA

<u>Stress Period</u>	<u>Month/Year*</u>	<u>Maximum ET Rate**</u>
1	January 1986	3.71
2	February 1986	4.91
3	March 1986	6.99
4	April 1986	8.83
5	May 1986	9.37
6	June 1986	7.74
7	July 1986	7.33
8	August 1986	8.44
9	September 1986	6.59
10	October 1986	5.47
11	November 1986	4.18
12	December 1986	3.06
13	January 1987	3.94
14	February 1987	4.33
15	March 1987	4.84
16	April 1987	7.78
17	May 1987	9.19
18	June 1987	7.96
19	July 1987	6.84
20	August 1987	7.89
21	September 1987	5.54
22	October 1987	5.28
23	November 1987	3.82
24	December 1987	3.72
25	January 1988	3.67
26	February 1988	4.21
27	March 1988	6.06
28	April 1988	7.02
29	May 1988	8.59
30	June 1988	7.54
31	July 1988	7.29
32	August 1988	7.11
33	September 1988	6.55
34	October 1988	6.21
35	November 1988	4.21
36	December 1988	3.83

\* Average monthly pan evaporation rates from stations at Clewiston, Labelle, and Hurricane Gate 1.

\*\* In inches per month. A rate of 3.72 inches per month was used in the steady state runs.



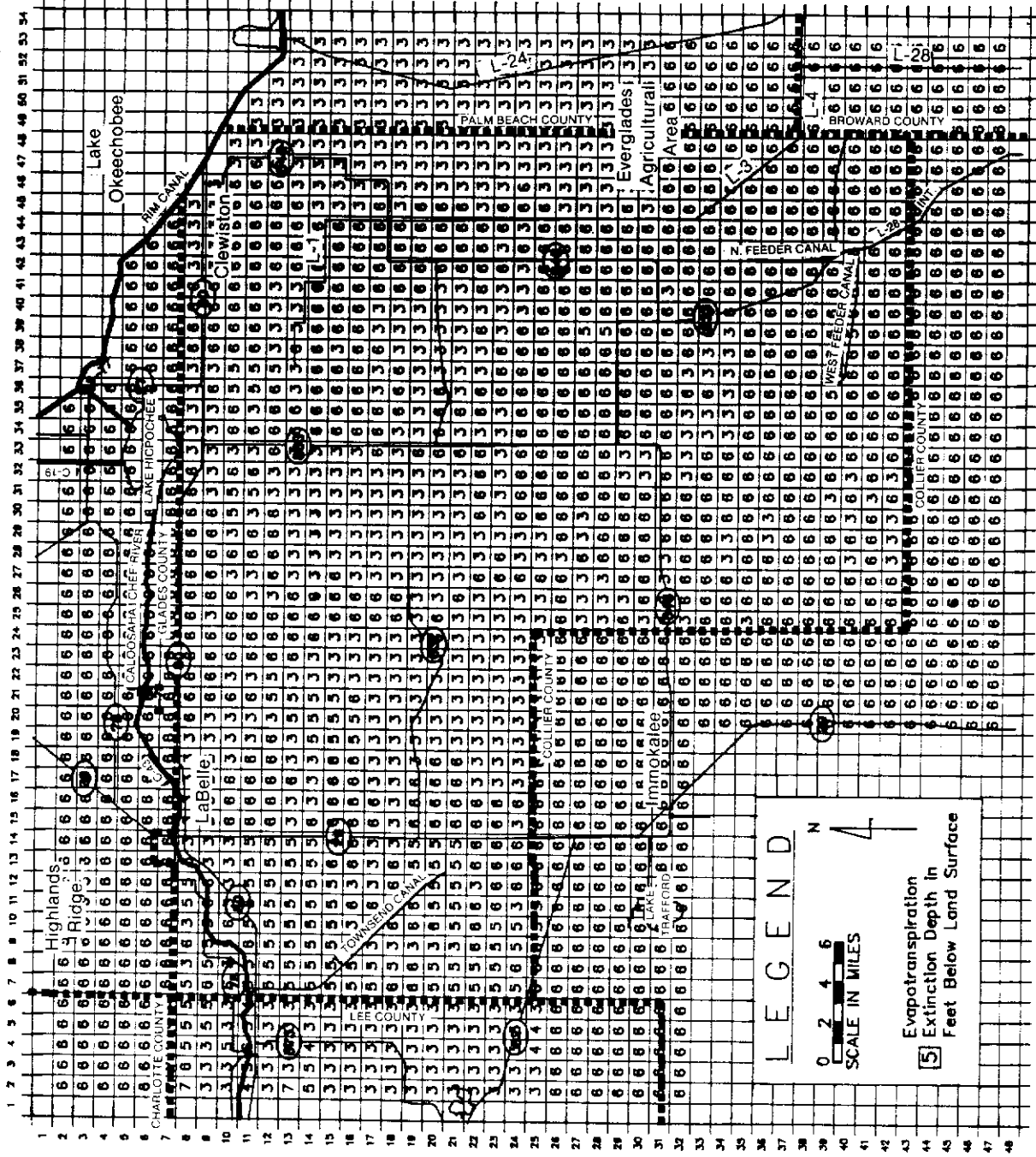


Figure D-1. EVAPOTRANSPIRATION EXTINCTION DEPTH

**APPENDIX E**  
**WATER USE DATA**

## INTRODUCTION

This appendix contains information on the individual water use permits issued by the Water Use Division, Regulation Department, South Florida Water Management District. This information was used to compile the well withdrawal data file used in the model.

Permits issued through November 1989 are included in this appendix. The information is organized into four spreadsheets. The first two spreadsheets contain information on the individual water use permits for agricultural use within Hendry County. The third spreadsheet contains information on individual water use permits for agricultural use within the buffer areas of Lee, Collier, Broward, Palm Beach, Glades, and Charlotte Counties. A legend for these spreadsheets is included on page 141. The final spreadsheet contains information on individual water use permits for public supply, commercial, industrial, and mining uses within the study area. A legend for this spreadsheet can be found on page 193.

AN.ALL. = Annual Permitted Allocation  
 ALL.UNT. = Annual Allocation Units  
     01 = MGD  
     02 = MGM  
     03 = MGY  
     04 = AC-FT  
 MAXMO = Maximum Monthly Permitted Allocation  
     01 = MGD  
     02 = MGM  
     03 = AC-FT  
 CC = County Code (from permit number)  
 DATE ISS = Date Permit Issued (mo/yr)  
 USE TYPE = AG,IND,GLF,PWS,CCM,REC.  
 SRC = Source (SW,GW, BOTH)  
 NO.WLS. = Number of ACTIVE permitted wells  
 SWPMPS = Number of Surface Water Pumps  
  
 DEVNO. = Development Number(for projected uses only)  
 AQ. = Aquifer  
     01 = Water Table  
     02 = Surficial (Semi-confined)  
     03 = Lower Tamiami  
     04 = Sandstone  
     05 = mid-Hawthorn  
     06 = lower Hawthorn  
     07 = Suwannee  
     08 = Floridan  
     09 = Biscayne  
 CROP TYPE = Blaney-Criddle Code  
     11 = Alfalfa  
     12 = Avacado  
     13 = Citrus  
     14 = Grapes  
     15 = Turf  
     16 = Suger Beet  
     20 = Pasture  
     51 = Dry Beans  
     52 = Green Beans  
     53 = Grain Corn  
     54 = Silage Corn  
     55 = Sweet Corn  
     56 = Melons  
     57 = Peas  
     58 = Potato  
     59 = Soybeans  
     60 = Tomato  
     61 = Small Vegetables  
     5 or 70 = Nursery  
 RAINST = Rain Station Code Number  
     1 = NAPLES  
     2 = FT. MYERS  
     3 = WEST PALM BEACH  
     4 = STUART  
     5 = FT. LAUDERDALE  
     6 = KISSIMMEE  
     7 = MELBOURNE  
     8 = ORLANDO  
     9 = TITUSVILLE  
     10 = FELLSMERE  
     11 = FT. PIERCE  
     12 = OKEECHOBEE  
     13 = AVON PARK  
     14 = MOORE HAVEN  
     15 = LABELLE  
     16 = BELLE GLADE  
     17 = LOXAHATCHEE  
     18 = JUPITER  
     21 = TAMIAMI 4  
     22 = HOMESTEAD  
     23 = POMPANO BEACH  
     24 = INDIANTOWN  
     25 = HYPOLUXO  
     26 = BIG CYPRESS  
     27 = EVERGLADES  
     28 = HIALEAH  
     29 = LAKE PLACID  
     30 = MERRIT ISLAND  
     31 = VERO BEACH

LOS = Level of Service (leave blank)

STS = Status  
01 = Existing  
02 = Proposed  
03 = Stand By/Backup  
04 = To Be Plugged

DPTH CODE = Datum for Elevations  
01 = NGVD  
02 = Land Surface

PMPINT = Depth to Pump Intake (Wells Only)

PUMP TYPE  
01 = Centrifical (suction)  
02 = Lift (turbine, jet, submersible)  
03 = Unknown

PUMP CAP. = Capacity in GPM (SW & GW Facilities)  
01 = Unknown.

MTR? = Is use Metered by Volume or Power  
Consumption and Reported to the District?  
Y = Yes  
N = No

YPLNR = North Planar Coordinate  
XPLNR = East Planar Coordinate

HENDRY COUNTY MODEL AREA WATER USE

LINE 1 HEADINGS (Table 1 - Existing Water Use - Permit Information and Table 2 - Forecasted Agricultural Demand for Each Permit)

PERMIT NO.	FACILITY NUMBER	QUAD NO.	WELL DIA.	WELL DPTH	CODE	TD	CD	PMP PUMP PUMP		MTR?	XPLNR	YPLNR	SRC	AQ.	COMMENTS	CROPSOIL TYPE	RAIN ST	IRR ACRES	IRR EFF	LOS		
								AG	BOTH													
2600016	938.30	03	346.35	02	26	8/87	AG	BOTH	28								13	0.8	26	1200	0.50	
2600016-1		208	01	6.00	02	60			500	N	480922	723955	GW	03								
2600016-2		208	01	6.00	02	60			500	N	480711	723812	GW	03								
2600016-3		208	01	6.00	02	60			500	N	480419	723667	GW	03								
2600016-4		208	01	6.00	02	60			500	N	480208	723009	GW	03								
2600016-5		208	01	6.00	02	60			500	N	479908	722647	GW	03								
2600016-6		208	01	6.00	02	60			500	N	484362	722050	GW	03								
2600016-7		208	01	6.00	02	60			500	N	483924	721177	GW	03								
2600016-8		208	01	6.00	02	60			500	N	483301	720607	GW	03								
2600016-9		208	01	6.00	02	60			500	N	484926	720922	GW	03								
2600016-10		208	01	6.00	02	60			500	N	485696	720973	GW	03								
2600016-11		208	01	6.00	02	60			500	N	483258	720027	GW	03								
2600016-12		208	01	6.00	02	60			500	N	480250	721225	GW	03								
2600016-13		208	01	6.00	02	60			500	N	479649	720590	GW	03								
2600016-14		208	01	6.00	02	60			500	N	479359	720290	GW	03								
2600016-15		208	01	6.00	02	60			500	N	477051	720251	GW	03								
2600016-16		208	01	6.00	02	60			500	N	476261	719633	GW	03								
2600016-17		208	01	6.00	02	60			500	N	477097	719651	GW	03								
2600016-18		208	01	6.00	02	60			500	N	485124	719606	GW	03								
2600016-19		208	01	6.00	02	60			500	N	481951	718491	GW	03								
2600016-20		208	01	6.00	02	60			500	N	478930	719244	GW	03								
2600016-21		208	01	6.00	02	60			500	N	478605	718633	GW	03								
2600016-22		208	01	6.00	02	60			500	N	484848	717894	GW	03								
2600016-23		208	01	6.00	02	60			500	N	482343	717214	GW	03								
2600016-24		208	01	6.00	02	60			500	N	481475	716668	GW	03								
2600016-26		208	01	6.00	02	60			500	N	483621	715547	GW	03								
2600016-26		208	01	6.00	02	60			500	N	483621	715547	GW	03								
2600016-27		208	01	6.00	02	60			500	N	483909	716427	GW	03								
2600016-28		208	01	9.00	02	60			900	N	484514	716860	GW	03								
2600016-SW		208	01						10000	N	486300	713500	SW									

2600020	4625.28	03	380.16	02	26	6/87	AG	GW	37													
2600020-1		174	01	6.00	02	150			600	N	JOE A. HILLIARD		GW	03								
2600020-2		174	01	6.00	02	150			600	N	449911	793105	GW	03								
2600020-3		174	01	6.00	02	150			600	N	452745	793172	GW	03								
2600020-4		174	01	6.00	02	150			600	N	453976	789656	GW	03								
2600020-5		174	01	6.00	02	150			600	N	457620	789508	GW	03								
2600020-6		174	01	6.00	02	150			600	N	454346	787925	GW	03								
2600020-7		174	01	6.00	02	150			600	N	450952	788536	GW	03								
2600020-1		192	01	6.00	02	150			600	N	457963	786213	GW	03								
2600020-2		192	01	6.00	02	150			600	N	0	0	0	GW	03							







2600053-6	172 01	6.00 02	33	600 N	352678	804185	GW	01						
2600053-7	172 01	6.00 02	33	600 N	353705	803721	GW	01						
2600054	373.73			3	CHARLES W. WARD									
2600054-14	194 01	6.00 02	450	800 N	511253	764902	GW	05			20	0.8	26	460 0.50
2600054-15	194 01	6.00 02	190	900 N	512447	763392	GW	03						
2600054-16	194 01	6.00 02	200	1000 N	513685	763448	GW	03						
2600055	22.49			5	DUDA - GENERAL GROVE									
2600055-4	135 01	8.00 02	27	500 N	373064	880241	GW	01			13	0.8	15	153 0.85
2600055-5	135 03	5.00 02	34	500 N	373657	880247	GW	01						
2600055-6	135 01	5.00 02	34	500 N	374329	880233	GW	01						
2600055-7	135 01	6.00 02	34	500 N	375151	880513	GW	01						
2600055-8	135 01	6.00 02	34	500 N	375106	881155	GW	01						
2600055-SW	135 01	6.00 02	34	1500 N	373009	882289	SW							
2600056	33.56			2	FELDA RANCH									
2600056-8	172 01	6.00 02	33	600 N	354834	804624	GW	01			20	0.8	15	155 0.50
2600056-9	172 01	6.00 02	33	600 N	354708	806053	GW	01						
2600057	20.12			3	RAYMOND CRAWFORD									
2600057-1	154 01	6.00 02	47	700 N	370874	866245	GW	01			20	0.8	15	20 0.50
2600057-2	154 01	4.00 02	154 01	400 N	372368	866079	GW	01						
2600057-3	154 01	6.00 02		700 N	372369	867252	GW	01						
2600059	29.90			1	SIX L'S									
2600059-1	134 01	6.00 02	142	1050 N	330200	884200	GW	04			13	0.8	15	65 0.85
2600061	40.24			4	W. G. WOOSLEY									
2600061-4	154 01	6.00 02	34	1050 N	356771	874756	GW	01			20	0.8	15	40 0.50
2600065	69.40			5	PAUL O'BANNON									
2600065-6	154 01	6.00 02	150	500 N	370436	851100	GW	04			20	1.5	15	320 0.50
2600065-7	154 01	6.00 02	150	500 N	371336	849003	GW	04						
2600065-8	154 03	6.00 02	150	N	371118	848229	GW	04						
2600065-9	154 03	3.00 02	20	N	370861	847445	GW	01						
2600065-10	154 03	3.00 02	30	N	372512	846350	GW	01						
2600066	16.09			2	G. AUSTIN OR ALEX E. CARLDEN									
2600066-5	154 01	4.00 02	20	333 N	337241	878389	GW	01			13	1.5	15	30 0.85
2600066-9	135 01	6.00 02	140	400 N	337033	878842	GW	04						
2600067	17.37			3	WESLEY HANSEN									
2600067-11	154 01	6.00 02	60	500 N	365197	863203	GW	01			13	0.8	15	80 0.85
2600067-12	154 01	6.00 02	150	500 N	367017	863768	GW	04						
2600067-13	154 01	9.00 02	200	500 N	365172	864004	GW	04						
2600068	967.25			10	ASPRING, INC.									
2600068-	176 01	6.00 02	90	600 N							20	0.8	26	2400 0.50
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										
2600068-	176 01	6.00 02	90	600 N										

2600069	354.13	03	43.20	02	26	6/87	AG	GW	5	F. C. MILLS	20	0.8	26	350	0.50
2600069-1	175 03	6.00	02	109					N	485966 792267 GW 03					
2600069-2	175 03	9.00	02	109					N	487153 789469 GW 03					
2600069-3	175 01	8.00	02	100					N	485988 791188 GW 03					
2600069-4	175 01	8.00	02	100					N	486061 793976 GW 03					
2600069-5	175 01	6.00	02	109					500 N	487176 794049 GW 03					
2600070	525.60	03	43.20	02	26	6/87	AG	GW	19	E. C. MILLS	20	0.8	26	2268	0.50
2600070-1	193 01	9.00	02	100					500 N	479995 785325 GW 03					
2600070-2	193 01	9.00	02	100					500 N	478576 785490 GW 03					
2600070-3	193 01	9.00	02	100					500 N	476313 785445 GW 03					
2600070-4	193 01	9.00	02	100					500 N	473456 785400 GW 03					
2600070-5	193 01	6.00	02	109	50				500 N	479090 783577 GW 03					
2600070-6	193 01	9.00	02	100					500 N	480484 781522 GW 03					
2600070-7	193 01	9.00	02	100					500 N	478725 781726 GW 03					
2600070-8	193 01	3.00	02	40	20				500 N	476488 781331 GW 01					
2600070-9	193 01	9.00	02	100					500 N	476092 781832 GW 03					
2600070-10	193 01	9.00	02	100					500 N	480605 779924 GW 03					
2600070-11	193 01	9.00	02	100					500 N	478977 780029 GW 03					
2600070-12	193 01	9.00	02	100					500 N	476405 779916 GW 03					
2600070-7	175 01	9.00	02	100					500 N	476141 790688 GW 03					
2600070-8	175 01	9.00	02	100					500 N	480053 788070 GW 03					
2600070-9	175 01	9.00	02	100					500 N	478478 788054 GW 03					
2600070-10	175 01	9.00	02	100					500 N	475985 788056 GW 03					
2600070-11	175 01	9.00	02	100					500 N	473577 788124 GW 03					
2600070-12	175 01	9.00	02	100					500 N	472948 788590 GW 03					
2600070-13	175 01	9.00	02	100					500 N	471676 787916 GW 03					
2600071	123.73	03	1.51	01	26	8/87	AG	GW	8	ALICO	13	0.8	15	269	0.50
2600071-14	154 01	8.00	02	60					750 N	359340 870459 GW 01					
2600071-15	154 01	8.00	02	60					750 N	359507 869557 GW 01					
2600071-127	154 01	10.00	02	60					1200 N	359063 871825 GW 01					
2600071-128	154 01	8.00	02	60					900 N	360398 870318 GW 01					
2600071-129	154 01	8.00	02	60					1000 N	361210 870366 GW 08					
2600071-130	154 01	4.00	02	1000					100 N	361231 870139 GW 08					
2600071-131	154 01	8.00	02	60					900 N	361335 869308 GW 01					
2600071-132	154 01	8.00	02	60					750 N	361674 869885 GW 01					
2600072	1849.60	03	267.74	02	26	6/87	AG	BOTH	2	1 JOE HILLIARD	01	0.8	26	1240	0.50
2600072-8	176 01	6.00	02	110					600 N	517263 815638 GW 03					
2600072-9	176 01	6.00	02	150					600 N	519188 809442 GW 03					
2600072-SW	176 01								10000 N	522150 805500 SW					
2600073	1264.87	03	465.54	02	26	4/88	AG	GW	62	USSC - DEVILS GARDEN CITRUS SOUTH	13	0.8	26	2750	0.85
2600073-13	193 04	6.00	02	120	70				N	459385 772097 GW 03					
2600073-14	193 04	16.00	02	120	70				N	463070 772171 GW 03					
2600073-15	193 04	6.00	02	120	70				N	464240 772082 GW 03					
2600073-16	193 04	6.00	02	120	70				N	459312 770328 GW 03					
2600073-17	193 04	6.00	02	120	70				N	462601 770189 GW 03					
2600073-18	193 04	6.00	02	120	70				N	459400 768039 GW 03					
2600073-19	193 04	6.00	02	120	70				N	463045 766452 GW 03					
2600073-20	193 04	8.00	02	120	70				N	463965 765436 GW 03					
2600073-21	193 04	6.00	02	120	70				N	459542 764321 GW 03					
2600073-22	193 04	6.00	02	120	70				N	462860 763550 GW 03					
2600073-23	193 04	6.00	02	120	70				N	464226 763519 GW 03					
2600073-24	193 04	6.00	02	120	70				N	461402 762607 GW 03					
2600073-25	193 04	6.00	02	120	70				N	460606 770331 GW 03					

2600073-26	193 04	6.00 02 12C	70	N	465880	771249	GW	03
2600073-27	193 04	16.00 02 12C	70	N	467391	772313	GW	03
2600073-28	193 04	6.00 02 12C	70	N	468642	771563	GW	03
2600073-29	193 04	6.00 02 12C	70	N	466980	769873	GW	03
2600073-30	193 04	6.00 02 12C	70	N	467701	769899	GW	03
2600073-31	193 04	6.00 02 12C	70	N	464778	766494	GW	03
2600073-32	193 04	6.00 02 12C	70	N	465895	766487	GW	03
2600073-33	193 04	6.00 02 12C	70	N	467123	766551	GW	03
2600073-34	193 04	6.00 02 12C	70	N	466552	764547	GW	03
2600073-35	193 04	6.00 02 12C	70	N	469857	763504	GW	03
2600073-36	193 04	6.00 02 12C	70	N	470945	772151	GW	03
2600073-37	193 04	10.00 02 12C	70	N	472098	772069	GW	03
2600073-38	193 04	6.00 02 12C	70	N	470325	770677	GW	03
2600073-39	193 04	6.00 02 12C	70	N	469905	767808	GW	03
2600073-40	193 04	6.00 02 12C	70	N	472515	767853	GW	03
2600073-41	193 04	6.00 02 12C	70	N	474573	768281	GW	03
2600073-42	193 04	6.00 02 12C	70	N	474418	767561	GW	03
2600073-43	193 04	6.00 02 12C	70	N	471325	764676	GW	03
2600073-44	193 04	6.00 02 12C	70	N	471325	763533	GW	03
2600073-45	193 04	6.00 02 12C	70	N	473765	763270	GW	03
2600073-46	193 04	6.00 02 12C	70	N	473472	769061	GW	03
2600073-47	193 04	6.00 02 12C	70	N	471367	762910	GW	03
2600073-48	193 04	6.00 02 12C	70	N	472572	770552	GW	03
2600073-175	193 01	10.00 02 100	60	600	460551	763400	GW	03
2600073-176	193 01	10.00 02 100	60	600	463348	763454	GW	03
2600073-177	193 01	10.00 02 100	60	600	460326	765916	GW	03
2600073-178	193 01	10.00 02 100	60	600	463133	765806	GW	03
2600073-179	193 01	10.00 02 100	60	600	460641	768454	GW	03
2600073-180	193 01	10.00 02 100	60	600	460652	770901	GW	03
2600073-181	193 01	10.00 02 100	60	600	463371	770956	GW	03
2600073-182	193 01	10.00 02 100	60	600	462800	768558	GW	03
2600073-183	193 01	10.00 02 100	60	600	464859	765593	GW	03
2600073-184	193 01	10.00 02 100	60	600	466946	765670	GW	03
2600073-185	193 01	10.00 02 100	60	600	469573	765682	GW	03
2600073-186	193 01	10.00 02 100	60	600	465244	762510	GW	03
2600073-187	193 01	10.00 02 100	60	600	468560	762751	GW	03
2600073-188	193 01	10.00 02 100	60	600	464965	768315	GW	03
2600073-189	193 01	10.00 02 100	60	600	467301	768327	GW	03
2600073-190	193 01	10.00 02 100	60	600	469381	768398	GW	03
2600073-191	193 01	10.00 02 100	60	600	465025	770902	GW	03
2600073-192	193 01	10.00 02 100	60	600	467282	771039	GW	03
2600073-193	193 01	10.00 02 100	60	600	470944	770821	GW	03
2600073-194	193 01	10.00 02 100	60	600	473404	770971	GW	03
2600073-195	193 01	10.00 02 100	60	600	473466	768350	GW	03
2600073-196	193 01	10.00 02 100	60	600	471012	768620	GW	03
2600073-197	193 01	10.00 02 100	60	600	473687	765281	GW	03
2600073-198	193 01	10.00 02 100	60	600	471283	765456	GW	03
2600073-199	193 01	10.00 02 100	60	600	473778	763044	GW	03
2600073-200	193 01	10.00 02 100	60	600	471357	763117	GW	03
2600075	63.86	11.72 02 26	4/87	AG	GW			
2600075-10	172 01	3.00 02 60	40	01	200 N	D. B. TOWNSEND		63 0.50
2600075-11	172 01	3.00 02 60	40	01	200 N	357476	801361	GW 03
2600075-12	172 01	3.00 02 60	40	01	250 N	355743	801313	GW 03
2600078	73.00	-02	C1	26	1/89	AG	GW	
2600078-16	154 01	6.00 02 100			1500 N	LABELLE PLANT WORLD		40 0.50
2600078-17	154 01	6.00 02 45			N	350316	876480	GW 04
						249681	873498	GW 01

2600078-119	154 01	6.00 02	60	240	349996	875085	GW	01				
2600078-120	154 01	10.00 02	65	240	350213	875054	GW	01				
2600079 33.56	03			4	LAWAYNE RAWLS							
2600079-	172 01	6.00 02	30	600 N	354900	806400	GW	01	13	0.8	15	143 0.85
2600079-	172 01	6.00 02	80	N	354900	806400	GW	03				
2600079-	172 01	6.00 02	80	N	354900	806400	GW	03				
2600079-	172 01	8.00 02	160	N	354900	806400	GW	04				

2600080 433.68	03			21	M. J. FLIPSE							
2600080-18	154 01	6.00 02	30	900 N	365431	859635	GW	01	20	0.8	15	5290 0.50
2600080-19	154 01	6.00 02	30	900 N	365025	861630	GW	01				
2600080-20	154 01	6.00 02	30	900 N	365068	853887	GW	01				
2600080-21	154 01	6.00 02	30	900 N	362354	853907	GW	01				
2600080-22	154 01	8.00 02	30	900 N	372524	861764	GW	01				
2600080-23	154 01	6.00 02	30	900 N	367572	859434	GW	01				
2600080-24	154 01	6.00 02	30	900 N	369976	857006	GW	01				
2600080-25	154 01	8.00 02	30	900 N	373622	861687	GW	01				
2600080-26	154 01	8.00 02	30	900 N	377162	861719	GW	01				
2600080-27	154 01	8.00 02	30	900 N	372887	859308	GW	01				
2600080-28	154 01	6.00 02	30	900 N	374917	856852	GW	01				
2600080-29	154 01	8.00 02	30	900 N	376401	856951	GW	01				
2600080-30	154 01	6.00 02	30	900 N	377377	856985	GW	01				
2600080-31	154 01	6.00 02	30	900 N	367944	856554	GW	01				
2600080-32	154 01	6.00 02	30	900 N	370035	856543	GW	01				
2600080-33	154 01	6.00 02	30	900 N	371780	856546	GW	01				
2600080-34	154 01	6.00 02	30	900 N	373371	856538	GW	01				
2600080-35	154 01	6.00 02	30	900 N	370174	851512	GW	01				
2600080-19	155 01	6.00 02	30	900 N	411881	841625	GW	01				
2600080-20	155 01	6.00 02	30	900 N	410586	841565	GW	01				
2600080-21	155 01	8.00 02	30	900 N	416278	836282	GW	01				

2600083 131.77	03	26.55	02	26 12/87	AG	GW	11					
2600083-49	193 03	6.00 02	80	50	CROOKS RANCH				61	0.8	26	135 0.50
2600083-50	193 03	6.00 02	80	50	459457	772693	GW	03				
2600083-51	193 01	6.00 02	80	50	459907	774400	GW	03				
2600083-52	193 01	6.00 02	80	50	459364	775622	GW	03				
2600083-53	193 03	6.00 02	80	50	461595	778078	GW	03				
2600083-54	193 01	6.00 02	80	50	462786	782093	GW	03				
2600083-55	193 01	6.00 02	80	50	465273	774925	GW	03				
2600083-56	193 03	6.00 02	80	50	464992	778043	GW	03				
2600083-57	193 03	6.00 02	80	50	466776	782406	GW	03				
2600083-58	193 01	6.00 02	80	50	468486	783273	GW	03				
2600083-59	193 03	6.00 02	80	50	467885	785566	GW	03				
					468311	787158	GW	03				

2600085 3631.20	03	695.20	02	26 8/88	AG	BOTH	16	1	LYKES				
2600085-116	194 01	6.00 02	100	500 N	507085	767676	GW	03	25	20	0.8	26	900 0.50
2600085-117	194 01	8.00 02	100	700 N	507203	768936	GW	03	61	0.8	26	600 0.50	
2600085-118	194 01	6.00 02	100	500 N	506926	770444	GW	03					
2600085-119	194 01	8.00 02	100	700 N	507972	771349	GW	03					
2600085-120	194 01	6.00 02	100	500 N	507998	772635	GW	03					
2600085-121	194 01	8.00 02	100	700 N	507609	774707	GW	03					
2600085-122	194 01	6.00 02	100	500 N	507329	776481	GW	03					
2600085-123	194 01	8.00 02	100	700 N	510997	775478	GW	03					
2600085-124	194 01	6.00 02	100	500 N	510202	775454	GW	03					
2600085-125	194 01	8.00 02	100	700 N	512034	776807	GW	03					
2600085-126	194 01	6.00 02	100	500 N	511978	776862	GW	03					

2600087	2600087-127	194 01	8.00 02 100	1480.00 02 26 3/88	AG	GW	101	ROBERT E. MCDANIEL, SR.	511271	777622	GW	03	13	0.8	26	3480	0.85
2600087	2600087-128	194 01	6.00 02 100				700 N		509507	777536	GW	03	61	0.8	26	1000	0.50
2600087	2600087-129	194 01	8.00 02 100				500 N		510401	778037	GW	03	20	0.8	26	3164	0.50
2600087	2600087-130	194 01	6.00 02 100				500 N		511115	778418	GW	03					
2600087	2600087-SW	194 01					3500 N										
2600087	2600087-32	208 01	6.00 02 100				600 N		484278	741836	GW	03					
2600087	2600087-33	208 01	6.00 02 100				600 N		492689	741854	GW	03					
2600087	2600087-34	208 01	6.00 02 100				600 N		499692	740291	GW	03					
2600087	2600087-35	208 01	6.00 02 100				600 N		499041	737909	GW	03					
2600087	2600087-36	208 01	6.00 02 100				600 N		499993	738093	GW	03					
2600087	2600087-37	208 01	6.00 02 100				600 N		494097	740997	GW	03					
2600087	2600087-38	208 01	6.00 02 100				600 N		494095	738397	GW	03					
2600087	2600087-39	208 01	6.00 02 100				600 N		495472	736793	GW	03					
2600087	2600087-40	208 01	6.00 02 100				600 N		494152	734794	GW	03					
2600087	2600087-41	208 01	6.00 02 100				600 N		493805	733869	GW	03					
2600087	2600087-42	208 01	6.00 02 100				600 N		494605	733900	GW	03					
2600087	2600087-43	208 01	6.00 02 100				600 N		494284	732906	GW	03					
2600087	2600087-44	208 01	6.00 02 100				600 N		499994	733324	GW	03					
2600087	2600087-45	208 01	6.00 02 100				600 N		499800	742750	GW	03					
2600087	2600087-110	193 01	6.00 02 100				600 N		497464	761861	GW	03					
2600087	2600087-111	193 01	6.00 02 100				600 N		496769	761141	GW	03					
2600087	2600087-112	193 01	6.00 02 100				600 N		500021	758735	GW	03					
2600087	2600087-113	193 01	6.00 02 100				600 N		491482	761621	GW	03					
2600087	2600087-114	193 01	6.00 02 100				600 N		492504	761680	GW	03					
2600087	2600087-115	193 01	6.00 02 100				600 N		493369	761735	GW	03					
2600087	2600087-116	193 01	6.00 02 100				600 N		494997	761302	GW	03					
2600087	2600087-117	193 01	6.00 02 100				600 N		491527	760294	GW	03					
2600087	2600087-118	193 01	6.00 02 100				600 N		493372	760212	GW	03					
2600087	2600087-119	193 01	6.00 02 100				600 N		494397	760450	GW	03					
2600087	2600087-120	193 01	6.00 02 100				600 N		492880	758853	GW	03					
2600087	2600087-121	193 01	6.00 02 100				600 N		495658	759005	GW	03					
2600087	2600087-122	193 01	6.00 02 100				600 N		499825	754152	GW	03					
2600087	2600087-123	193 01	6.00 02 100				600 N		498574	753861	GW	03					
2600087	2600087-124	193 01	6.00 02 100				600 N		497231	754619	GW	03					
2600087	2600087-125	193 01	6.00 02 100				600 N		495509	757014	GW	03					
2600087	2600087-126	193 01	6.00 02 100				600 N		494366	755602	GW	03					
2600087	2600087-127	193 01	6.00 02 100				600 N		494942	755078	GW	03					
2600087	2600087-128	193 01	6.00 02 100				600 N		492708	754444	GW	03					
2600087	2600087-129	193 01	6.00 02 100				600 N		493438	753821	GW	03					
2600087	2600087-130	193 01	6.00 02 100				600 N		492147	752521	GW	03					
2600087	2600087-131	193 01	6.00 02 100				600 N		498150	751434	GW	03					
2600087	2600087-132	193 01	6.00 02 100				600 N		497151	751268	GW	03					
2600087	2600087-133	193 01	6.00 02 100				600 N		495676	748844	GW	03					
2600087	2600087-134	193 01	6.00 02 100				600 N		494703	749234	GW	03					
2600087	2600087-135	193 01	6.00 02 100				600 N		494534	750116	GW	03					
2600087	2600087-136	193 01	6.00 02 100				600 N		494606	750810	GW	03					
2600087	2600087-137	193 01	6.00 02 100				600 N		492303	751342	GW	03					
2600087	2600087-138	193 01	6.00 02 100				600 N		489068	760715	GW	03					
2600087	2600087-139	193 01	6.00 02 100				600 N		483492	760452	GW	03					
2600087	2600087-140	193 01	6.00 02 100				600 N		483895	760036	GW	03					
2600087	2600087-141	193 01	6.00 02 100				600 N		485302	757313	GW	03					
2600087	2600087-142	193 01	6.00 02 100				600 N		476391	760645	GW	03					
2600087	2600087-143	193 01	6.00 02 100				600 N		478874	760654	GW	03					
2600087	2600087-144	193 01	6.00 02 100				600 N		477025	757520	GW	03					

2600087-145	193 01	6.00 02	100	60	600 N	478830	756906	GW	03
2600087-146	193 01	6.00 02	100	60	600 N	476065	756039	GW	03
2600087-147	193 01	6.00 02	100	60	600 N	475557	755496	GW	03
2600087-148	193 01	6.00 02	100	60	600 N	477479	753667	GW	03
2600087-149	193 01	6.00 02	100	60	600 N	481377	753662	GW	03
2600087-150	193 01	6.00 02	100	60	600 N	481252	752788	GW	03
2600087-151	193 01	6.00 02	100	60	600 N	486262	756481	GW	03
2600087-152	193 01	6.00 02	100	60	600 N	487775	756794	GW	03
2600087-153	193 01	6.00 02	100	60	600 N	488567	753970	GW	03
2600087-154	193 01	6.00 02	100	60	600 N	486273	752170	GW	03
2600087-155	193 01	6.00 02	100	60	600 N	491126	747831	GW	03
2600087-156	193 01	6.00 02	100	60	600 N	492557	747342	GW	03
2600087-157	193 01	6.00 02	100	60	600 N	490276	751126	GW	03
2600087-158	193 01	6.00 02	100	60	600 N	488431	750344	GW	03
2600087-159	193 01	6.00 02	100	60	600 N	486278	749100	GW	03
2600087-160	193 01	6.00 02	100	60	600 N	483822	749812	GW	03
2600087-161	193 01	6.00 02	100	60	600 N	475951	750825	GW	03
2600087-162	193 01	6.00 02	100	60	600 N	476411	747378	GW	03
2600087-163	193 01	6.00 02	100	60	600 N	478996	746991	GW	03
2600087-164	193 01	6.00 02	100	60	600 N	479452	742735	GW	03
2600087-165	193 01	6.00 02	100	60	600 N	483403	743615	GW	03
2600087-166	193 01	6.00 02	100	60	600 N	485175	742350	GW	03
2600087-167	193 01	6.00 02	100	60	600 N	486275	742113	GW	03
2600087-168	193 01	6.00 02	100	60	600 N	487373	742139	GW	03
2600087-169	193 01	6.00 02	100	60	600 N	487308	743417	GW	03
2600087-170	193 01	6.00 02	100	60	600 N	491291	742704	GW	03
2600087-171	193 01	6.00 02	100	60	600 N	494174	745314	GW	03
2600087-172	193 01	6.00 02	100	60	600 N	498115	745830	GW	03
2600087-173	193 01	6.00 02	100	60	600 N	498068	743487	GW	03
2600087-174	193 01	6.00 02	100	60	600 N	496827	742866	GW	03
2600087-96	194 01	6.00 02	100	60	600 N	505091	762190	GW	03
2600087-97	194 01	6.00 02	100	60	600 N	504977	761071	GW	03
2600087-98	194 01	6.00 02	100	60	600 N	504977	758862	GW	03
2600087-99	194 01	6.00 02	100	60	600 N	504937	757189	GW	03
2600087-100	194 01	6.00 02	100	60	600 N	505723	757179	GW	03
2600087-101	194 01	6.00 02	100	60	600 N	506369	757260	GW	03
2600087-102	194 01	6.00 02	100	60	600 N	505559	753917	GW	03
2600087-103	194 01	6.00 02	100	60	600 N	505806	752678	GW	03
2600087-104	194 01	6.00 02	100	60	600 N	500623	756865	GW	03
2600087-105	194 01	6.00 02	100	60	600 N	503380	751682	GW	03
2600087-106	194 01	6.00 02	100	60	600 N	505414	752018	GW	03
2600087-107	194 01	6.00 02	100	60	600 N	505795	751517	GW	03
2600087-108	194 01	6.00 02	100	60	600 N	505187	749527	GW	03
2600087-109	194 01	6.00 02	100	60	600 N	503176	748991	GW	03
2600087-110	194 01	6.00 02	100	60	600 N	500081	750626	GW	03
2600087-111	194 01	6.00 02	100	60	600 N	500169	742808	GW	03
2600087-112	194 01	6.00 02	100	60	600 N	502351	744592	GW	03
2600087-113	194 01	6.00 02	100	60	600 N	504595	745138	GW	03
2600087-114	194 01	6.00 02	100	60	600 N	504783	744119	GW	03
2600087-115	194 01	6.00 02	100	60	600 N	503215	736674	GW	03
2600087-13	209 01	6.00 02	100	60	600 N	504405	737530	GW	03
2600087-14	209 01	6.00 02	100	60	600 N	505546	736544	GW	03
2600087-15	209 01	6.00 02	100	60	600 N	505546	736544	GW	03
2600088 323.77	03	57.18	02	26 7/87	AG GW	S. C. FRY			20 0.8 26 320 0.50
2600088-29	208 01	8.00 02	120		1200 N	484255	730321	GW	03
2600088-30	208 01	8.00 02	120		1200 N	484342	727390	GW	03
2600089 173.67	03		26 11/77	AG GW	2	CROOKS RANCH			20 0.8 26 800 0.50

2600094 6117.31	192 01	6.00 02	80	50	122	USSC - SOUTHERN DIVISION CITRUS	13	0.8	26	13300 0.85
2600089-31	192 01	6.00 02	80	50		420125 770186 GW 03				
2600089-32	192 01	6.00 02	80	50		423937 773205 GW 03				
2600094-17	194 01	10.00 02	120			508061 761263 GW 03				
2600094-18	194 01	10.00 02	122			510381 761265 GW 03				
2600094-19	194 01	10.00 02	145			513125 761564 GW 03				
2600094-20	194 01	02 130				515228 761645 GW 03				
2600094-21	194 01	8.00 02	115			517048 761656 GW 03				
2600094-22	194 01	8.00 02	115			517160 758719 GW 03				
2600094-23	194 01	8.00 02	110			515040 758701 GW 03				
2600094-24	194 01	10.00 02				512315 758756 GW 03				
2600094-25	194 01	02 120				511061 758611 GW 03				
2600094-26	194 01	02 125				510545 758585 GW 03				
2600094-27	194 01	10.00 02	140			508171 758461 GW 03				
2600094-28	194 01	02 165				507559 758466 GW 03				
2600094-29	194 01	8.00 02	160			507969 757062 GW 03				
2600094-30	194 01	8.00 02	120			508606 757126 GW 03				
2600094-31	194 01	10.00 02	120			510727 756083 GW 03				
2600094-32	194 01	10.00 02	132			512648 756158 GW 03				
2600094-33	194 01	10.00 02	140			514811 756450 GW 03				
2600094-34	194 01	02 140				516991 756564 GW 03				
2600094-35	194 01	10.00 02	140			515782 754070 GW 03				
2600094-36	194 01	10.00 02	180	72		512531 753878 GW 03				
2600094-37	194 01	8.00 02	140			510812 753596 GW 03				
2600094-38	194 01	10.00 02	120			507965 753466 GW 03				
2600094-39	194 03	10.00 02	120			508249 751146 GW 03				
2600094-40	194 03	02 02				510799 751150 GW 03				
2600094-41	194 03	02 02				512456 751094 GW 03				
2600094-42	194 03	02 02				517186 748130 GW 03				
2600094-43	194 03	02 02				515474 748146 GW 03				
2600094-44	194 03	02 02				512690 748132 GW 03				
2600094-45	194 03	02 02				511053 748136 GW 03				
2600094-46	194 03	02 02				508304 748254 GW 03				
2600094-47	194 03	02 02				508539 745437 GW 03				
2600094-48	194 03	02 02				511216 745516 GW 03				
2600094-49	194 03	02 02				512898 745568 GW 03				
2600094-50	194 03	02 02				515522 745508 GW 03				
2600094-51	194 03	02 02				517169 745493 GW 03				
2600094-52	194 03	02 02				517121 742936 GW 03				
2600094-53	194 03	02 02				515573 742879 GW 03				
2600094-54	194 03	02 02				512969 742972 GW 03				
2600094-55	194 03	02 02				511381 742793 GW 03				
2600094-56	194 03	02 02				508677 742685 GW 03				
2600094-131	194 03	10.00 02	120	80	450	516049 752575 GW 03				
2600094-132	194 03	10.00 02	120	80	450	518479 751217 GW 03				
2600094-133	194 03	10.00 02	120	80	450	518698 748101 GW 03				
2600094-134	194 03	10.00 02	120	80	450	520508 748197 GW 03				
2600094-135	194 03	10.00 02	120	80	450	518480 745495 GW 03				
2600094-136	194 03	10.00 02	120	80	450	520292 745450 GW 03				
2600094-137	194 03	10.00 02	120	80	450	522226 745584 GW 03				
2600094-138	194 03	10.00 02	120	80	450	519403 742858 GW 03				
2600094-139	194 03	10.00 02	120	80	450	521717 742846 GW 03				
2600094-140	194 03	10.00 02	120	80	450	524098 742763 GW 03				
2600094-1	209 03	02 02				508687 740458 GW 03				
2600094-2	209 03	02 02				511313 740587 GW 03				
2600094-3	209 03	02 02				512904 740662 GW 03				
2600094-4	209 03	02 02				514974 740692 GW 03				





2600094-67	209 03	10.00 02	120	80	450	525509	724886	GW	03
2600094-68	209 03	10.00 02	120	80	450	528044	724926	GW	03
2600094-69	209 03	10.00 02	120	80	450	523316	721550	GW	03
2600094-70	209 03	10.00 02	120	80	450	525701	721518	GW	03
2600094-71	209 03	10.00 02	120	80	450	528127	721651	GW	03
2600094-72	209 03	10.00 02	120	80	450	530959	724738	GW	03
2600094-73	209 03	10.00 02	120	80	450	533155	724868	GW	03
2600094-74	209 03	10.00 02	120	80	450	531003	721630	GW	03
2600094-75	209 03	10.00 02	120	80	450				
2600095 36.25	03	.361	01	26 6/87	AG BOTH	3	1 E. C. MILLS		
2600095-4	153 01	6.00 02	700	20	50 N	332626	878630	GW	08
2600095-5	153 02	8.00 02	60	20	250 N	332991	878339	GW	03
2600095-6	153 02	8.00 02	60	20	250 N	333012	877862	GW	03
2600095-5W	153 01				750	332350	877500	SW	
2600098 303.54	03	53.61	02	26 10/87	AG GW	3	FRANK P. HARBEN		
2600098-57	194 01	8.00 02	50	20	750 N	510531	784064	GW	01
2600098-58	194 01	8.00 02	50	20	750 N	508901	782796	GW	01
2600098-59	194 03	8.00 02	50	20	N	506697	782938	GW	01
2600108 15532	03	1276.60	02	26 8/88	AG GW	129	ALICO		
2600108-14	175 01	6.00 02	80		N	497087	802369	GW	03
2600108-15	175 01	6.00 02	80		N	496751	805438	GW	03
2600108-16	175 01	6.00 02	80		N	497252	806152	GW	03
2600108-17	175 01	6.00 02	80		N	496555	810852	GW	03
2600108-18	175 01	6.00 02	80		N	496238	811730	GW	03
2600108-19	175 01	6.00 02	80		N	498462	821350	GW	03
2600108-20	175 01	6.00 02	80		N	490043	826170	GW	03
2600108-21	175 01	6.00 02	80		N	493036	824819	GW	03
2600108-22	175 01	6.00 02	80		N	491188	817680	GW	03
2600108-23	175 01	6.00 02	80		N	492792	816085	GW	03
2600108-24	175 01	6.00 02	80		N	492746	812034	GW	03
2600108-25	175 01	6.00 02	80		N	495004	812401	GW	03
2600108-26	175 01	6.00 02	80		N	493732	811285	GW	03
2600108-27	175 01	8.00 02	80		N	493020	808982	GW	03
2600108-28	175 01	6.00 02	80		N	490371	807664	GW	03
2600108-29	175 01	8.00 02	80		N	491682	807199	GW	03
2600108-30	175 01	6.00 02	80		N	491436	806630	GW	03
2600108-31	175 01	6.00 02	80		N	493430	799428	GW	03
2600108-32	175 01	6.00 02	80		N	489800	799165	GW	03
2600108-33	175 01	6.00 02	130	47	N	489383	801957	GW	03
2600108-34	175 01	8.00 02	80		N	485211	808782	GW	03
2600108-35	175 01	8.00 02	80		N	485168	810005	GW	03
2600108-36	175 01	8.00 02	80		N	489993	810489	GW	03
2600108-37	175 01	6.00 02	80		800 N	481987	796735	GW	03
2600108-38	175 01	8.00 02	80		800 N	481543	797001	GW	03
2600108-39	175 01	6.00 02	80		800 N	484690	798476	GW	03
2600108-40	175 01	6.00 02	80		800 N	481647	801095	GW	03
2600108-41	175 01	6.00 02	80		800 N	485133	801814	GW	03
2600108-42	175 01	6.00 02	80		N	481232	803097	GW	03
2600108-43	175 01	6.00 02	80		N	484934	804985	GW	03
2600108-44	175 01	6.00 02	80		N	480096	804951	GW	03
2600108-45	175 01	10.00 02	80		N	479903	806475	GW	03
2600108-46	175 01	10.00 02	80		N	481309	809645	GW	03
2600108-47	175 01	6.00 02	80		N	483638	812450	GW	03
2600108-48	175 01	10.00 02	80		N	482634	814635	GW	03

13 1.5 15 26 0.75  
20 1.5 15 20 0.50

20 0.8 26 320 0.50

20 0.8 15 23200 0.50

2600108-49	175 01	10.00 02	80	N	480626	815890	GW	03
2600108-50	175 01	6.00 02	80	N	478719	796345	GW	03
2600108-51	175 01	6.00 02	80	N	477748	803704	GW	03
2600108-52	175 01	6.00 02	80	N	475758	804637	GW	03
2600108-53	175 01	6.00 02	80	N	478823	805025	GW	03
2600108-54	175 01	8.00 02	80	N	475897	806632	GW	03
2600108-55	175 01	8.00 02	80	N	475843	806878	GW	03
2600108-56	175 01	8.00 02	80	N	475965	807987	GW	03
2600108-57	175 01	8.00 02	80	N	479459	814168	GW	03
2600108-58	175 01	6.00 02	80	N	477698	819072	GW	03
2600108-59	175 01	6.00 02	80	N	471954	789761	GW	03
2600108-60	175 01	6.00 02	80	N	469641	789748	GW	03
2600108-61	175 01	6.00 02	80	N	470796	793091	GW	03
2600108-62	175 01	6.00 02	80	N	471321	795354	GW	03
2600108-63	175 01	6.00 02	80	N	469812	794863	GW	03
2600108-64	175 01	6.00 02	80	N	470573	795855	GW	03
2600108-65	175 01	6.00 02	80	N	473882	799466	GW	03
2600108-66	175 01	6.00 02	80	N	473263	802057	GW	03
2600108-67	175 01	6.00 02	80	N	472509	803257	GW	03
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2600108-69	175 01	6.00 02	80	N	472984	806156	GW	03
2600108-70	175 01	6.00 02	80	N	470288	806550	GW	03
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2600108-72	175 01	6.00 02	80	N	473173	811396	GW	03
2600108-73	175 01	6.00 02	80	N	469317	814526	GW	03
2600108-74	175 01	6.00 02	80	N	470667	817696	GW	03
2600108-75	175 01	6.00 02	80	N	469595	818004	GW	03
2600108-76	175 01	6.00 02	80	N	470536	822133	GW	03
2600108-77	175 01	6.00 02	80	800 N	469173	796457	GW	03
2600108-78	175 01	8.00 02	80	N	468368	801661	GW	03
2600108-79	175 01	6.00 02	80	N	465729	812753	GW	03
2600108-80	175 01	6.00 02	80	N	465691	813635	GW	03
2600108-81	175 01	6.00 02	80	800 N	467416	813196	GW	03
2600108-82	175 01	6.00 02	80	800 N	468081	813849	GW	03
2600108-83	175 01	6.00 02	80	N	467992	818369	GW	03
2600108-84	175 01	6.00 02	80	N	467957	818818	GW	03
2600108-85	175 01	8.00 02	80	N	461865	794663	GW	03
2600108-86	175 01	8.00 02	80	N	462631	795389	GW	03
2600108-8	174 01	6.00 02	80	800 N	456362	794403	GW	03
2600108-9	174 01	6.00 02	80	800 N	453491	796851	GW	03
2600108-10	174 01	6.00 02	80	800 N	457688	799141	GW	03
2600108-11	174 01	6.00 02	80	600 N	458293	811266	GW	03
2600108-12	174 01	6.00 02	80	800 N	452591	800268	GW	03
2600108-13	174 01	6.00 02	80	800 N	449582	801416	GW	03
2600108-14	174 01	6.00 02	80	800 N	451170	802132	GW	03
2600108-15	174 01	6.00 02	80	800 N	450107	804443	GW	03
2600108-16	174 01	6.00 02	80	N	450805	805584	GW	03
2600108-17	174 01	6.00 02	80	N	450381	808527	GW	03
2600108-18	174 01	6.00 02	80	N	444994	800972	GW	03
2600108-19	174 01	6.00 02	80	N	446827	804761	GW	03
2600108-20	174 01	8.00 02	80	N	442745	807866	GW	03
2600108-21	174 01	8.00 02	80	N	443107	808164	GW	03
2600108-22	174 01	6.00 02	80	N	442696	814456	GW	03
2600108-23	174 01	6.00 02	80	378 N	441362	795660	GW	03
2600108-24	174 01	6.00 02	80	800 N	441061	796419	GW	03
2600108-25	174 01	6.00 02	80	800 N	439637	796921	GW	03
2600108-26	174 01	6.00 02	80	800 N	439488	797811	GW	03
2600108-27	174 01	6.00 02	80	N	442029	802393	GW	03

2600108-28	174 01	6.00 02	80	N	441841	803799	GW	03				
2600108-29	174 01	6.00 02	80	N	441299	803830	GW	03				
2600108-30	174 01	6.00 02	80	N	440307	807003	GW	03				
2600108-31	174 01	6.00 02	80	N	425787	800031	GW	03				
2600108-32	174 01	6.00 02	80	800 N	421996	814401	GW	03				
2600108-33	174 01	6.00 02	80	800 N	422021	815107	GW	03				
2600108-34	174 01	4.00 02	80	N	424383	816071	GW	03				
2600108-35	174 01	4.00 02	80	N	418369	809667	GW	03				
2600108-36	174 01	4.00 02	80	N	418900	809593	GW	03				
2600108-37	174 01	4.00 02	80	N	420772	809583	GW	03				
2600108-38	174 01	6.00 02	80	850 N	418332	811213	GW	03				
2600108-39	174 01	6.00 02	80	750 N	420234	811548	GW	03				
2600108-40	174 01	6.00 02	80	N	458708	810067	GW	03				
2600108-41	174 01	6.00 02	80	N	459151	808221	GW	03				
2600108-42	174 01	6.00 02	80	N								
2600108-1	173 01	6.00 02	80	800 N	417573	813793	GW	03				
2600108-2	173 01	6.00 02	80	800 N	416060	814337	GW	03				
2600108-3	173 01	3.00 02	80	N	413494	809661	GW	03				
2600108-4	173 01	6.00 02	80	800 N	414734	818732	GW	03				
2600108-5	173 01	6.00 02	80	600 N	415575	821387	GW	03				
2600108-6	173 01	6.00 02	80	800 N	408584	813770	GW	03				
2600108-7	173 01	6.00 02	80	800 N	409677	816238	GW	03				
2600108-8	173 01	6.00 02	80	375 N	407770	818132	GW	03				
2600108-9	173 01	6.00 02	80	800 N	405239	819694	GW	03				
2600108-10	173 01	6.00 02	80	800 N	405259	822290	GW	03				
2600108-11	173 01	6.00 02	80	800 N	406661	823485	GW	03				
2600108-12	173 01	6.00 02	80	800 N	408449	823314	GW	03				
2600108-13	173 01	6.00 02	80	800 N	409165	823701	GW	03				
2600108-14	173 01	6.00 02	80	800 N	405243	826560	GW	03				
2600108-15	173 01	6.00 02	80	800 N	406762	828178	GW	03				
2600108-16	173 01	6.00 02	80	800 N	404022	825080	GW	03				
2600108-17	173 01	6.00 02	80	800 N	390359	822234	GW	03				
2600108-6	155 01	4.00 02	80	N	387814	838804	GW	03				
2600108-7	155 01	4.00 02	80	N	388529	837622	GW	03				
2600108-8	155 01	4.00 02	80	N	387719	836576	GW	03				
2600108-9	155 01	4.00 02	80	N	386907	836821	GW	03				
2600109 132.94	03	26 6/78	AG	GW	2	COLLIER DEVELOPMENT CORPORATION			61	0.8	26	612 0.50
2600109-9	191 01	6.00 02	40	800 N	412587	759036	GW	03				
2600109-10	191 01	8.00 02	52	800 N	414312	759923	GW	03				
2600110 56.69	03	26 6/78	AG	GW	1	CARLOS L. REYNOLDS			20	3.6	26	587 0.50
2600110-10	176 01	8.00 02		328 N	516819	830730	GW					
2600112 3668.11	03	891.96 02	26 9/87	AG	GW	88	BARRON COLLIER III TRUST		61	0.8	26	3164 0.50
2600112									56	0.8	26	3164 0.50
2600112-11	191 01	8.00 02	44		418099	757199	GW	03				
2600112-12	191 01	8.00 02	54		416938	756302	GW	03				
2600112-13	191 01	10.00 02	60		417500	751680	GW	03				
2600112-10	206 01	9.00 02	66		413710	730475	GW	03				
2600112-11	206 01	4.00 02	60		415731	728675	GW	03				
2600112-12	206 01	6.00 02	54		412923	728627	GW	03				
2600112-13	206 01	6.00 02	45		412350	726605	GW	03				
2600112-14	206 01	9.00 02	43		412306	725527	GW	03				
2600112-15	206 01	8.00 02	44		413115	724569	GW	03				
2600112-16	206 01	8.00 02	53		415474	725966	GW	03				
2600112-17	206 01	8.00 02	45		412375	722670	GW	03				
2600112-18	206 01	8.00 02	46		413975	723415	GW	03				

2600112-19	206 01	9.00 02	49	415774	723421	GW	03
2600112-20	206 01	8.00 02	42	416316	722261	GW	03
2600112-21	206 01	8.00 02	67	415329	720621	GW	03
2600112-22	206 01	8.00 02	47	413105	721125	GW	03
2600112-23	206 01	6.00 02	51	412927	719774	GW	03
2600112-24	206 01	6.00 02	58	417366	722064	GW	03
2600112-25	206 01	8.00 02	52	417095	720986	GW	03
2600112-53	192 01	8.00 02	61	424993	759746	GW	03
2600112-54	192 01	6.00 02	66	424726	757279	GW	03
2600112-55	192 01	6.00 02	82	425830	757868	GW	03
2600112-56	192 01	6.00 02	86	425393	758858	GW	03
2600112-57	192 01	6.00 02	63	426792	758101	GW	03
2600112-58	192 01	6.00 02	40	431528	756588	GW	03
2600112-59	192 01	2.00 02		433196	757322	GW	03
2600112-60	192 01	2.00 02		428540	760581	GW	03
2600112-61	192 01	8.00 02	52	420414	758243	GW	03
2600112-62	192 01	2.00 02		420076	759211	GW	03
2600112-63	192 01	8.00 02	49	419334	757621	GW	03
2600112-64	192 01	8.00 02	61	428056	754313	GW	03
2600112-65	192 01	8.00 02	60	431829	747400	GW	03
2600112-66	192 01	8.00 02	62	427980	744465	GW	03
2600112-67	192 01	8.00 02	61	430532	742645	GW	03
2600112-68	192 01	8.00 02	47	421884	759200	GW	03
2600112-15	207 01	8.00 02	51	418177	722698	GW	03
2600112-16	207 01	6.00 02	149	419151	723154	GW	03
2600112-17	207 01	4.00 02	45	421004	720936	GW	03
2600112-18	207 01	10.00 02	91	420102	719907	GW	03
2600112-19	207 01	8.00 02	76	418176	719103	GW	03
2600112-20	207 01	10.00 02	52	422323	721060	GW	03
2600112-21	207 01	8.00 02	57	425862	720710	GW	03
2600112-22	207 01	8.00 02	48	431655	723888	GW	03
2600112-23	207 01	8.00 02	50	432731	724043	GW	03
2600112-24	207 01	8.00 02	52	435275	723381	GW	03
2600112-25	207 01	8.00 02	79	438534	723462	GW	03
2600112-26	207 01	8.00 02	73	439839	723586	GW	03
2600112-27	207 01	8.00 02	57	440124	722600	GW	03
2600112-28	207 01	8.00 02	77	441493	720907	GW	03
2600112-29	207 01	6.00 02	78	438538	722050	GW	03
2600112-30	207 01	6.00 02	64	438341	720673	GW	03
2600112-31	207 01	9.00 02	64	440111	720604	GW	03
2600112-32	207 01	6.00 02	65	440824	720844	GW	03
2600112-33	207 01	8.00 02	76	442149	719948	GW	03
2600112-34	207 01	6.00 02	70	439008	719576	GW	03
2600112-35	207 01	6.00 02	60	442067	718916	GW	03
2600112-36	207 01	6.00 02	58	442400	717412	GW	03
2600112-37	207 01	8.00 02	65	440596	716259	GW	03
2600112-38	207 01	8.00 02	66	439837	715917	GW	03
2600112-39	207 01	8.00 02	64	441532	716209	GW	03
2600112-40	207 01	6.00 02	64	439786	714452	GW	03
2600112-41	207 01	8.00 02	54	435205	718985	GW	03
2600112-42	207 01	8.00 02	53	435428	717710	GW	03
2600112-43	207 01	8.00 02	46	433307	714676	GW	03
2600112-44	207 01	8.00 02	67	429933	715888	GW	03
2600112-45	207 01	8.00 02	67	428202	715008	GW	03
2600112-46	207 01	6.00 02	66	430286	714666	GW	03
2600112-47	207 01	8.00 02	61	432853	737934	GW	03
2600112-48	207 01	9.00 02	63	433747	739220	GW	03
2600112-49	207 01	9.00 02	63	436490	739357	GW	03

2600112-50	207 01	9.00 02	63	433958	737761	GW 03
2600112-51	207 01	8.00 02	44	445124	733896	GW 03
2600112-52	207 01	6.00 02	30	444168	730597	GW 03
2600112-53	207 01	8.00 02	34	445940	731651	GW 03
2600112-54	207 01	8.00 02	39	447753	730507	GW 03
2600112-55	207 01	9.00 02	61	441430	731884	GW 03
2600112-56	207 01	9.00 02	60	439745	729655	GW 03
2600112-57	207 01	8.00 02	58	438077	729009	GW 03
2600112-58	207 01	9.00 02	60	442056	729257	GW 03
2600112-59	207 01	10.00 02	79	439896	727615	GW 03
2600112-60	207 01	8.00 02	54	442210	727588	GW 03
2600112-61	207 01	8.00 02	116	438179	727299	GW 03
2600112-62	207 01	8.00 02	101	438223	726380	GW 03
2600112-63	207 01	8.00 02	74	441277	726344	GW 03
2600112-64	207 01	8.00 02	77	438270	725596	GW 03
2600112-65	207 01	6.00 02	62	435285	727403	GW 03
2600112-66	207 01	8.00 02	41	429910	726192	GW 03
2600112-67	207 01	8.00 02	41	431321	725920	GW 03
2600114 37.72	03	.46	02	26 11/87	AG	GW
2600114-7	153 01	4.00 02	30	SCHLEY CITRUS		
2600114-8	153 01	6.00 02	30	335957	878121	GW 08
2600114-9	153 01	4.00 02	180	336025	877907	GW 01
				30 N	878083	GW 04
2600115 2499.11	03		26 9/78	AG	BOTH	30 Y
2600115						
2600115-18	176 01	6.00 02		506546	828599	GW 03
2600115-19	176 01	6.00 02		507057	831074	GW 03
2600115-20	176 01	6.00 02		506295	831070	GW 03
2600115-21	176 01	8.00 02		506780	831788	GW 03
2600115-22	176 01	8.00 02		507502	831750	GW 03
2600115-23	176 01	6.00 02		512016	829706	GW 03
2600115-24	176 01	6.00 02		511416	831715	GW 03
2600115-25	176 01	6.00 02		513753	831811	GW 03
2600115-26	176 01	8.00 02		514458	832423	GW 03
2600115-27	176 01	66.00 02		511300	832414	GW 03
2600115-7	157 01	6.00 02		497610	847250	GW 03
2600115-8	157 01	6.00 02		495061	847282	GW 03
2600115-9	157 01	8.00 02		496235	845628	GW 03
2600115-10	157 01	8.00 02		499249	843695	GW 03
2600115-11	157 01	8.00 02		498671	845126	GW 03
2600115-12	157 01	6.00 02		497743	845941	GW 03
2600115-13	157 01	6.00 02		497636	844341	GW 03
2600115-14	157 01	6.00 02		495162	843592	GW 03
2600115-15	157 01	6.00 02		498341	840067	GW 03
2600115-16	157 01	6.00 02		499788	840274	GW 03
2600115-17	157 01	6.00 02		498267	840789	GW 03
2600115-18	157 01	6.00 02		496889	840754	GW 03
2600115-19	157 01	6.00 02		496209	840762	GW 03
2600115-20	157 01	6.00 02		495522	840784	GW 03
2600115-21	157 01	6.00 02		495430	838452	GW 03
2600115-22	157 01	6.00 02		496162	838447	GW 03
2600115-23	157 01	6.00 02		496842	838442	GW 03
2600115-24	157 01	6.00 02		497771	838491	GW 03
2600115-25	157 01	6.00 02		498499	838604	GW 03
2600115-26	157 01	6.00 02		499689	838914	GW 03
2600115-SW						SW

13 1.5 15 82 0.85

20 0.8 26 10000 0.50  
61 0.8 26 600 0.50  
53 0.8 26 900 0.50



2600128	71.90	03	50.70	02	26 10/88	AG	GW	2	BERCHTOLD GROVES	13	0.8	15	86 0.50
2600128-4		137 01	6.00	02	70			800 N	435568 883401 GW 03				
2600128-9		137 01	6.00	02	100	50		700 N	433021 883696 GW 03				
2600130	213.88	03	2.62	01	26 4/87	AG	GW	7	LAKE BUTLER GROVES, INC.	13	0.8	15	465 0.50
2600130-12		135 01	10.00	02	132	113	02	900 N	341890 815150 GW 04				
2600130-13		135 01	10.00	02	216	132	02	700 N	339820 881390 GW 04				
2600130-14		135 01	8.00	02	200			N	340820 885150 GW 04				
2600130-15		135 01	6.00	02	50	40		N	343030 883350 GW 01				
2600130-16		135 01	6.00	02	50	40		N	343030 881690 GW 01				
2600130-17		135 04											
2600130-18		135 01							342230 882520 GW				
2600134	275.97	03	101.57	02	26 10/87	AG	GW	3	PAUL & WHEELER	13	0.8	15	600 0.85
2600134-90		172 01	8.00	02	130	60	02	100 N	359850 807700 GW 04				
2600134-91		172 01	8.00	02	125	80	02	100 N	358500 807100 GW 04				
2600134-92		172 01	8.00	02	145	80	02	100 N	359100 805550 GW 04				
2600135	549.69	03	6.74	01	26 12/87	AG	GW	10	BOB PAUL, (KINSER GROVE)	13	1.5	15	703 0.85
2600135-3		134 01	12.00	02	140	90	02	600 N	359045 883751 GW 04				
2600135-4		134 02	12.00	02	140	90	02	600 N	361289 883596 GW 04				
2600135-5		134 01	8.00	02	140	110	02	400 N	358795 881700 GW 04				
2600135-6		134 02	12.00	02	140	90	02	600 N	361315 881440 GW 04				
2600135-7		134 01	6.00	02	180	97	02	40 N	362278 880198 GW 04				
2600135-8		134 01	6.00	02	150	118	02	300 N	364289 879840 GW 04				
2600135-11		153 02	12.00	02	140	90	02	600 N	323409 878304 GW 04				
2600135-12		153 01	6.00	02	140	120	02	250 N	323686 878280 GW 04				
2600135-13		153 01	8.00	02	140	100	02	40 N	325744 878490 GW 04				
2600135-14		153 02	12.00	02	140	90	02	600 N	323379 876464 GW 04				
2600136	2240.83	03	492.02	02	26 9/87	AG	GW	27	FRED BARFIELD	20	0.8	26	1731 0.50
2600136-69		207 01	10.00	02	85				425109 708245 GW 03	13	0.8	26	460 0.50
2600136-70		207 01	10.00	02	85				424636 708243 GW 03	61	0.8	26	260 0.50
2600136-71		207 01	6.00	02	85				426318 707416 GW 03				
2600136-72		207 01	8.00	02	85				427225 705625 GW 03				
2600136-73		207 01	10.00	02	85				425676 704540 GW 03				
2600136-74		207 01	10.00	02	85				423747 703350 GW 03				
2600136-75		207 01	8.00	02	85				424647 705007 GW 03				
2600136-76		207 01	10.00	02	85				424754 705838 GW 03				
2600136-77		207 01	10.00	02	85				421988 707765 GW 03				
2600136-78		207 01	8.00	02	85				420019 707644 GW 03				
2600136-79		207 01	10.00	02	85				419375 705649 GW 03				
2600136-80		207 01	10.00	02	85				420428 705718 GW 03				
2600136-81		207 01	8.00	02	85				421990 705861 GW 03				
2600136-82		207 01	8.00	02	85				421957 703819 GW 03				
2600136-83		207 01	8.00	02	85				419966 702900 GW 03				
2600136-84		207 01	10.00	02	85				419918 702092 GW 03				
2600136-85		207 01	8.00	02	85				419855 700187 GW 03				
2600136-86		207 01	10.00	02	85				422153 700111 GW 03				
2600136-87		207 01	10.00	02	85				423690 700116 GW 03				
2600136-88		207 01	10.00	02	85				426408 700460 GW 03				
2600136-89		207 01	10.00	02	85				426490 701817 GW 03				
2600136-90		207 01	10.00	02	85				424024 702906 GW 03				
2600136-26		206 01	6.00	02	85				416930 705792 GW 03				

LIVESTOCK WATERING

2600141	79-20	03	26	1/82	AG	GW	3	USSC	ZIPPERER FARMS	13	0.8	26	1600	0.50
2600136-27	206 01	4.00 02	85					417470	705738	GW	03			
2600136-28	206 01	8.00 02	85					417417	704502	GW	03			
2600136-29	206 01	8.00 02	85					417029	702807	GW	03			
2600136-30	206 01	8.00 02	85					414733	700325	GW	03			
2600141-4	158 01	6.00 02	90	70	01	175	N	508073	863040	GW	03			
2600141-5	158 01	8.00 02	100	60	02	240	N	516618	863155	GW	03			
2600141-6	158 01	6.00 02	84		01	140	N	515930	863568	GW	03			
2600143 3462.11	03	847.12	02	26	12/87	AG	GW	105	11					
2600143-11	176 01	6.00 02	130				N	505465	791367	GW	03			
2600143-12	176 01	6.00 02	130				N	504152	791326	GW	03			
2600143-13	176 01	6.00 02	130				N	504124	790032	GW	03			
2600143-14	176 01	6.00 02	130				N	505547	788685	GW	03			
2600143-15	176 01	6.00 02	130				N	504148	788703	GW	03			
2600143-16	176 01	6.00 02	130				N	501345	789188	GW	03			
2600143-17	176 01	6.00 02	130				N	501129	787450	GW	03			
2600143-87	175 01	6.00 02	130				N	492436	793666	GW	03			
2600143-88	175 01	6.00 02	130				N	491140	794278	GW	03			
2600143-89	175 01	6.00 02	130				N	498476	792963	GW	03			
2600143-90	175 01	6.00 02	130				N	497443	793022	GW	03			
2600143-91	175 01	6.00 02	130				N	492318	790883	GW	03			
2600143-92	175 01	6.00 02	130				N	491001	790571	GW	03			
2600143-93	175 01	8.00 02	130				N	492097	789957	GW	03			
2600143-94	175 01	6.00 02	130				N	494961	788727	GW	03			
2600143-95	175 01	8.00 02	130				N	492042	788674	GW	03			
2600143-96	175 02	12.00 02	120			3000	N	491681	788213	GW	03			
2600143-65	193 01	6.00 02	130				N	495149	787229	GW	03			
2600143-66	193 01	6.00 02	130				N	499590	786532	GW	03			
2600143-67	193 01	6.00 02	130				N	497693	784489	GW	03			
2600143-68	193 01	6.00 02	130				N	499462	784606	GW	03			
2600143-69	193 01	6.00 02	130				N	495147	784435	GW	03			
2600143-70	193 01	6.00 02	130				N	494125	782896	GW	03			
2600143-71	193 01	6.00 02	130				N	499467	781933	GW	03			
2600143-72	193 01	6.00 02	130				N	497859	781875	GW	03			
2600143-73	193 01	6.00 02	130				N	492451	781845	GW	03			
2600143-74	193 01	6.00 02	130				N	491795	781855	GW	03			
2600143-75	193 01	6.00 02	130				N	491157	781832	GW	03			
2600143-76	193 01	6.00 02	130				N	492574	780249	GW	03			
2600143-77	193 01	6.00 02	130				N	491644	780843	GW	03			
2600143-78	193 01	6.00 02	130				N	491385	780250	GW	03			
2600143-79	193 01	6.00 02	135				N	491630	777885	GW	03			
2600143-80	193 01	6.00 02	135				N	491113	778199	GW	03			
2600143-81	193 01	6.00 02	135				N	491099	777571	GW	03			
2600143-82	193 01	6.00 02	135				N	491243	776503	GW	03			
2600143-83	193 01	6.00 02	135				N	491255	775386	GW	03			
2600143-84	193 01	6.00 02	135				N	491206	774799	GW	03			
2600143-85	193 01	6.00 02	135				N	493191	774186	GW	03			
2600143-86	193 01	6.00 02	135				N	493112	773229	GW	03			
2600143-87	193 01	6.00 02	135				N	491887	773204	GW	03			
2600143-88	193 01	6.00 02	130				N	495360	768410	GW	03			
2600143-89	193 01	6.00 02	130				N	493136	768224	GW	03			
2600143-90	193 01	6.00 02	130				N	495550	766965	GW	03			
2600143-91	193 01	6.00 02	130				N	494144	766746	GW	03			







Well ID	Well Type	Depth (ft)	AG	GW	609.78	02	26	7/87	AG	GW	62	CPI	873671	GW	01	353091	873671	GW	01	13	0.8	15	3602	0.85	
2600158-97	154 01	6.00	02	40	20	01	600 N	353091	873671	GW	01														
2600158-98	154 01	6.00	02	40	20	01	600 N	872090	GW	01															
2600158-SW	154 01						2800 N	352000	875250	SW															
2600158-SW	154 01						2800 N	352000	873750	SW															
2600158-SW	154 01						2800 N	353000	873000	SW															
2600159	1656.75	609.78	02	26	7/87	AG	GW																		
2600159-10	171 01	12.00	02	256	165	-91	02	540 Y	322137	823141	GW	04													
2600159-11	171 01	12.00	02	256	165	-91	02	414 Y	323063	822127	GW	04													
2600159-12	171 01	12.00	02	240	170	-91	02	437 Y	325459	822376	GW	04													
2600159-13	171 01	12.00	02	275	195	-92	02	463 Y	321873	819489	GW	04													
2600159-14	171 01	12.00	02	256	165	-92	02	624 Y	319877	823467	GW	04													
2600159-15	171 03	12.00	02	275	170			N	318828	822294	GW	04													
2600159-16	171 01	12.00	02	260	172	-92	02	464 Y	318664	819655	GW	04													
2600159-17	171 01	12.00	02	280	208	-90	02	653 Y	321023	817226	GW	04													
2600159-18	171 01	12.00	02	256	175	-88	02	675 Y	326040	809745	GW	04													
2600159-19	171 01	12.00	02	258	170	-90	02	750 Y	316704	812823	GW	04													
2600159-20	171 01	12.00	02	265	175	-90	02	500 Y	316782	811624	GW	04													
2600159-21	171 01	12.00	02	260	165	-90	02	284 Y	319761	811683	GW	04													
2600159-22	171 01	12.00	02	286	210	-90	02	360 Y	322311	816104	GW	04													
2600159-23	171 03	12.00	02	256	215				326027	814953	GW	04													
2600159-24	171 01	12.00	02	278	187	-88	02	602 Y	322610	811641	GW	04													
2600159-25	171 01	12.00	02	265	185	-88	02	549 Y	322686	810071	GW	04													
2600159-26	171 01	12.00	02	256	170	-90	02	647 Y	316970	809988	GW	04													
2600159-27	171 01	12.00	02	250	155	-90	02	669 Y	319681	809585	GW	04													
2600159-28	171 01	12.00	02	260	170	-90	02	617 Y	316988	809041	GW	04													
2600159-29	171 01	12.00	02	226	180	-90	02	363 Y	316679	804144	GW	04													
2600159-30	171 01	12.00	02	245	180	-90	02	220 Y	319878	805272	GW	04													
2600159-31	171 03	12.00	02	235	175				319433	803754	GW	04													
2600159-32	171 01	12.00	02	250	170	-88	02	454 Y	322200	807729	GW	04													
2600159-33	171 01	12.00	02	268	180	-88	02	422 Y	323691	807936	GW	04													
2600159-34	171 03	12.00	02	265	172				326113	807729	GW	04													
2600159-35	171 01	12.00	02	255	175	-88	02	520 Y	321977	806185	GW	04													
2600159-36	171 01	12.00	02	285	180	-89	02	533 Y	325445	806125	GW	04													
2600159-37	171 01	12.00	02	230	160	-88	02	367 Y	321931	804877	GW	04													
2600159-38	171 01	12.00	02	265	162	-89	02	296 Y	323727	804990	GW	04													
2600159-39	171 01	12.00	02	215	160	-88	02	745 Y	322052	803573	GW	04													
2600159-40	171 01	12.00	02	241	193	-89	02	468 Y	0	0	GW	04													
2600159-41	171 01	12.00	02	241	193	-89	02	448 Y	315632	801693	GW	04													
2600159-42	171 03	12.00	02	250	163				316679	823236	GW	04													
2600159-43	171 01	12.00	02	300	206	-90	02	415 Y	322165	818192	GW	04													
2600159-44	171 01	12.00	02	280	195	-90	02	505 Y	324626	818260	GW	04													
2600159-45	171 01	12.00	02	285	187	-90	02	753 Y	324661	817352	GW	04													
2600159-46	171 01	12.00	02	230	167	-90	02	530 Y	320390	802235	GW	04													
2600159-47	171 01	12.00	02	215	165	-90	02	610 Y	320682	799695	GW	04													
2600159-48	171 03	12.00	02	226	190				315630	798523	GW	04													
2600159-49	171 03	12.00	02	225	175				319958	797891	GW	04													
2600159-50	171 01	12.00	02	256	210	-90	02	603 Y	321715	814448	GW	04													
2600159-51	171 01	12.00	02	280	165	-90	02	611 Y	319722	812899	GW	04													
2600159-52	171 01	12.00	02	250	180	-89	02	457 Y	324622	803733	GW	04													
2600159-53	171 01	12.00	02	250	167	-90	02	470 Y	324395	823193	GW	04													
2600159-54	171 01	12.00	02	255	210	-90	02	613 Y	324786	815681	GW	04													
2600159-55	171 01	12.00	02	285	187	-88	02	736 Y	324900	811905	GW	04													
2600159-56	171 03	12.00	02	285	202				316916	806209	GW	04													
2600159-57	171 01	12.00	02	215	165	-90	02	559 Y	319534	801181	GW	04													
2600159-58	171 01	10.00	02	250	162	-92	02	388 Y	316833	820323	GW	04													
2600159-59	171 01	8.00	02	90	68	-22	02	224 Y	316180	822065	GW	04													
2600159-60	171 01	8.00	02	84	69	-22	02	236 Y	317222	822090	GW	04													





HENDRY COUNTY MODEL AREA WATER USE

LINE 1 HEADINGS (Table 1 - Existing Water Use - Permit Information and Table 2 - Forecasted Agricultural Demand for Each Permit)

PERMIT NO.	AN.	ALL.	UNT.	MO.	MAX.	MO.	DATE	USE	SRC.	NO.	SW	WLS.	PMP	OWNER	CROP	SOIL	RAIN	IRR	ACRES	EFF
															TYPE		ST			

LINE 2+ HEADINGS (Table 1 - Existing Water Use - Facilities Information for Each Permit)

PERMIT NO.	FACILITY	QUAD NO.	WELL DIA.	WELL CODE	DPTH	PMP PUMP	AG	AG	AG	GW	INT	TYPE	CAP.	MTR?	XPLNR	YPLNR	SRC	AQ.	COMMENTS	
2600215	91.30	03	1.22	01	26	4/87	AG	GW	4	RIVER ROAD GROVES	13	0.8	15						199	0.85
2600215-19		135	01	6.00	02	120	80	02	350	N	338642	883188	GW	04						
2600215-20		135	02	6.00	02	105	60	02	250	N	338423	885174	GW	04						
2600215-21		135	01	6.00	02	120	80	02	350	N	336951	885128	GW	04						
2600215-9		154	01	10.00	02	120	80	02	375	N	370861	847445	GW	04						
2600217	32.10	03	5.37	02	26	5/85	AG	GW	1	JULIAN HOWARD	13	0.8	15						32	0.85
2600217-66		154	02	12.00	02	30	20	01	N	362838	853273	GW	01							
2600220	3.29	03	.274	02	26	6/85	AG	GW	21	RICHARD ROBERTS	368800	831996	GW	04						
2600220-25		172	01	10.00	02	190	80	02	400		366913	831916	GW	04						
2600220-26		172	01	10.00	02	190	80	02	500		363061	829528	GW	04						
2600220-27		172	01	10.00	02	190	80	02	500		366580	826409	GW	04						
2600220-28		172	01	10.00	02	190	80	02	400		372817	823731	GW	04						
2600220-29		172	01	8.00	02	190	80	02	400		372788	822921	GW	04						
2600220-30		172	01	8.00	02	190	80	02	400		368803	823287	GW	04						
2600220-31		172	01	8.00	02	190	80	02	400		367004	824026	GW	04						
2600220-32		172	01	8.00	02	190	80	02	400		367118	823409	GW	04						
2600220-33		172	01	8.00	02	190	80	02	400		363683	824000	GW	04						
2600220-34		172	01	8.00	02	190	80	02	400		361399	824333	GW	04						
2600220-35		172	01	8.00	02	190	80	02	400		361575	823393	GW	04						
2600220-36		172	01	8.00	02	190	80	02	400		361470	821724	GW	04						
2600220-37		172	01	8.00	02	190	80	02	400		361677	820521	GW	04						
2600220-38		172	01	8.00	02	190	80	02	400		369266	800074	GW	04						
2600220-39		172	01	6.00	02	160	80	02	250		369282	798781	GW	04						
2600220-40		172	01	6.00	02	160	80	02	250		361589	838937	GW	04						
2600220-83		154	01	8.00	02	190	80	02	250		363360	838986	GW	04						
2600220-84		154	01	8.00	02	190	80	02	250		371659	839445	GW	04						
2600220-85		154	01	8.00	02	190	80	02	250		372151	839103	GW	04						
2600220-86		154	01	8.00	02	190	80	02	250		376322	835107	GW	04						
2600220-87		154	01	8.00	02	190	80	02	250											
2600222	270.90	03	99.71	02	26	5/87	AG	GW	5	NEIL JOLLY	344508	809208	GW	04					1381	0.85
2600222-20		172	02	12.00	02	200	140	105	02	546	344624	810178	GW	04						
2600222-21		172	02	12.00	02	200	140	105	02	546	344715	811329	GW	04						
2600222-22		172	02	12.00	02	200	140	105	02	546	344721	812160	GW	04						
2600222-23		172	02	12.00	02	200	140	105	02	546	344682	812984	GW	04						
2600222-24		172	02	12.00	02	200	140	105	02	546										
2600227	635.30	03	233.79	02	26	6/87	AG	GW	39	JO MAR EL CITRUS	338222	805258	GW	03					1381	0.85
2600227-56		172	02	10.00	02	90				N										









Well ID	Depth	03	17.14	02	26 9/87	AG	GW	3	KENNETH & CAROL RUTTER	13	0.8	15	80 0.85
2600271-	02	12.00	02	250				1200	GW 04	61	0.8	15	33 0.50
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-	02	12.00	02	250				1200	GW 04				
2600271-SW	02							9000	SW				
2600271-SW	02							5200	SW				
2600273 61.79	03	17.14	02	26 9/87	AG	GW	3						
2600273	154 01	10.00	02	205				760 N	362312 847261 GW 04				
	154 01	10.00	02	22				400 N	362585 847213 GW 01				
	154 01	10.00	02	205				760 N	363446 846186 GW 04				
2600274 20.70	03	.254	01	26 9/87	AG	GW	2						
	134 02	10.00	02	150	120			1000	JAMES KELLY 372806 881877 GW 04	13	0.8	15	45 0.85
	134 02	10.00	02	150	120			1000	372855 881618 GW 04				
2600277 234.58	03	86.34	02	26 10/87	AG	GW	5						
	172 02	12.00	02	200	140			420 N	TURNER CORPORATION 338465 813190 GW 04	13	0.8	15	510 0.85
	172 02	12.00	02	200	140			425 N	338080 811812 GW 04				
	172 02	12.00	02	200	140			465 N	339065 810550 GW 04				
	172 02	12.00	02	200	140			550 N	339268 808882 GW 04				
	172 02	12.00	02	200	140			500 N	341436 811270 GW 04				
2600278 215.81	03	2.65	01	26 12/88	AG	GW	7						
	154 01	8.00	02	150				1250 N	LaBELLE PLANT WORLD 373024 839787 GW 04	13	0.8	15	476 0.85
	154 01	8.00	02	150				1250 N	375047 840423 GW 04				
	154 01	8.00	02	150				1250 N	373086 838055 GW 04				
	154 01	8.00	02	150				1250 N	375418 837763 GW 04				
	154 01	6.00	02	150				1000 N	373106 835745 GW 04				
	154 01	8.00	02	150				1250 N	374854 835833 GW 04				
	154 01	8.00	02	150				1250 N	376077 835753 GW 04				
2600279 582.28	03	199.60	02	26 10/87	AG	BOTH	4						
	172 02	8.00	02	240				600 N	GUTWEIN GROVE'S 337933 794070 GW 04	13	0.8	15	1179 0.85
	172 02	8.00	02	240				600 N	338011 792717 GW 04				
	172 02	8.00	02	240				600 N	341660 793542 GW 04				
	172 02	8.00	02	240				600 N	345252 796690 GW 04				
	172 02	8.00	02	240				1000 N	399299 854351 SW				
	172 02	8.00	02	240				3000 N	399379 848999 SW				
2600281 200.54	03	73.81	02	26 1/88	AG	GW	6						
	171 02	10.00	02	260	120			420 Y	TURNER CORPORATION 323820 796484 GW 04	13	0.8	15	436 0.85
	171 02	10.00	02	260	120			415 Y	324721 796526 GW 04				
	171 02	10.00	02	260	120			532 Y	321831 795916 GW 04				
	171 02	10.00	02	260	120			426 Y	322958 796469 GW 04				
	171 02	10.00	02	260	120			527 Y	322328 793747 GW 04				
	171 02	10.00	02	260	120			422 Y	326034 794093 GW 04				

2600282	515.15	03	189.60	02	26 12/87	AG	GW	11	USSC - DEVIL'S GARDEN CITRUS NORTH	13	0.8	26	1120 0.85
2600282-200	193 02	10.00	02	100	60			600	471357 763117 GW 03	20	0.8	15	127 0.50
2600282-201	193 02	10.00	02	100	60			600	471064 774238 GW 03	13	0.8	15	78 0.50
2600282-202	193 02	10.00	02	100	60			600	473370 774329 GW 03				
2600282-203	193 02	10.00	02	100	60			600	471225 776488 GW 03				
2600282-204	193 02	10.00	02	100	60			600	473485 776608 GW 03				
2600282-205	193 02	10.00	02	100	60			600	471157 779119 GW 03				
2600282-206	193 02	10.00	02	100	60			600	473378 779180 GW 03				
2600282-207	193 02	10.00	02	100	60			600	471100 781556 GW 03				
2600282-208	193 02	10.00	02	100	60			600	473543 781591 GW 03				
2600282-209	193 02	10.00	02	100	60			600	470642 784815 GW 03				
2600282-210	193 02	10.00	02	100	60			600	470070 786915 GW 03				
2600293 163.77	03	36.68	02	26 12/88	AG	BOTH		1 Y	OSCAR TORRES				
2600293-9	156 01	8.00	02	25	18	01	500		434675 876841 GW 01				
2600293-SW	156								SW				
2600294 43.70	03	16.08	03	26 3/88	AG	GW		1	T. C. & C. M. PERRY	13	0.8	15	95 0.85
2600294-14	137 01	10.00	02	35			879 N		421300 881000 GW 01				
2600297 15.64	03	.192	01	26 4/88	AG	GW		1	JACKIE D. CORBITT	13	1.5	15	34 0.85
2600297-52	153 01	6.00	02	100	65		150 N		324955 871486 GW 04				
2600300 1294.31	03	476.38	03	26 1/89	AG	GW		54	COLLIER ENTERPRISES - CROW'S NEST	13	0.8	26	2816 0.85
2600300-36	192 01	8.00	02	49					438402 758983 GW 03				
2600300-37	192 01	8.00	02	47					438418 758070 GW 03				
2600300-38	192 01	8.00	02	48					438418 757570 GW 03				
2600300-39	192 01	8.00	02	48					438532 757130 GW 03				
2600300-40	192 01	8.00	02	50					440035 760460 GW 03				
2600300-41	192 01	20.00	02	91					440018 759106 GW 03				
2600300-42	192 01	8.00	02	52					441398 759753 GW 03				
2600300-43	192 01	8.00	02	51					441400 758845 GW 03				
2600300-44	192 01	8.00	02	37					441418 757692 GW 03				
2600300-45	192 01	8.00	02	42					441958 759963 GW 03				
2600300-46	192 01	8.00	02	51					435540 751806 GW 03				
2600300-47	192 01	8.00	02	60					436325 747380 GW 03				
2600300-48	192 01	6.00	02	65					435251 746328 GW 03				
2600300-49	192 01	9.00	02	62					435781 743741 GW 03				
2600300-50	192 01	9.00	02	62					433723 742229 GW 03				
2600300-51	192 01	6.00	02	102					445642 760007 GW 03				
2600300-52	192 01	6.00	02	84					446982 758192 GW 03				
2600300-82	192 01	8.00	02	57					422523 764387 GW 03				
2600300-83	192 01	8.00	02	56					424984 762504 GW 03				
2600300-84	192 01	1.50	02						427700 765453 GW 03				
2600300-85	192 01	8.00	02	78					430831 765560 GW 03				
2600300-86	192 01	6.00	02	87					427577 764647 GW 03				
2600300-87	192 01	6.00	02	56					429008 763378 GW 03				
2600300-88	192 01	6.00	02	61					431358 764492 GW 03				
2600300-89	192 01	8.00	02	64					431315 763462 GW 03				
2600300-90	192 01	6.00	02	65					431349 762319 GW 03				
2600300-91	192 01	6.00	02	53					431018 761702 GW 03				
2600300-92	192 01	2.00	02						438156 763268 GW 03				
2600300-93	192 01	8.00	02	83					443679 765730 GW 03				
2600300-94	192 01	9.00	02						444544 765621 GW 03				
2600300-95	192 01	8.00	02						447023 765509 GW 03				
2600300-96	192 01	8.00	02	47					443743 763430 GW 03				
2600300-97	192 01	8.00	02	80					444208 762719 GW 03				





HENDRY COUNTY MODEL AREA WATER USE

LINE 1 HEADINGS (Table 1 - Existing Water Use - Permit Information and Table 2 - Forecasted Agricultural Demand for Each Permit)

PERMIT NO.	AN. ALL.	MAX. UNT.	MO. UTS.	CO. ISS.	DATE	USE SRC.	NO. SW	WLS.	PMP	OWNER	CROPSOIL TYPE	RAIN ST	IRR ACRES	IRR EFF
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LINE 2+ HEADINGS (Table 1 - Existing Water Use - Facilities Information for Each Permit)

PERMIT NO.	FACILITY NUMBER	QUAD NO.	SATS DIA.	WELL CODE	DPTH	PMP PUMP	AG	GW	62	0	BABCOCK	(Only part of permit in modelled area)	61	0.8	15	4615	0.50
800002	29930.41	03	4389.23	02	8	9/88	AG	GW	62	0	BABCOCK	(Only part of permit in modelled area)	61	0.8	15	4615	0.50
800002													53	0.8	15	1500	0.50
800002													15	0.8	15	300	0.50
0800002-68	152 01			02				03	N	286559	877376	GW	04				
0800002-69	152 01		6.00	02				03	600 N	283350	874588	GW	04				
0800002-70	152 01			02	105			03	N	288859	877601	GW	04				
0800002-71	152 01		6.00	02				03	400 N	289882	878182	GW	04				
0800002-72	152 01			02				03	N	290215	874491	GW	04				
0800002-73	152 01			02	70			03	N	291536	874764	GW	04				
0800002-74	152 01		6.00	02	60			03	450 N	294963	876641	GW	04				
0800002-84	134 01		8.00	02	60	20		03	650 N	337931	888945	GW	03				
0800002-85	134 01		8.00	02	60	20		03	650 N	337808	885919	GW	03				
0800002-86	134 02		8.00	02	60	20		03	650 N	343971	889828	GW	03				
0800002-87	134 02		8.00	02	60	20		03	650 N	345324	890459	GW	03				
0800002-88	134 02		8.00	02	60	20		03	650 N	345896	894616	GW	03				
0800002-89	134 02		8.00	02	60	20		03	650 N	343424	894423	GW	03				
0800002-90	134 01		8.00	02	13			03	600 N	348104	900700	GW	01				
0800002-91	134 01		9.00	02				03	800 N	348485	900628	GW	01				
0800002-92	134 01		8.00	02				03	600 N	347869	899293	GW	01				
0800002-93	134 01		8.00	02				03	600 N	348079	899210	GW	01				
0800002-94	134 01		8.00	02				03	600 N	347852	899014	GW	01				
0800002-95	134 01		8.00	02	460			03	600 N	348095	898961	GW	01				
0800002-96	134		10.00	02	40			03	350 N	348288	906545	GW	05				
0800002-97	134 01		6.00	02	40			03	400 N	346193	905945	GW	03				
0800002-98	134 01		6.00	02	40			03	400 N	346079	904422	GW	03				
0800002-99	134 01		9.00	02	40			03	700 N	346009	903467	GW	03				
0800002-100	134 01			02	30			03	N	347827	901567	GW	03				
0800002-101	134 01		8.00	02	45			03	400 N	0	0	GW	01				
0800002-102	134 01		9.00	02	100			03	600 N	341550	906461	GW	03				
0800002-103	134 01		9.00	02	45			03	600 N	341293	905982	GW	04				
0800002-104	134 01		9.00	02	30			03	600 N	341588	905746	GW	03				
0800002-105	134 01		9.00	02	600			03	350 N	342018	903753	GW	01				
0800002-106	134		6.00	02				03	300 N	342049	902775	GW	05				
0800002-107	134 01		8.00	02				03	500 N	341806	902519	GW	01				
0800002-108	134 01		8.00	02	26			03	200 N	341816	902263	GW	01				
0800002-109	134 01		8.00	02	570			03	350 N	342282	902243	GW	01				
0800002-110	134		12.00	02	45			03	1000 N	342363	901675	GW	05				
0800002-111	134 01		9.00	02	34			03	600 N	342692	902143	GW	03				
0800002-112	134 01		6.00	02	45			03	700 N	340191	906552	GW	01				
0800002-113	134 01		6.00	02	27			03	600 N	339722	906563	GW	03				
0800002-114	134 01		6.00	02				03	600 N	338412	906043	GW	01				



1100035-90	206 01	8.00 02	11 1/89	AG	GW	19	394896	718816	GW	03	61	3.6	26	450	0.50
1100035-91	206 01	8.00 02	11 1/89	AG	GW	1200	379078	735748	GW	03	13	3.6	26	175	0.50
1100035 344.68	03	98.91	02	11 1/89	AG	GW	JOHN E. PRICE, JR.								
1100035-176	206 01	4.00 02	100			400	405012	709836	GW	03					
1100035-177	206 03	6.00 02	100			600	393716	710624	GW	03					
1100035-178	206 01	6.00 02	100			600	394763	710615	GW	03					
1100035-179	206 01	6.00 02	100			600	397601	713205	GW	03					
1100035-180	206 01	6.00 02	100			600	399634	713269	GW	03					
1100035-181	206 01	6.00 02	100			600	387075	710046	GW	03					
1100035-182	206 01	6.00 02	100			600	386944	708086	GW	03					
1100035-183	206 01	8.00 02	100			1200	389324	711069	GW	03					
1100035-184	206 01	8.00 02	100			1200	390392	709977	GW	03					
1100035-185	206 01	8.00 02	100			1200	390547	711118	GW	03					
1100035-186	206 03	8.00 02	100			1200	390042	715673	GW	03					
1100035-187	206 03	8.00 02	100			1200	402545	699368	GW	03					
1100035-188	206 03	8.00 02	100			1200	397737	700809	GW	03					
1100035-189	206 03	8.00 02	100			1200	399927	701243	GW	03					
1100035-190	206 03	8.00 02	100			1200	400368	698685	GW	03					
1100035-191	206 03	8.00 02	100			1200	398111	698518	GW	03					
1100035-192	206 01	12.00 02	100			1200	398946	711411	GW	03					
1100035-193	206 01	12.00 02	100			1200	399689	712155	GW	03					
1100035-194	206 01	12.00 02	100			1200	397378	698547	GW	03					

1100036 136.52	03	11 5/78	AG	GW	11	DAVID C BROWN					13	0.8	26	365	0.85
1100036-94	172 01	8.00 02	102			347703	789943	GW	03		15	0.8	26	253	0.50
1100036-95	172 01	8.00 02	102			349291	789967	GW	03						
1100036-96	172 01	8.00 02	102			350899	790007	GW	03						
1100036-97	172 01	8.00 02	102			351425	788503	GW	03						
1100036-8	190 01	8.00 02	102			348553	785891	GW	03						
1100036-9	190 01	8.00 02	102			350429	786130	GW	03						
1100036-10	190 01	8.00 02	102			351189	786697	GW	03						
1100036-11	190 01	8.00 02	102			349720	786605	GW	03						
1100036-12	190 01	8.00 02	102			347523	786569	GW	03						
1100036-13	190 01	8.00 02	102			347666	787318	GW	03						
1100036-259	190 02	8.00 02	200			0	0	GW	04						

177

1100037 51.8?	03	11 5/78	AG	GW	5	H. I. H. GROVES					13	0.8	26	40	0.85
1100037-1	224 01	8.00 02	83			800 N	526200	691470	GW	03	15	0.8	26	198	0.50
1100037-2	224 01	8.00 02	103			800 N	526200	691470	GW	03					
1100037-3	224 01	8.00 02	83			800 N	526200	691470	GW	03					
1100037-4	224 02	8.00 02	100			800 N	526200	691470	GW	03					
1100037-5	224 02	8.00 02	100			800 N	526200	691470	GW	03					

1100042 849.00	03	200.27	02	11 11/84	AG	GW	47	0	COLLIER COMPANY - GROVE DIVISION		12	0.8	26	140	0.75
1100042-48	206 01	8.00 02	80			1000 N	409800	733050	GW	03	13	0.8	26	1080	0.75
1100042-49	206 01	8.00 02	80			1000 N	409500	733050	GW	03					
1100042-50	206 01	8.00 02	80			1000 N	408650	733050	GW	03					
1100042-51	206 01	8.00 02	290			400 N	408400	733050	GW	04					
1100042-52	206 01	16.00 02	90			1500 N	409600	732000	GW	03					
1100042-53	206 01	8.00 02	75			1000 N	406400	732000	GW	03					
1100042-54	206 01	16.00 02	78			1500 N	409800	730800	GW	03					
1100042-55	206 01	5.00 02	80			500 N	408650	730700	GW	03					
1100042-56	206 01	6.00 02	300			800 N	407850	730700	GW	04					
1100042-57	206 01	8.00 02	70			1000 N	406200	730700	GW	03					



1100042-58	206 01	8.00 02	300	200	03	500 N	406200	731000	GW 04										
1100042-59	206 01	8.00 02	60	40	03	1000 N	404200	730600	GW 03										
1100042-60	206 01	8.00 02	290	240	03	800 N	404200	731000	GW 04										
1100042-61	206 01	8.00 02	65	58	03	600 N	401200	730600	GW 03										
1100042-62	206 01	16.00 02	79	32	02	1500 N	409600	729600	GW 03										
1100042-63	206 01	10.00 02	90	33	03	1000 N	409600	728400	GW 03										
1100042-64	206 01	10.00 02	90	33	03	1000 N	409600	727800	GW 03										
1100042-65	206 01	8.00 02	315	212	03	800 N	407900	728300	GW 04										
1100042-66	206 01	8.00 02	120	44	03	550 N	406500	728300	GW 03										
1100042-67	206 01	16.00 02	75	20	02	1500 N	411000	727000	GW 03										
1100042-68	206 01	16.00 02	70	20	02	1500 N	409600	727000	GW 03										
1100042-69	206 01	6.00 02	75	40	03	900 N	406500	727000	GW 03										
1100042-70	206 01	8.00 02	80	27	01	1000 N	409600	725300	GW 03										
1100042-71	206 01	8.00 02	300	200	03	500 N	409600	725600	GW 04										
1100042-72	206 01	8.00 02	300	200	03	500 N	408150	725600	GW 04										
1100042-73	206 01	6.00 02	200	100	03	500 N	405500	725600	GW 03										
1100042-74	206 01	10.00 02	90	33	03	1000 N	410150	731950	GW 03										
1100042-75	206 01	10.00 02	90	33	03	1000 N	410150	731400	GW 03										
1100042-76	206 01	10.00 02	90	33	03	1000 N	410400	730800	GW 03										
1100042-77	206 01	10.00 02	90	33	03	1000 N	410400	730000	GW 03										
1100042-78	206 01	10.00 02	90	33	03	1000 N	410400	729400	GW 03										
1100042-79	206 01	10.00 02	90	33	03	1000 N	410400	728600	GW 03										
1100042-80	206 01	13.00 02	45	28	02	1250 N	406900	732700	GW 01										
1100042-81	206 01	13.00 02	53	25	02	1250 N	407800	732700	GW 01										
1100042-82	206 01	13.00 02	53	34	02	1250 N	406800	732700	GW 01										
1100042-83	206 01	13.00 02	55	32	02	1250 N	409400	732700	GW 01										
1100042-84	206 01	13.00 02	46	39	02	1250 N	410100	732700	GW 01										
1100056 34.86	03		11 7/78	AG	GW	7	E.L. JOHNSON, JR.				15	0.8	15	155	0.50				
1100056-1	190 01	8.00 02	200			1200	356444	777393	GW 04										
1100056-2	190 01	6.00 02	200				356787	778673	GW 04										
1100056-3	190 01	6.00 02	200				357257	778708	GW 04										
1100056-4	190 01	6.00 02	200				357600	779305	GW 04										
1100056-5	190 01	8.00 02	200				357572	776704	GW 04										
1100056-6	190 01	8.00 02	200				357001	776676	GW 04										
1100056-7	190 01	6.00 02	200				355829	779000	GW 04										
1100068 21.73	03		11 10/78	AG	GW	3	CARROLL & RENEE ROLLINS				13	0.8	15	50	0.80				
1100068											13	0.8	15	50	0.50				
1100068-37	190 01	6.00 02	240	190		250	352621	784924	GW 04										
1100068-38	190 01	8.00 02	65			350	354086	784945	GW 03										
1100068-39	190 02	6.00 02					352517	787391	GW 04										
1100081 8.70	02		11 12/78	AG	GW	1	SAM P. HEATH				13	0.8	15	40	0.50				
1100081-29	190 01	8.00 02	135			500	352596	783831	GW 04										
1100082 635.37	03		11 12/78	AG	GW	6	GEORGE FORTSON				15	0.8	15	1100	0.50				
1100082-31	190 01	8.00 02				1500	346758	770286	GW 04										
1100082-32	190 01	8.00 02					344824	770858	GW 04										
1100082-33	190 01	8.00 02					343428	770831	GW 04										
1100082-34	190 01	8.00 02					342376	770264	GW 04										
1100082-35	190 01	8.00 02					343596	768807	GW 04										
1100082-36	190 01	6.00 02					336589	770091	GW 04										
1100083 8.70	03		11 12/78	AG	GW	1	WILLIARD DURRANCE				13	0.8	15	40	0.50				
1100083-28	190 01	8.00 02	84			500	355570	783014	GW 03										
1100088 15.22	03		11 12/78	AG	GW	1	WILLIAM LEINWEBER				13	0.8	15	70	0.50				

1100091	15.22	190 01	6.00 02	11 12/78 AG GW	500	351637	783822	GW 01	13	0.8	15	70	0.50
1100091	1100091-26	190 01	6.00 02		500	R.A. BETHEA, JR. 350635	784074	GW 01	13	0.8	15	131	0.50
1100093	28.44	03	8.00 02	11 12/78 AG GW	500	TONY ROSBOUGH 348403	784715	GW 01	13	0.8	15	2575	0.85
1100093	1100093-24	190 01	6.00 02		500	349322	784424	GW 01					
1100093	1100093-25	190 01	6.00 02		500								
1100094	2774.00	03	576.36 02	11 1/87 AG BOTH	53	3 TURNER CORPORATION			13	1.5	15		
1100094	1100094-135	190 01	8.00 02	60 40	600	342000	783200	GW 01					
1100094	1100094-136	190 03	8.00 02	60 40	600	242100	783800	GW 01					
1100094	1100094-137	190 01	8.00 02	60 40	600	342150	784500	GW 01					
1100094	1100094-138	190 01	8.00 02	60 40	600	341600	785700	GW 01					
1100094	1100094-139	190 03	8.00 02	60 40	600	338000	786150	GW 04					
1100094	1100094-140	190 01	8.00 02	160 100	600	342150	786700	GW 04					
1100094	1100094-141	190 03	8.00 02		600	342150	785050	GW 04					
1100094	1100094-142	190 03	8.00 02		600	341532	786547	GW 04					
1100094	1100094-143	190 01	8.00 02	260 140	600	342300	786200	GW 04					
1100094	1100094-144	190 03	8.00 02	60 40	900	343700	782400	GW 01					
1100094	1100094-145	190 01	8.00 02	80 50	600	343650	784550	GW 01					
1100094	1100094-146	190 01	8.00 02	215 138	1000	344800	784550	GW 04					
1100094	1100094-147	190 01	8.00 02	195 135	1000	344900	783500	GW 04					
1100094	1100094-148	190 01	8.00 02	300 250	600	346250	782700	GW 04					
1100094	1100094-149	190 01	8.00 02	60 40	600	347100	781100	GW 01					
1100094	1100094-150	190 01	8.00 02	60 40	600	343600	779700	GW 01					
1100094	1100094-151	190 03	8.00 02	60 40	600	342500	776600	GW 01					
1100094	1100094-152	190 01	8.00 02	195 135	1000	343700	777400	GW 04					
1100094	1100094-153	190 01	8.00 02	269 208	300	345700	777400	GW 04					
1100094	1100094-154	190 01	12.00 02	60 40	600	344800	780200	GW 01					
1100094	1100094-155	190 01	8.00 02	290 238	600	345950	780650	GW 04					
1100094	1100094-156	190 01	8.00 02	275 168	600	343800	778300	GW 04					
1100094	1100094-157	190 01	8.00 02	275 172	800	343900	777400	GW 04					
1100094	1100094-158	190 01	8.00 02	60 40	600	339600	777700	GW 01					
1100094	1100094-159	190 01	8.00 02	60 40	600	339600	780550	GW 01					
1100094	1100094-160	190 01	10.00 02	60 40	900	341900	779150	GW 01					
1100094	1100094-161	190 01	10.00 02	60 40	600	341900	780450	GW 01					
1100094	1100094-162	190 01	8.00 02	60 40	600	342000	781500	GW 01					
1100094	1100094-163	190 01	8.00 02	60 40	600	341950	777800	GW 01					
1100094	1100094-164	190 01	8.00 02	60 40	600	341950	446900	GW 01					
1100094	1100094-165	190 01	8.00 02	60 40	600	339650	772300	GW 01					
1100094	1100094-166	190 01	8.00 02	60 40	600	340700	775400	GW 04					
1100094	1100094-167	190 01	8.00 02	60 40	600	339600	776250	GW 01					
1100094	1100094-168	190 01	8.00 02	236 174	1000	339050	775050	GW 04					
1100094	1100094-169	190 01	8.00 02	185 180	1000	339700	773600	GW 04					
1100094	1100094-170	190 01	12.00 02	235 167	2000	338100	773600	GW 04					
1100094	1100094-171	190 01	8.00 02	60 40	600	342500	771700	GW 01					
1100094	1100094-172	190 01	8.00 02	60 40	600	343100	772100	GW 01					
1100094	1100094-173	190 01	8.00 02	60 40	600	346200	772550	GW 01					
1100094	1100094-174	190 01	8.00 02	60 40	600	346100	775200	GW 01					
1100094	1100094-175	190 01	8.00 02	60 40	600	343150	775500	GW 01					
1100094	1100094-176	190 01	8.00 02	60 40	600	343150	776200	GW 01					
1100094	1100094-177	190 01	8.00 02	60 40	600	342000	771000	GW 01					
1100094	1100094-178	190 01	8.00 02	60 40	600	341500	770900	GW 01					
1100094	1100094-247	190 01	8.00 02	275 172	800	343900	777400	GW 04					
1100094	1100094-248	190 01	10.00 02	275 240	650	339600	776600	GW 04					
1100094	1100094-249	190 01	10.00 02	270 235	650	339600	777800	GW 04					
1100094	1100094-250	190 01	10.00 02	260 223	650	339600	779150	GW 04					

1100094-251	190 01	10.00 02	260	220	650	339600	780650	GW 04	61	0.8	26	3331 0.50
1100094-252	190 01	10.00 02	260	220	700	339600	781800	GW 04				
1100094-253	190 02	10.00 02	260	220	600	339469	784577	GW 04				
1100094-254	190 02	10.00 02	260	220	600	339442	786029	GW 04				
1100094-255	190 02	10.00 02	260	220	600	343825	766586	GW 04				
1100094-SW1	190 01				2500	338000	772900	SW				
1100094-SW2	190 01				2500	338000	773200	SW				
1100094-SW3	190 01				6000	338000	776150	SW				
1100100		678.27	02	11 8/86	AG GW	31	BARRON COLLIER		61	0.8	26	
1100100-34	191 01	02 21				406065	756853	GW 01				
1100100-35	191 01	02 54				407923	756670	GW 01				
1100100-36	191 01	02 60				408947	757586	GW 03				
1100100-37	191 01	02 64				408626	755766	GW 03				
1100100-38	191 01	02 62				403104	755757	GW 03				
1100100-39	191 01	02 18				396865	759428	GW 01				
1100100-40	191 01	02 02				392307	756289	GW 01				
1100100-41	191 01	02 30				383423	755531	GW 01				
1100100-42	191 01	02 26				383494	756881	GW 01				
1100100-43	191 01	02 02				384054	757463	GW 01				
1100100-44	191 01	02 25				382256	756891	GW 01				
1100100-45	191 01	02 23				380251	757686	GW 01				
1100100-46	191 01	02 02				379753	757159	GW 01				
1100100-47	191 01	02 21				384001	755125	GW 01				
1100100-48	191 01	02 28				383012	753227	GW 01				
1100100-49	191 01	02 29				381830	750207	GW 01				
1100100-50	191 01	02 02				388242	754522	GW 01				
1100100-51	191 01	02 02				387622	750497	GW 01				
1100100-52	191 01	02 02				385862	753166	GW 01				
1100100-53	191 01	02 24				395378	752126	GW 01				
1100100-54	191 01	02 22				397999	753152	GW 01				
1100100-55	191 01	02 15				403716	754712	GW 01				
1100100-56	191 01	02 31				404695	752173	GW 01				
1100100-57	191 01	02 37				407314	752923	GW 01				
1100100-58	191 01	02 34				384104	749417	GW 01				
1100100-59	191 01	02 25				381033	748575	GW 01				
1100100-60	191 01	02 54				381212	748088	GW 01				
1100100-61	191 01	02 71				382741	746289	GW 03				
1100100-62	191 01	02 32				384363	749942	GW 01				
1100100-63	191 01	02 02				384062	748575	GW 01				
1100100-64	191 01	02 30				384075	748077	GW 01				
1100101		65.00	02	11 3/82	AG GW	2	THE COLLIER COMPANY		61	0.8	26	146 0.50
1100101-1	221 01	02 02			600	390733	682095	GW 01	15	0.8	26	1104 0.50
1100101-2	221 01	02 02			900	390733	682095	GW 01				
1100102	1596.56		03	11 1/79	AG GW	35	THE COLLIER COMPANY		61	3.6	15	2157 0.50
1100102-94	206 01	9.00 02			900	386745	728835	GW 03	20	3.6	15	1500 0.50
1100102-95	206 01	9.00 02			900	386754	727863	GW 03				
1100102-96	206 01	9.00 02			900	386849	726838	GW 03				
1100102-97	206 01	9.00 02			900	386839	725902	GW 03				
1100102-98	206 01	9.00 02			900	386912	724188	GW 03				
1100102-99	206 01	8.00 02			800	384913	724383	GW 03				
1100102-100	206 01	8.00 02			800	389620	726478	GW 03				
1100102-101	206 01	10.00 02			1000	389587	725111	GW 03				
1100102-102	206 01	10.00 02			1000	379627	728417	GW 03				

1100102-103	206 01	9.00 02				380187	726877	GW	03
1100102-104	206 01	9.00 02				380703	726386	GW	03
1100102-105	206 01	9.00 02				383478	726344	GW	03
1100102-106	206 01	8.00 02				379568	723855	GW	03
1100102-107	206 01	9.00 02				379578	723488	GW	03
1100102-108	206 01	9.00 02				381540	723528	GW	03
1100102-109	206 01	8.00 02				382368	723512	GW	03
1100102-110	206 01	9.00 02				384255	723524	GW	03
1100102-111	206 01	8.00 02				384238	722407	GW	03
1100102-112	206 01	9.00 02				381466	721750	GW	03
1100102-113	206 01	8.00 02				381539	721174	GW	03
1100102-114	206 01	8.00 02				384635	721266	GW	03
1100102-115	206 01	6.00 02				382321	720908	GW	03
1100102-116	206 01	6.00 02				382292	720306	GW	03
1100102-117	206 01	6.00 02				380735	719890	GW	03
1100102-118	206 01	8.00 02				380162	718587	GW	03
1100102-119	206 01	6.00 02				406057	719990	GW	03
1100102-120	206 01	8.00 02				410973	719225	GW	03
1100102-121	206 01	6.00 02	56			406799	722595	GW	03
1100102-122	206 01	7.00 02	52			407546	722186	GW	03
1100102-123	206 01	6.00 02				380995	718027	GW	03
1100102-124	206 01	6.00 02				382174	718037	GW	03
1100102-125	206 01	6.00 02				383057	716648	GW	03
1100102-126	206 01	8.00 02				382952	715850	GW	03
1100102-127	206 01	8.00 02				380074	715919	GW	03
1100102-128	206 01	6.00 02				379826	714053	GW	03

1100105 1171.38 03 210.54 02 11 1/79 AG GW 6 COLLIER DEVELOPMENT CORPORATION 61 0.8 15 338 0.50  
1100105 181 03 210.54 02 11 1/79 AG GW 6 COLLIER DEVELOPMENT CORPORATION 15 0.8 15 864 0.50

1100107	190 01	32.58 02	11 8/86	AG	GW	15	BARRON COLLIER		61	0.8	26	160	0.50
1100107-19	191 01	02 20				800	391904	768663	GW	01			
1100107-20	191 01	02 24				800	392614	763306	GW	01			
1100107-21	191 01	02 21	185	135		800	393391	761761	GW	01			
1100107-22	191 01	02 84	190	130		800	394255	762027	GW	03			
1100107-23	191 01	02 17	190	130		800	397075	764295	GW	01			
1100107-24	191 01	02 67				800	404781	763681	GW	03			
1100107-25	191 01	02 67				800	404864	764717	GW	03			
1100107-26	191 01	02 65				800	403195	765111	GW	03			
1100107-27	191 01	02 47				800	403212	765667	GW	03			
1100107-28	191 01	02 47				800	402186	765819	GW	03			
1100107-29	191 01	02 51				800	403067	763371	GW	03			
1100107-30	191 01	02 51				800	401460	762481	GW	01			
1100107-31	191 01	02 51				800	402158	761771	GW	01			
1100107-32	191 01	02 02				600	407450	761272	GW	01			
1100107-33	191 01	02 02				600	410096	761974	GW	03			

1100108 196.80 03 11 8/86 AG GW 15 COLLIER DEVELOPMENT CORPORATION 61 0.8 26 354 0.50  
1100108 181 03 196.80 03 11 8/86 AG GW 15 COLLIER DEVELOPMENT CORPORATION 15 0.8 26 200 0.50

1100108-132	206 01	9.00 02 40 30	11 11/86 AG GW	900	385252	716691 GW 03	13	1.5	15	1800	0.50
1100119		223		12	ALICO FELDA GROVE						
1100119-33	173 01	10.00 02 170 150	02 02	600	380900	792550 GW 04					
1100119-34	173 01	10.00 02 40 50	02 02	600	380500	790850 GW 01					
1100119-35	173 01	10.00 02 40 50	02 02	600	378200	790500 GW 01					
1100119-36	173 01	10.00 02 40 50	02 02	600	378800	789000 GW 01					
1100119-37	173 01	10.00 02 50 50	02 02	600	378800	787650 GW 01					
1100119-38	173 01	10.00 02 50 50	02 02	600	378600	787700 GW 01					
1100119-120	191 01	10.00 02 50 50	02 02	600	378989	784966 GW 01					
1100119-121	191 01	10.00 02 50 50	02 02	600	378759	786484 GW 01					
1100119-122	191 01	10.00 02 50 50	02 02	600	381112	787414 GW 01					
1100119-123	191 01	10.00 02 50 50	02 02	600	382424	787591 GW 01					
1100119-124	191 01	6.00 02 50 50	02 02	600	383301	787164 GW 01					
1100119-134	172 01	6.00 02 50 50	02 02	600	375609	791232 GW 01					
1100120 71.84	03	26.44 02 11 12/88 AG GW	6	6	BOB PAUL, INC.						
1100120-64	190 03	12.00 02 210	02 02	500	349431	777537 GW 04					175 0.85
1100120-65	190 01	8.00 02 80	02 02	250	350454	776467 GW 03					
1100120-66	190 01	8.00 02 80	02 02	250	351121	776453 GW 03					
1100120-67	190	8.00 02 80	02 02	450	351614	776455 GW 03					
1100120-68	190 01	8.00 02 80	02 02	450	350606	775206 GW 03					
1100120-69	190 01	8.00 02 80	02 02	450	351418	775191 GW 03					
1100128		1415.00 01 11 9/81 AG GW	25	25	ALICO						
1100128-204	189 01	8.00 02 32	02 02	600	318734	787715 GW 01					3455 0.50
1100128-205	189 01	9.00 02 30	02 02	600	319407	787660 GW 01					
1100128-206	189 01	9.00 02 44	02 02	600	320776	785500 GW 01					
1100128-207	189 01	6.00 02 28	02 02	600	318378	784756 GW 01					
1100128-208	189 01	9.00 02 41	02 02	600	318202	781523 GW 01					
1100128-209	189 01	6.00 02 45	02 02	600	334723	783071 GW 01					
1100128-210	189 01	6.00 02 45	02 02	500	333385	784507 GW 01					
1100128-211	189 01	6.00 02 55	02 02	500	334168	784656 GW 01					
1100128-212	189 01	6.00 02 55	02 02	500	332745	787685 GW 01					
1100128-213	189 01	6.00 02 30	02 02	500	329628	785595 GW 01					
1100128-214	189 01	6.00 02 90	02 02	500	331994	786998 GW 03					
1100128-128	171 01	8.00 02 190	02 02	650	334530	791410 GW 04					
1100128-129	171 01	8.00 02 190	02 02	650	335678	791091 GW 04					
1100128-130	171 01	6.00 02 60	02 02	500	336215	790122 GW 04					
1100128-131	171 01	6.00 02 150	02 02	500	336215	788608 GW 04					
1100128-132	171 01	10.00 02 196	02 02	1100	335974	788155 GW 04					
1100128-133	171 01	4.00 02 48	02 02	350	329939	788177 GW 01					
1100128-134	171 01	6.00 02 30	02 02	500	329495	789057 GW 01					
1100128-135	171 01	6.00 02 45	02 02	500	329382	788205 GW 01					
1100128-136	171 04	7.00 02	02 02	500	315806	790673 GW					
1100128-137	171 01	10.00 02 45	02 02	319980	791368 GW	01					
1100128-138	171 01	9.00 02 39	02 02	322822	791611 GW	01					
1100128-139	171 01	9.00 02 38	02 02	321103	789453 GW	01					
1100128-140	171 01	9.00 02 46	02 02	322600	789637 GW	01					
1100128-141	171 01	9.00 02 33	02 02	323823	789630 GW	01					
1100140 18.25	03	22.60 02 11 5/79 AG GW	2	2	HARRY C. McDONALD						
1100140-17	190 01	8.00 02 175	02 02	250	352585	781673 GW 04					84 0.50
1100140-18	190 01	8.00 02 175	02 02	250	352604	780947 GW 04					
1100146-53	190 01	22.60 02 11 7/86 AG GW	2	2	HARRY C. McDONALD						
1100146-54	190 01	6.00 02 84	02 02	354736	784631 GW	03					40 0.50
		6.00 02 84	02 02	354638	783403 GW	03					

1100147  
1100147

177.00 02 11 3/82 AG GW 41

13 0.8 26  
15 0.8 26

640 0.85  
2520 0.50

MILES SCOFIELD

41

AG GW

11 3/82

02 11 3/82

AG GW

11 3/82

02 11 3/82

1100147	1100147-111	192 01	6.00 02 61	420366	767587	GW 03	WINDMILL
	1100147-112	192 01	6.00 02 84	426290	771393	GW 03	
	1100147-113	192 01	6.00 02	424193	769365	GW 03	
	1100147-114	192 01	6.00 02 59	421664	768572	GW 03	
	1100147-74	191 01	8.00 02 185	413899	778428	GW 03	
	1100147-75	191 01	8.00 02 103	412913	779107	GW 03	
	1100147-76	191 01	8.00 02 178	412065	777924	GW 03	
	1100147-77	191 01	6.00 02 80	413897	780619	GW 03	
	1100147-78	191 01	8.00 02 103	413420	779889	GW 03	
	1100147-79	191 01	6.00 02 80	415371	771997	GW 03	
	1100147-80	191 01	6.00 02 88	0	0	GW 03	
	1100147-81	191 01	8.00 02 96	0	0	GW 03	
	1100147-82	191 01	8.00 02 96	414483	774514	GW 03	
	1100147-83	191 01	8.00 02 94	413007	774457	GW 03	
	1100147-84	191 01	6.00 02 84	411651	774473	GW 03	
	1100147-85	191 01	6.00 02 87	411127	775567	GW 03	
	1100147-86	191 01	8.00 02 101	414214	776589	GW 03	
	1100147-87	191 01	10.00 02 69	415968	766996	GW 03	
	1100147-88	191 01	8.00 02 95	414362	768926	GW 03	
	1100147-89	191 01	6.00 02 69	414016	771227	GW 03	
	1100147-90	191 01	6.00 02 79	411212	766981	GW 03	
	1100147-91	191 01	8.00 02 102	406788	776884	GW 03	
	1100147-92	191 01	8.00 02 107	407803	778654	GW 03	
	1100147-93	191 01	4.00 02 25	407037	779194	GW 01	WINDMILL
	1100147-94	191 01	6.00 02 39	401723	778989	GW 01	
	1100147-95	191 01	6.00 02 97	401785	779611	GW 03	
	1100147-96	191 01	6.00 02 110	401050	779414	GW 03	
	1100147-97	191 01	4.00 02 23	400786	779734	GW 01	
	1100147-98	191 01	6.00 02 94	400240	775742	GW 03	
	1100147-99	191 01	6.00 02 84	401826	773772	GW 03	
	1100147-100	191 01	6.00 02 115	402290	774718	GW 03	
	1100147-101	191 01	9.63 02 103	401547	775782	GW 03	
	1100147-102	191 01	9.63 02 103	401288	775819	GW 03	
	1100147-103	191 01	8.00 02 99	410818	772720	GW 03	
	1100147-104	191 01	8.00 02 105	410401	774748	GW 03	
	1100147-105	191 01	8.00 02 58	410674	766621	GW 03	
	1100147-106	191 01	8.00 02 92	409634	769379	GW 03	
	1100147-107	191 01	8.00 02 94	408702	769820	GW 03	
	1100147-108	191 01	8.00 02 99	407139	768688	GW 03	
	1100147-109	191 01	6.00 02 81	405397	769318	GW 03	
	1100147-110	191 01	8.00 02 105	403111	769273	GW 03	

1100172	1100172-40	190 03	64.8 02 11 1.80	BERRY GROVES	FREEZE PROTECTION ONLY	350 0.65
	1100172-41	190 03 <td>10.00 02 90 <td>350411</td> <td>781729</td> <td>GW 03</td> </td>	10.00 02 90 <td>350411</td> <td>781729</td> <td>GW 03</td>	350411	781729	GW 03
	1100172-42	190 03 <td>10.00 02 90 <td>351022</td> <td>781758</td> <td>GW 03</td> </td>	10.00 02 90 <td>351022</td> <td>781758</td> <td>GW 03</td>	351022	781758	GW 03
	1100172-43	190 03 <td>10.00 02 90 <td>351568</td> <td>781858</td> <td>GW 03</td> </td>	10.00 02 90 <td>351568</td> <td>781858</td> <td>GW 03</td>	351568	781858	GW 03
	1100172-44	190 03 <td>10.00 02 90 <td>350817</td> <td>780763</td> <td>GW 03</td> </td>	10.00 02 90 <td>350817</td> <td>780763</td> <td>GW 03</td>	350817	780763	GW 03
	1100172-45	190 03 <td>10.00 02 90 <td>352062</td> <td>780797</td> <td>GW 03</td> </td>	10.00 02 90 <td>352062</td> <td>780797</td> <td>GW 03</td>	352062	780797	GW 03
	1100172-46	190 03 <td>10.00 02 90 <td>350276</td> <td>779440</td> <td>GW 03</td> </td>	10.00 02 90 <td>350276</td> <td>779440</td> <td>GW 03</td>	350276	779440	GW 03
	1100172-47	190 03 <td>10.00 02 90 <td>351425</td> <td>779412</td> <td>GW 03</td> </td>	10.00 02 90 <td>351425</td> <td>779412</td> <td>GW 03</td>	351425	779412	GW 03
	1100172-48	190 03 <td>10.00 02 90 <td>351846</td> <td>779447</td> <td>GW 03</td> </td>	10.00 02 90 <td>351846</td> <td>779447</td> <td>GW 03</td>	351846	779447	GW 03
	1100172-49	190 01	8.00 02 200	352279	779443	GW 03
	1100172-50	190 01	8.00 02 200	349415	780998	GW 04
	1100172-51	190 01	8.00 02 200	351386	781205	GW 04
		190 01	8.00 02 200	349409	779511	GW 04

1100214	579.00	03	130.00	02	11	12/81	AG	GW	10	CHRIS SAPP	13	0.8	26	240	0.50
1100214-133	206 01	8.00	02	100	402239	715629	GW	03							
1100214-134	206 01	8.00	02	100	401712	715680	GW	03							
1100214-135	206 01	8.00	02	100	401076	716016	GW	03							
1100214-136	206 01	8.00	02	100	401185	717250	GW	03							
1100214-137	206 01	8.00	02	100	402061	717485	GW	03							
1100214-138	206 01	8.00	02	100	404263	717522	GW	03							
1100214-139	206 01	8.00	02	100	404629	716994	GW	03							
1100214-140	206 01	8.00	02	100	406097	717903	GW	03							
1100214-141	206 01	8.00	02	100	406182	718700	GW	03							
1100214-142	206 01	8.00	02	100	405254	718677	GW	03							

1100217		52.40	02	11	1/88	AG	GW	12	C. M. HEARTLAND	61	0.8	26	280	0.50	
1100217-1	223 01	8.00	02	60	20	01	1000	465000	694000	GW	01				
1100217-2	223 01	8.00	02	60	20	01	1000	465000	694000	GW	01				
1100217-3	223 01	8.00	02	60	20	01	1000	466000	681000	GW	01				
1100217-4	223 01	8.00	02	60	20	01	1000	466000	681000	GW	01				
1100217-5	223 01	8.00	02	60	20	01	1000	462000	681000	GW	01				
1100217-6	223 01	8.00	02	60	20	01	1000	462000	681000	GW	01				
1100217-7	223 01	8.00	02	60	20	01	1000	464000	681000	GW	01				
1100217-8	223 01	8.00	02	60	20	01	1000	464000	681000	GW	01				
1100217-9	223 01	8.00	02	60	20	01	1000	461000	678000	GW	01				
1100217-10	223 01	8.00	02	60	20	01	1000	461000	687000	GW	01				
1100217-11	223 01	8.00	02	60	20	01	1000	463000	683000	GW	01				
1100217-12	223 01	8.00	02	60	20	01	1000	463000	683000	GW	01				

1100223		302.00	02	11	3/82	AG	GW	7	THE COLLIER COMPANY	61	0.4	26	490	0.50	
1100223-3	221 01	6.00	02	70			1000	385000	687000	GW	03				
1100223-4	221 01	6.00	02	70			1000	385000	687000	GW	03				
1100223-5	221 01	6.00	02	70			1000	385000	687000	GW	03				
1100223-6	221 01	6.00	02	70			1000	385000	687000	GW	03				
1100223-7	221 01	6.00	02	70			1000	385000	687000	GW	03				
1100223-8	221 01	6.00	02	70			1000	385000	687000	GW	03				
1100223-9	221 01	8.00	02	70			1000	385000	687000	GW	03				

1100233	2304.36	03	848.13	02	11	9/87	AG	GW	35	BARRON COLLIER SILVER STRAND DIVISION	13	0.8	15	5010	0.85
1100233-260	01	10.00	02	190	130		800	364680	786300	GW	04				
1100233-261	01	10.00	02	190	130		800	365990	786300	GW	04				
1100233-262	01	10.00	02	185	130		800	365440	783600	GW	04				
1100233-263	01	10.00	02	190	130		800	370710	786530	GW	04				
1100233-264	01	10.00	02	185	130		800	369200	783600	GW	04				
1100233-265	01	10.00	02	190	130		800	366500	780640	GW	04				
1100233-266	01	10.00	02	190	130		800	367890	780640	GW	04				
1100233-267	01	10.00	02	190	130		800	368300	778660	GW	04				
1100233-268	01	10.00	02	190	130		800	368330	777350	GW	04				
1100233-269	01	10.00	02	200	140		800	364610	780670	GW	04				
1100233-270	02	10.00	02	200	140		800	363090	780670	GW	04				
1100233-271	02	12.00	02	200	140		800	361480	779360	GW	04				
1100233-272	02	12.00	02	200	140		800	359290	779340	GW	04				
1100233-273	02	12.00	02	200	140		800	359310	776600	GW	04				
1100233-274	02	12.00	02	200	140		800	361630	775330	GW	04				
1100233-275	01	10.00	02	200	140		800	364360	775480	GW	04				
1100233-276	01	10.00	02	200	140		800	366660	775480	GW	04				
1100233-277	01	10.00	02	200	140		800	367010	772860	GW	04				
1100233-278	01	12.00	02	200	140		800	364690	772810	GW	04				
1100233-279	02	12.00	02	200	140		800	361630	772740	GW	04				

1100233-280	02	12.00	02	200	140	800	359650	772700	GW	04
1100233-281	02	12.00	02	200	140	800	359060	783800	GW	04
1100233-282	02	12.00	02	200	140	800	361570	783810	GW	04
1100233-283	02	12.00	02	200	140	800	358450	786500	GW	04
1100233-284	02	12.00	02	200	140	800	360120	789000	GW	04
1100233-285	02	12.00	02	200	140	800	362500	789020	GW	04
1100233-286	02	12.00	02	200	140	800	364900	789050	GW	04
1100233-287	02	12.00	02	200	140	800	367150	789660	GW	04
1100233-288	02	12.00	02	200	140	800	358600	791800	GW	04
1100233-289	02	12.00	02	200	140	800	361200	791820	GW	04
1100233-290	02	12.00	02	200	140	800	364140	791840	GW	04
1100233-291	02	12.00	02	200	140	800	366860	791900	GW	04
1100233-292	02	12.00	02	200	140	800	369690	791920	GW	04
1100233-293	02	12.00	02	200	140	800	372630	791880	GW	04
1100233-294	02	12.00	02	200	140	800	369140	789100	GW	04

1100250 5.3 02 11 9/83 AG GW 1 DAVID C. BROWN 13 0.8 15 50 0.85

1100250-134 190 01 8.00 02 90 600 353150 782200 GW 03

1100262 837.13 02 11 1/87 AG GW 50 TURNER CORPORATION/GATOR SLOUGH 13 0.8 15 4945 0.85

1100262-99	171 01	10.00	02	262	120	583 Y	334350	807240	GW	04
1100262-100	171 01	8.00	02	255	161	02	431 Y	807230	GW	04
1100262-101	171 01	8.00	02	245	136	02	442 Y	335690	805650	GW
1100262-102	171 01	10.00	02	260	120	02	580 Y	333460	805760	GW
1100262-103	171 01	8.00	02	245	128	02	448 Y	335660	804535	GW
1100262-104	171 01	8.00	02	245	140	02	435 Y	335635	803250	GW
1100262-105	171 01	8.00	02	240	141	02	442 Y	336880	803335	GW
1100262-106	171 01	10.00	02	235	130	02	576 Y	332330	803115	GW
1100262-107	171 01	10.00	02	255	136	02	557 Y	335630	801885	GW
1100262-108	171 01	10.00	02	230	120	02	477 Y	332340	801785	GW
1100262-109	171 01	10.00	02	250	140	02	500 Y	335640	800580	GW
1100262-110	171 01	10.00	02	247	130	02	441 Y	332350	800455	GW
1100262-111	171 01	10.00	02	267	140	02	448 Y	335650	799440	GW
1100262-112	171 01	10.00	02	250	140	02	510 Y	332365	799140	GW
1100262-113	171 01	10.00	02	260	146	02	511 Y	335665	797890	GW
1100262-114	171 01	10.00	02	203	115	02	434 Y	327240	801660	GW
1100262-115	171 01	10.00	02	206	115	02	459 Y	327400	799120	GW
1100262-116	171 01	10.00	02	227	130	02	477 Y	332380	797765	GW
1100262-117	171 01	10.00	02	260	128	02	450 Y	335680	796475	GW
1100262-118	171 01	10.00	02	220	135	02	324 Y	332390	796375	GW
1100262-119	171 01	10.00	02	228	136	02	445 Y	335690	795230	GW
1100262-120	171 01	10.00	02	224	135	02	670 Y	334165	793885	GW
1100262-121	171 01	10.00	02	229	138	02	613 Y	335020	792550	GW
1100262-105	172 02	10.00	02	260	120	02	337 Y	346526	791383	GW
1100262-106	172 02	10.00	02	260	120	02	417 Y	346506	790074	GW
1100262-107	172 02	10.00	02	260	120	02	461 Y	343656	789086	GW
1100262-108	172 02	10.00	02	260	120	02	461 Y	346566	788958	GW
1100262-109	172 02	10.00	02	260	120	02	454 Y	343729	787845	GW
1100262-110	172 02	10.00	02	260	120	02	454 Y	346665	787779	GW
1100262-111	172 02	10.00	02	260	120	02	375 Y	338083	791381	GW
1100262-112	172 02	10.00	02	260	120	02	375 Y	340875	791395	GW
1100262-113	172 02	10.00	02	260	120	02	570 Y	340800	790103	GW
1100262-114	172 02	10.00	02	260	120	02	485 Y	338118	789622	GW
1100262-115	172 02	10.00	02	260	120	02	485 Y	340855	788800	GW
1100262-116	172 02	10.00	02	260	120	02	617 Y	340831	787432	GW
1100262-117	172 02	10.00	02	260	120	02	634 Y	337822	801943	GW
1100262-118	172 02	10.00	02	260	120	02	400 Y	340784	801844	GW
1100262-119	172 02	10.00	02	260	120	02	424 Y	340789	800420	GW



1100262-120	172 02	10.00 02	260	120	02	500 Y	337915	799196	GW 04								
1100262-121	172 02	10.00 02	260	120	02	493 Y	340813	798891	GW 04								
1100262-122	172 02	10.00 02	260	120	02	345 Y	340833	797712	GW 04								
1100262-123	172 02	10.00 02	260	120	02	745 Y	337926	796846	GW 04								
1100262-124	172 02	10.00 02	260	120	02	463 Y	341771	796324	GW 04								
1100262-125	172 02	10.00 02	260	120	02	465 Y	341859	795014	GW 04								
1100262-126	172 02	10.00 02	260	120	02	405 Y	337933	794070	GW 04								
1100262-127	172 02	10.00 02	260	120	02	405 Y	338011	792717	GW 04								
1100262-128	172 02	10.00 02	260	120	02	645 Y	341660	793542	GW 04								
1100262-129	172 02	10.00 02	260	120	02	647 Y	345252	796690	GW 04								
1100262-130	172 02	10.00 02	260	120	02	470 Y	346457	794239	GW 04								
1100262-246	190 01	10.00 02	275	172	02	800 Y	347113	785500	GW 04								
1100318		49.29	02	11 3/85	AG	7	THOMAS & RHONDA BAKER						61	0.8	26	290	0.50
1100318-	02	8.00 02	85	15	02	200 Y	454466	699520	GW 03								
1100318-	02	8.00 02	85	15	02	200 Y	455294	699348	GW 03								
1100318-	02	8.00 02	85	15	02	200 Y	465070	699120	GW 03								
1100318-	02	8.00 02	85	15	02	200 Y	455142	698224	GW 03								
1100318-	02	8.00 02	85	15	02	200 Y	455330	696792	GW 03								
1100318-	02	8.00 02	85	15	02	200 Y	455202	695812	GW 03								
1100318-	02	8.00 02	85	15	02	200 Y	455346	694922	GW 03								
1100320	23.00	8.45	02	11 7/85	AG	5	COLLIER ENTERPRISES (NURSERY)						13	0.8	26	47	0.70
1100320-147	206 01	12.00 02	90		02	1400	384525	736423	GW 03								
1100320-148	206 01	12.00 02	90		02	1400	384471	735561	GW 03								
1100320-149	206 01	12.00 02	90		02	1400	385282	736451	GW 03								
1100320-150	206 01	12.00 02	90		02	1400	384487	736015	GW 03								
1100320-151	206 02	12.00 02	80		02	1355	383048	737221	GW 03								
1100321		533.27	02	11 7/85	AG	28	COLLIER ENTERPRISES						61	1.5	26	2698	0.50
1100321-154	206 01	6.00 02			02		390320	739833	GW 01								
1100321-155	206 01	6.00 02			02		408301	738672	GW 01								
1100321-156	206 01	8.00 02			02		407642	737839	GW 01								
1100321-157	206 01	8.00 02			02		408935	737413	GW 01								
1100321-158	206 01	6.00 02			02		408602	736773	GW 01								
1100321-159	206 01	6.00 02			02		404943	736238	GW 01								
1100321-160	206 01	8.00 02			02		401236	736289	GW 01								
1100321-161	206 01	6.00 02			02		400816	738106	GW 01								
1100321-162	206 01	8.00 02			02		399016	738024	GW 01								
1100321-163	206 01	6.00 02			02		395743	737340	GW 01								
1100321-164	206 01	8.00 02			02		395286	737248	GW 01								
1100321-165	206 01	6.00 02			02		380367	738448	GW 01								
1100321-166	206 01	8.00 02			02		383614	738787	GW 01								
1100321-167	206 01	6.00 02			02		384330	739336	GW 01								
1100321-168	206 01	8.00 02			02		384839	738537	GW 01								
1100321-169	206 01	6.00 02			02		379525	734143	GW 01								
1100321-170	206 01	8.00 02			02		383051	734142	GW 01								
1100321-171	206 01	6.00 02			02		384328	734028	GW 01								
1100321-172	206 01	8.00 02			02		384339	729297	GW 01								
1100321-173	206 01	6.00 02			02		385376	729770	GW 01								
1100321-174	206 01	8.00 02			02		385899	730301	GW 01								
1100321-175	206 01	6.00 02			02		390029	729503	GW 01								
1100321-67	191 01	8.00 02			02		386128	747440	GW 01								
1100321-68	191 01	8.00 02			02		385866	746764	GW 01								
1100321-69	191 01	8.00 02			02		384727	744953	GW 01								
1100321-70	191 01	8.00 02			02		385244	744927	GW 01								
1100321-71	191 01	8.00 02			02		387086	747674	GW 01								
1100321-72	191 01	16.00 02			02		388020	743264	GW 01								

1100354	1100354-143	206 01	59.76	02	11	6/86	AG	GW	4	JAMES E. WILLIAMS	13	0.8	26	353 0.85
	1100354-144	206 01	8.00	02	60	40			1000	410387 718607 GW 03				
	1100354-145	206 01	8.00	02	60	40			1000	408126 718457 GW 03				
	1100354-146	206 01	8.00	02	60	40			1000	407687 717040 GW 03				
		206 01	8.00	02	60	40			1000	409732 717528 GW 03				
1100376			234.9	02	11	1/87	AG	GW	22	BARRON COLLIER COMPANY	15	0.4	26	909 0.50
	1100376-195	206 01	9.00	02	40	45		01	900 N	386280 715050 GW 01				
	1100376-196	206 01	6.00	02	80	30		02	600 N	386280 714350 GW 03				
	1100376-197	206 03	8.00	02	51	70		01	800 N	383590 713300 GW 01				
	1100376-198	206 03	8.00	02				01	800 N	383580 712740 GW 01				
	1100376-199	206 03	9.00	02	36	32		01	900 N	383270 708400 GW 01				
	1100376-200	206 03	6.00	02	33	30		01	600 N	382800 706800 GW 01				
	1100376-201	206 02	10.00	02	80	45		02	1000 Y	384200 714400 GW 03				
	1100376-202	206 02	10.00	02	80	45		02	1000 Y	385500 714410 GW 03				
	1100376-203	206 02	10.00	02	80	45		02	1000 Y	382250 713180 GW 03				
	1100376-204	206 02	10.00	02	80	45		02	1000 Y	384600 713200 GW 03				
	1100376-205	206 02	10.00	02	80	45		02	1000 Y	380300 711710 GW 03				
	1100376-206	206 02	10.00	02	80	45		02	1000 Y	381460 712060 GW 03				
	1100376-207	206 02	10.00	02	80	45		02	1000 Y	380240 709450 GW 03				
	1100376-208	206 02	10.00	02	80	45		02	1000 Y	383020 710630 GW 03				
	1100376-209	206 02	10.00	02	80	45		02	1000 Y	383240 710230 GW 03				
	1100376-210	206 02	10.00	02	80	45		02	1000 Y	384530 710200 GW 03				
	1100376-211	206 02	10.00	02	80	45		02	1000 Y	380310 707840 GW 03				
	1100376-212	206 02	10.00	02	80	45		02	1000 Y	381200 707840 GW 03				
	1100376-213	206 02	10.00	02	80	45		02	1000 Y	384390 707860 GW 03				
	1100376-214	206 02	10.00	02	80	45		02	1000 Y	385540 707890 GW 03				
	1100376-215	206 02	10.00	02	80	45		02	1000 Y	384490 706890 GW 03				
	1100376-216	206 02	10.00	02	80	45		02	1000 Y	383380 705120 GW 03				
1100386			195.89	02	11	3/87	AG	GW	10	JAMES E. WILLIAMS, JR.	60	0.8	15	900 0.50
	1100386-234	190 01	10.00	02	28	27		02	800	354100 755300 GW 01				
	1100386-235	190 01	10.00	02	27	27		02	800	350300 756200 GW 01				
	1100386-236	190 01	10.00	02	32	30		02	800	351100 753800 GW 01				
	1100386-237	190 01	8.00	02	30	30		02	600	349800 753500 GW 01				
	1100386-238	190 01	13.00	02	27	25		02	1000	352400 750800 GW 01				
	1100386-239	190 01	13.00	02	30	27		02	1000	347700 752700 GW 01				
	1100386-240	190 01	13.00	02	25	25		02	1000	346200 750900 GW 01				
	1100386-241	190 01	10.00	02	28	28		02	800	350500 755500 GW 01				
	1100386-242	190 01	6.00	02	35	35		02	600	353000 755600 GW 01				
	1100386-243	190 01	13.00	02	30	30		02	1000	348400 754800 GW 01				
	1100386-244	190 01	6.00	02	35	35		02	500	350400 752800 GW 01				
	1100386-245	190 01	6.00	02	35	35		02	500	345200 750400 GW 01				
1100440	197.78	03	72.79	02	11	3/88	AG	GW	3	REX PROPERTIES - WRIGHT GROVES	13	1.5	16	430 0.85
	1100440-256	190 02	12.00	02	100	70			1100	342081 770281 GW 01				
	1100440-257	190 02	12.00	02	100	70			1100	347451 768695 GW 01				
	1100440-258	190 02	12.00	02	100	70			1100	349563 786618 GW 01				
2200002	2106.56	03	349.34	02	22	2/77	AG	BOTH	3	1 THE GRAHAM COMPANY	20	0.8	14	2136 0.50
	2200002-5	137 03	6.00	02	70				800	443803 920651 GW 03				
	2200002-6	137 03	6.00	02	70				800	443775 919399 GW 03				
	2200002-7	137 03	6.00	02	70				800	443753 918064 GW 03				
	2200002-SW1	137 01							16000	SW				
2200039	9.45	03			22	7/77	AG	GW	1	PAUL O'BANNON	20	0.8	15	30 0.75
	2200039-4	136 01	6.00	02	32				500	387158 886216 GW 01				

2200047	537.62	03	135 01	8.00 02	700	22 1/88	AG	GW	4	LYKES BROTHERS, INC.	20	0.8	15	640	0.50
	2200047-23								450	368479 904786 GW 08					
	2200047-24								300	369513 906103 GW 08					
	2200047-25								700	371457 902662 GW 08					
	2200047-26								800	375189 901889 GW 08					
2200065	149.37	03	138 01	27.38 02	150	22 8/87	AG	GW	2	FRIERSON FARMS	01	3.6	14	181	0.50
	2200065-7								800	498572 900569 GW 03					
	2200065-8								800	498587 898634 GW 03					
2200066	377.00	03	138 01	71.4 02	150	22 5/82	AG	GW	2	FRIERSON FARMS	01	3.6	14	487	0.50
	2200066-9								800	494316 893639 GW 03					
	2200066-10								800	494327 892703 GW 03					
2200069	18.4	03	134 01	0.22 02	150	22 7/89	AG	GW	1	ROWLAND WALKER	13	0.8	15	40	0.85
	2200069-11								150	367519 905696 GW 04					
2200070	759.71	03	134 01	8.74 02	150	22 8/88	AG	GW	34	SIX L'S	61	0.8	15	370	0.50
	2200070-12								750	326100 910900 GW 08	13	0.8	15	1155	0.85
	2200070-13								700	326100 911100 GW 04					
	2200070-14								700	325000 911300 GW 04					
	2200070-15								750	324000 911300 GW 08					
	2200070-16								700	322600 911300 GW 04					
	2200070-17								700	321600 909000 GW 04					
	2200070-18								700	318400 906100 GW 04					
	2200070-19								700	317500 906100 GW 04					
	2200070-20								700	317500 904300 GW 04					
	2200070-21								700	316800 903500 GW 03					
	2200070-22								700	318400 903250 GW 04					
	2200070-23								750	323000 906250 GW 04					
	2200070-24								750	324500 906250 GW 04					
	2200070-25								750	324800 904600 GW 04					
	2200070-26								300	326000 903700 GW 04					
	2200070-27								750	325200 901000 GW 04					
	2200070-28								700	326300 901000 GW 04					
	2200070-29								700	326300 899600 GW 04					
	2200070-30								750	324100 897400 GW 04					
	2200070-31								750	326350 896000 GW 04					
	2200070-32								750	329000 903650 GW 04					
	2200070-33								700	330500 903650 GW 04					
	2200070-34								700	331650 903650 GW 04					
	2200070-35								700	316300 902900 GW 03					
	2200070-36								700	316300 902200 GW 03					
	2200070-37								700	316300 901500 GW 03					
	2200070-38								700	371060 903597 GW 04					
	2200070-39								0	0					
	2200070-40								700	371178 903675 GW 04					
	2200070-41								500	371641 903727 GW 04					
	2200070-66								500	363086 906616 GW 03					
	2200070-67								500	364287 904054 GW 03					
	2200070-68								500	366341 902226 GW 03					
	2200070-69								500	368803 902409 GW 03					
2200068	9.20	03	134 01	.113 02	120	22 6/83	AG	GW	1	C.M. & S.P. HANSEN	13	0.8	15	20	0.85
	2200068-10								107	336000 906850 GW 04					



2200134	41.40	03	135 01	10.00	22 12-87 AG	GW	1	650	AUSTIN - MURRAY CITRUS GROVE	13	0.8	15	90 0.85
	2200134-38				185 100	02			338338 897690 GW 04				
2200138	13.80	03	135 02	6.00 02	22 0 AG	CW	1	300	JOSEPH F. PHILLIPS	13	0.8	15	30 0.85
	2200138-39				150 100	02			338615 892556 GW 04				
2200144	91.99	03	134 02	8.00 02	22 4/88 AG	BOTH	8	1	DAVID LEE	13	0.8	15	200 0.85
	2200144-70				50 15		300		364555 895695 GW 01				
	2200144-71				50 15		300		365786 895716 GW 01				
	2200144-72				50 15		300		366401 894468 GW 01				
	2200144-73				50 15		300		365323 893560 GW 01				
	2200144-74				200		300		362770 894083 GW 04				
	2200144-75				200		300		363320 895352 GW 04				
	2200144-76				200		300		365641 895299 GW 04				
	2200144-77				180 100		300		364124 894852 GW 04				
	2200144-SW5						500		SW				
	2200144-SW6						500		SW				
3600016	69.00	03	134 01	4.00 02	36 7/77 AG	GW	10		T. H. BAKER	20	0.8	15	213 0.50
	3600016-61				20				355671 880035 GW 01				
	3600016-62				20				347021 878703 GW 01				
	3600016-31				20				305910 877692 GW 01				
	3600016-32				700				306001 877458 GW 08				
	3600016-33				20				305987 876262 GW 01				
	3600016-34				20				306006 875238 GW 01				
	3600016-35				20				304774 877847 GW 01				
	3600016-36				10				304928 877488 GW 01				
	3600016-37				20				304778 877080 GW 01				
	3600016-38				20				304789 876303 GW 01				
3600049	81.00	03	170 01	31.4 02	36 4/82 AG	GW	1	1000	LEHIGH ACRES DEVELOPMENT, INC.	20	0.8	2	120 0.50
	3600049-2				80				294597 812765 GW 04				
3600077	156.00	03	189 01	64.8 02	36 0 AG	GW	3	500	TONY ROSBOUGH	13	0.8	2	200 0.50
	3600077-				6.00 02				304050 764760 GW 03				
	3600077-				6.00 02				302800 764700 GW 03				
	3600077-				8.00 02				303100 762200 GW 03				
3600005	368.27	03	152 01	6.00 02	36 12/87 AG	BOTH	2	75	YODER BROTHERS	15	0.8	15	126 0.85
	3600005-66				120				293842 865724 GW 04				
	3600005-37				170				264470 859569 GW 04				
	3600005-SW								SW				
3600075	6.29	03	153 01	2.00 02	36 11/78 AG	GW	4	50	VOSS GROVES	13	0.8	15	17 0.50
	3600075-27				40				303564 861642 GW 01				
	3600075-28				40				303659 861431 GW 01				
	3600075-29				90				303483 861073 GW 04				
	3600075-30				90				303512 860829 GW 04				
3600076	18.47	03	189 01	10.00 02	36 12-78 AG	GW	2	2200	CHARLES CONLEY	60	0.8	2	85 0.50
	3600076-6				70 60				298669 763822 GW 03				
	3600076-7				28 20				298902 763801 GW 01				
3600090	13.03	03	189 01	8.00 02	36 2/79 AG	GW	2	1500	RALPH G. BEARDSLEE	61	0.8	2	20 0.50
	3600090-1				23 20				299087 767706 GW 01	60	0.8	2	30 0.50
	3600090-2				23 20				299530 767778 GW 01				

GRAVITY FED FROM CALOOSAHATCHEE RIVER

3600094	13.03	03	02	36 2/86	AG	GW	5	12	0.8	2	60	0.85
3600094-8	189 01	10.00	02	130	40	02	1200	296000	759927	GW	03	
3600094-9	189 01	10.00	02	130	40	02	1200	296321	759912	GW	03	
3600094-10	189 01	8.00	02	190	160	02	500	295665	759971	GW	04	
3600094-48	188 01	13.00	02	130	25	02	1200	295083	760008	GW	03	
3600094-49	188 01	10.00	02	130	40	02	1200	295480	759999	GW	03	
3600095	10.85	03	36 2/79	AG	GW	5		PENINSULAR GROVES, INC.				
3600095-50	188 01	13.00	02	100	40	02	1200	286555	770165	GW	03	
3600095-51	188 01	13.00	02	100	40	02	1200	286580	770782	GW	03	
3600095-52	188 01	13.00	02	100	40	02	1200	286615	771448	GW	03	
3600095-53	188 01	13.00	02	100	40	02	1200	286692	772111	GW	03	
3600095-54	188 01	8.00	02	200	116	02	500	286946	771419	GW	04	
3600113	8.70	03	36 12/87	AG	GW	2		CHARLES FLINT				
3600113-75	171 01	6.00	02	80			500	298478	817427	GW	04	
3600113-76	171 01	2.00	02	200			1	298684	817949	GW	05	
3600119	141.08	03	36 3.79	AG	GW	3		CHARLES FLINT				
3600119-72	171 01		02				500	304053	795847	GW	01	
3600119-73	171 01	6.00	02				500	302220	797393	GW	01	
3600119-74	171 01	6.00	02				500	300906	797350	GW	01	
3600129	565.00	03	270.00	02	36 7/82	AG	GW	57	SBN GROVE MAINTENANCE			
3600129-128	189 01	9.00	02	47	26			315572	769287	GW	01	
3600129-129	189 01	9.00	02	42	29			315119	769311	GW	01	
3600129-130	189 01	9.00	02	37	32			314686	769291	GW	01	
3600129-131	189 01	9.00	02	45				314191	769252	GW	01	
3600129-132	189 01	9.00	02	34				313762	769204	GW	01	
3600129-133	189 01	9.00	02	176				313607	768773	GW	03	
3600129-134	189 01	9.00	02	174				313595	769603	GW	03	
3600129-135	189 01	9.00	02	37				313365	769132	GW	01	
3600129-136	189 01	9.00	02	37				312742	769115	GW	01	
3600129-137	189 01	9.00	02	42				312318	769132	GW	01	
3600129-138	189 01	9.00	02	40				311836	769093	GW	01	
3600129-139	189 01	9.00	02	65				311105	769029	GW	01	
3600129-140	189 01	12.00	02	41				315444	767826	GW	01	
3600129-141	189 01	12.00	02	31				314968	767817	GW	01	
3600129-142	189 01	12.00	02	30				314446	767794	GW	01	
3600129-143	189 01	12.00	02	35				313977	767771	GW	01	
3600129-144	189 01	12.00	02	35				313394	767646	GW	01	
3600129-145	189 01	10.00	02	246	78			312954	767627	GW	04	
3600129-146	189 01	12.00	02	35				312531	767575	GW	01	
3600129-147	189 01	12.00	02	35				312132	767484	GW	01	
3600129-148	189 01	9.00	02	155	87			314820	766874	GW	03	
3600129-149	189 01	12.00	02	35				311751	767002	GW	01	
3600129-150	189 01	12.00	02	44	36			315350	765447	GW	01	
3600129-151	189 01	12.00	02	195	72			315002	765596	GW	04	
3600129-152	189 01	12.00	02	36	31			314591	765596	GW	01	
3600129-153	189 01	12.00	02	35				314191	765623	GW	01	
3600129-154	189 01	12.00	02	35	25			313640	765643	GW	01	
3600129-155	189 01	10.00	02	246	98			312977	765625	GW	04	
3600129-156	189 01	12.00	02	35	25			312507	765727	GW	01	
3600129-157	189 01		02					312064	765692	GW	01	
3600129-158	189 01	12.00	02	50	37			310179	770733	GW	01	
3600129-159	189 01	12.00	02	50	39			309549	770729	GW	01	

3600129-160	189 01	12.00 02	60	39	308975	770637	GW 01
3600129-161	189 01	12.00 02	60	39	308552	770601	GW 01
3600129-162	189 01	9.00 02	430	227	308070	771022	GW 05
3600129-163	189 01	8.00 02	450	212	308030	770628	GW 05
3600129-164	189 01	8.00 02	65	50	308058	770290	GW 01
3600129-165	189 01	12.00 02	60	39	307035	770739	GW 01
3600129-166	189 01	12.00 02	47	35	306623	770491	GW 01
3600129-167	189 01	12.00 02	51	36	306098	770451	GW 01
3600129-168	189 01	12.00 02	43	34	305285	770354	GW 01
3600129-169	189 01	12.00 02	50	33	309858	772125	GW 01
3600129-170	189 01	12.00 02	55	35	310020	773459	GW 01
3600129-171	189 01	12.00 02	27	22	309419	772077	GW 01
3600129-172	189 01	12.00 02	60	40	309571	773430	GW 01
3600129-173	189 01	12.00 02	54	39	308985	772619	GW 01
3600129-174	189 01	12.00 02	57	39	308644	772577	GW 01
3600129-175	189 01	12.00 02	41	34	308398	772582	GW 01
3600129-176	189 01	12.00 02	37	31	308093	772570	GW 01
3600129-177	189 01	12.00 02	42	28	307917	772858	GW 01
3600129-178	189 01	10.00 02	260	114	307879	773225	GW 04
3600129-179	189 01	12.00 02	38	31	308153	774996	GW 01
3600129-180	189 01	12.00 02	47	34	309727	774737	GW 01
3600129-181	189 01	9.00 02	225	115	309770	774133	GW 04
3600129-182	189 01	12.00 02	60	31	307247	772595	GW 01
3600129-183	189 01	12.00 02	60	32	306987	772577	GW 01
3600129-184	189 01	12.00 02	65	32	306503	771855	GW 01

AN.ALL. = Annual Permitted Allocation  
 ALL.UNT. = Annual Allocation Units  
     01 = MGD  
     02 = MGM  
     03 = MGY  
     04 = AC-FT  
 MAXMO = Maximum Monthly Permitted Allocation  
     01 = .MGD  
     02 = MGM  
     03 = AC-FT  
 CO = County Code (from permit number)  
 DATE ISS = Date Permit Issued (mo/yr)  
 USE TYPE = AG,IND,GLF,PWS,COM,REC  
 SRC = Source (SW,GW, BOTH)  
 NO.WLS. = Number of ACTIVE permitted wells  
 SWPMPs = Number of Surface Water Pumps  
  
 SAID = Service Area ID  
 LAD = Low Average Demand (Million Gallons per Month)  
 HAD = High Average Demands (Million Gallons per Month)  
 LMMD = Low Max. Month Demand (Million Gallons per Month)  
 HMMD = High Max. Month Demand (Million Gallons per Month)  
 AQ = Aquifer  
     01 = Water Table  
     02 = Surficial (semi-confined)  
     03 = Lower Tamiami  
     04 = sandstone  
     05 = mid-Hawthorn  
     06 = lower Hawthorn  
     07 = Suwannee  
     08 = Floridan  
     09 = Biscayne  
 PPOP = Permanent Population (1000's)  
 SPOP = Seasonal Population (1000's)  
  
 STS = Status  
     01 = Existing  
     02 = Proposed  
     03 = Standby/Backup  
     04 = To Be Plugged  
 DPRH CODE = Datum for Elevations  
     01 = NGVD  
     02 = Land Surface  
 PMPINT = Depth to Pump Intake (Wells Only)  
 PUMP TYPE  
     01 = Centrifical (suction)  
     02 = Lift (turbine, jet, submersible)  
     03 = Unknown  
 PUMP CAP = Capacity in GPM (GW & SW Facilities)  
     01 = Unknown  
 MTR? = Is use Metered by Volume or Power  
     Consumption and Reportrd to the District?  
     Y = Yes  
     N = No  
 XPLNR = East Planar Coordinate  
 YPLNR = North Planar Coordinate



ORY COUNTY MODEL AREA WATER USE

Table 1 - Existing Water Use - Permit Information and Table 3 - Forecasted Demands for Each Permit

MIT AN.	ALL.	MAX	MO.	DATE	USE	SRC.	NO.	SW
ALL.	UNT.	MO.	UTS.	CO	ISS.	TYPE	WLS.	PMP
								OWNER

Table 1 - Existing Water Use - Facilities Information for Each Permit

MIT	FACILITY	WELL	DPTH	PMP	PUMP	IND	GW	CD	TD	CD	INT	TYPE	CAP.	MTR?	XPLNR	YPLNR	SRC	AO.	COMMENTS
841.00	03	3.30	01	11	10/87?	PWS	GW	15	IMMOKALEE	WATER &	SEWER	DISTRICT							
	01	4.00	02	275	236	237	02	110	Y										
	01	6.00	02	255	220	211	02	200	Y										
	03	6.00	02		154	155	02	250	Y										
	01	8.00	02	315	229	230	02	350	Y										
	01	8.00	02	275	250	251	02	350	Y										
	01	8.00	02	175	95	96	02	350	Y										
	01	8.00	02	310	234	235	02	350	Y										
	01	8.00	02	200	145	146	02	350	Y										
	01	8.00	02	201	140	141	02	350	Y										
	01	8.00	02	180	100	101	02	350	Y										
	01	8.00	02	180	100	101	02	350	Y										
	02	8.00	02	200	140	141	02	250	Y										
	02	8.00	02	200	140	141	02	250	Y										
	02	8.00	02	200	140	141	02	250	Y										
	02	8.00	02	200	140	141	02	250	Y										

0026 313.00 03 22 4/76 IND GW 4 GLADES COUNTY SUGAR GROWERS

2200026-1	01	12.00	02	75	40			400	Y										
2200026-2	01	12.00	02	75	40			400	Y										
2200026-3	01	12.00	02	75	40			400	Y										
2200026-4	02																		

0045 120.45 02 .33 01 22 7/87? PWS GW 4 CITY OF MOORE HAVEN

2200045-5	01	10.00	02	100	60			400	Y										
2200045-6	03	10.00	02	100	60			400	Y										
	02	10.00	02	50	30			200											
	02	10.00	02	50	30			200											

200073 5.48 03 .30 01 22 7/87? PWS GW 2 WHISPERING PINES MOBILE HOME PARK

2200073-29A	02	4.00	02	100	70			50											
2200073-29B	02	4.00	02	100	70			50											

200113 1.44 01 22 8/86? IND GW 2 FLORIDA ROCK INDUSTRIES (DEWATERING AND DREDGE MINING)

01	12.00	02	50	20	02			500	N										
02	12.00	02	50	20	02			500	N										
01	6.00	02	130	80	70	02		1000	N										
01	6.00	02	130	80	70	02		1800	N										

15.67 03 .05 01 22 3/87? PWS GW 3 WHISPER CREEK (LABELLE OAKS)

01	6.00	02	130	80	70	02		50	Y										
01	6.00	02	130	80	70	02		50	Y										



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**APPENDIX F**  
**COMPARATIVE HYDROGRAPHS**

Water Levels in Feet, Datum NGVD

	12	22	32	42	52	62
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*+					
MAR 86 :	*					
APR 86 :	*+					
MAY 86 :	+*					
JUN 86 :	+ *					
JUL 86 :	+*					
AUG 86 :	+*					
SEP 86 :	*					
OCT 86 :	+*					
NOV 86 :	+*					
DEC 86 :	+*					
JAN 87 :	+*					
FEB 87 :	*					
MAR 87 :	+*					
APR 87 :	*					
MAY 87 :	*					
JUN 87 :	+*					
JUL 87 :	*					
AUG 87 :	+*					
SEP 87 :	+*					
OCT 87 :	*					
NOV 87 :	+*					
DEC 87 :	*					
JAN 88 :	*					
FEB 88 :	*					
MAR 88 :	*+					
APR 88 :	+*					
MAY 88 :	+*					
JUN 88 :	*					
JUL 88 :	*					
AUG 88 :	+*					
SEP 88 :	+*					
OCT 88 :	*					
NOV 88 :	+*					
DEC 88 :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	18	28	38	48	58	68
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*					
MAR 86 :	*					
APR 86 :	* +					
MAY 86 :	*+					
JUN 86 :	+*					
JUL 86 :	*+					
AUG 86 :	*					
SEP 86 :	*					
OCT 86 :	* +					
NOV 86 :	*+					
DEC 86 :	*+					
JAN 87 :	*+					
FEB 87 :	*+					
MAR 87 :	*+					
APR 87 :	*+					
MAY 87 :	*+					
JUN 87 :	*+					
JUL 87 :	*+					
AUG 87 :	*+					
SEP 87 :	*+					
OCT 87 :	*+					
NOV 87 :	*					
DEC 87 :	*+					
JAN 88 :	*+					
FEB 88 :	* +					
MAR 88 :	* +					
APR 88 :	* +					
MAY 88 :	*					
JUN 88 :	*+					
JUL 88 :	* +					
AUG 88 :	*+					
SEP 88 M	*					
OCT 88 :	*+					
NOV 88 :	*					
DEC 88 :	*+					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	8	18	28	38	48	58
	+.....+.....+.....+.....+.....+					
JAN 86 :	+	*				
FEB 86 :	+	*				
MAR 86 :	+	*				
APR 86 :	+	*				
MAY 86 :	+	*				
JUN 86 :	+	*				
JUL 86 :	+	*				
AUG 86 :	+	*				
SEP 86 :	+	*				
OCT 86 :	+	*				
NOV 86 :	+	*				
DEC 86 :	+	*				
JAN 87 :	+	*				
FEB 87 :	+	*				
MAR 87 :	+	*				
APR 87 :	+	*				
MAY 87 :	+	*				
JUN 87 :	+	*				
JUL 87 :	+	*				
AUG 87 :	+	*				
SEP 87 :	+	*				
OCT 87 :	+	*				
NOV 87 :	+	*				
DEC 87 :	+	*				
JAN 88 :	+	*				
FEB 88 :	+	*				
MAR 88 :	+	*				
APR 88 :	+	*				
MAY 88 :	+	*				
JUN 88 :	+	*				
JUL 88 :	+	*				
AUG 88 :	+	*				
SEP 88 M :		*				
OCT 88 :	+	*				
NOV 88 :	+	*				
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located near canal, affected by cell wide averaging.

STATION: HE-554                      LAYER: 1                      ROW: 22                      COLUMN: 16

Water Levels in Feet, Datum NGVD

	25	35	45	55	65	75
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*+					
MAR 86 :	*+					
APR 86 :	*+					
MAY 86 :	*+					
JUN 86 :	+ *					
JUL 86 :	*					
AUG 86 :	*+					
SEP 86 :	*+					
OCT 86 :	*	+				
NOV 86 :	*+					
DEC 86 :	*+					
JAN 87 :	*+					
FEB 87 :	*+					
MAR 87 :	*					
APR 87 :	*+					
MAY 87 :	*					
JUN 87 :	*					
JUL 87 :	+*					
AUG 87 :	+ *					
SEP 87 :	+ *					
OCT 87 :	*					
NOV 87 :	*+					
DEC 87 :	*					
JAN 88 :	*					
FEB 88 :	*+					
MAR 88 :	*					
APR 88 :	*					
MAY 88 :	*					
JUN 88 :	* +					
JUL 88 :	+*					
AUG 88 M	*					
SEP 88 :	*+					
OCT 88 :	*+					
NOV 88 :	*					
DEC 88 :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	* +					
MAR 86 :	* +					
APR 86 :	* +					
MAY 86 :	* +					
JUN 86 :	*+					
JUL 86 :	*+					
AUG 86 :	*+					
SEP 86 :	*+					
OCT 86 :	* +					
NOV 86 :	* +					
DEC 86 :	*+					
JAN 87 :	* +					
FEB 87 :	* +					
MAR 87 :	* +					
APR 87 :	* +					
MAY 87 :	* +					
JUN 87 :	* +					
JUL 87 :	* +					
AUG 87 :	* +					
SEP 87 :	* +					
OCT 87 :	*+					
NOV 87 :	*					
DEC 87 :	*					
JAN 88 :	*+					
FEB 88 :	* +					
MAR 88 :	* +					
APR 88 :	* +					
MAY 88 :	* +					
JUN 88 :	* +					
JUL 88 :	* +					
AUG 88 :	*+					
SEP 88 :	* +					
OCT 88 :	* +					
NOV 88 :	* +					
DEC 88 :	* +					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	17	27	37	47	57	67
	+.....+.....+.....+.....+.....+					
JAN 86 :	*+					
FEB 86 :	*					
MAR 86 :	*					
APR 86 :	*					
MAY 86 :	*+					
JUN 86 :	+ *					
JUL 86 :	+ *					
AUG 86 :	+ *					
SEP 86 :	+ *					
OCT 86 :	*					
NOV 86 :	*+					
DEC 86 :	*					
JAN 87 :	*					
FEB 87 :	*+					
MAR 87 :	*					
APR 87 :	*+					
MAY 87 :	*					
JUN 87 :	*					
JUL 87 :	*					
AUG 87 :	+*					
SEP 87 :	+ *					
OCT 87 :	+ *					
NOV 87 :	+*					
DEC 87 :	*					
JAN 88 :	*					
FEB 88 :	*+					
MAR 88 :	*+					
APR 88 :	*+					
MAY 88 :	*+					
JUN 88 :	* +					
JUL 88 :	*					
AUG 88 :	+ *					
SEP 88 :	*					
OCT 88 :	*+					
NOV 88 :	*+					
DEC 88 :	*+					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	19	29	39	49	59	69
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*					
MAR 86 :	*					
APR 86 :	*+					
MAY 86 :	*					
JUN 86 :	+ *					
JUL 86 :	*					
AUG 86 :	*					
SEP 86 :	*+					
OCT 86 :	*	+				
NOV 86 :	*	+				
DEC 86 :	*	+				
JAN 87 :	*	+				
FEB 87 :	*	+				
MAR 87 :	*	+				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :	*+					
JUL 87 :	*	+				
AUG 87 :	*+					
SEP 87 :	*	+				
OCT 87 :	*	+				
NOV 87 :	*	+				
DEC 87 :	*	+				
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 :	*	+				
APR 88 :	*	+				
MAY 88 :	*+					
JUN 88 :	*+					
JUL 88 :	*	+				
AUG 88 :	*	+				
SEP 88 :	*	+				
OCT 88 :	*	+				
NOV 88 :	*	+				
DEC 88 :	*	+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	14	24	34	44	54	64
	+.....+.....+.....+.....+.....+					
JAN 86 :		*				
FEB 86 :		+	*			
MAR 86 :	+		*			
APR 86 :	+		*			
MAY 86 :	+		*			
JUN 86 :	+		*			
JUL 86 :	+		*			
AUG 86 :	+		*			
SEP 86 :	+		*			
OCT 86 :		+	*			
NOV 86 :		+	*			
DEC 86 :		+	*			
JAN 87 :		+	*			
FEB 87 :		+	*			
MAR 87 :		+	*			
APR 87 :		+	*			
MAY 87 :		+	*			
JUN 87 :		+	*			
JUL 87 :		+	*			
AUG 87 :		+	*			
SEP 87 :		+	*			
OCT 87 :		+	*			
NOV 87 :		+	*			
DEC 87 :		+	*			
JAN 88 :		*	+			
FEB 88 :		*	+			
MAR 88 :		*				
APR 88 :		*				
MAY 88 :		+	*			
JUN 88 :		+	*			
JUL 88 :		+	*			
AUG 88 M :			*			
SEP 88 :		*	+			
OCT 88 :		*	+			
NOV 88 :		*				
DEC 88 :		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	14	24	34	44	54	64
	+.....+.....+.....+.....+.....+					
JAN 86 :	+	*				
FEB 86 :	+	*				
MAR 86 :	+	*				
APR 86 :	+	*				
MAY 86 :	+	*				
JUN 86 :	+	*				
JUL 86 :	+	*				
AUG 86 :	+	*				
SEP 86 :	+	*				
OCT 86 :	+	*				
NOV 86 :	+	*				
DEC 86 :	+	*				
JAN 87 :	+	*				
FEB 87 :	+	*				
MAR 87 :	+	*				
APR 87 :	+	*				
MAY 87 :	+	*				
JUN 87 :	+	*				
JUL 87 :	+	*				
AUG 87 :	+	*				
SEP 87 :	+	*				
OCT 87 :	+	*				
NOV 87 :	+	*				
DEC 87 :	+	*				
JAN 88 :	+	*				
FEB 88 :	+	*				
MAR 88 :	+	*				
APR 88 M :		*				
MAY 88 M :		*				
JUN 88 M :		*				
JUL 88 M :		*				
AUG 88 M :		*				
SEP 88 M :		*				
OCT 88 M :		*				
NOV 88 M :		*				
DEC 88 M :		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	19	29	39	49	59	69
	+.....+.....+.....+.....+.....+					
JAN 86 :						*+
FEB 86 :		*				+
MAR 86 :		*				+
APR 86 :	*					+
MAY 86 :	*					+
JUN 86 :		*				
JUL 86 :		*				+
AUG 86 :		*				+
SEP 86 :		*				+
OCT 86 :		*				+
NOV 86 :		*				+
DEC 86 :		*				+
JAN 87 :		*				+
FEB 87 :		*				+
MAR 87 :		*				+
APR 87 :	*					+
MAY 87 :	*					+
JUN 87 :	*					+
JUL 87 :	*					+
AUG 87 :	*					+
SEP 87 :	*					+
OCT 87 :	*					+
NOV 87 :	*					+
DEC 87 :	*					+
JAN 88 :	*					+
FEB 88 :	*					+
MAR 88 :	*					+
APR 88 :	*					+
MAY 88 :	*					+
JUN 88 :	*					+
JUL 88 :	*					+
AUG 88 :	*					+
SEP 88 M :	*					
OCT 88 :	*					+
NOV 88 :	*					+
DEC 88 :	*					+

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	9	19	29	39	49	59
	+.....+.....+.....+.....+.....+					
JAN 86 :		*+				
FEB 86 :		* +				
MAR 86 :		* +				
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :	*	+				
JUL 86 :	*		+			
AUG 86 :	*		+			
SEP 86 :	*		+			
OCT 86 :	*		+			
NOV 86 :	*		+			
DEC 86 :	*		+			
JAN 87 :	*		+			
FEB 87 :	*		+			
MAR 87 :	*		+			
APR 87 :	*		+			
MAY 87 :	*		+			
JUN 87 :	*		+			
JUL 87 :	*		+			
AUG 87 :	*		+			
SEP 87 :	*		+			
OCT 87 :	*		+			
NOV 87 :	*		+			
DEC 87 :	*		+			
JAN 88 :	*	+				
FEB 88 :	*		+			
MAR 88 :	*		+			
APR 88 :	*		+			
MAY 88 :	*		+			
JUN 88 :	*		+			
JUL 88 :	*		+			
AUG 88 :	*		+			
SEP 88 M :	*					
OCT 88 :	*		+			
NOV 88 :	*		+			
DEC 88 :	*		+			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located near canal, affected by cell wide averaging.

Water Levels in Feet, Datum NGVD

	12	22	32	42	52	62
	+.....+.....+.....+.....+.....+					
JAN 86 :		*+				
FEB 86 :		*+				
MAR 86 :		* +				
APR 86 :		* +				
MAY 86 M :	*					
JUN 86 M :	*					
JUL 86 M :	*					
AUG 86 M :	*					
SEP 86 M :	*					
OCT 86 :	*	+				
NOV 86 :	*	+				
DEC 86 :	*	+				
JAN 87 :	*	+				
FEB 87 :	*	+				
MAR 87 :	*	+				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*	+				
AUG 87 :	*	+				
SEP 87 :	*	+				
OCT 87 :	*	+				
NOV 87 :		*				
DEC 87 :	*	+				
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 :	*	+				
APR 88 :	*	+				
MAY 88 :	*	+				
JUN 88 :	*	+				
JUL 88 :	*	+				
AUG 88 :	*	+				
SEP 88 :	*	+				
OCT 88 :	*	+				
NOV 88 :	*	+				
DEC 88 :	*	+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located near canal, affected by cell wide averaging.



Water Levels in Feet, Datum NGVD

	16	26	36	46	56	66
	+.....+.....+.....+.....+.....+					
JAN 86 :	*+					
FEB 86 :	* +					
MAR 86 :	* +					
APR 86 :	* +					
MAY 86 :	* +					
JUN 86 :	+*					
JUL 86 :	* +					
AUG 86 :	* +					
SEP 86 :	* +					
OCT 86 :	* +					
NOV 86 :	* +					
DEC 86 :	* +					
JAN 87 :	* +					
FEB 87 :	* +					
MAR 87 :	* +					
APR 87 :	* +					
MAY 87 :	* +					
JUN 87 :	* +					
JUL 87 :	* +					
AUG 87 :	**+					
SEP 87 :	* +					
OCT 87 :	* +					
NOV 87 :	* +					
DEC 87 :	* +					
JAN 88 :	* +					
FEB 88 :	* +					
MAR 88 :	* +					
APR 88 :	* +					
MAY 88 M :	*					
JUN 88 M :	*					
JUL 88 M :	*					
AUG 88 M :	*					
SEP 88 M :	*					
OCT 88 M :	*					
NOV 88 M :	*					
DEC 88 M :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	6	16	26	36	46	56
	+.....+.....+.....+.....+.....+					
JAN 86 :		+	*			
FEB 86 :		+	*			
MAR 86 :		+	*			
APR 86 :		+	*			
MAY 86 :		+	*			
JUN 86 :		+	*			
JUL 86 :		+	*			
AUG 86 :		+	*			
SEP 86 :		+	*			
OCT 86 :		+	*			
NOV 86 :		+	*			
DEC 86 :		+	*			
JAN 87 :		+	*			
FEB 87 :		+	*			
MAR 87 :		+	*			
APR 87 :		+	*			
MAY 87 :		+	*			
JUN 87 :		+	*			
JUL 87 :		+	*			
AUG 87 :		+	*			
SEP 87 :		+	*			
OCT 87 :		+	*			
NOV 87 :		+	*			
DEC 87 :		+	*			
JAN 88 :		+	*			
FEB 88 :		+	*			
MAR 88 :		+	*			
APR 88 :		+	*			
MAY 88 :		+	*			
JUN 88 :		+	*			
JUL 88 :		+	*			
AUG 88 :		+	*			
SEP 88 :		+	*			
OCT 88 :		+	*			
NOV 88 :		+	*			
DEC 88 :		+	*			

\* =simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located near canal, affected by cell wide averaging.

Water Levels in Feet, Datum NGVD

	11	21	31	41	51	61
	+.....+.....+.....+.....+.....+					
JAN 86	M	*				
FEB 86	M	*				
MAR 86	M	*				
APR 86	M	*				
MAY 86	M	*				
JUN 86	M	*				
JUL 86	M	*				
AUG 86	M	*				
SEP 86	M	*				
OCT 86	:	+ *				
NOV 86	:	+ *				
DEC 86	:	+ *				
JAN 87	:	+ *				
FEB 87	:	+*				
MAR 87	:	+ *				
APR 87	:	+ *				
MAY 87	:	+*				
JUN 87	:	+ *				
JUL 87	:	+ *				
AUG 87	:	+ *				
SEP 87	:	+ *				
OCT 87	:	+ *				
NOV 87	:	+ *				
DEC 87	:	+ *				
JAN 88	:	+ *				
FEB 88	:	+ *				
MAR 88	:	+*				
APR 88	:	+ *				
MAY 88	:	+ *				
JUN 88	:	*				
JUL 88	:	+ *				
AUG 88	:	+ *				
SEP 88	M	*				
OCT 88	:	+ *				
NOV 88	:	+ *				
DEC 88	:	+*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located near canal, affected by nodal averaging.

Water Levels in Feet, Datum NGVD

	22	32	42	52	62	72
	+.....+.....+.....+.....+.....+					
JAN 86 M	*					
FEB 86 M	*					
MAR 86 M	*					
APR 86 M	*					
MAY 86 M	*					
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 M		*				
NOV 86 M		*				
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 M		*				
MAY 87 M		*				
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 M		*				
NOV 87 :		*+				
DEC 87 :		*+				
JAN 88 M		*				
FEB 88 :		* +				
MAR 88 M		*				
APR 88 M		*				
MAY 88 M		*				
JUN 88 M		*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 M		*				
OCT 88 M		*				
NOV 88 M		*				
DEC 88 M		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	19	29	39	49	59	69
	+.....+.....+.....+.....+.....+					
JAN 86	M	*				
FEB 86	M	*				
MAR 86	M	*				
APR 86	M	*				
MAY 86	M	*				
JUN 86	M	*				
JUL 86	M	*				
AUG 86	M	*				
SEP 86	M	*				
OCT 86	M	*				
NOV 86	M	*				
DEC 86	M	*				
JAN 87	M	*				
FEB 87	M	*				
MAR 87	M	*				
APR 87	M	*				
MAY 87	M	*				
JUN 87	M	*				
JUL 87	M	*				
AUG 87	M	*				
SEP 87	M	*				
OCT 87	:	*				
NOV 87	:	*				
DEC 87	:	*				
JAN 88	:	*+				
FEB 88	:	*+				
MAR 88	:	*+				
APR 88	:	*+				
MAY 88	:	* +				
JUN 88	:	*+				
JUL 88	:	*+				
AUG 88	:	*+				
SEP 88	:	*+				
OCT 88	:	*+				
NOV 88	:	*				
DEC 88	:	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is plotted)

Comments: none

Water Levels in Feet, Datum NGVD

	15	25	35	45	55	65
	+.....+.....+.....+.....+.....+					
JAN 86	M	*				
FEB 86	M	*				
MAR 86	M	*				
APR 86	M	*				
MAY 86	M	*				
JUN 86	M		*			
JUL 86	M		*			
AUG 86	M		*			
SEP 86	M		*			
OCT 86	M		*			
NOV 86	M		*			
DEC 86	M		*			
JAN 87	M		*			
FEB 87	M		*			
MAR 87	M		*			
APR 87	M		*			
MAY 87	M		*			
JUN 87	M		*			
JUL 87	M		*			
AUG 87	M		*			
SEP 87	M		*			
OCT 87	:		*			
NOV 87	:		*			
DEC 87	:		*			
JAN 88	:		*+			
FEB 88	:		*+			
MAR 88	:		*+			
APR 88	:		*			
MAY 88	:		*			
JUN 88	:		*			
JUL 88	M		*			
AUG 88	M		*			
SEP 88	:		*+			
OCT 88	:		*			
NOV 88	:		*			
DEC 88	:		*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	10	20	30	40	50	60
	+.....+.....+.....+.....+.....+					
JAN 86 M		*				
FEB 86 M		*				
MAR 86 M		*				
APR 86 M		*				
MAY 86 M		*				
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 M		*				
NOV 86 M		*				
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 M		*				
MAY 87 M		*				
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :		++				
NOV 87 :		++				
DEC 87 :		++				
JAN 88 :		*				
FEB 88 :		++				
MAR 88 :		*				
APR 88 :		++				
MAY 88 :		+ *				
JUN 88 :		+ *				
JUL 88 :		+ *				
AUG 88 :		+ *				
SEP 88 :		*				
OCT 88 :		++				
NOV 88 :		++				
DEC 88 :		++				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	13	23	33	43	53	63
	+.....+.....+.....+.....+.....+					
JAN 86 M	*					
FEB 86 M	*					
MAR 86 M	*					
APR 86 M	*					
MAY 86 M	*					
JUN 86 M	*					
JUL 86 M	*					
AUG 86 M	*					
SEP 86 M	*					
OCT 86 M	*					
NOV 86 M	*					
DEC 86 M	*					
JAN 87 M	*					
FEB 87 M	*					
MAR 87 M	*					
APR 87 M	*					
MAY 87 M	*					
JUN 87 M	*					
JUL 87 M	*					
AUG 87 M	*					
SEP 87 M	*					
OCT 87 :	+ *					
NOV 87 :	+ *					
DEC 87 :	+ *					
JAN 88 :	+*					
FEB 88 :	*					
MAR 88 :	+*					
APR 88 :	*					
MAY 88 :	*					
JUN 88 :	*+					
JUL 88 :	*+					
AUG 88 :	+*					
SEP 88 M	*					
OCT 88 :	* +					
NOV 88 :	*+					
DEC 88 :	*+					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	20	30	40	50	60	70
	+.....+.....+.....+.....+.....+					
JAN 86 M	*					
FEB 86 M	*					
MAR 86 M	*					
APR 86 M	*					
MAY 86 M	*					
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 M		*				
NOV 86 M		*				
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 M		*				
MAY 87 M		*				
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 M		*				
NOV 87 M		*				
DEC 87 M		*				
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 :	*	+				
APR 88 :	*	+				
MAY 88 :	*					
JUN 88 :	*					
JUL 88 :	*	+				
AUG 88 :	*	+				
SEP 88 :	*	+				
OCT 88 :	*	+				
NOV 88 :	*	+				
DEC 88 :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observes agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	13	23	33	43	53	63
	+.....+.....+.....+.....+.....+					
JAN 86 :	+	*				
FEB 86 :	+	*				
MAR 86 :	+	*				
APR 86 :	+	*				
MAY 86 :	+	*				
JUN 86 :	+		*			
JUL 86 :		+	*			
AUG 86 :		+	*			
SEP 86 :		+	*			
OCT 86 :		+	*			
NOV 86 :	+	*				
DEC 86 :	+	*				
JAN 87 :		+	*			
FEB 87 :		+	*			
MAR 87 :		+	*			
APR 87 :	+	*				
MAY 87 :	+	*				
JUN 87 :	+	*				
JUL 87 :	+	*				
AUG 87 :	+	*				
SEP 87 :		+	*			
OCT 87 :		+	*			
NOV 87 :		+	*			
DEC 87 :		+	*			
JAN 88 :		+	*			
FEB 88 :	+	*				
MAR 88 :	+	*				
APR 88 :	+	*				
MAY 88 :	+	*				
JUN 88 :	+	*				
JUL 88 :	+	*				
AUG 88 :		+	*			
SEP 88 :			*			
OCT 88 :		+	*			
NOV 88 :	+	*				
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	18	28	38	48	58	68
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*					
MAR 86 :	*					
APR 86 :	*					
MAY 86 :	*+					
JUN 86 :	*					
JUL 86 :	+*					
AUG 86 :	+*					
SEP 86 :	+ *					
OCT 86 :	+ *					
NOV 86 :	*					
DEC 86 :	+ *					
JAN 87 :	+*					
FEB 87 :	+ *					
MAR 87 :	+ *					
APR 87 :	*					
MAY 87 :	+*					
JUN 87 :	+ *					
JUL 87 :	+ *					
AUG 87 :	+ *					
SEP 87 :	+ *					
OCT 87 :	+ *					
NOV 87 :	+ *					
DEC 87 M	*					
JAN 88 :	+ *					
FEB 88 :	+*					
MAR 88 :	+ *					
APR 88 :	+*					
MAY 88 :	*					
JUN 88 :	+*					
JUL 88 :	*					
AUG 88 :	+*					
SEP 88 :	+ *					
OCT 88 :	*					
NOV 88 :	*					
DEC 88 :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

STATION: L-1964            LAYER: 1        ROW: 22            COLUMN: 4

Water Levels in Feet, Datum NGVD

	20	30	40	50	60	70
	+	+	+	+	+	+
JAN 86 :		++				
FEB 86 :		++				
MAR 86 :		*+				
APR 86 :		*+				
MAY 86 :		*+				
JUN 86 :		*				
JUL 86 :		*+				
AUG 86 :		+*				
SEP 86 :		+*				
OCT 86 :		*				
NOV 86 :		*				
DEC 86 :		*				
JAN 87 :		*+				
FEB 87 :		* +				
MAR 87 :		*				
APR 87 :		*				
MAY 87 :		* +				
JUN 87 :		*+				
JUL 87 :		*+				
AUG 87 :		*				
SEP 87 :		* +				
OCT 87 :		* +				
NOV 87 :		* +				
DEC 87 :		*				
JAN 88 :		*				
FEB 88 :		*				
MAR 88 :		*				
APR 88 :		*				
MAY 88 :		*				
JUN 88 :		+*				
JUL 88 :		*+				
AUG 88 :		*+				
SEP 88 :		*				
OCT 88 :		*				
NOV 88 :		*				
DEC 88 :		*				

\* = simulated water levels  
+ = observed water levels  
M = observed data missing  
(if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	8	18	28	38	48	58
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	+	*				
MAR 86 :	*					
APR 86 :	*					
MAY 86 :	*					
JUN 86 :	*					
JUL 86 :	*	+				
AUG 86 :		+	*			
SEP 86 :		*	+			
OCT 86 :		*				
NOV 86 :		*	+			
DEC 86 :	+	*				
JAN 87 :		+	*			
FEB 87 :		+	*			
MAR 87 :		+	*			
APR 87 :		*	+			
MAY 87 :		*	+			
JUN 87 :		*	+			
JUL 87 :		*				
AUG 87 :		*				
SEP 87 :		*	+			
OCT 87 :		*				
NOV 87 :		*				*
DEC 87 :		+	*			
JAN 88 :		+	*			
FEB 88 :		+	*			
MAR 88 :		*				
APR 88 :		*				
MAY 88 :		*	+			
JUN 88 :		*	+			
JUL 88 :		*	+			
AUG 88 M :		*				*
SEP 88 :		*	+			
OCT 88 :		*	+			
NOV 88 :		*				
DEC 88 :		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

STATION: L-1992            LAYER: 1        ROW: 21            COLUMN: 6

Water Levels in Feet, Datum NGVD

	18	28	38	48	58	68
	+.....+.....+.....+.....+.....+					
JAN 86 :		+	*			
FEB 86 :		+	*			
MAR 86 :		+	*			
APR 86 :		+	*			
MAY 86 :		+	*			
JUN 86 :		+	*			
JUL 86 :		+	*			
AUG 86 :		+	*			
SEP 86 :		+	*			
OCT 86 :		+	*			
NOV 86 :		+	*			
DEC 86 :		+	*			
JAN 87 :		+	*			
FEB 87 :		+	*			
MAR 87 :		+	*			
APR 87 :		+	*			
MAY 87 :		+	*			
JUN 87 :		+	*			
JUL 87 :		+	*			
AUG 87 :		+	*			
SEP 87 :		+	*			
OCT 87 :		+	*			
NOV 87 :		+	*			
DEC 87 :		+	*			
JAN 88 :		+	*			
FEB 88 :		+	*			
MAR 88 :		+	*			
APR 88 :		+	*			
MAY 88 :		+	*			
JUN 88 :		+	*			
JUL 88 :		+	*			
AUG 88 :		+	*			
SEP 88 :		+	*			
OCT 88 :		+	*			
NOV 88 :		+	*			
DEC 88 :		+	*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*+					
MAR 86 :	* +					
APR 86 :	*+					
MAY 86 :	*					
JUN 86 :	* +					
JUL 86 :	* +					
AUG 86 :	* +					
SEP 86 :	* +					
OCT 86 :	* +					
NOV 86 :	* +					
DEC 86 :	* +					
JAN 87 :	* +					
FEB 87 :	* +					
MAR 87 :	*+					
APR 87 :	* +					
MAY 87 :	*+					
JUN 87 :	* +					
JUL 87 :	*+					
AUG 87 :	* +					
SEP 87 :	* +					
OCT 87 :	* +					
NOV 87 :	* +					
DEC 87 :	*+					
JAN 88 :	*+					
FEB 88 :	*+					
MAR 88 :	* +					
APR 88 :	*+					
MAY 88 :	* +					
JUN 88 :	*+					
JUL 88 :	* +					
AUG 88 :	* +					
SEP 88 :	* +					
OCT 88 :	* +					
NOV 88 M :	*					
DEC 88 :	* +					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	16	26	36	46	56	66
	+.....+.....+.....+.....+.....+					
JAN 86 :		*				
FEB 86 :		*				
MAR 86 :		*				
APR 86 :		*				
MAY 86 :	+	*				
JUN 86 :		*	+			
JUL 86 :		*	+			
AUG 86 :		*				
SEP 86 :		*	+			
OCT 86 :		*	+			
NOV 86 :		*	+			
DEC 86 :		*	+			
JAN 87 :		*				
FEB 87 :		*				
MAR 87 :		*	+			
APR 87 :	+	*				
MAY 87 :		*				
JUN 87 :		*				
JUL 87 :		*	+			
AUG 87 :	+	*				
SEP 87 :	+	*				
OCT 87 :	+	*				
NOV 87 :		*				
DEC 87 :		*				
JAN 88 :		*				
FEB 88 :		*	+			
MAR 88 :		*				
APR 88 :	+	*				
MAY 88 :	+	*				
JUN 88 :		*				
JUL 88 :		*	+			
AUG 88 :	+	*				
SEP 88 :		*	+			
OCT 88 :	+	*				
NOV 88 :	+	*				
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	20	30	40	50	60	70
	+.....+.....+.....+.....+.....+					
JAN 86 :	*	+				
FEB 86 :	*	+				
MAR 86 :	*	+				
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :	*		+			
JUL 86 :	*		+			
AUG 86 :	*		+			
SEP 86 :	*		+			
OCT 86 :	*		+			
NOV 86 :	*		+			
DEC 86 :	**					
JAN 87 :	*		+			
FEB 87 :	*		+			
MAR 87 :	*		+			
APR 87 :	*		+			
MAY 87 :	*		+			
JUN 87 :	*		+			
JUL 87 :	*		+			
AUG 87 :	**					
SEP 87 :	**					
OCT 87 :	**					
NOV 87 :	**					
DEC 87 :	*		+			
JAN 88 :	**					
FEB 88 :	*		+			
MAR 88 :	**					
APR 88 :	*		+			
MAY 88 :	**					
JUN 88 :	**					
JUL 88 :	**					
AUG 88 :	*		+			
SEP 88 :	*					
OCT 88 :	**					
NOV 88 :	**					
DEC 88 :	**					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

STATION: C-462

LAYER: 1

ROW: 29

COLUMN: 15

Water Levels in Feet, Datum NGVD

	22	32	42	52	62	72
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	+	*				
MAR 86 :	*	+				
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :	*					
JUL 86 :	*	+				
AUG 86 :	*	+				
SEP 86 :	*		+			
OCT 86 :	*	+				
NOV 86 :	*	+				
DEC 86 :	*	+				
JAN 87 :	*	+				
FEB 87 :	*	+				
MAR 87 :	*	+				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*	+				
AUG 87 :	*	+				
SEP 87 :	*	+				
OCT 87 :	*	+				
NOV 87 :	*		+			
DEC 87 :	*		+			
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 :	*	+				
APR 88 :	*	+				
MAY 88 :	*	+				
JUN 88 :	*	+				
JUL 88 :	*	+				
AUG 88 :	*	+				
SEP 88 :	*		+			
OCT 88 :	*	+				
NOV 88 :	*	+				
DEC 88 :	*	+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

## Water Levels in Feet, Datum NGVD

	26	36	46	56	66	76
	+.....+.....+.....+.....+.....+					
JAN 86 :		*				+
FEB 86 :		*				+
MAR 86 :		*				+
APR 86 :	*					+
MAY 86 :	*					+
JUN 86 :	*					+
JUL 86 :	*					+
AUG 86 :	*					+
SEP 86 :	*					+
OCT 86 :	*					+
NOV 86 :	*					+
DEC 86 :	*					+
JAN 87 :	*					+
FEB 87 :	*					+
MAR 87 :	*					+
APR 87 :	*					+
MAY 87 :	*					+
JUN 87 :	*					+
JUL 87 :	*					+
AUG 87 :	*					+
SEP 87 :	*					+
OCT 87 :	*					+
NOV 87 :	*					+
DEC 87 :	*					+
JAN 88 :	*					+
FEB 88 :	*					+
MAR 88 :	*					+
APR 88 :	*					+
MAY 88 :	*					+
JUN 88 :	*					+
JUL 88 M :	*					
AUG 88 M :	*					
SEP 88 M :	*					
OCT 88 M :	*					
NOV 88 M :	*					
DEC 88 M :	*					

\* = simulated water levels

+ = observed water levels

M = observed data missing

(if observed agrees with simulated, only a \* is printed)

Comments: Well located in cell with several intense ground water uses, affected by cell wide averaging.

Water Levels in Feet, Datum NGVD

	13	23	33	43	53	63
	+.....+.....+.....+.....+.....+					
JAN 86 :		*				
FEB 86 :		*				
MAR 86 :		*				
APR 86 :		++				
MAY 86 :		++				
JUN 86 :			**			
JUL 86 :		++				
AUG 86 :		*				
SEP 86 :		*				
OCT 86 :		+ *				
NOV 86 :		++				
DEC 86 :		++				
JAN 87 :		++				
FEB 87 :		++				
MAR 87 :		*				
APR 87 :		++				
MAY 87 :		++				
JUN 87 :		++				
JUL 87 :		*				
AUG 87 :		++				
SEP 87 :		++				
OCT 87 :		++				
NOV 87 :		++				
DEC 87 :		++				
JAN 88 :		*				
FEB 88 :		*				
MAR 88 :		*				
APR 88 :		++				
MAY 88 :		++				
JUN 88 :		+ *				
JUL 88 :		++				
AUG 88 :		++				
SEP 88 :		++				
OCT 88 :		*				
NOV 88 :		*+				
DEC 88 :		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is plotted)

Comments: none

Water Levels in Feet, Datum NGVD

	6	16	26	36	46	56
	+.....+.....+.....+.....+.....+					
JAN 86 :		+	*			
FEB 86 :		+	*			
MAR 86 :		+	*			
APR 86 :		+	*			
MAY 86 :		+	*			
JUN 86 :	+					*
JUL 86 :		+				*
AUG 86 :			+			*
SEP 86 :			+			*
OCT 86 :		+				*
NOV 86 :		+				*
DEC 86 :		+				*
JAN 87 :		+				*
FEB 87 :		+				*
MAR 87 :		+				*
APR 87 :		+				*
MAY 87 :		+				*
JUN 87 :	+					*
JUL 87 :		+				*
AUG 87 :		+				*
SEP 87 :		+				*
OCT 87 :	+					*
NOV 87 :			+			*
DEC 87 :		+				*
JAN 88 :		+				*
FEB 88 :		+				*
MAR 88 :		+				*
APR 88 :	+					*
MAY 88 :	+		*			
JUN 88 :	+					*
JUL 88 :		+				*
AUG 88 M						*
SEP 88 :		+				*
OCT 88 :	+					*
NOV 88 :	+					*
DEC 88 :	+					*

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located in corner of model with specified head cells on two sides.

Water Levels in Feet, Datum NGVD

	4	14	24	34	44	54
	+.....+.....+.....+.....+.....+					
JAN 86 :	+	*				
FEB 86 :	+	*				
MAR 86 :	+	*				
APR 86 M		*				
MAY 86 M		*				
JUN 86 M			*			
JUL 86 M			*			
AUG 86 M			*			
SEP 86 M			*			
OCT 86 :		+	*			
NOV 86 M			*			
DEC 86 M			*			
JAN 87 :	+		*			
FEB 87 :	+		*			
MAR 87 :	+		*			
APR 87 :	+		*			
MAY 87 :		+	*			
JUN 87 :	+		*			
JUL 87 :	+		*			
AUG 87 :	+		*			
SEP 87 :	+		*			
OCT 87 :		+	*			
NOV 87 :		+	*			
DEC 87 :		+	*			
JAN 88 :		+	*			
FEB 88 :		+	*			
MAR 88 :		+	*			
APR 88 :	+		*			
MAY 88 :	+		*			
JUN 88 :		+	*			
JUL 88 :		+	*			
AUG 88 :		+	*			
SEP 88 :			+	*		
OCT 88 :	+		*			
NOV 88 :	+		*			
DEC 88 :	+		*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: Well located near canal, affected by cell wide averaging.

Water Levels in Feet, Datum NGVD

	22	32	42	52	62	72
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*+					
MAR 86 :	* +					
APR 86 :	* +					
MAY 86 M *						
JUN 86 M *	*					
JUL 86 M *	*					
AUG 86 M *	*					
SEP 86 M *	*					
OCT 86 :	* +					
NOV 86 :	* +					
DEC 86 :	* +					
JAN 87 :	* +					
FEB 87 :	* +					
MAR 87 :	* +					
APR 87 :	* +					
MAY 87 :	* +					
JUN 87 :	*+					
JUL 87 :	* +					
AUG 87 :	*+					
SEP 87 :	*+					
OCT 87 :	* +					
NOV 87 :	*+					
DEC 87 :	* +					
JAN 88 :	* +					
FEB 88 :	* +					
MAR 88 :	* +					
APR 88 :	* +					
MAY 88 :	* +					
JUN 88 :	* +					
JUL 88 :	*+					
AUG 88 M *	*					
SEP 88 :	* +					
OCT 88 :	* +					
NOV 88 :	* +					
DEC 88 :	* +					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	19	29	39	49	59	69
	+.....+.....+.....+.....+.....+					
JAN 86 :						
FEB 86 :						
MAR 86 :						
APR 86 :						
MAY 86 M :						
JUN 86 M :						
JUL 86 M :						
AUG 86 M :						
SEP 86 M :						
OCT 86 :						
NOV 86 :						
DEC 86 :						
JAN 87 :						
FEB 87 :						
MAR 87 :						
APR 87 :						
MAY 87 :						
JUN 87 :						
JUL 87 :						
AUG 87 :						
SEP 87 :						
OCT 87 :						
NOV 87 :						
DEC 87 :						
JAN 88 :						
FEB 88 :						
MAR 88 :						
APR 88 :						
MAY 88 :						
JUN 88 :						
JUL 88 :						
AUG 88 :						
SEP 88 :						
OCT 88 :						
NOV 88 :						
DEC 88 :						

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	13	23	33	43	53	63
	+.....+.....+.....+.....+.....+					
JAN 86 :	+ *					
FEB 86 :	+ *					
MAR 86 :	+ *					
APR 86 :	*					
MAY 86 :	+	*				
JUN 86 :	+ *					
JUL 86 :	+ *					
AUG 86 :	+	*				
SEP 86 :	+ *					
OCT 86 :	+ *					
NOV 86 :	+	*				
DEC 86 :	+ *					
JAN 87 :	+	*				
FEB 87 :	+	*				
MAR 87 :	+	*				
APR 87 :	*					
MAY 87 :	+	*				
JUN 87 :	*					
JUL 87 :	+ *					
AUG 87 :	+	*				
SEP 87 :	+	*				
OCT 87 :	+	*				
NOV 87 :	+ *					
DEC 87 :	+ *					
JAN 88 :	+	*				
FEB 88 :	+	*				
MAR 88 :	+	*				
APR 88 :	*					
MAY 88 :	+	*				
JUN 88 :	*					
JUL 88 :	*	+				
AUG 88 :	*					
SEP 88 :	+	*				
OCT 88 :	*					
NOV 88 :	+	*				
DEC 88 :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	21	31	41	51	61	71
	+.....+.....+.....+.....+.....+					
JAN 86 :	*	+				
FEB 86 :	*	+				
MAR 86 :	*	+				
APR 86 :	*	+				
MAY 86 M :	*					
JUN 86 M :	*					
JUL 86 M :	*					
AUG 86 M :	*					
SEP 86 M :	*					
OCT 86 :	*	+				
NOV 86 :	*	+				
DEC 86 :	*	+				
JAN 87 :	*	+				
FEB 87 :	*	+				
MAR 87 :	*	+				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*	+				
AUG 87 :	*	+				
SEP 87 :	*	+				
OCT 87 :	*	+				
NOV 87 :	*	+				
DEC 87 :	*	+				
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 :	*	+				
APR 88 :	*	+				
MAY 88 :	*+					
JUN 88 :	*					
JUL 88 :	*+					
AUG 88 :	*+					
SEP 88 :	*+					
OCT 88 :	*+					
NOV 88 :	*+					
DEC 88 :	*+					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	19	29	39	49	59	69
	+.....+.....+.....+.....+.....+					
JAN 86 :						
FEB 86 :	*	+				
MAR 86 :	*	+				
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :	+	*				
JUL 86 :	*	+				
AUG 86 :	*	+				
SEP 86 :	*	+				
OCT 86 :	*	+				
NOV 86 :	*	+				
DEC 86 :	*	+				
JAN 87 :	*	+				
FEB 87 :	*	+				
MAR 87 :	*	+				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*					
AUG 87 :	*	+				
SEP 87 :	*	+				
OCT 87 :	*	+				
NOV 87 :	*	+				
DEC 87 :	*	+				
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 :	*	+				
APR 88 :	*	+				
MAY 88 :	*	+				
JUN 88 :	*	+				
JUL 88 :	*	+				
AUG 88 :	*	+				
SEP 88 :	*	+				
OCT 88 :	*	+				
NOV 88 :	*					
DEC 88 :	*	+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	14	24	34	44	54	64
	+.....+.....+.....+.....+.....+					
JAN 86 :		*	+			
FEB 86 :		*	+			
MAR 86 :		*	+			
APR 86 :	*		+			
MAY 86 :	*	+				
JUN 86 :		+	*			
JUL 86 :			*			
AUG 86 :		*	+			
SEP 86 :		*	+			
OCT 86 :		*	+			
NOV 86 :		*	+			
DEC 86 :		*	+			
JAN 87 :		*	+			
FEB 87 :		*	+			
MAR 87 :		*	+			
APR 87 :	*		+			
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*	+				
AUG 87 :	*	+				
SEP 87 :		*	+			
OCT 87 :		*	+			
NOV 87 :		*	+			
DEC 87 :		*	+			
JAN 88 :		*	+			
FEB 88 :		*	+			
MAR 88 :	*		+			
APR 88 :	*		+			
MAY 88 :	*	+				
JUN 88 :	*		+			
JUL 88 :	*		+			
AUG 88 :	*		+			
SEP 88 M	*					
OCT 88 :	*	+				
NOV 88 :	*	+				
DEC 88 :	*	+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86 :	+	*				
FEB 86 :	+	*				
MAR 86 :	+	*				
APR 86 :	+	*				
MAY 86 :	+	*				
JUN 86 :	+	*				
JUL 86 :	+	*				
AUG 86 :	+	*				
SEP 86 :	+	*				
OCT 86 :	+	*				
NOV 86 :	+	*				
DEC 86 :	+	*				
JAN 87 :	+	*				
FEB 87 :	+	*				
MAR 87 :	+	*				
APR 87 :	+	*				
MAY 87 :	+	*				
JUN 87 :	+	*				
JUL 87 :	+	*				
AUG 87 :	+	*				
SEP 87 :	+	*				
OCT 87 :	+	*				
NOV 87 :	+	*				
DEC 87 :	+	*				
JAN 88 :	+	*				
FEB 88 :	+	*				
MAR 88 :	+	*				
APR 88 :	+	*				
MAY 88 :	+	*				
JUN 88 :	+	*				
JUL 88 :	+	*				
AUG 88 :	+	*				
SEP 88 :	+	*				
OCT 88 :	+	*				
NOV 88 :	+	*				
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: Observed water levels exhibit high variation coefficient.

Water Levels in Feet, Datum NGVD

	12	22	32	42	52	62
	+.....+.....+.....+.....+.....+					
JAN 86 :	*	+				
FEB 86 :	*	+				
MAR 86 :	*	+				
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :		++				
JUL 86 :		*	+			
AUG 86 :		*	+			
SEP 86 :		++				
OCT 86 :		++				
NOV 86 :		*	+			
DEC 86 :		*	+			
JAN 87 :		*	+			
FEB 87 :		*	+			
MAR 87 :		**	+			
APR 87 :		*	+			
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*	+				
AUG 87 :	*	+				
SEP 87 :		*	+			
OCT 87 :		++				
NOV 87 :		*	+			
DEC 87 :		*	+			
JAN 88 :		*	+			
FEB 88 :		*	+			
MAR 88 :		*	+			
APR 88 :	*	+				
MAY 88 :	*	+				
JUN 88 :		*	+			
JUL 88 :		*	+			
AUG 88 :		*	+			
SEP 88 M		*				
OCT 88 :		++				
NOV 88 :		++				
DEC 88 :		++				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	22	32	42	52	62	72
	+.....+.....+.....+.....+.....+					
JAN 86 M	*					
FEB 86 M	*					
MAR 86 M	*					
APR 86 M	*					
MAY 86 M	*					
JUN 86 M	*					
JUL 86 M	*					
AUG 86 M	*					
SEP 86 M	*					
OCT 86 M	*					
NOV 86 M	*					
DEC 86 M	*					
JAN 87 M	*					
FEB 87 M	*					
MAR 87 M	*					
APR 87 M	*					
MAY 87 M	*					
JUN 87 M	*					
JUL 87 M	*					
AUG 87 M	*					
SEP 87 M	*					
OCT 87 :	**					
NOV 87 :	**					
DEC 87 :	**					
JAN 88 M	*					
FEB 88 :	* +					
MAR 88 :	**					
APR 88 :	**					
MAY 88 :	+*					
JUN 88 :	+*					
JUL 88 :	*					
AUG 88 :	*					
SEP 88 :	**					
OCT 88 :	**					
NOV 88 :	*					
DEC 88 :	**					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	22	32	42	52	62	72
	+.....+.....+.....+.....+.....+					
JAN 86 M	*					
FEB 86 M	*					
MAR 86 M	*					
APR 86 M	*					
MAY 86 M	*					
JUN 86 M	*					
JUL 86 M	*					
AUG 86 M	*					
SEP 86 M	*					
OCT 86 M	*					
NOV 86 M	*					
DEC 86 M	*					
JAN 87 M	*					
FEB 87 M	*					
MAR 87 M	*					
APR 87 M	*					
MAY 87 M	*					
JUN 87 M	*					
JUL 87 M	*					
AUG 87 M	*					
SEP 87 M	*					
OCT 87 :	*+					
NOV 87 :	*+					
DEC 87 :	* +					
JAN 88 M	*					
FEB 88 :	* +					
MAR 88 :	*+					
APR 88 :	*+					
MAY 88 :	*					
JUN 88 :	+*					
JUL 88 :	* +					
AUG 88 :	+*					
SEP 88 :	*					
OCT 88 :	*+					
NOV 88 :	*					
DEC 88 :	*+					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	18	28	38	48	58	68
	+.....+.....+.....+.....+.....+					
JAN 86 M		*				
FEB 86 M		*				
MAR 86 M		*				
APR 86 M		*				
MAY 86 M		*				
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 M		*				
NOV 86 M		*				
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 M		*				
MAY 87 M		*				
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :	+	*				
NOV 87 :		+	*			
DEC 87 :	+	*				
JAN 88 :		+	*			
FEB 88 :		+	*			
MAR 88 :		+	*			
APR 88 :	+	*				
MAY 88 :		*				
JUN 88 :	+	*				
JUL 88 :		+	*			
AUG 88 :		+	*			
SEP 88 M		*				
OCT 88 :	+	*				
NOV 88 :		+	*			
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	14	24	34	44	54	64
	+.....+.....+.....+.....+.....+					
JAN 86 M	*					
FEB 86 M	*					
MAR 86 M	*					
APR 86 M	*					
MAY 86 M	*					
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 M		*				
NOV 86 M		*				
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 M		*				
MAY 87 M		*				
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :		*+				
NOV 87 :		* +				
DEC 87 :		* +				
JAN 88 :		* +				
FEB 88 :		* +				
MAR 88 :		* +				
APR 88 :		* +				
MAY 88 :		*+				
JUN 88 :		+*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 :		*+				
OCT 88 :		*				
NOV 88 :		*				
DEC 88 :		*+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	11	21	31	41	51	61
	+.....+.....+.....+.....+.....+					
JAN 86	M	*				
FEB 86	M	*				
MAR 86	M	*				
APR 86	M	*				
MAY 86	M	*				
JUN 86	M		*			
JUL 86	M		*			
AUG 86	M			*		
SEP 86	M		*			
OCT 86	M		*			
NOV 86	M		*			
DEC 86	M		*			
JAN 87	M		*			
FEB 87	M		*			
MAR 87	M		*			
APR 87	M	*				
MAY 87	M	*				
JUN 87	M	*				
JUL 87	M	*				
AUG 87	M	*				
SEP 87	M		*			
OCT 87	:	+	*			
NOV 87	:	+	*			
DEC 87	:	+	*			
JAN 88	:	+	*			
FEB 88	:	+	*			
MAR 88	:	+	*			
APR 88	:	+	*			
MAY 88	:	+	*			
JUN 88	:	+	*			
JUL 88	:	+	*			
AUG 88	:	+	*			
SEP 88	:	+	*			
OCT 88	:	+	*			
NOV 88	:	+	*			
DEC 88	:	+	*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	10	20	30	40	50	60
	+.....+.....+.....+.....+.....+					
JAN 86 M		*				
FEB 86 M		*				
MAR 86 M		*				
APR 86 M		*				
MAY 86 M		*				
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 M		*				
NOV 86 M		*				
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 M		*				
MAY 87 M		*				
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :		+	*			
NOV 87 :		+	*			
DEC 87 :		+	*			
JAN 88 :		+	*			
FEB 88 :		+	*			
MAR 88 :		*				
APR 88 :		*	+	*		
MAY 88 :		*				
JUN 88 :		*				
JUL 88 :		*				
AUG 88 :		+	*			
SEP 88 M		*				
OCT 88 :		+	*			
NOV 88 :		+	*			
DEC 88 :		+	*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86	M	*				
FEB 86	M	*				
MAR 86	M	*				
APR 86	M	*				
MAY 86	M	*				
JUN 86	M	*				
JUL 86	M	*				
AUG 86	M	*				
SEP 86	M	*				
OCT 86	M	*				
NOV 86	M	*				
DEC 86	M	*				
JAN 87	M	*				
FEB 87	M	*				
MAR 87	M	*				
APR 87	M	*				
MAY 87	M	*				
JUN 87	M	*				
JUL 87	M	*				
AUG 87	M	*				
SEP 87	M	*				
OCT 87	:	+	*			
NOV 87	:	+	*			
DEC 87	:	+	*			
JAN 88	:	+	*			
FEB 88	:	+	*			
MAR 88	:	+	*			
APR 88	:	+	*			
MAY 88	:	+	*			
JUN 88	:	+	*			
JUL 88	:	+	*			
AUG 88	:	+	*			
SEP 88	:	+	*			
OCT 88	:	+	*			
NOV 88	:	+	*			
DEC 88	:	+	*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: Well located in Everglades Agricultural Area, water levels artificially maintained.

STATION: C-1074            LAYER: 2        ROW: 31            COLUMN: 25

Water Levels in Feet, Datum NGVD

	15	25	35	45	55	65
	+.....+.....+.....+.....+.....+					
JAN 86 :		*	+			
FEB 86 :		*	+			
MAR 86 :		*	+			
APR 86 M :		*				
MAY 86 M :	*					
JUN 86 M :		*				
JUL 86 M :		*				
AUG 86 M :		*				
SEP 86 M :		*				
OCT 86 M :		*				
NOV 86 M :		*				
DEC 86 M :		*				
JAN 87 :		*	+			
FEB 87 :		*	+			
MAR 87 :		*	+			
APR 87 :	*		+			
MAY 87 :	*		+			
JUN 87 :		*	+			
JUL 87 :		**	+			
AUG 87 :		**	+			
SEP 87 :		**	+			
OCT 87 :		**	+			
NOV 87 :		*	+			
DEC 87 :		*	+			
JAN 88 :		*	+			
FEB 88 :		*	+			
MAR 88 :		*	+			
APR 88 :	*		+			
MAY 88 :	*		+			
JUN 88 :		*	+			
JUL 88 :		*				
AUG 88 :		*				
SEP 88 :		**	+			
OCT 88 :		*				
NOV 88 :		*				
DEC 88 :		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agrees with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	21	31	41	51	61	71
	+.....+.....+.....+.....+.....+					
JAN 86 :		*+				
FEB 86 :		* +				
MAR 86 :		* +				
APR 86 :	*	+				
MAY 86 M *						
JUN 86 M *						
JUL 86 M *						
AUG 86 M *						
SEP 86 M *						
OCT 86 M *						
NOV 86 M *						
DEC 86 M *						
JAN 87 :		* +				
FEB 87 :		* +				
MAR 87 :		* +				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :	*	+				
JUL 87 :	*	+				
AUG 87 :		*+				
SEP 87 :		* +				
OCT 87 :		* +				
NOV 87 :		* +				
DEC 87 :		* +				
JAN 88 :	*	+				
FEB 88 :	*	+				
MAR 88 M *						
APR 88 M *						
MAY 88 M *						
JUN 88 M *						
JUL 88 M *						
AUG 88 M *						
SEP 88 M *						
OCT 88 M *						
NOV 88 M *						
DEC 88 M *						

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

## Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86 :		+		*		
FEB 86 :		+		*		
MAR 86 :			+	*		
APR 86 :			+	*		
MAY 86 :	+			*		
JUN 86 :		+		*		
JUL 86 :				*		
AUG 86 :				++		
SEP 86 :			+	*		
OCT 86 :			+	*		
NOV 86 :		+		*		
DEC 86 :		+		*		
JAN 87 :			+	*		
FEB 87 :			+	*		
MAR 87 :				++		
APR 87 :	+			*		
MAY 87 :				*		
JUN 87 :				++		
JUL 87 :				*		
AUG 87 :				++		
SEP 87 :				*		
OCT 87 :				*		
NOV 87 :				*		
DEC 87 :			+	*		
JAN 88 :			+	*		
FEB 88 :		+		*		
MAR 88 :	+			*		
APR 88 :	+			*		
MAY 88 :				*		
JUN 88 :		+		*		
JUL 88 :				*		
AUG 88 :				++		
SEP 88 :		+		*		
OCT 88 :	+			*		
NOV 88 :	+			*		
DEC 88 :	+			*		

\* = simulated water levels

+ = observed water levels

M = observed data missing

(if observed agree with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86 :	+	*				
FEB 86 :	+	*				
MAR 86 :	+	*				
APR 86 :	+	*				
MAY 86 :		**				
JUN 86 :		*+				
JUL 86 :		* +				
AUG 86 :		**				
SEP 86 :		+ *				
OCT 86 :		+ *				
NOV 86 :	+	*				
DEC 86 :		*	+			
JAN 87 :	+	*				
FEB 87 :		**				
MAR 87 :		+ *				
APR 87 :	+	*				
MAY 87 :		*				
JUN 87 :		*				
JUL 87 :		*				
AUG 87 :		*				
SEP 87 :		*				
OCT 87 :		*				
NOV 87 :		*				
DEC 87 M		*				
JAN 88 :		**				
FEB 88 :	+	*				
MAR 88 :	+	*				
APR 88 :	+	*				
MAY 88 :	+	*				
JUN 88 :	+	*				
JUL 88 :	+	*				
AUG 88 :		**				
SEP 88 :		*				
OCT 88 :	+	*				
NOV 88 :	+	*				
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	-8	2	12	22	32	42
	+.....+.....+.....+.....+.....+					
JAN 86 :			+			*
FEB 86 :			+			*
MAR 86 :				+		*
APR 86 :		+				*
MAY 86 :		+				*
JUN 86 :					+	*
JUL 86 :					+	*
AUG 86 :						*
SEP 86 :			+			*
OCT 86 :			+			*
NOV 86 :		+				*
DEC 86 :			+			*
JAN 87 :				+		*
FEB 87 :					+	*
MAR 87 :					+	*
APR 87 :		+				*
MAY 87 :					+	*
JUN 87 :					+	*
JUL 87 :					+	*
AUG 87 :			+			*
SEP 87 :				+		*
OCT 87 :			+			*
NOV 87 :				+		*
DEC 87 :				+		*
JAN 88 :					+	*
FEB 88 :				+		*
MAR 88 :				+		*
APR 88 :		+				*
MAY 88 :			+			*
JUN 88 :		+				*
JUL 88 :					+	*
AUG 88 :						*
SEP 88 :			+			*
OCT 88 :		+				*
NOV 88 :		+				*
DEC 88 :		+				*

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: Unreliable observed data.

Water Levels in Feet, Datum NGVD

	8	18	28	38	48	58
	+.....+.....+.....+.....+.....+					
JAN 86 :		+	*			
FEB 86 :		+	*			
MAR 86 :		+	*			
APR 86 :		*	+			
MAY 86 :	+	*				
JUN 86 :		+	*			
JUL 86 :		*		+		
AUG 86 :		*				+
SEP 86 :		*	+			
OCT 86 :		*	+			
NOV 86 :		*+				
DEC 86 :		*	+			
JAN 87 :		*+				
FEB 87 :		*			+	
MAR 87 :		*			+	
APR 87 :		*				
MAY 87 :		*				+
JUN 87 :		+	*			
JUL 87 :		*	+			
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :		*		+		
NOV 87 M		*				
DEC 87 M		*				
JAN 88 M		*				
FEB 88 M		*				
MAR 88 M		*				
APR 88 :	+	*				
MAY 88 M		*				
JUN 88 M		*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 :		+	*			
OCT 88 :	+	*				
NOV 88 :		*	+			
DEC 88 :	+	*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	7	17	27	37	47	57
	+.....+.....+.....+.....+.....+					
JAN 86 :		+	*			
FEB 86 :		+	*			
MAR 86 :			*			
APR 86 M			*			
MAY 86 :	+	*				
JUN 86 :			+	*		
JUL 86 :				*		
AUG 86 :			*		+	
SEP 86 :			*		+	
OCT 86 :			*	+		
NOV 86 :			*			
DEC 86 :		+	*			
JAN 87 :			*			
FEB 87 :			+	*		
MAR 87 :			*			
APR 87 :			*	+		
MAY 87 :			*			+
JUN 87 :			+	*		
JUL 87 :			*	+		
AUG 87 :			*	+		
SEP 87 :			+	*		
OCT 87 :			*		+	
NOV 87 :			*			+
DEC 87 :			*			
JAN 88 :			*			
FEB 88 :		+	*			
MAR 88 :			*	+		
APR 88 :	+		*			
MAY 88 :	+		*			
JUN 88 :		+	*			
JUL 88 :			+	*		
AUG 88 :			*			+
SEP 88 :			+	*		
OCT 88 :		+	*			
NOV 88 :		+	*			
DEC 88 :		+	*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	14	24	34	44	54	64
	+.....+.....+.....+.....+.....+					
JAN 86 :			+	*		
FEB 86 :	+		*			
MAR 86 :			+	*		
APR 86 :		+	*			
MAY 86 :		*	+			
JUN 86 :			*	+		
JUL 86 :			*			
AUG 86 :			*	+		
SEP 86 :			*			
OCT 86 :			*	+		
NOV 86 :			*	+		
DEC 86 :			*	+		
JAN 87 :			*	+		
FEB 87 :			*	+		
MAR 87 :			*			
APR 87 :			*	+		
MAY 87 :			*	+		
JUN 87 :			*			
JUL 87 :			*	+		
AUG 87 M			*			
SEP 87 M			*			
OCT 87 :			*			
NOV 87 M			*			
DEC 87 M			*			
JAN 88 M			*			
FEB 88 M			*			
MAR 88 M			*			
APR 88 :			*	+		
MAY 88 M			*			
JUN 88 M			*			
JUL 88 M			*			
AUG 88 M			*			*
SEP 88 :			*	+		
OCT 88 :		+	*			
NOV 88 :		*				
DEC 88 :		+	*			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	9	19	29	39	49	59
	+.....+.....+.....+.....+.....+					
JAN 86 :		*				
FEB 86 :		*				
MAR 86 :		* +				
APR 86 :	*					
MAY 86 :	*		+			
JUN 86 :		* +				
JUL 86 :		*		+		
AUG 86 :		* +				
SEP 86 :		**+				
OCT 86 :		*+				
NOV 86 :		* +				
DEC 86 :		*			+	
JAN 87 :		* +				
FEB 87 :		* +				
MAR 87 :		* +				
APR 87 :	*	+				
MAY 87 :	*		+			
JUN 87 :		**				
JUL 87 :		* +				
AUG 87 :		* +				
SEP 87 :		* +				
OCT 87 :		*		+		
NOV 87 :		*			+	
DEC 87 :		* +				
JAN 88 :		*				
FEB 88 :		**				
MAR 88 :		* +				
APR 88 :	+	*				
MAY 88 :	+	*				
JUN 88 :		+ *				
JUL 88 :		* +				
AUG 88 :		*			+	
SEP 88 :		*				
OCT 88 :	+	*				
NOV 88 :		**				
DEC 88 :		**				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

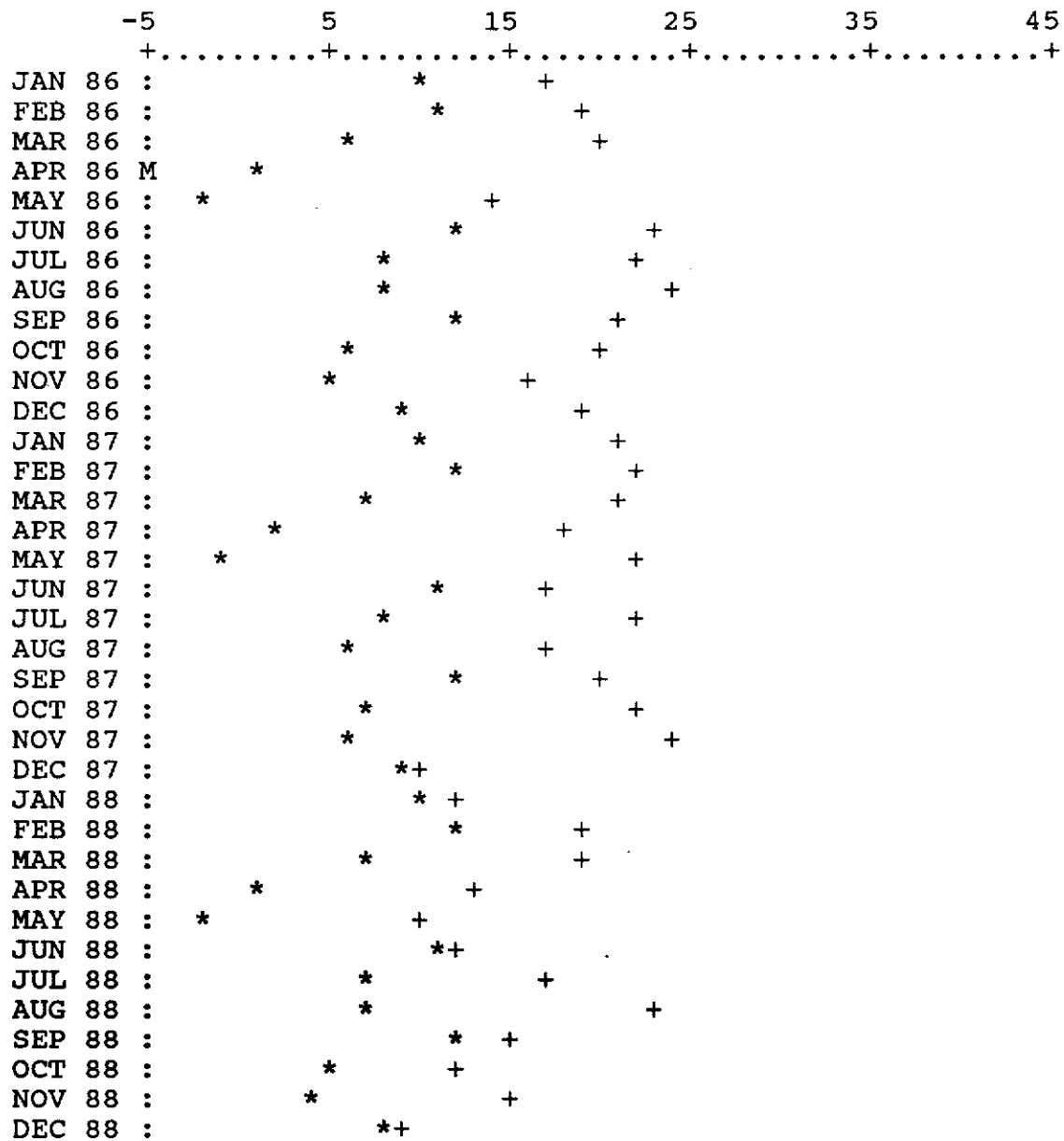
Water Levels in Feet, Datum NGVD

	10	20	30	40	50	60
	+.....+.....+.....+.....+.....+					
JAN 86 M		*				
FEB 86 M		*				
MAR 86 M		*				
APR 86 M	*					
MAY 86 :	*					
JUN 86 M		*				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 M		*				
OCT 86 :	*	+				
NOV 86 M	*					
DEC 86 M		*				
JAN 87 M		*				
FEB 87 M		*				
MAR 87 M		*				
APR 87 :	*	+				
MAY 87 M	*					
JUN 87 M		*				
JUL 87 M		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 M		*				
NOV 87 :	*		+			
DEC 87 M		*				
JAN 88 M		*				
FEB 88 M		*				
MAR 88 M		*				
APR 88 :	++					
MAY 88 M	*					
JUN 88 M		*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 :		*				
OCT 88 :	+	*				
NOV 88 :		++				
DEC 88 :		++				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is plotted)

Comments: Unreliable observed data.

Water Levels in Feet, Datum NGVD



\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is plotted)

Comments: none



Water Levels in Feet, Datum NGVD

	11	21	31	41	51	61
	+.....+.....+.....+.....+.....+					
JAN 86 :		*				
FEB 86 :		+ *				
MAR 86 :		* +				
APR 86 :	*+					
MAY 86 :	*+					
JUN 86 :		+ *				
JUL 86 :		+*				
AUG 86 :		*+				
SEP 86 :		*+				
OCT 86 :		* +				
NOV 86 :		* +				
DEC 86 :		* +				
JAN 87 :		*+				
FEB 87 :		*				
MAR 87 :		* +				
APR 87 :	*				+	
MAY 87 :	* +					
JUN 87 :		+*				
JUL 87 :		*				
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :		* +				
NOV 87 M		*				
DEC 87 M		*				
JAN 88 M		*				
FEB 88 M		*				
MAR 88 M		*				
APR 88 :	* +					
MAY 88 :	+*					
JUN 88 M		*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 :	+ *					
OCT 88 :	+ *					
NOV 88 :		+*				
DEC 88 :	+ *					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

STATION: L-727                      LAYER: 3            ROW: 15            COLUMN: 5

Water Levels in Feet, Datum NGVD

	8	18	28	38	48	58
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*					
MAR 86 :	* +					
APR 86 M :	*					
MAY 86 :	* +					
JUN 86 :	+*					
JUL 86 :	**					
AUG 86 :	* +					
SEP 86 :	**					
OCT 86 :	**					
NOV 86 :	* +					
DEC 86 :	**					
JAN 87 M :	*					
FEB 87 M :	*					
MAR 87 M :	*					
APR 87 :	* +					
MAY 87 M :	*					
JUN 87 M :	*					
JUL 87 M :	*					
AUG 87 M :	*					
SEP 87 M :	*					
OCT 87 :	**					
NOV 87 M :	*					
DEC 87 M :	*					
JAN 88 M :	*					
FEB 88 M :	*					
MAR 88 M :	*					
APR 88 :	* +					
MAY 88 M :	*					
JUN 88 M :	*					
JUL 88 M :	*					
AUG 88 M :	*					
SEP 88 :	*					
OCT 88 :	*					
NOV 88 :	* +					
DEC 88 :	* +					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	13	23	33	43	53	63
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*					
MAR 86 :	*+					
APR 86 :	* +					
MAY 86 :	* +					
JUN 86 :	+ *					
JUL 86 :	*+					
AUG 86 :	*+					
SEP 86 :	*+					
OCT 86 :	*+					
NOV 86 :	* +					
DEC 86 :	*+					
JAN 87 :	*+					
FEB 87 :	*+					
MAR 87 :	*+					
APR 87 :	* +					
MAY 87 :	* +					
JUN 87 :	*					
JUL 87 :	*+					
AUG 87 :	* +					
SEP 87 :	*					
OCT 87 :	*+					
NOV 87 :	*+					
DEC 87 :	*+					
JAN 88 :	*					
FEB 88 :	*+					
MAR 88 :	* +					
APR 88 :	* +					
MAY 88 :	*+					
JUN 88 :	*					
JUL 88 :	*+					
AUG 88 :	*+					
SEP 88 :	+ *					
OCT 88 :	+*					
NOV 88 :	*					
DEC 88 :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	13	23	33	43	53	63
	+.....+.....+.....+.....+.....+					
JAN 86 :		* +				
FEB 86 :		*+				
MAR 86 :		* +				
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :		+*				
JUL 86 :		*+				
AUG 86 :		* +				
SEP 86 :		* +				
OCT 86 :		* +				
NOV 86 :		* +				
DEC 86 :		* +				
JAN 87 :		* +				
FEB 87 :		* +				
MAR 87 :		* +				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :		*+				
JUL 87 :		* +				
AUG 87 :		* +				
SEP 87 :		*+				
OCT 87 :		* +				
NOV 87 :		* +				
DEC 87 :		* +				
JAN 88 :		* +				
FEB 88 :		* +				
MAR 88 :		* +				
APR 88 :	*	+				
MAY 88 :	*	+				
JUN 88 :		*+				
JUL 88 :		* +				
AUG 88 :		* +				
SEP 88 :		*				
OCT 88 :		*+				
NOV 88 :		* +				
DEC 88 :		* +				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

STATION: L-2187      LAYER: 3      ROW: 15      COLUMN: 5

Water Levels in Feet, Datum NGVD

	8	18	28	38	48	58
	+.....+.....+.....+.....+.....+					
JAN 86 :	*					
FEB 86 :	*					
MAR 86 :	* +					
APR 86 :	* +					
MAY 86 :	* +					
JUN 86 :	*+					
JUL 86 :	* +					
AUG 86 :	*+					
SEP 86 :	*					
OCT 86 :	*					
NOV 86 :	* +					
DEC 86 :	* +					
JAN 87 :	*+					
FEB 87 :	*					
MAR 87 :	*+					
APR 87 :	* +					
MAY 87 :	* +					
JUN 87 :	*					
JUL 87 :	* +					
AUG 87 :	*+					
SEP 87 :	*					
OCT 87 :	*+					
NOV 87 :	* +					
DEC 87 :	*					
JAN 88 :	*+					
FEB 88 :	*					
MAR 88 :	* +					
APR 88 M :	*					
MAY 88 M :	*					
JUN 88 M :	*					
JUL 88 M :	*					
AUG 88 M :	*					
SEP 88 M :	*					
OCT 88 M :	*					
NOV 88 M :	*					
DEC 88 M :	*					

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

STATION: HE-557                      LAYER: 3                      ROW: 11                      COLUMN: 9

Water Levels in Feet, Datum NGVD

	1	11	21	31	41	51
	+.....+.....+.....+.....+.....+					
JAN 86 :		* +				
FEB 86 :		* +				
MAR 86 :		* +				
APR 86 :	*	+ +				
MAY 86 :	*	+ +				
JUN 86 :		+*				
JUL 86 :		* +				
AUG 86 :		* +				
SEP 86 :		* +				
OCT 86 :		* +				
NOV 86 :		* +				
DEC 86 :		* +				
JAN 87 :		* +				
FEB 87 :		* +				
MAR 87 :		* +				
APR 87 :	*	+ +				
MAY 87 :	*	+ +				
JUN 87 :		+ *				
JUL 87 :		* +				
AUG 87 :		* +				
SEP 87 :		* +				
OCT 87 :		* +				
NOV 87 :		* +				
DEC 87 :		* +				
JAN 88 :		*+				
FEB 88 :		* +				
MAR 88 :		* +				
APR 88 :	*	+ +				
MAY 88 :	* +	+ +				
JUN 88 :		+*				
JUL 88 :		* +				
AUG 88 :		* +				
SEP 88 :		+ *				
OCT 88 :		+*				
NOV 88 :		* +				
DEC 88 :		*+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	2	12	22	32	42	52
	+.....+.....+.....+.....+.....+					
JAN 86 :		* +				
FEB 86 :		*+				
MAR 86 :		* +				
APR 86 M :	*					
MAY 86 :	*	+				
JUN 86 :		*+				
JUL 86 :		*+				
AUG 86 :		* +				
SEP 86 :		*+				
OCT 86 :		*+				
NOV 86 :		* +				
DEC 86 :		* +				
JAN 87 :		* +				
FEB 87 :		*+				
MAR 87 :		* +				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :		*+				
JUL 87 :		* +				
AUG 87 :		*+				
SEP 87 :		*+				
OCT 87 :		*+				
NOV 87 :		* +				
DEC 87 :		* +				
JAN 88 :		* +				
FEB 88 :		*+				
MAR 88 :		* +				
APR 88 :	*	+				
MAY 88 :	*	+				
JUN 88 :		*+				
JUL 88 :		* +				
AUG 88 :		* +				+
SEP 88 :		*+				
OCT 88 :		*+				
NOV 88 :		* +				
DEC 88 :		* +				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	-1	9	19	29	39	49
	+.....+.....+.....+.....+.....+					
JAN 86 :		* +				
FEB 86 :		* +				
MAR 86 :		* +				
APR 86 :	*	+				
MAY 86 :	*		+			
JUN 86 :		* +				
JUL 86 :		* +				
AUG 86 :		*	+			
SEP 86 :			*+			
OCT 86 :		* +				
NOV 86 :		* +				
DEC 86 :		*		+		
JAN 87 :		* +				
FEB 87 :		* +				
MAR 87 :		* +				
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :		*				
JUL 87 :		* +				
AUG 87 :		* +				
SEP 87 :			*+			
OCT 87 :		* +				
NOV 87 :		* +				
DEC 87 :		* +				
JAN 88 :		* +				
FEB 88 :		+ *				
MAR 88 :		* +				
APR 88 M	*					
MAY 88 M	*					
JUN 88 M		*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 M			*			
OCT 88 M		*				
NOV 88 M		*				
DEC 88 M		*				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none



Water Levels in Feet, Datum NGVD

	-1	9	19	29	39	49
	+.....+.....+.....+.....+.....+					
JAN 86 :		*	+			
FEB 86 :		*	+			
MAR 86 :		*				+
APR 86 :	*					+
MAY 86 :	*		+			
JUN 86 :			+	*		
JUL 86 :			*			+
AUG 86 :			*			+
SEP 86 :				*		+
OCT 86 :		*				+
NOV 86 :		*				+
DEC 86 :		*				+
JAN 87 :		*	+			
FEB 87 :		*				+
MAR 87 :		*				+
APR 87 :	*					+
MAY 87 :	*					+
JUN 87 :			*	+		
JUL 87 :		*				+
AUG 87 :		*				+
SEP 87 :			*			+
OCT 87 :		*				+
NOV 87 :		*				+
DEC 87 :		*				+
JAN 88 :		*				+
FEB 88 :		*				+
MAR 88 :		*				+
APR 88 :	*			+		
MAY 88 :	*		+			
JUN 88 :			*	+		
JUL 88 :		*				+
AUG 88 :		*				+
SEP 88 :		*				
OCT 88 :		*	+			
NOV 88 :	*					+
DEC 88 :		*	+			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	-3	7	17	27	37	47
	+.....+.....+.....+.....+.....+					
JAN 86 :		*	+			
FEB 86 :		*	+			
MAR 86 :		*		+		
APR 86 :	*			+		
MAY 86 :	*		+			
JUN 86 :			*	+		
JUL 86 :		*		+		
AUG 86 :		*			+	
SEP 86 :			*		+	
OCT 86 :		*			+	
NOV 86 :	*				+	
DEC 86 :		*			+	
JAN 87 :		*			+	
FEB 87 :		*	+			
MAR 87 :		*			+	
APR 87 :	*				+	
MAY 87 :	*				+	
JUN 87 :		*			+	
JUL 87 :		*			+	
AUG 87 :		*			+	
SEP 87 :			*		+	
OCT 87 :		*			+	
NOV 87 :		*			+	
DEC 87 :		*			+	
JAN 88 :		*	+			
FEB 88 :		*	+			
MAR 88 :		*			+	
APR 88 :	*				+	
MAY 88 :	*		+			
JUN 88 :		*	+			
JUL 88 :		*			+	
AUG 88 :		*			+	
SEP 88 :		*	+			
OCT 88 :	*				+	
NOV 88 :	*				+	
DEC 88 :		*			+	

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	3	13	23	33	43	53
	+.....+.....+.....+.....+.....+					
JAN 86 M		*				
FEB 86 M		*				
MAR 86 M		*				
APR 86 M	*					
MAY 86 M	*					
JUN 86 :		+ *				
JUL 86 M		*				
AUG 86 M		*				
SEP 86 :		+ *				
OCT 86 :		+*				
NOV 86 :		*				
DEC 86 :		+*				
JAN 87 :		+*				
FEB 87 :		+ *				
MAR 87 :		**+				
APR 87 :		*+				
MAY 87 :		**+				
JUN 87 :		+ *				
JUL 87 :		+ *				
AUG 87 :		+*				
SEP 87 :		+ *				
OCT 87 :		* +				
NOV 87 :		**+				
DEC 87 :		*				
JAN 88 :		*				
FEB 88 :		+ *				
MAR 88 :		* +				
APR 88 :		*+				
MAY 88 :		* +				
JUN 88 :		+ *				
JUL 88 :		* +				
AUG 88 :		* +				
SEP 88 :		+*				
OCT 88 :		+*				
NOV 88 :		**+				
DEC 88 :		**+				

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments: none

Water Levels in Feet, Datum NGVD

	1	11	21	31	41	51
	+.....+.....+.....+.....+.....+					
JAN 86 :		+	*			
FEB 86 :		+	*			
MAR 86 :		*	+			
APR 86 :	*	+				
MAY 86 :	*	+				
JUN 86 :		+	*			
JUL 86 :		*	+			
AUG 86 :		*	+			
SEP 86 :		*	+			
OCT 86 :		*	+			
NOV 86 :	*	+				
DEC 86 :	*	+				
JAN 87 :		*	+			
FEB 87 :		*				
MAR 87 :		*	+			
APR 87 :	*	+				
MAY 87 :	*	+				
JUN 87 :		*				
JUL 87 :		*	+			
AUG 87 M		*				
SEP 87 M		*				
OCT 87 :		*	+			
NOV 87 M		*				
DEC 87 M		*				
JAN 88 M		*				
FEB 88 M		*				
MAR 88 M		*				
APR 88 :	*	+				
MAY 88 M	*					
JUN 88 M		*				
JUL 88 M		*				
AUG 88 M		*				
SEP 88 :		*				
OCT 88 :	*	+				
NOV 88 :	*	+				
DEC 88 :		*	+			

\* = simulated water levels  
 + = observed water levels  
 M = observed data missing  
 (if observed agree with simulated, only a \* is printed)

Comments:            none