Lee County
Southwest Florida

Board of County Commissioners

April 21, 2022

Ray Eubanks, Plan Processing Administrator
State Land Planning Agency
Caldwell Building
107 East Madison – MSC 160
Tallahassee, FL. 32399-0800

Re: Lee County ESR 22-02, Amendment to the Lee Plan, Adoption Submission Package

In accordance with the provisions of F.S. Chapter 163, this submission package constitutes the adoption of Comprehensive Plan Amendments known locally as CPA2021-00006 (Wellfield Protection Zone Update). The adopted amendment is being submitted through the expedited state review process as described in F.S. Chapter 163.3184(3). The amendments are as follows:

> ***CPA2021-00006, Wellfield Protection Zone Update:*** Amend the Wellfield Protection Zones in the Lee Plan to reflect updated iso-travel time contours for existing and planned production wells as required by § 163.3177(6)(a)10.c.(I), Fla. Stat. (Adopted by Lee County Ordinance #22-09)

The Lee County Board of County Commissioners held an adoption hearing to adopt the above identified ordinances for the plan amendments on April 21, 2022. As required by F.S. 163.3184(3), the final action on this amendment was completed within 180 days of the receipt of the state land planning agency's report.

The name, title, address, telephone number, and email address of the person for the local government who is most familiar with the proposed amendment is as follows:

Mr. Brandon Dunn, Principal Planner
Lee County Planning Section
P.O. Box 398
Fort Myers, Florida 33902-0398
(239) 533-8585
Email: bdunn@leegov.com

By copy of this letter and its attachments, I certify that this amendment and supporting data and analysis have been sent on this date to the agencies listed below.

Sincerely,
Lee County Department of Community Development

Mikki Rozdolski
Manager, Community Development Operations
Planning Section

All documents and reports attendant to this transmittal are also being sent by copy of this cover in an electronic format to:

Comprehensive Plan Review
Department of Agriculture and Consumer Services

Mark Weigly
Department of Education

Plan Review
Department of Environmental Protection

Jason Aldridge
Florida Department of State

Scott Sanders
Florida Fish and Wildlife Conservation Commission

Community Planning Services
FDOT District One

Margaret Wuerstle
Southwest Florida Regional Planning Council

Terry Manning, AICP, Senior Planner, Intergovernmental Coordination Section
South Florida Water Management District

LEE COUNTY ORDINANCE NO. 22-09
Wellfield Protection Zone Update
(CPA2021-00006)

AN ORDINANCE AMENDING THE LEE COUNTY COMPREHENSIVE PLAN, COMMONLY KNOWN AS THE "LEE PLAN," ADOPTED BY ORDINANCE NO. 89-02, AS AMENDED, SO AS TO ADOPT AMENDMENT PERTAINING TO THE WELLFIELD PROTECTION ZONE UPDATE (CPA2021-00006) APPROVED DURING A PUBLIC HEARING; PROVIDING FOR PURPOSE, INTENT, AND SHORT TITLE; AMENDMENTS TO ADOPTED MAP AND TEXT; LEGAL EFFECT OF "THE LEE PLAN"; PERTAINING TO MODIFICATIONS THAT MAY ARISE FROM CONSIDERATION AT PUBLIC HEARING; GEOGRAPHICAL APPLICABILITY; SEVERABILITY, CODIFICATION, SCRIVENER'S ERRORS, AND AN EFFECTIVE DATE.

WHEREAS, the Lee County Comprehensive Plan ("Lee Plan") and Chapter XIII, provides for adoption of amendments to the Plan in compliance with State statutes and in accordance with administrative procedures adopted by the Board of County Commissioners ("Board"); and,

WHEREAS, the Board, in accordance with Section 163.3181, Florida Statutes, and Lee County Administrative Code AC-13-6 provide an opportunity for the public to participate in the plan amendment public hearing process; and,

WHEREAS, the Lee County Local Planning Agency ("LPA") held a public hearing on the proposed amendment in accordance with Florida Statutes and the Lee County Administrative Code on December 13, 2021, and,

WHEREAS, the Board held a public hearing for the transmittal of the proposed amendment on January 19, 2022. At that hearing, the Board approved a motion to send, and did later send, proposed amendment pertaining to Wellfield Protection Zone Update (CPA2021-00006) to the reviewing agencies set forth in Section 163.3184(1)(c), F.S. for review and comment; and,

WHEREAS, at the January 19, 2022 meeting, the Board announced its intention to hold a public hearing after the receipt of the reviewing agencies' written comments; and,

WHEREAS, on April 20, 2022, the Board held a public hearing and adopted the proposed amendment to the Lee Plan set forth herein.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, THAT:

SECTION ONE: PURPOSE, INTENT AND SHORT TITLE

The Board of County Commissioners of Lee County, Florida, in compliance with Chapter 163, Part II, Florida Statutes, and with Lee County Administrative Code AC-13-6, conducted public hearings to review proposed amendments to the Lee Plan. The purpose of this ordinance is to adopt map and text amendments to the Lee Plan discussed at those meetings and approved by a majority of the Board of County Commissioners. The short title and proper reference for the Lee County Comprehensive Land Use Plan, as hereby amended, will continue to be the "Lee Plan." **This amending ordinance may be referred to as the "Wellfield Protection Zone Update Ordinance (CPA2021-00006).**

SECTION TWO: ADOPTION OF COMPREHENSIVE PLAN AMENDMENT

The Lee County Board of County Commissioners amends the existing Lee Plan, adopted by Ordinance Number 89-02, as amended, by adopting an amendment, which amends the Wellfield Protection Zones in the Lee Plan to reflect updated iso-travel time contours for existing and planned production wells as required by § 163.3177(6)(a)10.c.(I), Florida Statutes, known as Wellfield Protection Zone Update Ordinance (CPA2021-00006).

The corresponding Staff Reports and Analysis, along with all attachments and application submittals for this amendment are adopted as "Support Documentation" for the Lee Plan. Proposed amendments adopted by this Ordinance are attached as Exhibit A.

SECTION THREE: LEGAL EFFECT OF THE "LEE PLAN"

No public or private development will be permitted except in conformity with the Lee Plan. All land development regulations and land development orders must be consistent with the Lee Plan as amended.

SECTION FOUR: MODIFICATION

It is the intent of the Board of County Commissioners that the provisions of this Ordinance may be modified as a result of consideration that may arise during Public Hearing(s). Such modifications shall be incorporated into the final version.

SECTION FIVE: GEOGRAPHIC APPLICABILITY

The Lee Plan is applicable throughout the unincorporated area of Lee County, Florida, except in those unincorporated areas included in joint or interlocal agreements with other local governments that specifically provide otherwise.

SECTION SIX: SEVERABILITY

The provisions of this ordinance are severable and it is the intention of the Board of County Commissioners of Lee County, Florida, to confer the whole or any part of the powers herein provided. If any of the provisions of this ordinance are held unconstitutional by a court of competent jurisdiction, the decision of that court will not affect or impair the remaining provisions of this ordinance. It is hereby declared to be the legislative intent of the Board that this ordinance would have been adopted had the unconstitutional provisions not been included therein.

SECTION SEVEN: INCLUSION IN CODE, CODIFICATION, SCRIVENERS' ERROR

It is the intention of the Board of County Commissioners that the provisions of this ordinance will become and be made a part of the Lee County Code. Sections of this ordinance may be renumbered or relettered and the word "ordinance" may be changed to "section," "article," or other appropriate word or phrase in order to accomplish this intention; and regardless of whether inclusion in the code is accomplished, sections of this ordinance may be renumbered or relettered. The correction of typographical errors that do not affect the intent, may be authorized by the County Manager, or his designee, without need of public hearing, by filing a corrected or recodified copy with the Clerk of the Circuit Court.

SECTION EIGHT: EFFECTIVE DATE

The plan amendments adopted herein are not effective until 31 days after the State Land Planning Agency notifies the County that the plan amendment package is complete. If timely challenged, an amendment does not become effective until the State Land Planning Agency or the Administrative Commission enters a final order determining the adopted amendment to be in compliance. No development orders, development permits, or land uses dependent on this amendment may be issued or commence before the amendment has become effective. If a final order of noncompliance is issued by the Administration Commission, this amendment may nevertheless be made effective by adoption of a resolution affirming its effective status.

THE FOREGOING ORDINANCE was offered by Commissioner Ruane, who moved its adoption. The motion was seconded by Commissioner Hamman. The vote was as follows:

Kevin Ruane	Aye
Cecil L Pendergrass	Aye
Raymond Sandelli	Aye
Brian Hamman	Aye
Frank Mann	Aye

DONE AND ADOPTED this 20th day of April 2022.

ATTEST:
KEVIN KARNES, CLERK

BY: _____
Deputy Clerk

LEE COUNTY BOARD OF
COUNTY COMMISSIONERS

BY: _____
Cecil L Pendergrass, Chair

BOARD OF COUNTY COMMISSIONERS
SEAL
LEE COUNTY, FLORIDA

DATE: 4-20-22

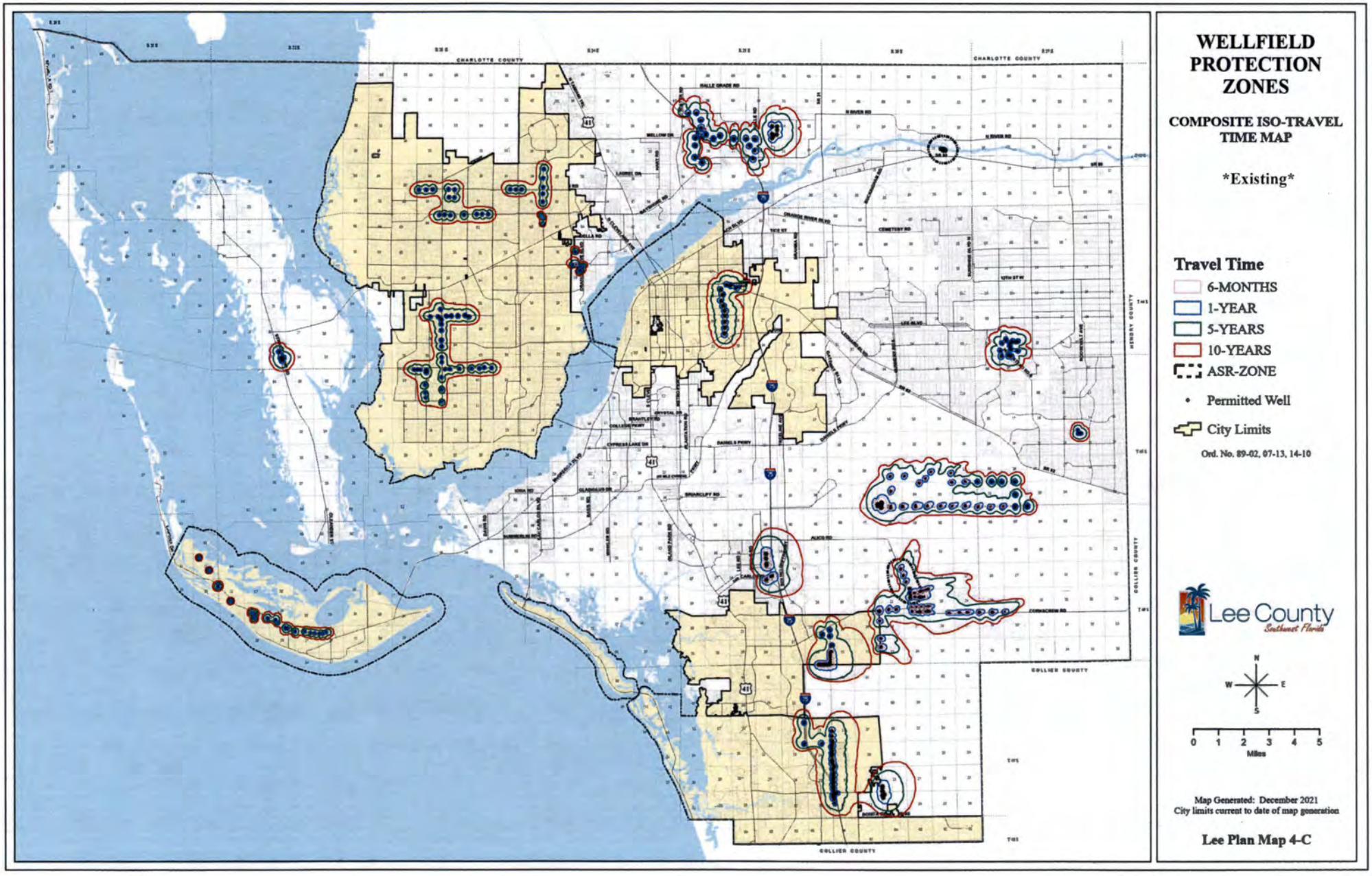
APPROVED AS TO FORM FOR THE
RELIANCE OF LEE COUNTY ONLY

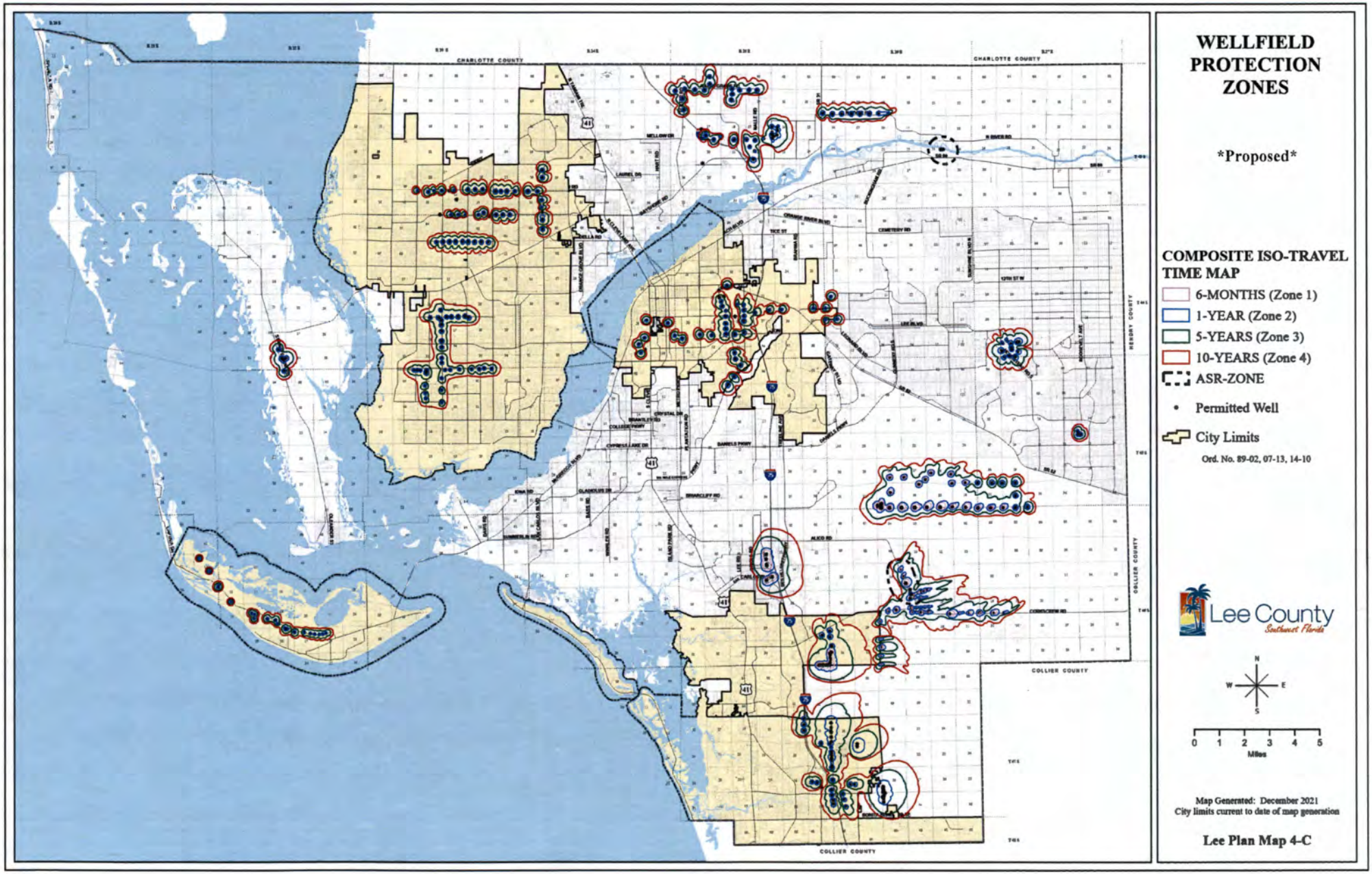
_____
County Attorney's Office

Exhibit A: Adopted revisions to Wellfield Protection Zones (Adopted by BOCC April 20, 2022)

EXHIBIT A

Note: Text depicted with underscore represents additions to the Lee Plan. Strike-through text represents deletions from the Lee Plan.


CHARLOTTE COUNTY
CHARLOTTE COUNTY
HENDRY COUNTY
COLLIER COUNTY
COLLIER COUNTY
COLLIER COUNTY
WELLFIELD PROTECTION ZONES
COMPOSITE ISO-TRAVEL TIME MAP
Existing
Travel Time
6-MONTHS
1-YEAR
5-YEARS
10-YEARS
ASR-ZONE
Permitted Well
City Limits
Ord. No. 89-02, 07-13, 14-10
Lee County
Southwest Florida
N
W
E
S
0 1 2 3 4 5
Miles
Map Generated: December 2021
City limits current to date of map generation
Lee Plan Map 4-C



WELLFIELD PROTECTION ZONES

Proposed

COMPOSITE ISO-TRAVEL TIME MAP

- 6-MONTHS (Zone 1)
- 1-YEAR (Zone 2)
- 5-YEARS (Zone 3)
- 10-YEARS (Zone 4)
- ASR-ZONE
- Permitted Well
- City Limits

Ord. No. 89-02, 07-13, 14-10

Lee County
Southwest Florida

N
W E
S

0 1 2 3 4 5
Miles

Map Generated: December 2021
City limits current to date of map generation

Lee Plan Map 4-C

FLORIDA DEPARTMENT of STATE

RON DESANTIS
Governor

LAUREL M. LEE
Secretary of State

April 20, 2022

Honorable Kevin Karnes
Clerk of the Circuit Courts
Lee County
Post Office Box 2469
Fort Myers, Florida 33902-2469

Attn: Chris Jagodzinski

Dear Mr. Karnes:

Pursuant to the provisions of Section 125.66, Florida Statutes, this will acknowledge receipt of your electronic copy of Lee County Ordinance No. 22-09, which was filed in this office on April 20, 2022.

Sincerely,

Anya Owens
Program Administrator

AO/lb

RECEIVED
By Chris Jagodzinski at 4:01 pm, Apr 20, 2022

FLORIDA COUNTY ORDINANCE DATA RETRIEVAL SYSTEM
CODRS CODING FORM

COUNTY: Lee **COUNTY ORDINANCE #:** 22-09

(e.g.,93-001)

PRIMARY KEYFIELD DESCRIPTOR: Comprehensive Planning

SECONDARY KEYFIELD DESCRIPTOR: Planning

OTHER KEYFIELD DESCRIPTOR: Land Use Planning

ORDINANCE DESCRIPTION: Wellfield Protection Zone

(25 Characters Maximum Including Spaces)

ORDINANCES AMENDED: (List below the ordinances that are amended by this legislation. If more than two, list the most recent two.)

AMENDMENT #1: 89-02 **AMENDMENT #2:**

ORDINANCES REPEALED: (List below the ordinances that are repealed by this legislation.)

REPEAL #1: ; **REPEAL #3:**

REPEAL #2: ; **REPEAL #4:**

(Others Repealed: List All That Apply):

(FOR OFFICE USE ONLY): **COUNTY CODE NUMBER:**

KEYFIELD 1 CODE: **KEYFIELD 2 CODE:**

KEYFIELD 3 CODE:

Rev. 09/11/02
CODING

MEMORANDUM
FROM THE
OFFICE OF COUNTY ATTORNEY

VIA HAND DELIVERY

DATE: April 20, 2022

TO: Commissioner Pendergrass
Chair, Board of County Commissioners

FROM: Michael D. Jacob
Deputy County Attorney

RE: Lee County Ordinance Amending the Lee County Comprehensive Plan
Ord #22-09 – Wellfield Protection Zone Update Ordinance (CPA2021-00006)
Adoption Hearing – April 20, 2022

On April 20, 2022, the Board of County Commissioners adopted an ordinance amending the Lee County Comprehensive Plan. The original ordinance is attached to this memorandum for execution. Kindly execute the ordinance at your earliest convenience and then forward to Eileen Gabrick in the Minutes Department.

By copy of this memorandum to Eileen Gabrick, I request that a clerk attest to the Chair's signature on the attached ordinance and email a copy of the fully executed ordinance with all exhibits to my attention.

Insofar as State Statute mandates that the ordinance reach Tallahassee within ten (10) days of the adoption, please expedite the above request so that the ordinance arrives in Tallahassee no later than April 29, 2022.

Joyce, attached please find the Data Retrieval Form. Kindly include the amendments in the Lee County Ordinance History.

Thank you for your assistance.

MDJ:tlb
Attachment:
Ord #22-09 Wellfield Protection Zone Update (CPA2021-00006)

cc via email only: Joyce Conatser, Senior Fiscal Officer
Samantha Westen, Executive Assistant
Rose Bahena, Administrative Specialist, Senior
Eileen Gabrick, Manager, Minutes Department
Mikki Rozdolski, Section Manager, Planning
Brandon Dunn, Principal Planner, Planning
Janet Miller, Administrative Specialist/DCD
Debbie Carpenter, Administrative Specialist/DCD
Andrea Eggen, Legal Administrative Specialist (for ordinance history)

STAFF REPORT FOR CPA2021-00006: WELLFIELD PROTECTION ZONE UPDATE

Lee Plan Map Amendment

Amendment Type:
County-Initiated
Direction: 8/17/2021

County Departments:
Community Development
Natural Resources
Lee County Utilities

Hearing Dates:
LPA: 12/13/2021
BoCC #1: 1/19/2022
BoCC #2: 4/20/2022

Attachment(s):
1. Existing & Proposed Wellfield Protection Zones Maps

2. Supporting Documentation for the 2021 Update of the Lee County Wellfield Protection Zones (RMA GeoLogic Consultants, Inc., July 2021)

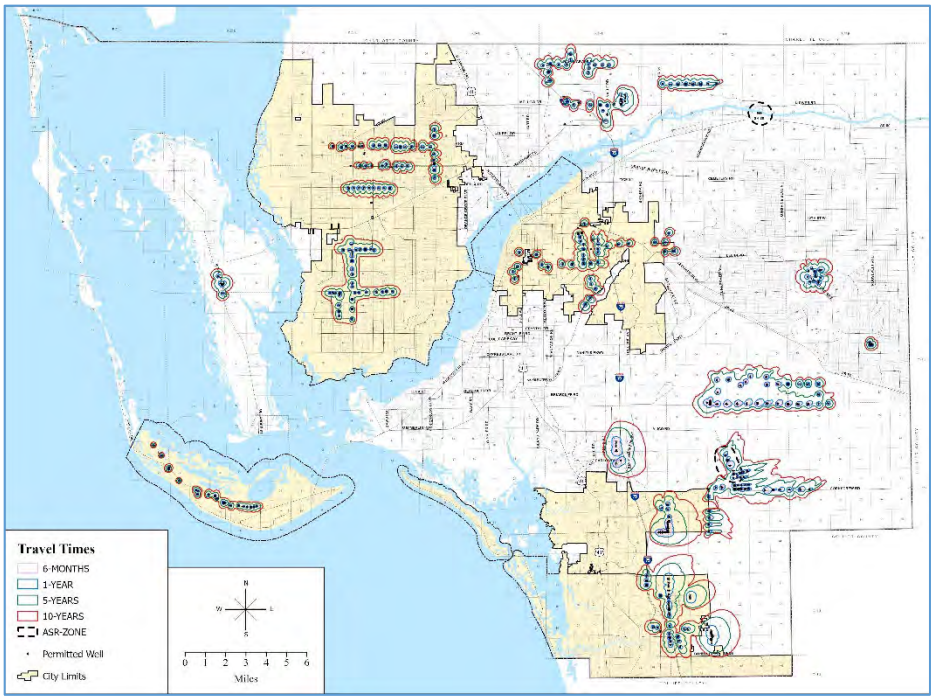
PURPOSE

Amend the Wellfield Protection Zones in the Lee Plan to reflect updated iso-travel time contours for existing and planned production wells as required by § 163.3177(6)(a)10.c.(I), Fla. Stat.

SUMMARY

In order to reflect changes to Lee County's wellfields and to wellfields where Lee County administers well permitting, the County conducted a study to update the wellfield iso-travel time contours last generated in 2014 or earlier. The iso-travel time contours are used to implement Lee County's Wellfield Protection Ordinance.

This amendment will update the Wellfield Protection Zones in the Lee Plan to reflect the iso-travel time contours documented in the study. Existing and planned public potable wellfields, cones of influence, and wellfield protection areas are required to be shown on the future land use map or map series pursuant to § 163.3177(6)(a)10.c.(I), Fla. Stat.



RECOMMENDATION

Staff recommends that the Board of County Commissioners:

- **ADOPT** CPA2021-00006 based on the analysis and findings provided in this staff report, and

- **DIRECT** staff to amend the Land Development Code to update references to the "Supporting Documentation for the Update of the Lee County Wellfield Protection Zones" to include the report dated July 2021 by RMA GeoLogic Consultants, Inc.

PART 1
BACKGROUND

The purpose of the Wellfield Protection Ordinance is to safeguard the public health, safety and welfare of Lee County's residents by protecting public potable water supply wells within unincorporated Lee County from contamination. The Wellfield Protection Ordinance provides criteria for the regulation of activities that may allow the entrance of brackish water into protection zones surrounding existing wellfields, and prohibits or regulates hazardous substances, toxic substances or sanitary hazards within protection zones surrounding such wellfields. The protection zones are delineated by iso-travel time contours and are calculated based on the rate of movement of groundwater in the vicinity of wells, with an allowance for the dispersion of a pollutant entering into and moving with the groundwater. There are four Wellfield Protection Zones:

Protection Zone 1 - Lands within the 6-month iso-travel time contour

Protection Zone 2 - Lands within the one-year iso-travel time contour

Protection Zone 3 - Lands between the one-year and five-year iso-travel time contours

Protection Zone 4 - Lands between the five-year and ten-year iso-travel time contours

These Wellfield Protection Zones are used by Lee County's Department of Natural Resources to administer the Wellfield Protection Ordinance.

PART 2
STAFF DISCUSSION AND ANALYSIS OF PROPOSED AMENDMENTS

The proposed Lee Plan map amendment will incorporate updated iso-travel time contours for the Lee County Utilities wellfields and for other wellfields located in areas where the Lee County Department of Natural Resources conducts well permitting. Those other wellfields include City of Fort Myers, Bonita Springs Utilities, Greater Pine Island Water Association, Florida Governmental Utility Authority Lehigh Acres, and City of Cape Coral North. The updated iso-travel time contours reflect the South Florida Water Management District permitted withdrawal rates and new well locations that were previously proposed and have since been installed.

To obtain the updated iso-travel time contours around each municipal wellfield, Lee County's consultant, RMA GeoLogic Consultants Inc., utilized a previously calibrated model and integrated the existing maximum annual allocation per aquifer per wellfield to perform a 10-year simulation based on the U.S. Geological Survey particle release method. The RMA study, *Supporting Documentation for the 2021 Update of the Lee County Wellfield Protection Zones*, dated July 2021 and attached to this staff report, provides the methodology and technical data needed to support the recommended changes to the Wellfield Protection Zones proposed by this amendment.

Wellfields

In part, the Wellfield Protection Zone updates are needed because of modifications to existing wellfields, including the addition or subtraction of production wells, since the iso-travel time contours were last updated in 2014. Overall there are about 4,077.6 acres being added and 6,125 acres being removed from Lee County's Wellfield Protection Zones.

The changed conditions for each wellfield is provided below:

Lee County Utilities Corkscrew and Green Meadows

- Addition of two surficial aquifer production wells and two Sandstone aquifer production wells

Greater Pine Island Water Association

- An increase of allocation to provide potable needs to the service area through 2035

Lee County Utilities Pinewoods

- Addition of three Lower Hawthorn aquifer and two Sandstone aquifer production wells

Lee County Utilities North Lee County

- Addition of fifteen Lower Hawthorne aquifer production wells and modification of seven proposed well locations
- Removal of the Waterway Estates production wells

Florida Governmental Utility Authority (FGUA) - Lehigh Acres

- Addition of three production wells and a slight increase in allocation to provide potable needs through 2035

Bonita Springs Utilities

- Addition of four Lower Tamiami aquifer and twelve Upper Floridan aquifer production wells as well as an increase in allocation provide potable needs to the service area through 2041

City of Fort Myers

- Addition of twenty four Upper Floridan aquifer production wells and an increase in allocation provide potable needs to the service area through 2039

City of Cape Coral (North Wellfield)

- Addition of fifteen production wells and an increase in allocation

Wellfield Protection Zones – Areas Added & Allowable Uses

As previously discussed, the Wellfield Protection Zones are used to administer the Wellfield Protection Ordinance. As a result of the proposed amendments, areas where the Wellfield Protection Zones expanded or are being added will now be subject to provisions of the Wellfield Protection Ordinance.

The areas being added to the Wellfield Protection Zones for each wellfield , and the impact, if any, on the allowable uses of these areas by the Wellfield Protection Ordinance are discussed on the pages that follow:

Florida Governmental Utility Authority (FGUA) - Lehigh Acres

The new iso-travel time contours expand the existing Wellfield Protection Zone boundary for this wellfield to the east and retract it to the north, west, and south (see Figure 1). The areas being added to the Wellfield Protection Zones are within the Central Urban future land use category, which permits residential, commercial, public and quasi-public and limited light industrial uses[1]. Existing uses within the areas where expansion occurred include single family homes, places of worship, and Veterans Park. These same uses are currently within the Wellfield Protection Zones on adjacent properties and are not prohibited due to being within the Wellfield Protection Zones.

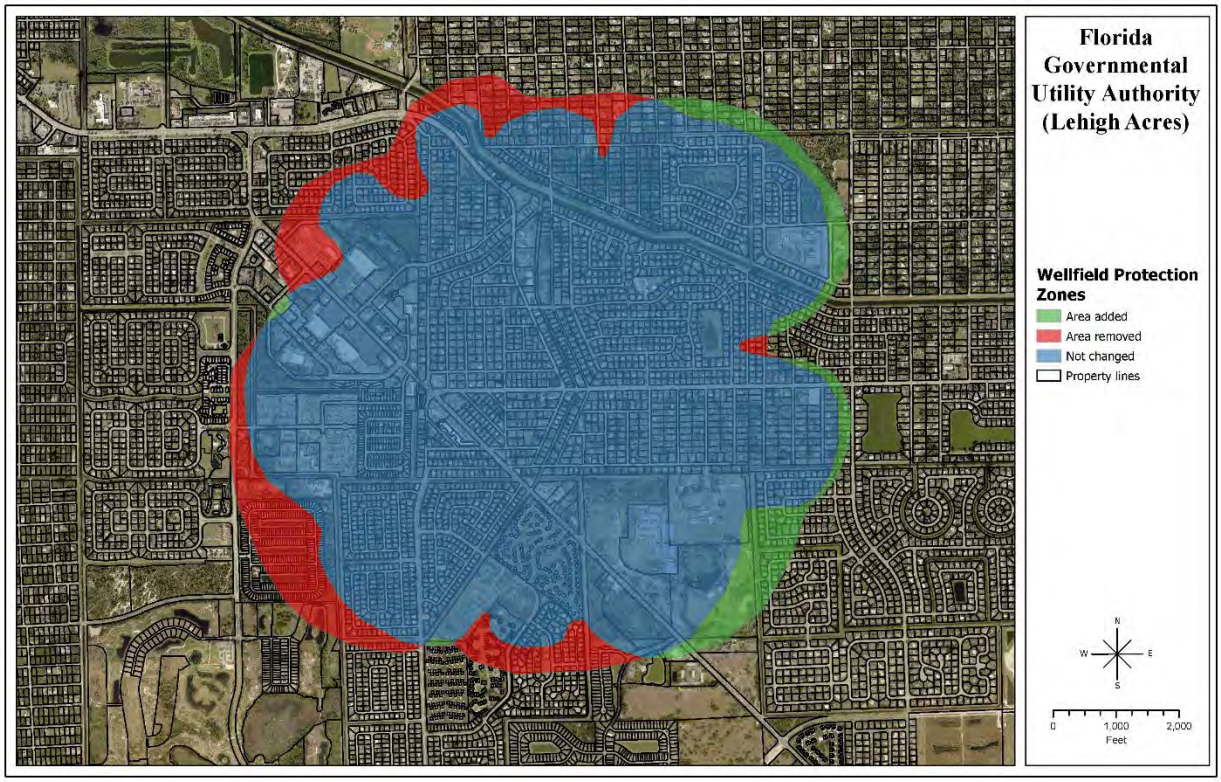


Figure 1 – Showing Changes to the Wellfield Protection Zones for FGUA Wellfield

[1] Policy 1.1.3

Lee County Utilities Green Meadows/Corkscrew

The new iso-travel time contours result in areas being removed from the Wellfield Protection Zones along the east side of the wellfield and areas being added along the west side (see Figure 2). The areas being added to the Wellfield Protections Zones are within the DR/GR and Conservation Lands future land use categories. Existing uses within the areas being added include single-family homes, conservation lands, and aggregate mining, not including mine processing areas. These same uses are currently within the Wellfield Protection Zones on the same or adjacent properties and are not prohibited due to being within the Wellfield Protection Zones.

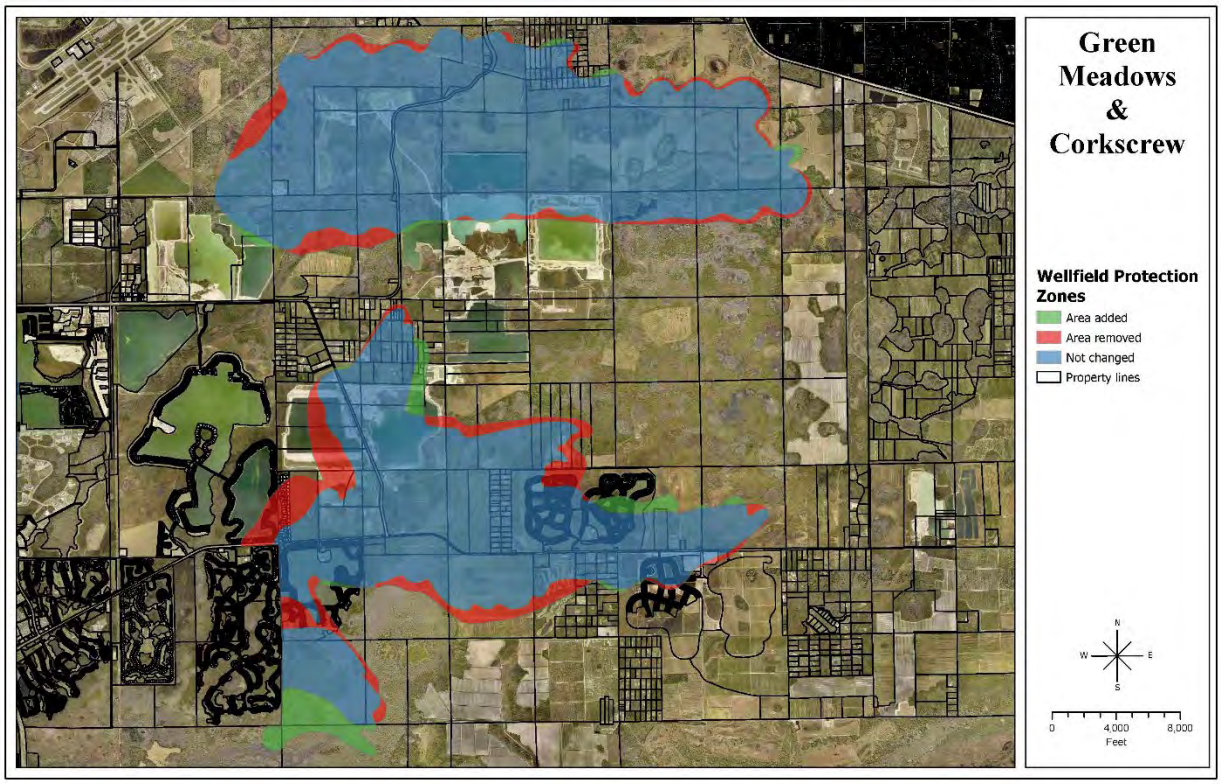


Figure 2 – Showing Changes to the Wellfield Protection Zones for Green Meadows and Corkscrew Wellfields

Greater Pine Island Water Association

The new iso-travel time contours result in areas being added along the Wellfield Protection Zones to the south, east and north (see Figure 3).

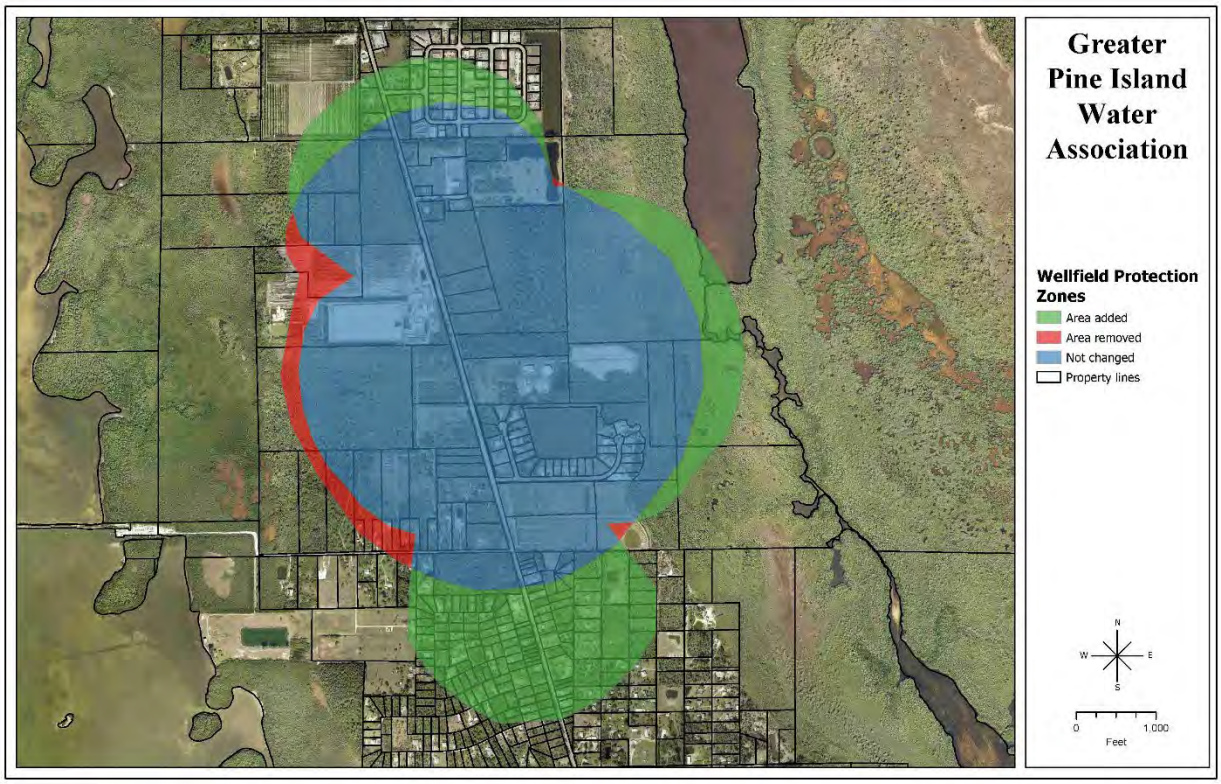


Figure 3 – Showing Changes to the Wellfield Protection Zones for Greater Pine Island Water Association Wellfield

The areas added to the south are within the Coastal Rural Future Land Use Category which permits agriculture, fill-dirt extraction, and conservation uses, minimal non-residential land uses, limited to marinas, fish houses, and minor commercial uses that serve the island residents and visitors, and low density residential uses[2]. The existing uses in the area include single-family homes.

Areas added along the east are within the Conservation Lands and Wetlands future land use categories. The Wetlands future land use category permits very low-density residential uses and recreational uses that will not adversely affect the ecological functions of wetlands[3]. The existing uses are conservation and vacant land.

Areas added to the north are within the Urban Community and Coastal Rural future land use categories. Permitted uses within the Urban Community future land use category include residential, commercial, public and quasi-public, and limited light industrial[4]. Existing uses within the Coastal Rural future land use

[2] Policy 1.4.7, Policy 24.4.4
[3] Policy 1.5.1
[4] Policy 1.1.4

category include vacant and agricultural lands and existing uses in the Urban Community future land use category include commercial and light industrial uses.

Wells within this Greater Pine Island Water Association wellfield are within the Lower Hawthorn Aquifer. In Lee County, the top of the Lower Hawthorn aquifer occurs approximately 440 to 620 feet below land surface and the aquifer is anywhere from 120- 300 feet thick. A layer of mixed clay and marl up to 150 feet thick confines it from above. Below the Lower Hawthorn aquifer is a marl and dense limestone confining layer that separates it from the Suwanee Aquifer and other aquifers beneath it.

The Main concerns for protection of the Lower Hawthorn are for the protections of any Aquifer Storage and Recovery (ASR) wells constructed to this zone; any influence of abandoned flowing wells that fall within the 10-year travel zone; and, other newly permitted Lower Hawthorn wells and the any construction concerns those wells may create. Typically, due to the depth of the Lower Hawthorn aquifer and the artesian pressure that occurs, surface water pollutants and uses are not as critical of a concern as they would be within Water-Table and Lower Tamiami Aquifers Surficial Aquifer System (SAS).

Therefore, even though uses permitted within the Urban Community may be objectionable if located in wellfield protection zones accessing the Water-Table or Lower Tamiami Aquifers, these uses are typically not a concern for wells accessing the Lower Hawthorn aquifer. The review process for adding new uses within the Wellfield Protection Zones addresses this concern so that the location of the Wellfield Protection Zones for this wellfield will not impact uses currently allowed based on current State laws and/or local ordinances.

North Lee County

The largest changes to the Wellfield Protection Zones occur in North Lee County, along North River Road and Nalle Grade Road, where multiple production wells are planned (see Figures 4 and 5)). Future Land Use Categories within the proposed new Wellfield Protection Zones include New Community, Rural, Density Reduction/Groundwater Resource (DR/GR), Wetlands, Open Lands, and Conservation Lands. All wells within the North Lee County Wellfield are within the Lower Hawthorn Aquifer and, as stated above, concern for protecting wells accessing the Lower Hawthorn Aquifer are primarily for the protections of any Aquifer Storage and Recovery (ASR) wells constructed to this zone, and any influence of any abandoned flowing wells that fall within the 10-year travel zone, along with other newly permitted Lower Hawthorn wells and any construction concerns those wells may create. Because of the depth that the aquifer and the artesian pressure that occurs, there is not as critical of a concern for any surface water pollutants or uses as there would be within Water-Table and Lower Tamiami Aquifers

The Babcock Ranch Community, located on the North side of North River Road and within the New Community Future Land Use Category, falls within protection zones 2, 3, and 4. The development's proposed preserve land is within protection zones 2 and 3. The southern portion of the community zoned MU-1/R falls within protection zone 4, which is the least restrictive protection zone and requires an operating permit for the storage, use, handling or production of a regulated substance in quantities greater than those set forth in LDC section 14-208. While a greater deal of scrutiny may be required in order to obtain an operating permit, no uses are specifically prohibited within protection zone 4 based on the Wellfield Protection Ordinance and the Land Development Code.

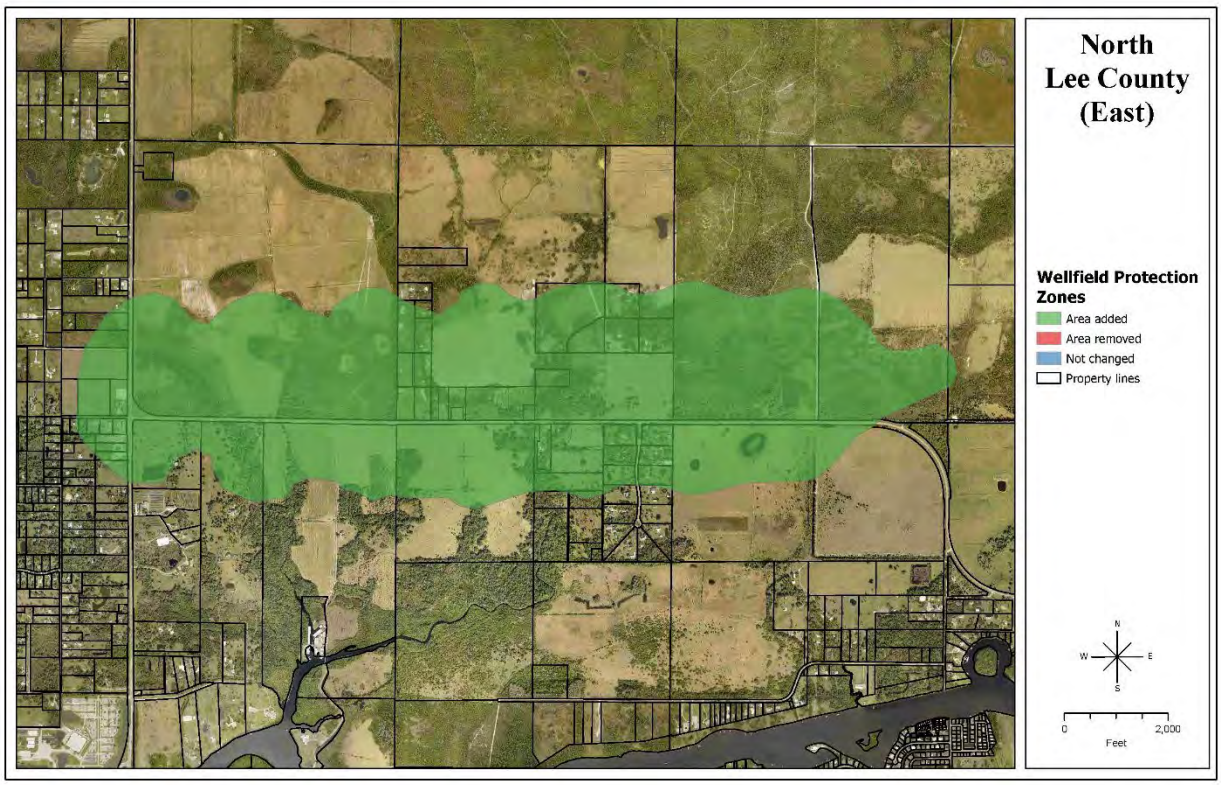


Figure 4 – Showing Changes to the Wellfield Protection Zones for LCUs North Lee County Wellfield (Eastern Portion)

Additional lands along Nalle Grade Road within the Rural, DR/GR, Open Lands, Wetlands, and Upland Conservation Lands future land use categories will fall within protection zones 2, 3, and 4 based on groundwater modeling. The permitted uses within the Rural Future Land Use category include low-density residential, agricultural uses, and minimal non-residential land uses that are needed to serve the rural community. Fill dirt operations and ancillary uses may be permitted in accordance with Lee Plan Policy 10.1.4. Permitted land uses within Wetlands future land use category include very low-density residential uses and recreational uses that will not adversely affect the ecological functions of wetlands[2]. Permitted land uses in the Open Lands future land use category include low-density residential, and limited commercial uses in accordance with the standards in the Rural future land use category[5]. Permitted land uses within the DR/GR include agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses at a maximum density of one dwelling unit per ten acres[6].

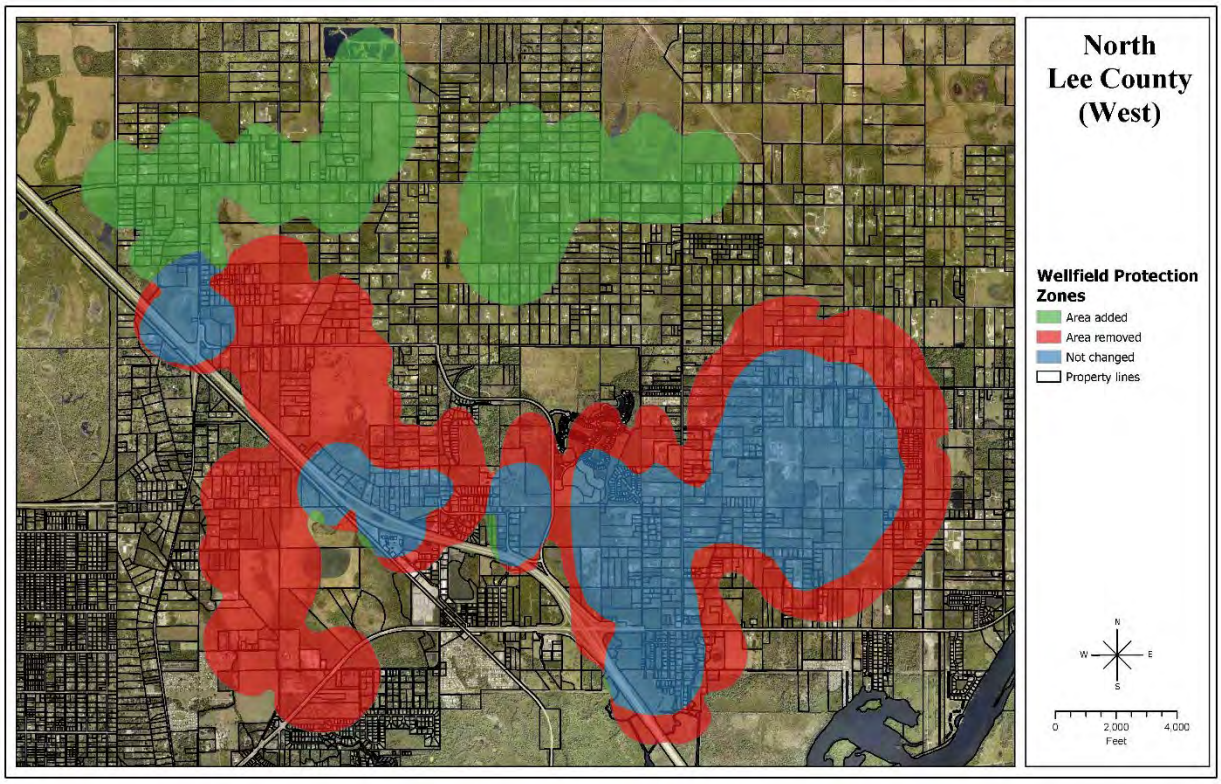


Figure 5 – Showing Changes to the Wellfield Protection Zones for LCUs North Lee County Wellfield (Western Portion)

Incorporated Areas - The inclusion of additional property within the City of Cape Coral, City of Bonita Springs, City of Fort Myers, City of Sanibel, and the Village of Estero are not required to comply with the Lee County Wellfield Protection Ordinance as these proposed changes are within incorporated Lee County and not subject to the Lee Plan.

[5] Policy 1.4.4
[6] Policy 1.4.5

PART 3
CONCLUSION

CONCLUSION

The proposed amendment will update the Wellfield Protection Zones identified in the Lee Plan, incorporating the latest data to maintain a high level of accuracy in the Lee Plan consistent with Florida Statute 163.3177(6)(a)10.c.(I). The proposed changes are supported by technical data and accepted methodologies. The proposed amendments are not anticipated to impact property based on current State laws and/or local ordinances.

STAFF RECOMMENDATION

Staff recommends that the BoCC ***transmit*** the proposed amendment as discussed in this report and seen in Attachment 1.

PART 4
LOCAL PLANNING AGENCY
REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: December 13, 2021

A. LOCAL PLANNING AGENCY REVIEW:

Staff provided a brief presentation addressing reasons for the amendment, board direction, Wellfield Protection Zone changes, and staff recommendation.

Members of the LPA questioned how properties included in the Wellfield Protection Zones update, specifically along North River Road, would be affected. Staff clarified that no uses will be prohibited but that an operating permit may be required to comply with the Wellfield Protection Ordinance. Due to the depth of the wells along North River Road, existing single-family residences would not be affected.

There was no public comment concerning the proposed amendment at the LPA Hearing.

B. LOCAL PLANNING AGENCY RECOMMENDATION:

A motion was made to recommend that the Board of County Commissioners ***transmit*** CPA2021-00006. The LPA recommended approval. The motion passed 6 to 0.

RAYMOND BLACKSMITH	**AYE**
DUSTIN GARDNER	**AYE**
JAMES M. INK	**AYE**
ALICIA OLIVO	**AYE**
DON SCHROTENBOER	**ABSENT**
STAN STOUDER	**AYE**
HENRY ZUBA	**AYE**

C. STAFF RECOMMENDATION:

Staff recommends that the BoCC ***transmit*** the proposed amendment as provided in attachment 1.

PART 5
BOARD OF COUNTY COMMISIONERS
TRANSMITTAL HEARING

DATE OF PUBLIC HEARING: January 19, 2022

A. BOARD REVIEW:

Staff provided a brief presentation for the proposed amendment which included an overview of the proposed amendment and staff recommendation.

One commissioner requested additional details regarding the establishment of the iso-travel time contours and clarification as to why the amount of land within Wellfield Protection Zones was being reduced in size. Staff clarified how iso-travel time contours are established and how they are used by Natural Resources Staff to protect the County public water supply. Staff clarified that the reduction in size is due to changes in permitted withdrawal rates and the removal and addition of County wells.

There was no public comment concerning the proposed amendment.

B. TRANSMITTAL HEARING:

A motion was made to ***transmit*** CPA2021-00006 as recommended by Staff and the LPA. The motion passed 5 to 0.

VOTE:

BRIAN HAMMAN	**AYE**
FRANK MANN	**AYE**
KEVIN RUANE	**AYE**
CECIL L. PENDERGRASS	**AYE**
RAY SANDELLI	**AYE**

PART 6
STATE REVIEWING AGENCIES' OBJECTIONS, RECOMMENDATIONS, AND COMMENTS

Comments from the State Reviewing Agencies were due to Lee County by March 23, 2022.

A. OBJECTIONS, RECOMMENDATIONS AND COMMENTS:

Lee County received responses from the following review agencies addressing the transmitted amendment:

- Florida Department of Economic Opportunity
- Florida Fish and Wildlife Conservation Commission
- Florida Department of Environmental Protection
- Florida Department of Agriculture and Consumer Services

There were **no objections or comments** concerning the proposed amendment.

B. STAFF RECOMMENDATION

Staff recommends that the BoCC ***adopt*** the amendment as attached to the staff report.

PART 7
BOARD OF COUNTY COMMISSIONERS
ADOPTION HEARING: April 20, 2022

A. BOARD REVIEW:

Staff provided a brief presentation for the proposed amendment which included an overview of the proposed amendments; including Lee Plan consistency, State Reviewing Agency comments and staff recommendation.

There was no public comment concerning the proposed amendments.

B. BOARD ACTION:

A motion was made to ***adopt*** CPA2021-00007 as recommended by staff. The motion was passed 5 to 0.

VOTE:

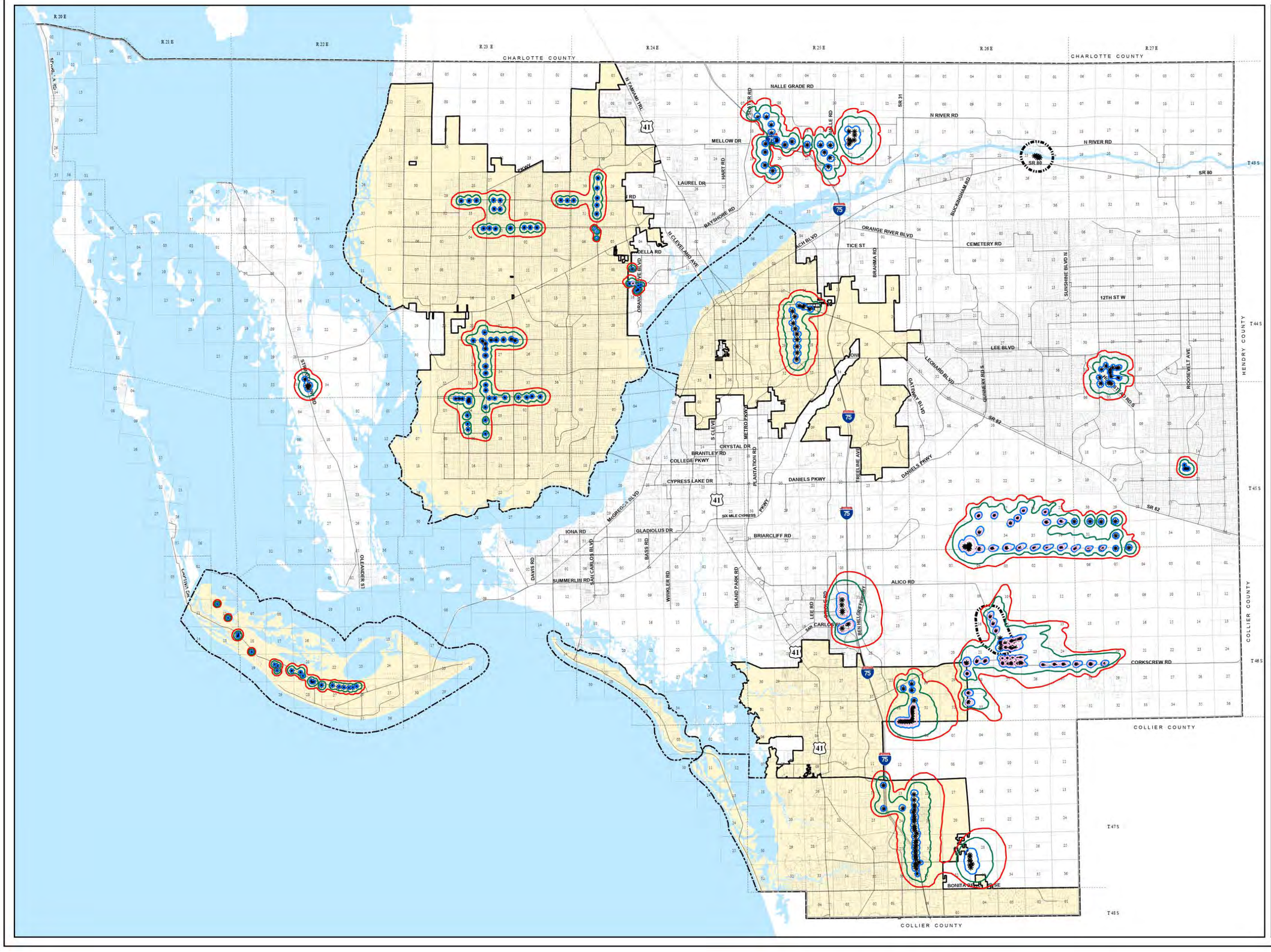
BRIAN HAMMAN	**AYE**
FRANK MANN	**AYE**
CECIL PENDERGRASS	**AYE**
KEVIN RUANE	**AYE**
RAY SANDELLI	**AYE**

ATTACHMENT 1

WELLFIELD PROTECTION ZONES

COMPOSITE ISO-TRAVEL TIME MAP

Existing



Travel Time

- 6-MONTHS
- 1-YEAR
- 5-YEARS
- 10-YEARS
- ASR-ZONE
- Permitted Well
- City Limits

Ord. No. 89-02, 07-13, 14-10

Lee County
Southwest Florida

N
W E
S

0 1 2 3 4 5
Miles

Map Generated: December 2021
City limits current to date of map generation

Lee Plan Map 4-C

WELLFIELD PROTECTION ZONES

Proposed

COMPOSITE ISO-TRAVEL TIME MAP

- 6-MONTHS (Zone 1)
- 1-YEAR (Zone 2)
- 5-YEARS (Zone 3)
- 10-YEARS (Zone 4)
- ASR-ZONE
- Permitted Well
- City Limits

Ord. No. 89-02, 07-13, 14-10

Lee County
Southwest Florida

N
W E
S

0 1 2 3 4 5
Miles

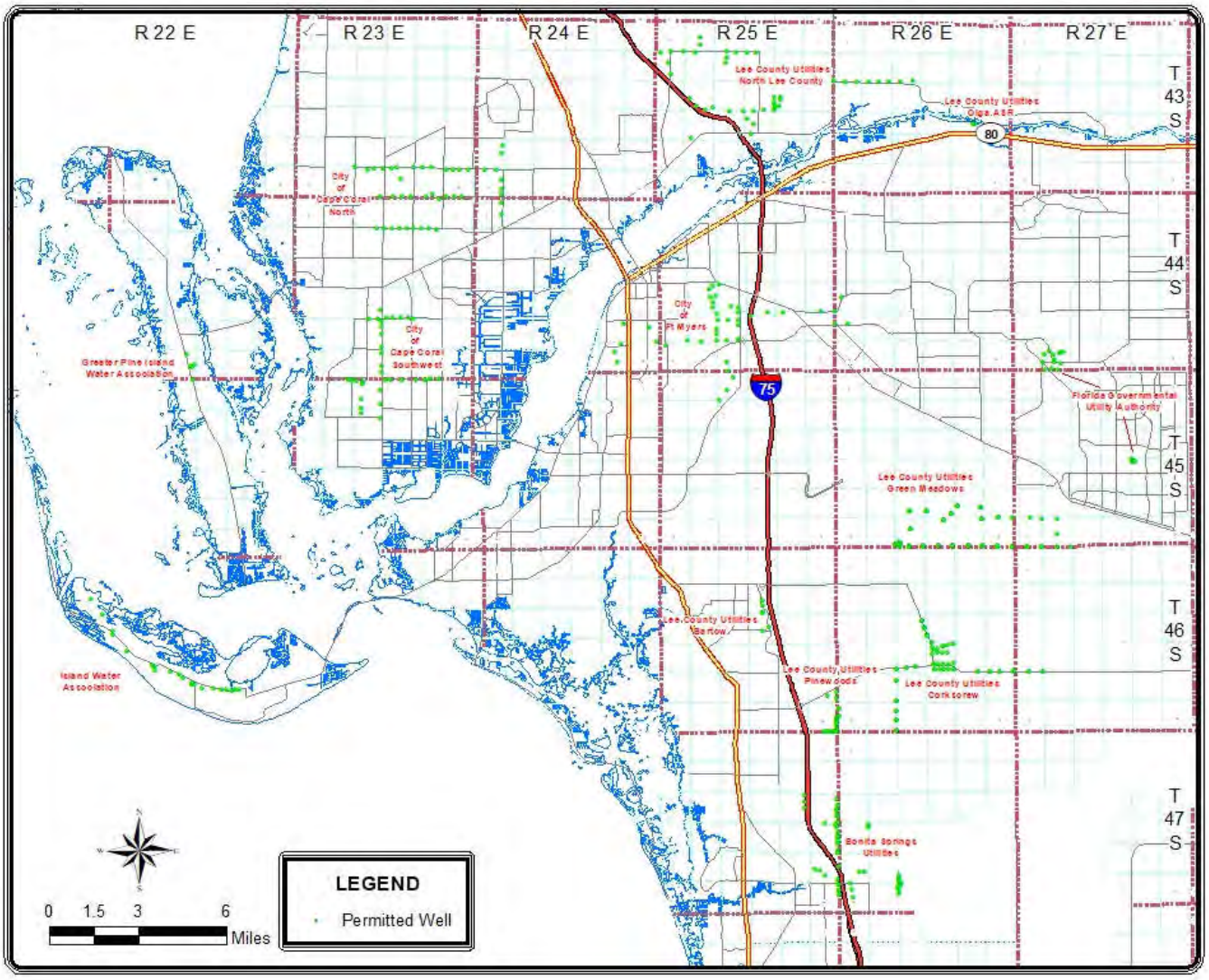
Map Generated: December 2021
City limits current to date of map generation

Lee Plan Map 4-C

ATTACHMENT 2

LEE COUNTY
SOUTHWEST FLORIDA

SUPPORTING DOCUMENTATION FOR THE 2021 UPDATE OF THE LEE COUNTY WELLFIELD PROTECTION ZONES



July 2021

Prepared by:

RMA
GeoLogic Consultants, Inc.

3401 SE 15th Place
Suite A
Cape Coral, Florida 33907

SUPPORTING DOCUMENTATION FOR THE 2021 UPDATE OF THE LEE COUNTY WELLFIELD PROTECTION ORDINANCE PROTECTION ZONES

Prepared for:

Lee County Utilities
1500 Monroe Street, Third Floor
Ft. Myers, FL 33902

June 2021

RMA Project # 20-145

Prepared by:

RMA
GeoLogic Consultants, Inc.
3415 SE 15th Place
Suite A
Cape Coral, FL 33904

OMAR RODRIGUEZ LICENSE No. 80330 STATE OF FLORIDA PROFESSIONAL ENGINEER

July 19, 2021

Omar Rodriguez, P.G., P.E.
President
Licensed Professional Geologist #2273
Licensed Professional Engineer #80330

TABLE OF CONTENTS

PAGE

LIST OF APPENDICES

LIST OF TABLES

PAGE

LIST OF FIGURES

PAGE

I. INTRODUCTION

Lee County adopted a wellfield protection ordinance (WFPO) in 1989 (County Ordinance 89-30). This ordinance established protection zones for public supply wells and regulated or prohibited certain activities within those protection zones. The ordinance was amended on several occasions (by County Ordinances 90-40, 90-46, 93-16, 95-01, and 07-35). The WFPO is administered by the Lee County Department of Natural Resources

In 1989, when the Lee County wellfield protection ordinance (WPO) was originally adopted, protection zone maps were established for all public supply wellfields which were permitted by the South Florida Water Management District (SFWMD) to pump more than 1,000,000 gallons per day (1.0 MGD). Four types of wellfield protection zones were adopted: (1) lands within the 6-month iso-travel time contour, (2) lands within the one-year iso-travel time contour, (3) lands between the one year and five-year iso-travel time contours, and (4) lands between the five-year and ten-year iso-travel time contours. The aquifers, to which the protection zones apply are the surficial, Lower Tamiami, and Sandstone aquifers.

Iso-travel time contours for the wellfields which existed in 1989, iso-travel time contours for new wellfields which were constructed after 1989, and iso-travel time contours for wellfields which produce from aquifers deeper than the Sandstone aquifer were developed in 2005 (Water Resource Solutions, 2005). Thereafter, the iso-travel time contours were updated in 2009 (RMA GeoLogic Consultants, 2009) and in 2014 (RMA GeoLogic Consultants, 2014). The updates were based on newly permitted withdrawal rates and locations of wells.

The purpose of the present study is to update the iso-travel time contours generated in 2014 for the Lee County Utilities (LCU) wellfields and previously for the other wellfields located in areas where well permitting is conducted by the Lee County Department of Natural Resources. Those other wellfields include City of Fort Myers, Bonita Springs

Utilities, Greater Pine Island Water Association, Florida Governmental Utility Authority Lehigh Acres, and City of Cape Coral North. The update is consistent with the recently issued or currently under review water use permits and modified locations of some wells which were previously proposed but have subsequently been installed. The updated permitted withdrawal rates and locations of wells result in some modification of the extents of the capture areas shown on the last update for those wellfields. No modifications of the aquifer storage and recovery (ASR) protection zones are included herein. Protection zones for ASR systems were previously done based on modeling conducted as part of the FDEP permitting for the Olga and Corkscrew ASR systems (RMA GeoLogic Consultants, 2010A and 2010B). At the direction of LCU, no modifications to Island Water Association and City of Cape Coral Southwest wellfields were undertaken as part of this work. A map showing the location of the municipal wellfields in Lee County is provided as Figure 1-1.

In order to update the information for the referenced LCU and other wellfields, RMA GeoLogic Consultants, Inc. (RMA), under contract to LCU, utilized the previously calibrated model developed in 2005, and integrated the existing maximum annual allocation per aquifer per wellfield to perform a 10-year simulation based on the U.S. Geological Survey (USGS) particle release method. The model was run to obtain the travel time (capture zone) around each municipal wellfield for 1, 5, and 10-year periods. In addition, for the surficial aquifer, the six-month travel time was also simulated. Based on the requirements of FDEP for the ASR systems, protection zones were previously established based on optimum storage volume determined using calibrated solute transport computer modeling. No changes to the protection areas for ASR wells are included herein.

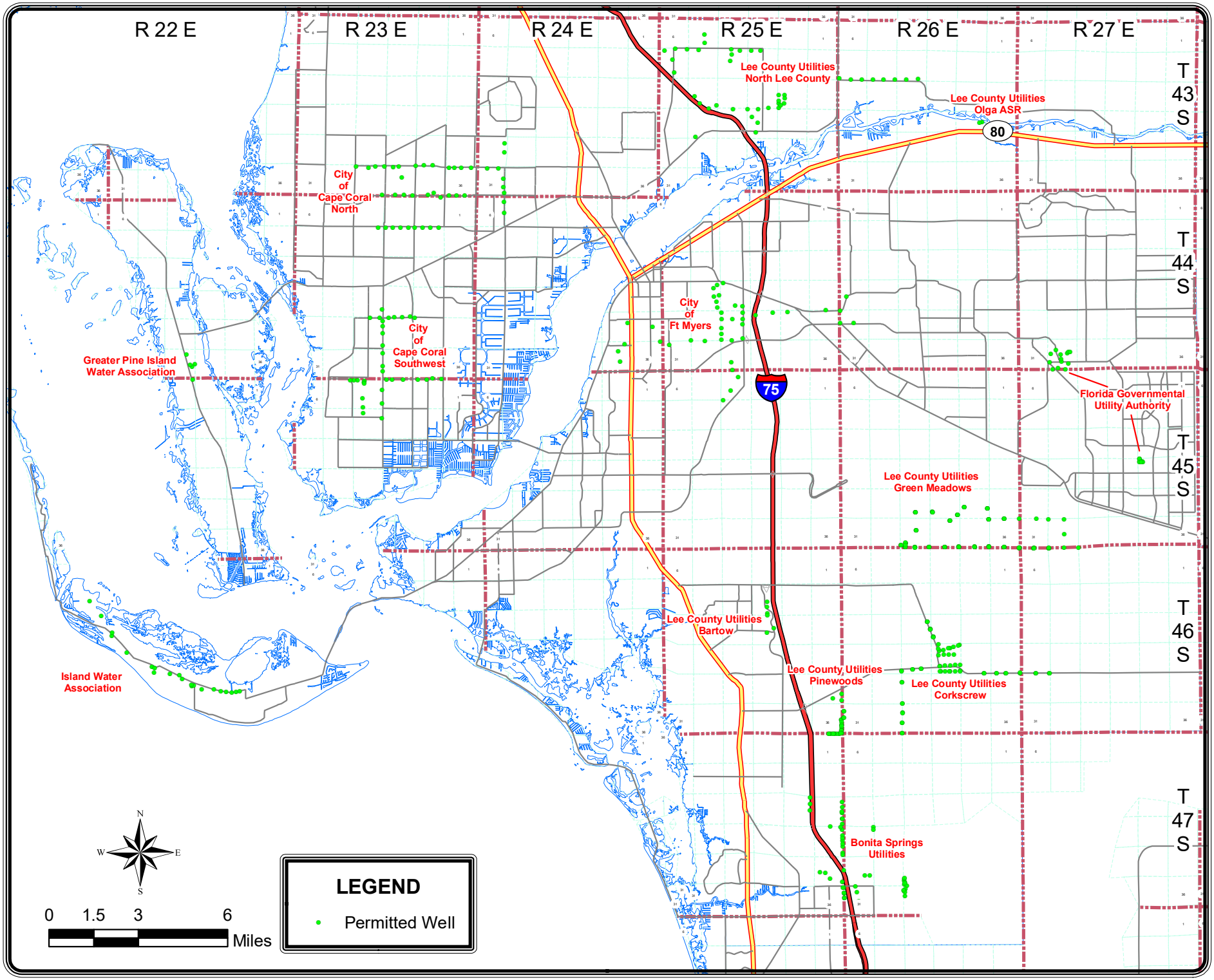


FIGURE 1-1. MAP SHOWING LOCATION OF PERMITTED PUBLIC WATER SUPPLY WELLFIELDS IN LEE COUNTY

II. UPDATE OF LEE COUNTY MUNICIPAL WELLFIELDS INFORMATION

As part of the present investigation all Lee County Utilities wellfields, City of Fort Myers wellfield, Bonita Springs Utilities wellfield, Florida Governmental Utility Authority Lehigh Acres wellfield, Greater Pine Island Water Association wellfield, and City of Cape Coral North wellfield were updated from the last update conducted in 2014 (RMA GeoLogic Consultants, 2014). An updated summary of the data for each public water supply wellfield in Lee County is provided on Table 2-1. Details on the modifications to the simulated wellfields are provided in a subsequent section of this report.

TABLE 2-1. SUMMARY OF EXISTING PUBLIC WATER SUPPLY WELLFIELDS IN LEE COUNTY

Water Use Permit Number	Utility	Wellfield	Annual Maximum (MG)	Daily Maximum (MG)	Number of Wells per Aquifer							Location					
					WTA	LTA	SSA	MHA	UFA		Total of Wells	Sec	Twp	Rge	Status	Comments	Expiration Date
									LH	SUW							
36-00003-W	LEE COUNTY UTILITIES	CORKSCREW	12,508.00	44.57	34		23	5	2		60	16, 20-24, 28	46	26	Active		06/15/31
		GREEN MEADOWS			23		22		29		74	26-28, 33-36	45	26	Active		
		OLGA ASR								2	2	23	43	26	Standby		
36-00008-W	BONITA SPRINGS UTILITIES	LOWER TAMIAMI AND UFA AQUIFER	7,821.00	26.17		23			27		50	1-36	47	25	Active	Application under review	NA
36-00034-W	ISLAND WATER ASSOCIATION INC	UFA RO WELLFIELD	1,904.50	5.90					8	9	17		46	22	Active		06/15/37
36-00035-W	CITY OF FORT MYERS	UFA RO WELLFIELD	4,362.84	16.14					42		42	1-36	44, 45	24-26	Active	Five Wells Used Only for Monitoring	04/03/40
36-00045-W	GREATER PINE ISLAND WATER ASSOCIATION	UFA RO WELLFIELD	908.10	3.19					5		5	25,26,35	43	21	Active		09/21/35
36-00046-W	CAPE CORAL, CITY OF	UFA RO WELLFIELD	14,326.00	43.16				10*	10*, 65	1	76		43, 44	23	Active		10/22/29
36-00122-W	LEE COUNTY UTILITIES	PINEWOODS	2,685.76	8.83	11		8		8		27	25, 36, 36	46	26	Active	Five Wells Out of Service	12/01/34
36-00152-W	LEE COUNTY UTILITIES	NORTH LEE COUNTY	5,667.50	19.32					42		42		43	25	Active	1 Well Abandoned and 2 Wells Used as Monitoring Wells	08/26/40
36-00166-W	FLORIDA GOVERNMENTAL UTILITY AUTHORITIES	LEHIGH ACRES	1,150.71	3.81			20				20	32	44	27	Active		02/09/35
36-07687-W	LEE COUNTY UTILITIES	BARTOW	952.65	2.66	6						6	10, 15	46	25	Active		04/11/22

* Wells completed in two aquifers
WTA = Water Table Aquifer
SSA = Sandstone Aquifer
MHA = Mid Hawthorn Aquifer
UFA = Upper Floridan Aquifer
LH = Lower Hawthorn Portion of the Upper Floridan Aquifer
SUW = Suwannee Portion of the Upper Floridan Aquifer
RO = Reverse Osmosis

III. UPDATE OF ISO-TRAVEL TIME CONTOURS

A. Introduction

The calibrated semi-regional numerical groundwater flow model developed in 2005 (Water Resource Solutions, 2005) was used to predict groundwater flow travel times resulting from the permitted withdrawals from the Lee County public water supply municipal wellfields. Details about the model construction, aquifer parameters, and calibration were provided in the report for the 2005 update.

The model was developed using the U.S. Geological Survey (USGS) Modular Three-Dimensional Finite-Difference Groundwater Flow Model (MODFLOW-2000). (Harbaugh, Banta, Hill, and McDonald, 2000). The Visual MODFLOW Pro v. 4.6 software package developed by Waterloo Hydrogeologic was used for processing MODFLOW input and output data.

The travel time simulation was developed using the USGS particle tracking post-processing package for MODFLOW, MODPATH (Pollock, 1994). MODPATH is a program designed to work with MODFLOW (McDonald and Harbaugh, 1988). Output from MODFLOW simulations is used in MODPATH to compute paths for imaginary "particles" of water moving through the simulated ground-water system. In addition to computing particle paths, MODPATH keeps track of the time of travel for particles moving through the system. By carefully defining the starting locations of particles, it is possible to perform a wide range of analyses, such as delineating capture and recharge areas. The Visual MODFLOW Pro v. 4.6 software package was used for processing MODPATH input and output data.

B. Travel Time Modeling

The travel time simulations were developed using the calibrated groundwater flow model. The permitted maximum annual withdrawal from each municipal wellfield was included in these simulations. The model was run for up to 10 years in daily iterations. The allocation per aquifer was divided by the number of permitted wells completed in that

aquifer in a particular wellfield. The location and producing aquifer of currently permitted wells was directly imported to the model. The updated information was submitted to LCU and other Utilities to verify the location and application rates for the supply wells. Any modifications to well locations and allocations provided by LCU and other Utilities were integrated into the model.

As previously simulated during the 2005, 2009, and 2014 updates, a total of 10 imaginary "particles" were released in a 50 feet radius around each pumping well in the aquifer in which the well is completed. The "particles" were simulated to move back in time to a release time set at 10 years (3,650 days). During the simulation, the "particles" moved through the modeled groundwater system based on the pumping rates and hydraulic properties of the aquifer. The travel time (capture zone) for each wellfield was obtained by drawing a contour along the location of each particle at the specified period of time. The capture zone was delineated for 1, 5, and 10 years. In addition, a six-month travel time for the surficial aquifer was simulated. An ArcView polygon shapefile for the modeled travel time around each municipal wellfield in Lee County was created.

Simulations were conducted for all Lee County Utilities wellfields (i.e. Corkscrew, Green Meadows, Pinewoods, Bartow, and North Lee County) except the ASR systems, Bonita Springs Utilities wellfield, City of Fort Myers wellfield, Greater Pine Island Water Association wellfield, City of Cape Coral North wellfield, and Florida Governmental Utility Authority Lehigh Acres wellfield. Details for the changes for each wellfield are provided below.

1- Water Use Permit 36-00003-W – Lee County Utilities Corkscrew and Green Meadows

Since the last update of the protection zones in 2014, no renewal/modification of the WUP for those wellfields has been issued. Changes simulated include the addition of two surficial aquifer production wells and two Sandstone aquifer production wells to the Corkscrew wellfield that are part of a letter modification of the permit currently being

prepared, adjusting the locations for the newly installed Green Meadows Upper Floridan aquifer production wells, and redistributing the pumping rates from the production wells based on the typical use of the wells. A summary of the well information data for Corkscrew is provided in Tables 3-1A (Corkscrew) and 3-1B (Green Meadows). The locations of the production wells and new protection zones are shown on Figures 3-1A (Corkscrew) and 3-1B (Green Meadows). A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

No changes to the protection zones for the ASR wells are proposed herein. The protection zones for ASR wells (i.e. 2,640 feet) is based on the solute transport simulation of the injected water at the optimum storage volume conducted as part of the FDEP permitting process for the Corkscrew and Olga ASR systems (RMA GeoLogic Consultants, 2010A and 2010B). The optimum storage volume is defined as the volume of water remaining in storage, combined with the volume injected during a new cycle, which would allow for a theoretical 100% recovery volume of the injected volume during that cycle and including an adjustment factor for the injected water lost around the periphery of the mixing zone.

2- Water Use Permit 36-00008-W – Bonita Springs Utilities

Modifications to the Bonita Springs Utilities (BSU) wellfield protection zones were made based on an ongoing modification/renewal application of the water use permit. The application includes the combination of the two BSU water use permits and wellfields (i.e. Lower Tamiami aquifer and Upper Floridan aquifer, previous permit 36-04062-W) into one permit (36-00008-W), increased allocations from the two wellfields to provide the potable water needs to the BSU service area through year 2041, and addition of 4 new LTA production wells and 12 UFA production wells. A summary of the well information data for BSU is provided in Tables 3-2A (Lower Tamiami aquifer wellfield) and 3-2B (UFA wellfield). The locations of the production wells and new protection zones are shown on Figures 3-2. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

TABLE 3-1A. SUMMARY OF WELL INFORMATION DATA FOR LCU CORKSCREW WELLFIELD (WATER USE PERMIT 36-00003-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00003	LCU - Corkscrew	1D	NW NW 22-46-26	26.461517	81.703884	753043	773548	425883	774067	243	132	SSA	Existing	417,299	477,425	420,000
36-00003	LCU - Corkscrew	2D	NW NE 22-46-26	26.462849	81.698100	754934	774037	427778	774541	213	160	SSA	Existing	453,666	442,999	460,000
36-00003	LCU - Corkscrew	3D	NE NE 22-46-26	26.464167	81.692882	756640	774520	429488	775011	227	180	SSA	Existing	127,293	433,260	200,000
36-00003	LCU - Corkscrew	4D	SE SW 22-46-26	26.451300	81.703116	753303	769835	426114	770352	219	185	SSA	Existing	374,230	401,245	420,000
36-00003	LCU - Corkscrew	5D	SW SE 22-46-26	26.451349	81.698117	754939	769857	427750	770361	235	205	SSA	Existing	282,529	416,963	325,000
36-00003	LCU - Corkscrew	6D	SE SE 22-46-26	26.451501	81.692482	756782	769916	429594	770406	249	210	SSA	Existing	242,521	389,867	325,000
36-00003	LCU - Corkscrew	7S	SE SW 22-46-26	26.453802	81.703501	753175	770744	425993	771262	135	45	SAS	Existing	89,200	95,546	90,000
36-00003	LCU - Corkscrew	8S	SE SW 22-46-26	26.453966	81.700831	754048	770806	426867	771317	145	60	SAS	Existing	9,490	179,038	40,000
36-00003	LCU - Corkscrew	9S	SW SE 22-46-26	26.454117	81.698032	754964	770863	427783	771367	145	55	SAS	Existing	15,907	143,345	40,000
36-00003	LCU - Corkscrew	10S	SE SE 22-46-26	26.454268	81.695283	755863	770920	428683	771417	156	60	SAS	Existing	7,534	130,346	40,000
36-00003	LCU - Corkscrew	11S	SE SE 22-46-26	26.454400	81.692517	756768	770970	429588	771460	155	55	SAS	Existing	13,704	89,400	45,000
36-00003	LCU - Corkscrew	12S	SE SW 22-46-26	26.451169	81.703501	753177	769787	425988	770305	145	50	SAS	Existing	133,937	129,448	135,000
36-00003	LCU - Corkscrew	13S	SE SW 22-46-26	26.451218	81.700750	754077	769807	426888	770318	140	50	SAS	Existing	7,795	106,762	40,000
36-00003	LCU - Corkscrew	14S	SW SE 22-46-26	26.451219	81.698400	754846	769809	427657	770314	150	50	SAS	Existing	438,611	206,243	440,000
36-00003	LCU - Corkscrew	15S	SE SE 22-46-26	26.451217	81.695267	755871	769811	428682	770308	150	58	SAS	Existing	95,233	153,972	100,000
36-00003	LCU - Corkscrew	16S	SE SE 22-46-26	26.451267	81.692517	756771	769831	429582	770321	155	76	SAS	Existing	46,036	96,550	70,000
36-00003	LCU - Corkscrew	18S	SE NW 22-46-26	26.459550	81.701516	753820	772835	426654	773348	115	45	SAS	Existing	3,934	149,296	40,000
36-00003	LCU - Corkscrew	19S	SW NE 22-46-26	26.459533	81.698780	754715	772831	427549	773337	120	50	SAS	Existing	120,553	304,840	125,000
36-00003	LCU - Corkscrew	20S	SE NE 22-46-26	26.459549	81.696048	755608	772839	428443	773338	120	50	SAS	Existing	89,436	249,273	95,000
36-00003	LCU - Corkscrew	21S	NW NE 22-46-26	26.461716	81.701865	753703	773622	426544	774136	105	35	SAS	Existing	37,748	267,422	50,000
36-00003	LCU - Corkscrew	22S	NW NE 22-46-26	26.462467	81.699101	754607	773897	427450	774404	110	40	SAS	Existing	0	109,005	35,000
36-00003	LCU - Corkscrew	23S	NE NE 22-46-26	26.463234	81.696367	755501	774178	428346	774678	115	45	SAS	Existing	222,627	100,714	230,000
36-00003	LCU - Corkscrew	24S	NE NE 22-46-26	26.463932	81.693733	756362	774434	429209	774927	120	50	SAS	Existing	0	148,952	35,000
36-00003	LCU - Corkscrew	25D	SW SW 21-46-26	26.451301	81.724449	746323	769820	419134	770391	290	190	SSA	Existing	0	163,256	0
36-00003	LCU - Corkscrew	25S	SW SW 21-46-26	26.451235	81.724448	746323	769796	419134	770367	130	50	SAS	Existing	0	254,190	0
36-00003	LCU - Corkscrew	26D	NE NE 29-46-26	26.445901	81.724284	746381	767858	419177	768428	290	190	SSA	Existing	6,493	233,071	100,000
36-00003	LCU - Corkscrew	26S	NE NE 29-46-26	26.445833	81.724268	746387	767833	419182	768403	130	50	SAS	Existing	84,049	98,944	85,000
36-00003	LCU - Corkscrew	27D	SE SE 29-46-26	26.435601	81.723849	746531	764114	419298	764683	290	190	SSA	Existing	65,540	120,730	100,000
36-00003	LCU - Corkscrew	27S	SE SE 29-46-26	26.435499	81.723867	746526	764077	419292	764646	130	50	SAS	Existing	0	142,415	35,000
36-00003	LCU - Corkscrew	28D	NE NE 32-46-26	26.430917	81.723652	746600	762411	419353	762980	300	190	SSA	Existing	54,463	101,637	100,000
36-00003	LCU - Corkscrew	28S	NE NE 32-46-26	26.430818	81.723667	746595	762375	419348	762944	130	50	SAS	Existing	198,274	244,910	200,000
36-00003	LCU - Corkscrew	29D	NE NE 16-46-26	26.475582	81.710616	750829	778656	423709	779192	180	105	SSA	Existing	434,238	270,004	475,000
36-00003	LCU - Corkscrew	29S	NE NE 16-46-26	26.475500	81.710600	750835	778626	423714	779162	62	31	SAS	Existing	94,797	110,201	95,000
36-00003	LCU - Corkscrew	30D	SE NE 16-46-26	26.471849	81.708933	751383	777300	424252	777832	169	132	SSA	Existing	327,107	270,004	375,000
36-00003	LCU - Corkscrew	30S	SE NE 16-46-26	26.471816	81.708899	751394	777288	424263	777820	59	40	SAS	Existing	102,090	110,201	105,000
36-00003	LCU - Corkscrew	31D	SE SE 15-46-26	26.468152	81.707266	751931	775958	424790	776485	200	115	SSA	Existing	283,003	270,004	300,000

TABLE 3-1A. SUMMARY OF WELL INFORMATION DATA FOR LCU CORKSCREW WELLFIELD (WATER USE PERMIT 36-00003-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00003	LCU - Corkscrew	31S	SE SE 15-46-26	26.468083	81.707250	751936	775933	424795	776460	110	45	SAS	Existing	614,553	110,201	550,000
36-00003	LCU - Corkscrew	32D	SW SE 21-46-26	26.452384	81.713682	749845	770221	422659	770765	292	179	SSA	Existing	578,482	270,004	550,000
36-00003	LCU - Corkscrew	32S	SW SE 21-46-26	26.452383	81.713783	749812	770221	422626	770765	89	40	SAS	Existing	262,140	110,201	265,000
36-00003	LCU - Corkscrew	33D	SE SW 21-46-26	26.452134	81.718485	748274	770127	421087	770683	238	130	SSA	Existing	376,893	270,004	400,000
36-00003	LCU - Corkscrew	33S	SE SW 21-46-26	26.452134	81.718568	748247	770127	421060	770683	79	40	SAS	Existing	1,052	110,201	40,000
36-00003	LCU - Corkscrew	34D	SE SE 23-46-26	26.450335	81.679733	760954	769503	433763	769960	360	260	SSA	Existing	293,984	270,004	325,000
36-00003	LCU - Corkscrew	34S	SE SE 23-46-26	26.450317	81.679516	761025	769496	433834	769953	160	40	SAS	Existing	509,827	110,201	500,000
36-00003	LCU - Corkscrew	35D	SW SW 24-46-26	26.450568	81.672901	763190	769593	435999	770033	301	210	SSA	Existing	0	270,004	100,000
36-00003	LCU - Corkscrew	35S	SW SW 24-46-26	26.450585	81.672764	763235	769600	436044	770039	150	42	SAS	Existing	0	110,201	35,000
36-00003	LCU - Corkscrew	36D	SE SW 24-46-26	26.450617	81.667715	764886	769615	437696	770042	260	179	SSA	Existing	5,597	270,004	100,000
36-00003	LCU - Corkscrew	36S	SE SW 24-46-26	26.450598	81.667583	764929	769609	437739	770035	110	40	SAS	Existing	245,189	110,201	250,000
36-00003	LCU - Corkscrew	37D	SE SE 24-46-26	26.450683	81.660032	767400	769646	440210	770053	200	146	SSA	Existing	435,005	270,004	475,000
36-00003	LCU - Corkscrew	37S	SE SE 24-46-26	26.450785	81.660100	767378	769683	440188	770090	110	45	SAS	Existing	272,225	110,201	275,000
36-00003	LCU - Corkscrew	38D	SE SW 19-46-27	26.450727	81.651600	770159	769669	442969	770055	238	166	SSA	Existing	274,510	270,004	300,000
36-00003	LCU - Corkscrew	38S	SE SW 19-46-27	26.450728	81.651447	770209	769670	443019	770055	116	43	SAS	Existing	392,707	110,201	395,000
36-00003	LCU - Corkscrew	39D	SE SE 19-46-27	26.450766	81.644201	772580	769690	445390	770057	200	146	SSA	Existing	35,277	270,004	100,000
36-00003	LCU - Corkscrew	39S	SE SE 19-46-27	26.450750	81.644051	772629	769685	445439	770051	120	40	SAS	Existing	16,882	110,201	40,000
36-00003	LCU - Corkscrew	40	SE SW 22-46-26	26.453851	81.703633	753132	770762	425950	771280	827	707	LHA	Existing	254,729	1,107,120	1,107,120
36-00003	LCU - Corkscrew	41	SW NW 22-46-26	26.459217	81.704414	752871	772712	425705	773232	810	599	LHA	Existing	80,337	1,107,120	1,107,120
36-00003	LCU - Corkscrew	42D	NE SE 32-46-26	26.425999	81.724000	746490	760624	419229	761193	290	190	SSA	Proposed	NA	NA	100,000
36-00003	LCU - Corkscrew	42S	NE SE 32-46-26	26.425999	81.723970	746500	760624	419239	761193	100	50	SAS	Proposed	NA	NA	45,000
36-00003	LCU - Corkscrew	43D	SE SE 32-46-26	26.421000	81.724000	746494	758807	419219	759376	290	190	SSA	Proposed	NA	NA	100,000
36-00003	LCU - Corkscrew	43S	SE SE 32-46-26	26.421000	81.723969	746504	758807	419229	759376	100	50	SAS	Proposed	NA	NA	45,000
36-00003	LCU - Corkscrew	ASR#1	NW NW 22-46-26	26.464352	81.704534	752828	774579	425676	775099	397	328	MHA	Existing	*	*	*
36-00003	LCU - Corkscrew	ASR#2	NW NW 22-46-26	26.462300	81.704568	752819	773832	425661	774353	397	337	MHA	Existing	*	*	*
36-00003	LCU - Corkscrew	ASR#3	SE NE 16-46-26	26.471701	81.708883	751399	777246	424268	777778	347	285	MHA	Existing	*	*	*
36-00003	LCU - Corkscrew	ASR#4	SE SE 15-46-26	26.467965	81.707200	751953	775890	424811	776417	368	310	MHA	Existing	*	*	*
36-00003	LCU - Corkscrew	ASR#5	NE NE 16-46-26	26.475418	81.710550	750851	778596	423730	779132	291	253	MHA	Existing	*	*	*
													Total Daily Pumpage (gpd):	**9,528,726**	**12,977,559**	**12,974,240**
													Surficial Aquifer System (SAS) Daily Pumpage (gpd):	**4,125,532**	**4,358,630**	**4,610,000**
													Sandstone Aquifer (SSA) Daily Pumpage (gpd):	**5,068,129**	**6,150,498**	**6,150,000**
													Lower Hawthorn (LHA) Aquifer Daily Pumpage (gpd):	**335,066**	**2,214,240**	**2,214,240**

SAS Permitted Average Allocation (MGD): 4.61
SSA Permitted Average Allocation (MGD): 6.15
LHA Permitted Average Allocation (MGD): 2.21
* ASR Protection Zone for Established by Optimum Storage Volume Modeling Permitted with FDEP

TABLE 3-1B. SUMMARY OF WELL INFORMATION DATA FOR LCU GREEN MEADOWS WELLFIELD (WATER USE PERMIT 36-00003-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00003	LCU - Green Meadows	1F	SW SW 33-45-26	26.513033	81.725264	746008	792258	418994	792832	860	650	LHA	Existing	335,134	413,566	340,000
36-00003	LCU - Green Meadows	2F	SW SW 33-45-26	26.511851	81.723000	746750	791830	419732	792398	872	665	LHA	Existing	453,521	413,566	455,000
36-00003	LCU - Green Meadows	3F	SW SW 33-45-26	26.513715	81.722635	746868	792508	419855	793075	850	650	LHA	Existing	805,022	413,566	805,000
36-00003	LCU - Green Meadows	4F	SW SE 33-45-26	26.511971	81.717579	748522	791878	421505	792432	837	631	LHA	Existing	779,293	413,566	780,000
36-00003	LCU - Green Meadows	5F	SE SE 33-45-26	26.511922	81.709891	751036	791865	424019	792400	860	585	LHA	Existing	866,085	413,566	870,000
36-00003	LCU - Green Meadows	6F	SE SW 34-45-26	26.512119	81.701187	753883	791943	426866	792456	727	572	LHA	Existing	1,014,104	413,566	1,000,000
36-00003	LCU - Green Meadows	7F	SE SE 34-45-26	26.512268	81.693803	756297	792003	429281	792497	724	568	LHA	Existing	521,942	413,566	525,000
36-00003	LCU - Green Meadows	8F	SE SW 35-45-26	26.512367	81.685223	759103	792046	432087	792518	840	625	LHA	Existing	608,674	413,566	610,419
36-00003	LCU - Green Meadows	9F	SE SE 35-45-26	26.512437	81.677457	761643	792078	434627	792530	869	664	LHA	Existing	0	413,566	314,667
36-00003	LCU - Green Meadows	10F	SE SW 36-45-26	26.512131	81.668902	764440	791974	437424	792404	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	11F	SE SE 36-45-26	26.511869	81.660696	767124	791886	440107	792295	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	12F	SE SW 31-45-27	26.511747	81.653118	769602	791848	442585	792238	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	13F	SE SE 3146-27	26.511854	81.644710	772352	791894	445335	792263	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	15F	SW NE 33-45-26	26.520349	81.716897	748739	794923	421745	795476	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	16F	SW SE 28-45-26	26.529103	81.717349	748584	798105	421615	798659	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	17F	SW SW 27-45-26	26.529344	81.708246	751560	798199	424592	798730	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	18F	NW NE 34-45-26	26.525128	81.698596	754719	796674	427739	797180	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	19F	SE SE 27-45-26	26.527858	81.694475	756064	797669	429092	798165	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	20F	NW SW 26-45-26	26.531589	81.690879	757236	799028	430275	799515	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	21F	NE SE 26-45-26	26.531088	81.678239	761370	798857	434407	799311	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	22F	NE NE 35-45-26	26.525713	81.677556	761598	796903	434620	797356	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	23F	NE NW 36-45-26	26.526081	81.669090	764366	797044	437389	797475	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	24F	NW NW 31-45-27	26.526119	81.660928	767035	797065	440058	797475	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	25F	NW NE 31-45-27	26.526162	81.651606	770082	797089	443106	797475	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	26F	NW NW 32-45-27	26.526026	81.645089	772214	797045	445237	797415	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	27F	NW NE 32-45-27	26.526119	81.636682	774962	797087	447986	797435	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	28F	C 32-45-27	26.518560	81.636457	775044	794339	448046	794687	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	29F	SW SE 32-45-27	26.511982	81.636543	775022	791948	448006	792296	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	30F	SE SE 32-45-27	26.512236	81.628808	777552	792048	450536	792376	850	650	LHA	Proposed	0	413,566	314,667
36-00003	LCU - Green Meadows	1	SW SW 33-45-26	26.513033	81.725264	746008	792258	418994	792832	180	90	SSA	Existing	434,904	220,284	435,000
36-00003	LCU - Green Meadows	2-R	SW SW 33-45-26	26.512391	81.722749	746831	792026	419815	792594	139	98	SSA	Existing	2,036	163,042	150,000
36-00003	LCU - Green Meadows	3	SW SW 33-45-26	26.513715	81.722632	746869	792508	419856	793075	190	100	SSA	Existing	5,756	347,465	150,000
36-00003	LCU - Green Meadows	4	SW SE 33-45-26	26.511934	81.717365	748592	791864	421575	792418	185	105	SSA	Existing	181,885	342,922	200,000

TABLE 3-1B. SUMMARY OF WELL INFORMATION DATA FOR LCU GREEN MEADOWS WELLFIELD (WATER USE PERMIT 36-00003-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00003	LCU - Green Meadows	5	SE SE 33-45-26	26.512082	81.709700	751099	791924	424082	792458	180	102	SSA	Existing	305,425	242,549	310,000
36-00003	LCU - Green Meadows	6	SE SW 34-45-26	26.512049	81.701351	753829	791918	426812	792431	235	90	SSA	Existing	147,329	127,039	150,000
36-00003	LCU - Green Meadows	7	SE SE 34-45-26	26.512200	81.693582	756369	791979	429353	792472	235	90	SSA	Existing	21,545	110,688	100,000
36-00003	LCU - Green Meadows	8	SE SW 35-45-26	26.512283	81.684999	759176	792016	432160	792487	190	90	SSA	Existing	0	212,703	100,000
36-00003	LCU - Green Meadows	9	SE SE 35-45-26	26.512366	81.677334	761683	792052	434667	792504	230	91	SSA	Existing	39,603	121,645	100,000
36-00003	LCU - Green Meadows	10	SE SW 36-45-26	26.512350	81.669050	764392	792053	437376	792484	200	90	SSA	Existing	198,614	240,381	200,000
36-00003	LCU - Green Meadows	11	SE SE 36-45-26	26.511734	81.660897	767058	791836	440041	792246	210	90	SSA	Existing	496,625	251,638	500,000
36-00003	LCU - Green Meadows	12	SE SW 31-45-27	26.511916	81.652850	769690	791910	442673	792299	90	82	SSA	Existing	42,762	122,230	100,000
36-00003	LCU - Green Meadows	13	SE SE 3146-27	26.511867	81.644899	772290	791899	445273	792268	92	84	SSA	Existing	41,088	42,295	100,000
36-00003	LCU - Green Meadows	15	SW NE 33-45-26	26.520349	81.716897	748739	794923	421745	795476	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	16	SW SE 28-45-26	26.529098	81.717273	748609	798103	421640	798657	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	17	SW SW 27-45-26	26.529221	81.708098	751608	798155	424640	798685	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	18	NW NE 34-45-26	26.525128	81.698593	754720	796674	427740	797180	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	19	SE SE 27-45-26	26.527871	81.694450	756072	797674	429100	798170	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	20	NW SW 26-45-26	26.531630	81.690873	757238	799043	430277	799530	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	21	NE SE 26-45-26	26.531088	81.678239	761370	798857	434407	799311	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	22	SE SE 26-45-26	26.525713	81.677556	761598	796903	434620	797356	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	23	SE SW 25-45-26	26.526081	81.669090	764366	797044	437389	797475	200	100	SSA	Proposed	0	212,703	207,222
36-00003	LCU - Green Meadows	1-D	SW SW 33-45-26	26.513001	81.725083	746068	792247	419053	792820	40	14	WTA	Existing	0	267,749	100,000
36-00003	LCU - Green Meadows	2-A	SW SW 33-45-26	26.511935	81.722719	746842	791861	419824	792428	38	20	WTA	Existing	0	275,242	100,000
36-00003	LCU - Green Meadows	3-A	SW SW 33-45-26	26.514152	81.722766	746824	792666	419813	793234	42	17	WTA	Existing	0	331,101	100,000
36-00003	LCU - Green Meadows	3-B	SW SW 33-45-26	26.513068	81.722799	746814	792272	419800	792840	42	22	WTA	Existing	761	312,895	100,000
36-00003	LCU - Green Meadows	4-A	SW SE 33-45-26	26.511815	81.717468	748559	791821	421541	792375	43	20	WTA	Existing	176,323	185,106	180,000
36-00003	LCU - Green Meadows	5-A	SE SE 33-45-26	26.512019	81.709800	751066	791900	424049	792435	24	20	WTA	Existing	283,943	140,186	285,000
36-00003	LCU - Green Meadows	6-A	SE SW 34-45-26	26.512184	81.701319	753840	791967	426823	792480	24	20	WTA	Existing	208,652	203,056	210,000
36-00003	LCU - Green Meadows	7-A	SE SE 34-45-26	26.512148	81.693652	756347	791960	429330	792453	45	21	WTA	Existing	254,901	124,097	260,000
36-00003	LCU - Green Meadows	8-A	SE SW 35-45-26	26.512197	81.685033	759165	791985	432149	792456	42	20	WTA	Existing	335,356	50,482	340,000
36-00003	LCU - Green Meadows	9-A	SE SE 35-45-26	26.512250	81.677401	761661	792010	434645	792462	42	20	WTA	Existing	70,644	37,962	100,000
36-00003	LCU - Green Meadows	10-A	SE SW 36-45-26	26.512201	81.669116	764370	791999	437354	792430	40	20	WTA	Existing	280,674	129,560	285,000
36-00003	LCU - Green Meadows	11-A	SE SE 36-45-26	26.511882	81.660984	767030	791890	440013	792300	40	20	WTA	Existing	63,375	108,930	100,000
36-00003	LCU - Green Meadows	12-A	SE SW 31-45-27	26.511633	81.652784	769712	791807	442694	792196	25	20	WTA	Existing	122,573	5,045	125,000
36-00003	LCU - Green Meadows	13-A	SE SE 3146-27	26.511967	81.644802	772322	791935	445305	792304	26	20	WTA	Existing	220,030	75,619	225,000
36-00003	LCU - Green Meadows	15A	SW NE 33-45-26	26.520349	81.716866	748749	794923	421755	795476	50	20	WTA	Proposed	0	130,000	80,000

TABLE 3-1B. SUMMARY OF WELL INFORMATION DATA FOR LCU GREEN MEADOWS WELLFIELD (WATER USE PERMIT 36-00003-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00003	LCU - Green Meadows	16A	SW SE 28-45-26	26.529098	81.717242	748619	798103	421650	798657	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	17A	SW SW 27-45-26	26.529218	81.708068	751618	798154	424650	798684	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	18A	NW NE 34-45-26	26.525128	81.698562	754730	796674	427750	797180	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	19A	SE SE 27-45-26	26.527872	81.694420	756082	797674	429110	798170	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	20A	NW SW 26-45-26	26.531633	81.690843	757248	799045	430287	799531	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	21A	NE SE 26-45-26	26.531088	81.678239	761370	798857	434407	799311	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	22A	SE SE 26-45-26	26.525713	81.677556	761598	796903	434620	797356	50	20	WTA	Proposed	0	130,000	80,000
36-00003	LCU - Green Meadows	23A	SE SW 25-45-26	26.526081	81.669090	764366	797044	437389	797475	50	20	WTA	Proposed	0	130,000	80,000
													Total Daily Pumpage (gpd):	**9,318,578**	**19,869,664**	**19,683,424**
													Water Table Aquifer (WTA) Daily Pumpage (gpd):	**2,017,232**	**3,417,030**	**3,230,000**
													Sandstone Aquifer (SSA) Daily Pumpage (gpd):	**1,917,571**	**4,459,208**	**4,459,998**
													Lower Hawthorn (LHA) Aquifer Daily Pumpage (gpd):	**5,383,775**	**11,993,426**	**11,993,426**

WTA Permitted Average Allocation (MGD): 3.23
SSA Permitted Average Allocation (MGD): 4.46
LHA Permitted Average Allocation (MGD): 11.99
Total (MGD): 19.68

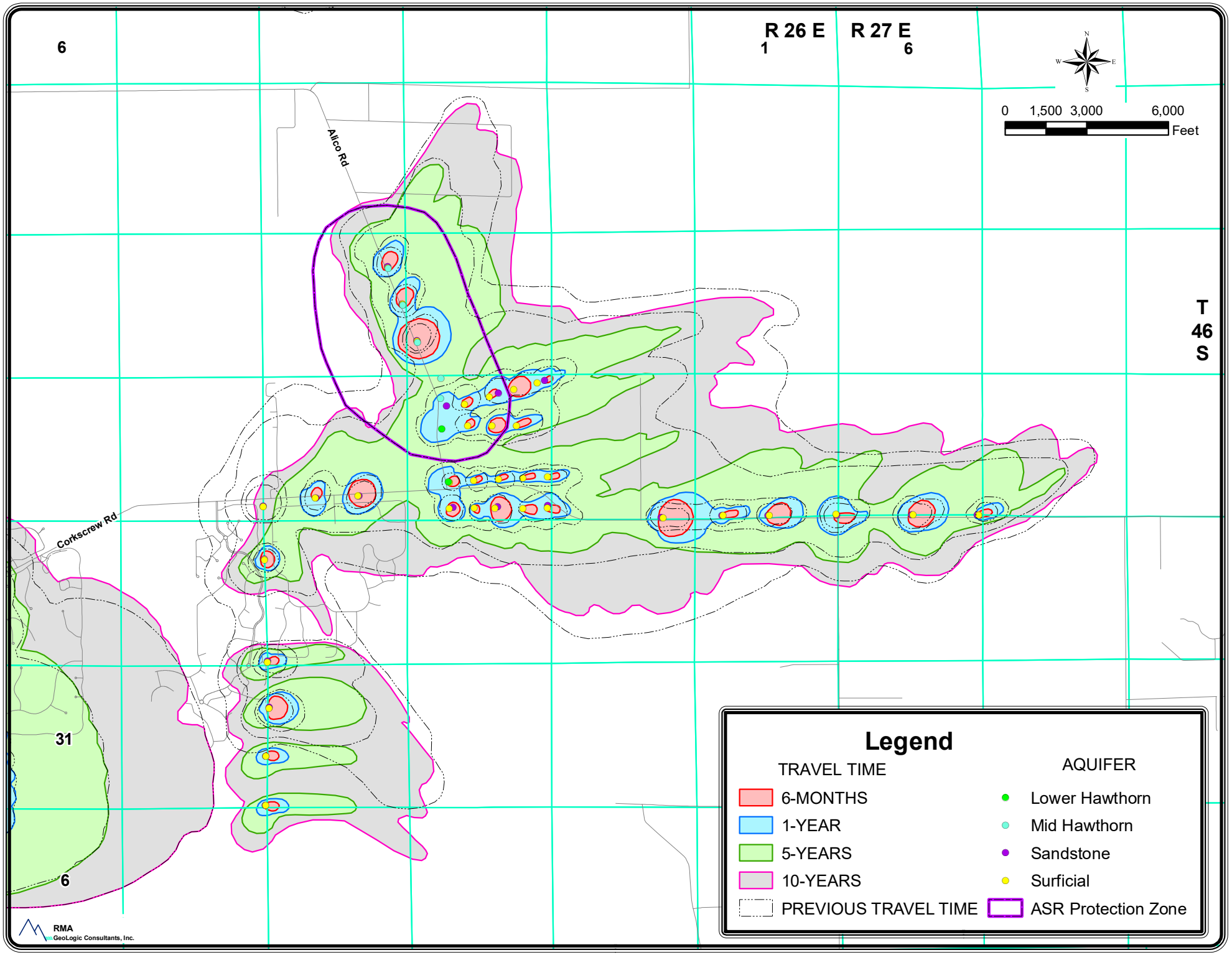


FIGURE 3-1A- MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR LCU CORKSCREW WELLFIELD.

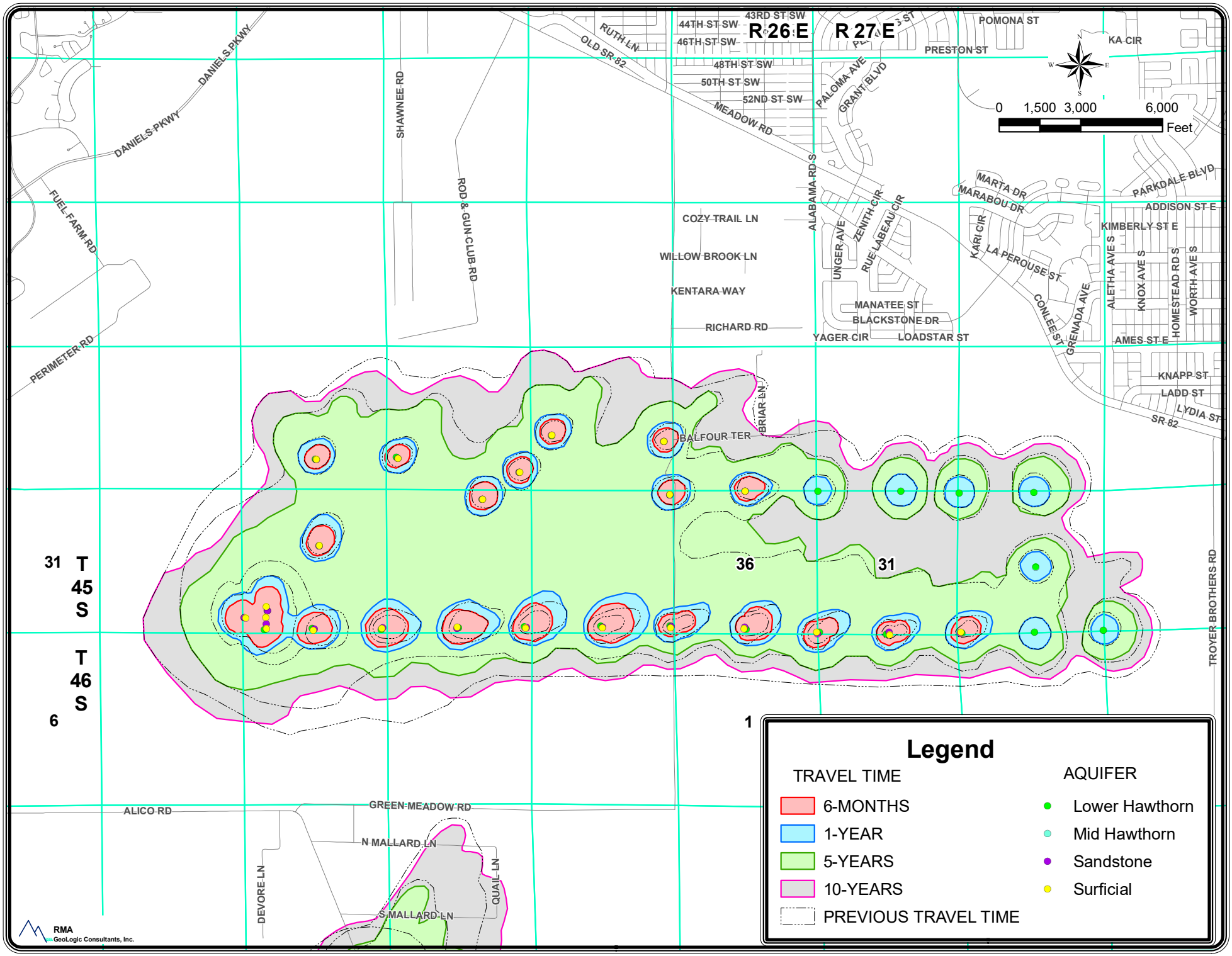


FIGURE 3-1B- MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR LCU GREEN MEADOWS WELLFIELD.

TABLE 3-2A. SUMMARY OF WELL INFORMATION DATA FOR BSU LOWER TAMIAMI AQUIFER WELLFIELD (WATER USE PERMIT 36-00008-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00008	Bonita Springs Utilities	1A	NE SE 13-47-25	26.384363	81.756060	736027	745469	408648	746119	100	70	LTA	Proposed	0	161,315	437,017
36-00008	Bonita Springs Utilities	2A	NE SE 13-47-25	26.386987	81.756141	735998	746423	408627	747073	100	70	LTA	Proposed	0	161,315	437,017
36-00008	Bonita Springs Utilities	3A	NE NE 19-47-26	26.374919	81.739075	741594	742047	414189	742654	100	70	LTA	Proposed	0	0	437,017
36-00008	Bonita Springs Utilities	4A	NE NE 19-47-26	26.373396	81.739025	741611	741493	414202	742100	100	70	LTA	Proposed	0	0	437,017
36-00008	Bonita Springs Utilities	5	NW NW 31-47-26	26.344968	81.755003	736400	731150	408910	731797	80	64	LTA	Existing	44,090	161,315	57,318
36-00008	Bonita Springs Utilities	6	SW NW 31-47-26	26.342240	81.754714	736496	730159	408999	730805	80	58	LTA	Existing	3	161,315	50,000
36-00008	Bonita Springs Utilities	8	SE SE 24-47-25	26.362181	81.755668	736170	737406	408729	738055	85	70	LTA	Existing	31,312	161,315	40,706
36-00008	Bonita Springs Utilities	9	NE SE 24-47-25	26.365193	81.755724	736150	738501	408717	739150	85	70	LTA	Existing	30,893	161,315	40,161
36-00008	Bonita Springs Utilities	10	SE NE 24-47-25	26.367880	81.755815	736118	739478	408693	740127	90	66	LTA	Existing	235,515	161,315	306,170
36-00008	Bonita Springs Utilities	11	SW NW 31-47-26	26.339941	81.754684	736508	729323	409004	729969	97	67	LTA	Existing	200,586	161,315	260,762
36-00008	Bonita Springs Utilities	12	SE NE 24-47-25	26.370620	81.755879	736095	740473	408678	741123	100	70	LTA	Existing	79,296	161,315	103,085
36-00008	Bonita Springs Utilities	13	NE NE 24-47-25	26.373370	81.756083	736027	741473	408617	742123	100	70	LTA	Existing	34,592	161,315	44,969
36-00008	Bonita Springs Utilities	14	SE SE 13-47-25	26.376116	81.756006	736050	742471	408648	743121	100	70	LTA	Existing	47,310	161,315	61,502
36-00008	Bonita Springs Utilities	15	NE SE 13-47-25	26.378869	81.756045	736035	743472	408641	744122	100	70	LTA	Existing	216,778	161,315	281,812
36-00008	Bonita Springs Utilities	16	NE SE 13-47-25	26.381620	81.756100	736015	744472	408629	745122	100	70	LTA	Existing	280,285	161,315	364,370
36-00008	Bonita Springs Utilities	17	SW SW 28-47-26	26.346740	81.722303	747107	731816	419623	732380	102	73	LTA	Existing	167,219	434,822	217,385
36-00008	Bonita Springs Utilities	18	SW SW 28-47-26	26.347746	81.722004	747204	732182	419723	732745	101	78	LTA	Existing	601,112	434,822	781,446
36-00008	Bonita Springs Utilities	19	SW SW 28-47-26	26.348748	81.722398	747074	732546	419596	733110	110	82	LTA	Existing	398,082	434,822	517,507
36-00008	Bonita Springs Utilities	20	NW SW 28-47-26	26.349802	81.722353	747088	732929	419613	733493	114	91	LTA	Existing	485,940	434,822	631,722
36-00008	Bonita Springs Utilities	21	NW NW 33-47-26	26.346164	81.720984	747540	731607	420054	732168	115	80	LTA	Existing	429,274	434,822	558,056
36-00008	Bonita Springs Utilities	22	NW NW 33-47-26	26.344666	81.721667	747317	731063	419827	731625	115	65	LTA	Existing	376,093	434,822	488,921
36-00008	Bonita Springs Utilities	23	NE NE 32-47-26	26.343804	81.722432	747067	730749	419575	731313	115	65	LTA	Existing	407,203	434,822	529,364
36-00008	Bonita Springs Utilities	24	NW NW 33-47-26	26.342904	81.721956	747224	730422	419729	730985	101	61	LTA	Existing	266,674	434,822	346,676
													Total Daily Average (gpd):	**4,332,258**	**5,575,671**	**7,429,999**

Lower Tamiami Aquifer Permitted Average Allocation (MGD): 7.43*

* = Permit application currently under review

TABLE 3-2B. SUMMARY OF WELL INFORMATION DATA FOR BSU UPPER FLORIDAN AQUIFER WELLFIELD (WATER USE PERMIT 36-00008-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00008	Bonita Springs Utilities	25	NE NE 26-47-25	26.345144	81.755444	736255	731214	408766	731862	1040	816	UFA	Existing	271,540	871,050	500,000
36-00008	Bonita Springs Utilities	26	SE SE 24-47-25	26.361012	81.755645	736178	736981	408734	737630	1063	835	UFA	Existing	458,973	871,050	500,000
36-00008	Bonita Springs Utilities	27	NE SE 24-47-25	26.366497	81.755742	736143	738975	408714	739624	1080	815	UFA	Existing	482,060	871,050	500,000
36-00008	Bonita Springs Utilities	28	SE NE 24-47-25	26.369231	81.755815	736117	739969	408696	740618	1012	805	UFA	Existing	241,299	871,050	500,000
36-00008	Bonita Springs Utilities	29	NE NE 24-47-25	26.374590	81.756833	735780	741916	408374	742568	1063	841	UFA	Existing	374,211	871,050	500,000
36-00008	Bonita Springs Utilities	30	SE SW 13-47-25	26.375118	81.762523	733917	742105	406512	742771	1120	900	UFA	Existing	487,795	871,050	500,000
36-00008	Bonita Springs Utilities	31	NE NE 14-47-25	26.385791	81.773574	730292	745977	402917	746672	843	660	UFA	Existing	1,474,249	871,050	1,000,000
36-00008	Bonita Springs Utilities	32	NE NE 14-47-25	26.389172	81.773548	730298	747206	402933	747901	701	650	UFA	Existing	26,825	871,050	500,000
36-00008	Bonita Springs Utilities	33	NE NE 36-47-25	26.342449	81.754868	736446	730235	408949	730881	1030	805	UFA	Existing	547,690	871,050	600,000
36-00008	Bonita Springs Utilities	34	SE SE 25-45-25	26.347880	81.755755	736151	732208	408670	732857	1008	830	UFA	Existing	454,460	871,050	500,000
36-00008	Bonita Springs Utilities	35	SW NW 14-47-25	26.382701	81.773630	730275	744854	402892	745549	886	705	UFA	Existing	1,157,877	871,050	1,000,000
36-00008	Bonita Springs Utilities	36	NW SW 25-47-25	26.352734	81.768013	732134	733965	404666	734645	1100	830	UFA	Existing	244,501	871,050	500,000
36-00008	Bonita Springs Utilities	37	NE SW 25-47-25	26.352296	81.765085	733093	733807	405624	734480	1040	850	UFA	Existing	577,775	871,050	600,000
36-00008	Bonita Springs Utilities	38	NW SE 25-47-25	26.349610	81.762512	733938	732833	406461	733499	1100	865	UFA	Existing	460	871,050	0
36-00008	Bonita Springs Utilities	39	SE NE 25-47-25	26.353647	81.755115	736357	734305	408892	734952	1000	800	UFA	Proposed	NA	871,050	497,500
36-00008	Bonita Springs Utilities	40	SW NW 31-47-26	26.340034	81.754675	736510	729357	409007	730003	1060	810	UFA	Existing	518,151	0	520,000
36-00008	Bonita Springs Utilities	41	SW SW 28-47-26	26.347350	81.722054	747188	732038	419706	732601	1060	800	UFA	Existing	0	0	497,500
36-00008	Bonita Springs Utilities	42	SW SW 28-47-26	26.349888	81.722216	747133	732960	419658	733524	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	43	NW NW 33-47-26	26.343968	81.722649	746996	730808	419504	731373	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	44	SW NW 33-47-26	26.340990	81.721904	747242	729726	419742	730289	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	45	NE NW 31-47-26	26.345663	81.748819	738424	731407	410937	732038	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	46	NE NW 31-47-26	26.342755	81.747841	738747	730350	411251	730979	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	47	NW SE 30-47-26	26.351220	81.743697	740098	733430	412626	734048	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	48	NE SE 30-47-26	26.351203	81.741010	740978	733426	413506	734037	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	49	NE SE 13-47-25	26.378784	81.756054	736032	743441	408638	744091	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	50	SE NE 13-47-25	26.382343	81.756300	735949	744734	408565	745385	1000	800	UFA	Proposed	NA	0	497,500
36-00008	Bonita Springs Utilities	51	SE NW 31-47-26	26.338636	81.746819	739084	728854	411577	729480	1000	800	UFA	Proposed	NA	0	497,500
													Total Daily Average (gpd):	**7,317,866**	**13,065,753**	**14,190,000**

Upper Floridan Aquifer Permitted Average Allocation (MGD): 14.19*

* = Permit application currently under review

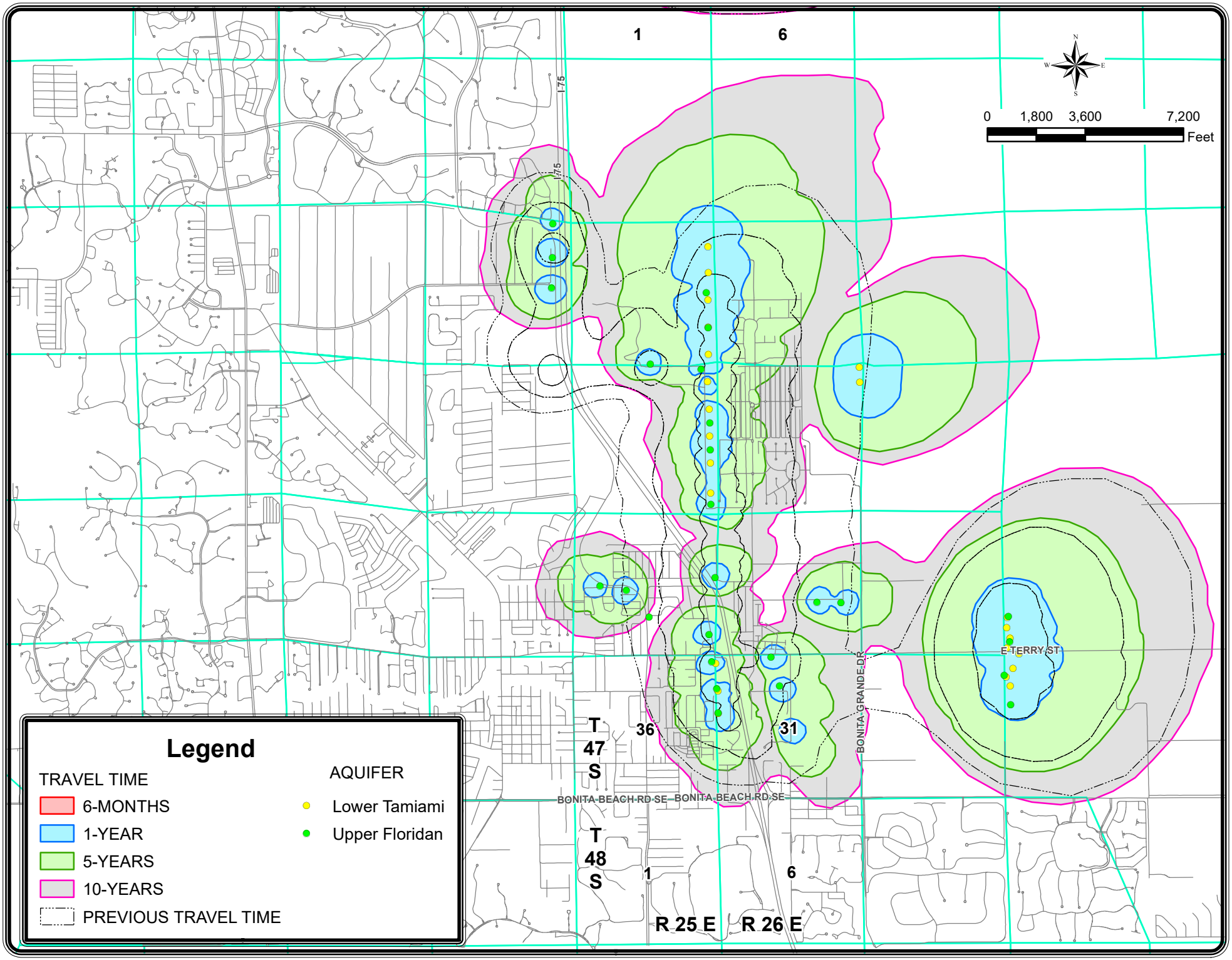


FIGURE 3-2. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR BSU WELLFIELD.

3- Water Use Permit 36-00035-W – City of Fort Myers

A renewal and modification to the City of Fort Myers water use permit was issued in 2020. The modification included the addition of 24 Upper Floridan aquifer (UFA) production wells and an increase of allocation to provide potable needs to the City of Fort Myers service area through year 2039. A summary of the well information data for the City of Fort Myers wellfield is provided in Table 3-3. The locations of the production wells and new protection zones are shown on Figure 3-3. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

4- Water Use Permit 36-00045-W – Greater Pine Island Water Association

A renewal and modification to the Greater Pine Island Water Association (GPIWA) water use permit was issued in 2015. The modification included only an increase of allocation to provide potable needs to the GPIWA service area through year 2035, no new production wells were included in the modification/renewal. A summary of the well information data for the GPIWA wellfield is provided in Table 3-4. The locations of the production wells and new protection zones are shown on Figure 3-4. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

5- Water Use Permit 36-00046-W – City of Cape Coral (North Wellfield)

The water use permit for the City of Cape Coral was issued in 2009. The travel time zones for the City of Cape Coral have not been updated since 2005. As part of this update, simulations were conducted for the North Wellfield using the information included in the last version of the permit (i.e. 2009). Changes to the North Wellfield included addition of 15 production wells and an increase of the allocation. A summary of the well information data is provided in Table 3-5. The locations of the production wells and new protection zones are shown on Figure 3-5. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

TABLE 3-3. SUMMARY OF WELL INFORMATION DATA FOR CITY OF FORT MYERS WELLFIELD (WATER USE PERMIT 36-00035-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00035	City of Fort Myers	P-1	SE SE 20-44-25	26.628692	81.825521	713166	834241	386478	835073	775	462	UFA	Existing	1,171,268	703,143	504,000
36-00035	City of Fort Myers	P-2	NE SE 20-44-25	26.631371	81.826042	712994	835215	386314	836048	775	465	UFA	Existing	1,476,079	703,143	504,000
36-00035	City of Fort Myers	P-3	NW NW 28-44-25	26.626130	81.823311	713889	833311	387194	834137	775	465	UFA	Existing	232,953	703,143	235,000
36-00035	City of Fort Myers	P-4	NW SW 28-44-25	26.622766	81.823198	713928	832088	387223	832914	775	465	UFA	Existing	486,107	703,143	490,000
36-00035	City of Fort Myers	P-5	NW SW 28-44-25	26.618543	81.823284	713902	830553	387185	831379	775	465	UFA	Existing	564,649	703,143	504,000
36-00035	City of Fort Myers	P-6	SW SW 28-44-25	26.615693	81.823270	713908	829517	387183	830343	800	475	UFA	Existing	508,589	703,143	504,000
36-00035	City of Fort Myers	P-7	SW SW 28-44-25	26.612761	81.823231	713922	828451	387189	829277	775	465	UFA	Existing	645,260	703,143	504,000
36-00035	City of Fort Myers	P-8	SE NE 20-44-25	26.633908	81.827429	712540	836136	385867	836973	775	465	UFA	OOS	0	0	0
36-00035	City of Fort Myers	P-9	SW NE 20-44-25	26.637991	81.827718	712444	837620	385782	838458	775	465	UFA	OOS	0	703,143	0
36-00035	City of Fort Myers	P-10	NE NE 20-44-25	26.639689	81.825698	713103	838238	386446	839071	775	465	UFA	OOS	0	703,143	0
36-00035	City of Fort Myers	P-11	SE NE 20-44-25	26.634535	81.824617	713458	836365	386787	837195	775	465	UFA	OOS	0	703,143	0
36-00035	City of Fort Myers	P-12	NW NW 21-44-25	26.640624	81.822469	714157	838580	387503	839404	775	465	UFA	Existing	1,608,233	703,143	504,000
36-00035	City of Fort Myers	P-13	SE SW 21-44-25	26.629551	81.815861	716321	834558	389636	835365	700	575	UFA	Existing	49,134	703,143	50,000
36-00035	City of Fort Myers	P-14	SW SE 21-44-25	26.629204	81.812029	717573	834434	390887	835231	680	440	UFA	Existing	730,775	703,143	504,000
36-00035	City of Fort Myers	P-15	NW NE 28-44-25	26.626362	81.811712	717678	833400	390984	834197	680	490	UFA	Existing	730,268	703,143	504,000
36-00035	City of Fort Myers	P-16	SW NE 28-44-25	26.622956	81.811792	717654	832162	390950	832959	720	460	UFA	Existing	417,701	703,143	420,000
36-00035	City of Fort Myers	P-17	SW NE 28-44-25	26.620355	81.811896	717621	831217	390910	832014	720	460	UFA	Existing	874,696	703,143	504,000
36-00035	City of Fort Myers	P-18	SE NW 28-44-25	26.622910	81.817329	715845	832143	389141	832954	685	485	UFA	OOS	0	703,143	0
36-00035	City of Fort Myers	P-19	SW SE 28-44-25	26.613537	81.811732	717679	828739	390948	829535	693	493	UFA	Existing	429,531	0	430,000
36-00035	City of Fort Myers	P-20	SE SW 28-44-25	26.612658	81.817736	715717	828416	388984	829228	720	492	UFA	Existing	956,688	0	504,000
36-00035	City of Fort Myers	P-21	NE NW 32-44-25	26.612037	81.832245	710977	828184	384242	829033	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-22	SE SE 30-44-25	26.612468	81.839859	708489	828338	381755	829206	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-23	SE SE 25-44-24	26.611869	81.856396	703086	828114	376350	829024	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-24	NE NE 35-44-24	26.610345	81.875852	696730	827553	369989	828513	800	500	UFA	Proposed	NA	0	390,233
36-00035	City of Fort Myers	P-25	SW NE 35-44-24	26.606785	81.879439	695559	826258	368808	827227	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-26	SW NE 25-44-24	26.618929	81.860807	701642	830678	374926	831600	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-27	SE NE 26-44-24	26.620552	81.874317	697228	831264	370516	832220	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-28	NW NW 31-44-25	26.610132	81.851627	704645	827484	377904	828382	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	ASR-1	NW SE 35-44-24	26.601767	81.878201	695966	824434	369200	825400	563	455	UFA	Existing	0	0	390,227
36-00035	City of Fort Myers	P-1E	NW NW 27-44-25	26.624924	81.804806	719935	832881	393237	833660	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-2Ea	NW NE 27-44-25	26.626467	81.795588	722946	833447	396252	834202	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-2Eb	NW NW 26-44-25	26.626806	81.787434	725610	833574	398917	834309	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-3E	SW SE 24-44-25	26.627577	81.766711	732379	833866	405689	834548	800	500	UFA	Proposed	NA	0	390,227

TABLE 3-3. SUMMARY OF WELL INFORMATION DATA FOR CITY OF FORT MYERS WELLFIELD (WATER USE PERMIT 36-00035-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00035	City of Fort Myers	P-4E	NW SW 19-44-26	26.634234	81.755414	736065	836293	409394	836946	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-5E	NW NW 30-44-26	26.627564	81.758835	734952	833867	408262	834528	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-6E	SE NW 30-44-26	26.621378	81.751476	737360	831622	410653	832265	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-7E	SW NW 30-44-26	26.621190	81.758793	734970	831550	408262	832211	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-1S	NE SW 33-44-25	26.601766	81.817824	715694	824457	388930	825269	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-2S	SE SW 33-44-25	26.597985	81.817164	715912	823083	389137	823893	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-3S	NW NE 04-45-25	26.594660	81.814004	716946	821876	390162	822678	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-4S	NE SW 04-45-25	26.588051	81.818115	715606	819472	388803	820284	800	500	UFA	Proposed	NA	0	390,227
36-00035	City of Fort Myers	P-5S	NW NW 09-45-25	26.583258	81.822004	714338	817728	387521	818550	800	500	UFA	Proposed	NA	0	390,227
													Total Daily Average (gpd):	**10,881,934**	**11,953,425**	**15,250,000**

Upper Floridan Aquifer Permitted Average Allocation (MGD): 15.25

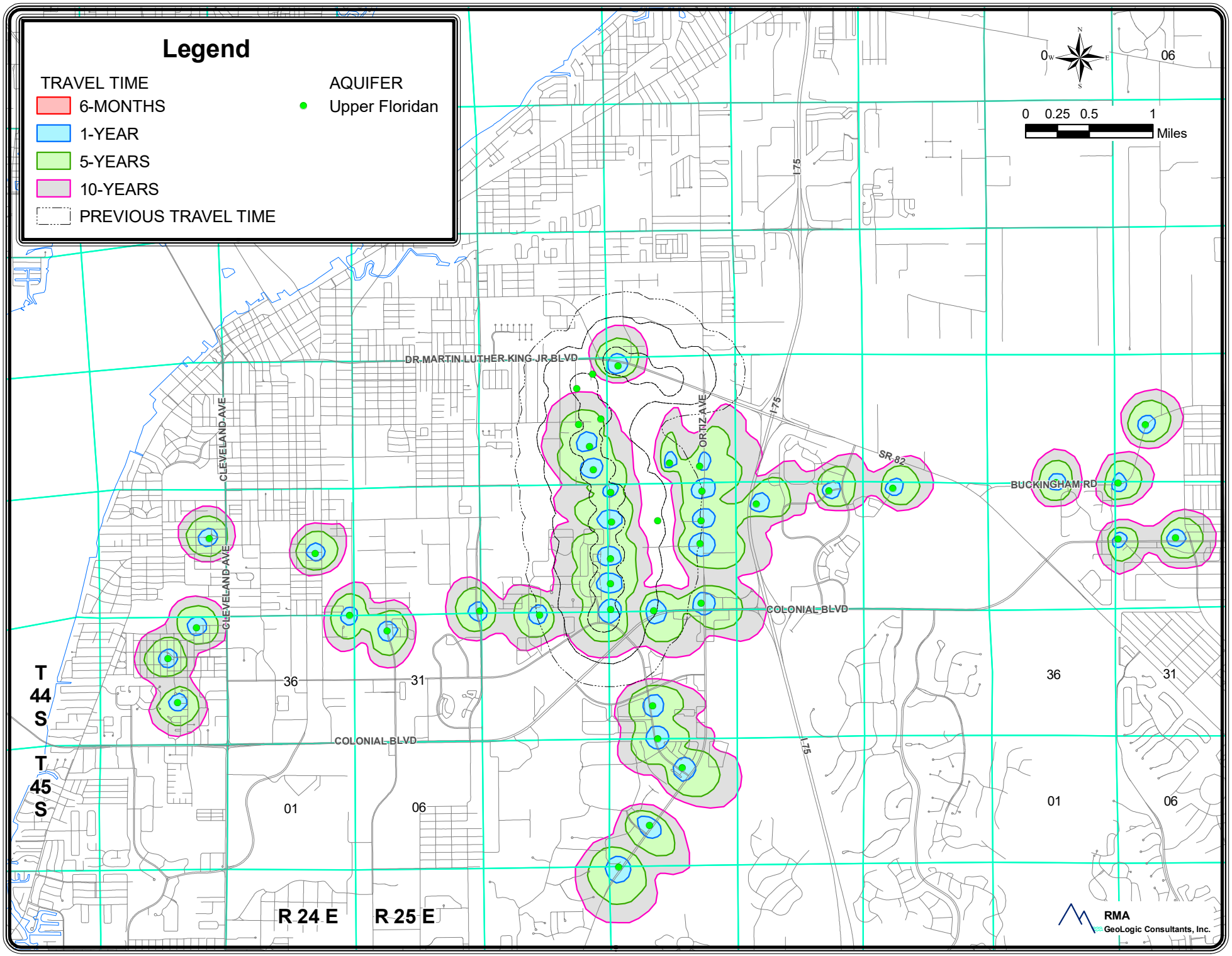


FIGURE 3-3. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR CITY OF FORT MYERS WELLFIELD.

TABLE 3-4. SUMMARY OF WELL INFORMATION DATA FOR GPIWA WELLFIELD (WATER USE PERMIT 36-00045-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00045	Greater Pine Island Water Association	RO-4	NE SE 33-44S-22E	26.598714	82.109413	620414	823321	293633	824877	739	583	LH	Existing	324,211	487,671	498,000
36-00045	Greater Pine Island Water Association	RO-5	NE SE 33-44S-22E	26.597764	82.110836	619949	822976	293165	824536	770	563	LH	Existing	350,455	487,671	498,000
36-00045	Greater Pine Island Water Association	RO-6	NE SE 33-44S-22E	26.598504	82.111911	619598	823245	292816	824808	737	598	LH	Existing	410,877	487,671	498,000
36-00045	Greater Pine Island Water Association	RO-7	NW NE 33-44S-22E	26.603578	82.113863	618961	825090	292194	826658	783	598	LH	Existing	289,241	487,671	498,000
36-00045	Greater Pine Island Water Association	RO-8	NE NE 04-45S-22E	26.591479	82.110460	620070	820691	293268	822250	692	568	LH	Existing	337,479	487,671	498,000
													Total Daily Average (gpd):	**1,712,263**	**2,438,356**	**2,490,000**

Lower Hawthorn Aquifer Permitted Average Allocation (MGD): 2.49

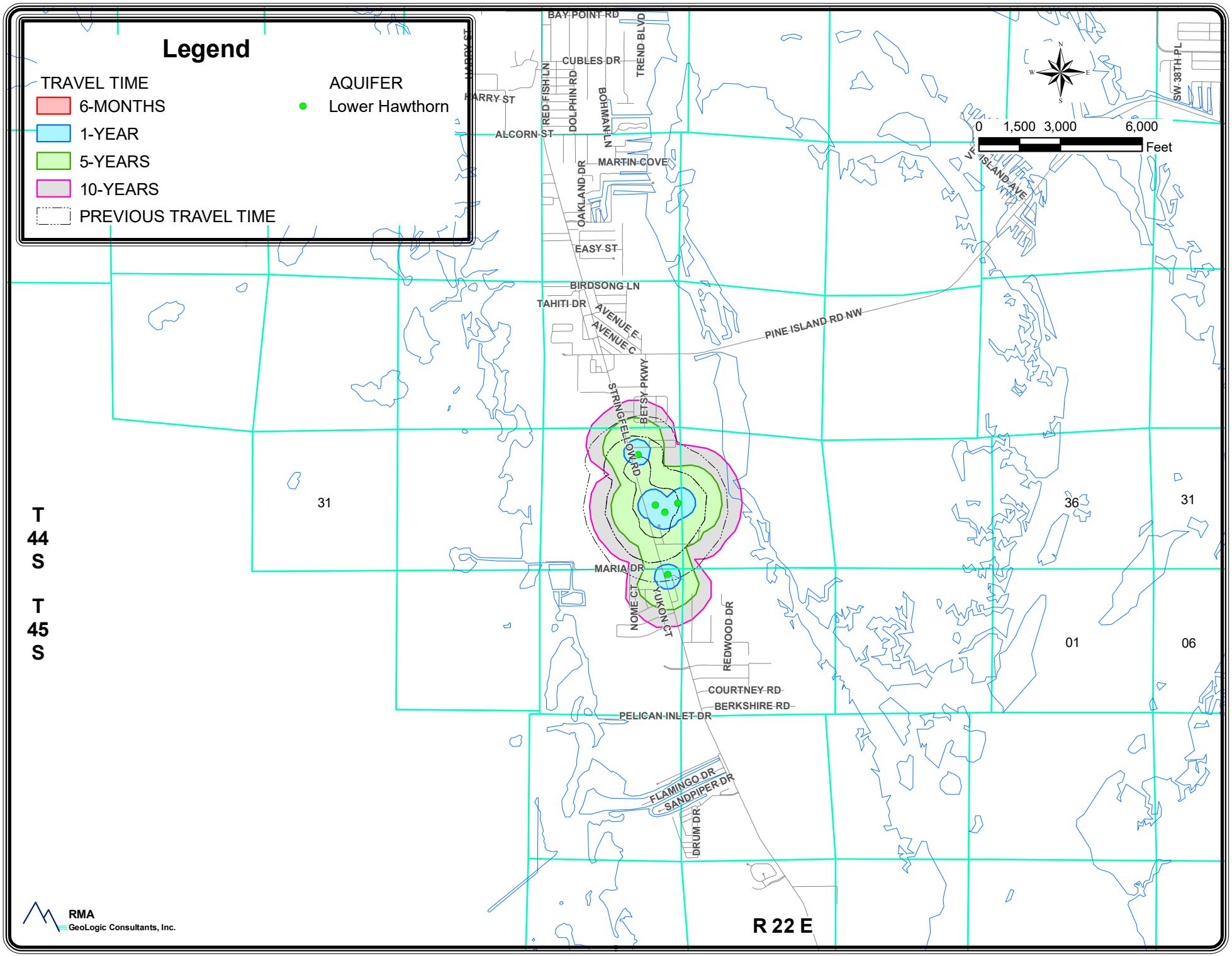


FIGURE 3-4. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR GPIWA WELLFIELD.

TABLE 3-5. SUMMARY OF WELL INFORMATION DATA FOR CITY OF CAPE CORAL NORTH WELLFIELD (WATER USE PERMIT 36-00046-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00046	City of Cape Coral	301	NW NW 33-43S-23E	26.696449	82.022701	648755	858832	322255	860170	735	500	LH	Existing	136,612	291,922	175,000
36-00046	City of Cape Coral	302	NE NW 33-43S-23E	26.695789	82.015709	651038	858592	324536	859912	714	453	LH	Existing	257,805	291,922	300,000
36-00046	City of Cape Coral	303	NW NE 33-43S-23E	26.696476	82.012093	652219	858841	325719	860152	672	453	LH	Existing	125,318	291,922	175,000
36-00046	City of Cape Coral	304	NE NE 33-43S-23E	26.696472	82.007131	653838	858840	327339	860138	712	476	LH	Existing	244,572	291,922	300,000
36-00046	City of Cape Coral	305	NE NW 34-43S-23E	26.696388	82.002310	655413	858809	328913	860095	636	440	LH	Existing	31,604	291,922	0
36-00046	City of Cape Coral	306	NE NW 34-43S-23E	26.696703	81.999345	656381	858924	329882	860202	645	445	LH	Existing	106,711	291,922	150,000
36-00046	City of Cape Coral	307	SW NE 34-43S-23E	26.691354	81.997678	656925	856979	330411	858253	614	460	LH	Existing	496	291,922	0
36-00046	City of Cape Coral	308	NW NW 36-43S-23E	26.695970	81.972219	665237	858658	338737	859867	702	505	LH	Existing	702,879	291,922	750,000
36-00046	City of Cape Coral	309	NE NW 36-43S-23E	26.695989	81.969034	666277	858665	339777	859866	702	503	LH	Existing	468,432	291,922	525,000
36-00046	City of Cape Coral	310	NE NW 36-43S-23E	26.696011	81.965378	667471	858674	340971	859865	722	520	LH	Existing	589,742	291,922	625,000
36-00046	City of Cape Coral	311	NE NE 36-43S-23E	26.696053	81.960009	669223	858689	342724	859867	802	575	LH	Existing	342,136	291,922	400,000
36-00046	City of Cape Coral	312	NE NW 31-43S-24E	26.695944	81.951344	672052	858650	345553	859806	520	428	LH	Existing	550,490	291,922	600,000
36-00046	City of Cape Coral	313	NE NE 31-43S-24E	26.695944	81.945136	674079	858651	347580	859791	805	542	LH	Existing	350,537	291,922	400,000
36-00046	City of Cape Coral	314	NE NE 30-43-24	26.708196	81.941920	675127	863105	348663	864237	750	500	LH	Proposed	0	291,922	500,000
36-00046	City of Cape Coral	315	SE NE 30-43-24	26.703989	81.942023	675094	861576	348618	862708	750	500	LH	Proposed	0	291,922	500,000
36-00046	City of Cape Coral	316	SE NE 31-43S-24E	26.691035	81.942416	674968	856867	348455	858000	800	560	LH	Proposed	340,910	291,922	400,000
36-00046	City of Cape Coral	317	NE SE 31-43S-24E	26.686901	81.942382	674980	855365	348455	856497	1100	782	SUW	Existing	367,461	291,922	425,000
36-00046	City of Cape Coral	318	SE SE 33-43S-23E	26.682619	82.008329	653447	853804	326908	855105	864	655	LH	Existing	1,948	291,922	0
36-00046	City of Cape Coral	319	SE SW 34-43S-23E	26.682584	82.001203	655774	853791	329235	855074	536	468	LH	Existing	142,103	291,922	200,000
36-00046	City of Cape Coral	320	SW SE 34-43S-23E	26.682590	81.996438	657330	853793	330791	855064	840	592	LH	Existing	170,678	291,922	225,000
36-00046	City of Cape Coral	321	SE SE 34-43S-23E	26.682422	81.991675	658885	853733	332346	854991	800	565	LH	Existing	351,655	291,922	400,000
36-00046	City of Cape Coral	322	SE SW 35-43S-23E	26.682657	81.983305	661618	853818	335080	855055	840	630	LH	Existing	188,047	291,922	250,000
36-00046	City of Cape Coral	323	SW SE 35-43S-23E	26.683688	81.980107	662662	854193	336127	855422	832	630	LH	Existing	371,306	291,922	425,000
36-00046	City of Cape Coral	324	NE NE 02-44S-23E	26.681557	81.976427	663864	853419	337323	854638	866	643	LH	Existing	0	291,922	0
36-00046	City of Cape Coral	401	SE SE 27-43S-23E	26.697071	81.990105	659397	859057	332900	860312	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	402	SE SW 26-43S-23E	26.697149	81.985607	660866	859086	334369	860329	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	403	SW SE 26-43S-23E	26.697149	81.980850	662419	859086	335922	860317	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	404	SW SW 36-43S-23E	26.682517	81.972035	665298	853768	338760	854976	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	405	SE SW 36-43S-23E	26.682546	81.967800	666681	853779	340143	854976	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	406	SW SE 36-43S-23E	26.682623	81.963391	668121	853807	341583	854993	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	407	SE SE 31-43S-24E	26.684013	81.941951	675121	854315	348588	855446	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	408	NE NE 06-44S-24E	26.679586	81.941951	675122	852706	348576	853837	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	409	NE SE 06-44S-24E	26.674151	81.941870	675149	850730	348588	851861	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	410	NE NE 09-44S-23E	26.666656	82.010216	652830	848002	326246	849307	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	411	NW NW 10-44S-23E	26.666739	82.006208	654139	848032	327555	849327	750	500	LH	Proposed	NA	NA	500,000

TABLE 3-5. SUMMARY OF WELL INFORMATION DATA FOR CITY OF CAPE CORAL NORTH WELLFIELD (WATER USE PERMIT 36-00046-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00046	City of Cape Coral	412	NE NW 10-44S-23E	26.666740	82.002292	655418	848032	328834	849317	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	413	NW NE 10-44S-23E	26.666774	81.998165	656766	848045	330182	849319	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	414	NE NE 10-44S-23E	26.666797	81.993659	658238	848053	331654	849316	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	415	NW NW 11-44S-23E	26.666705	81.990314	659330	848020	332746	849274	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	416	NE NW 11-44S-23E	26.666674	81.986080	660713	848008	334129	849252	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	417	NW NE 11-44S-23E	26.666673	81.981885	662083	848008	335499	849241	750	500	LH	Proposed	NA	NA	500,000
36-00046	City of Cape Coral	418	NE NE 11-44S-23E	26.666621	81.977414	663543	847990	336959	849211	750	500	LH	Proposed	NA	NA	500,000
													Total Daily Average (gpd):	**5,841,441**	**7,006,128**	**16,725,000**

Lower Hawthorn Aquifer Permitted Average Allocation (MGD): 39.25 (Incudes the Southwest Wellfields)

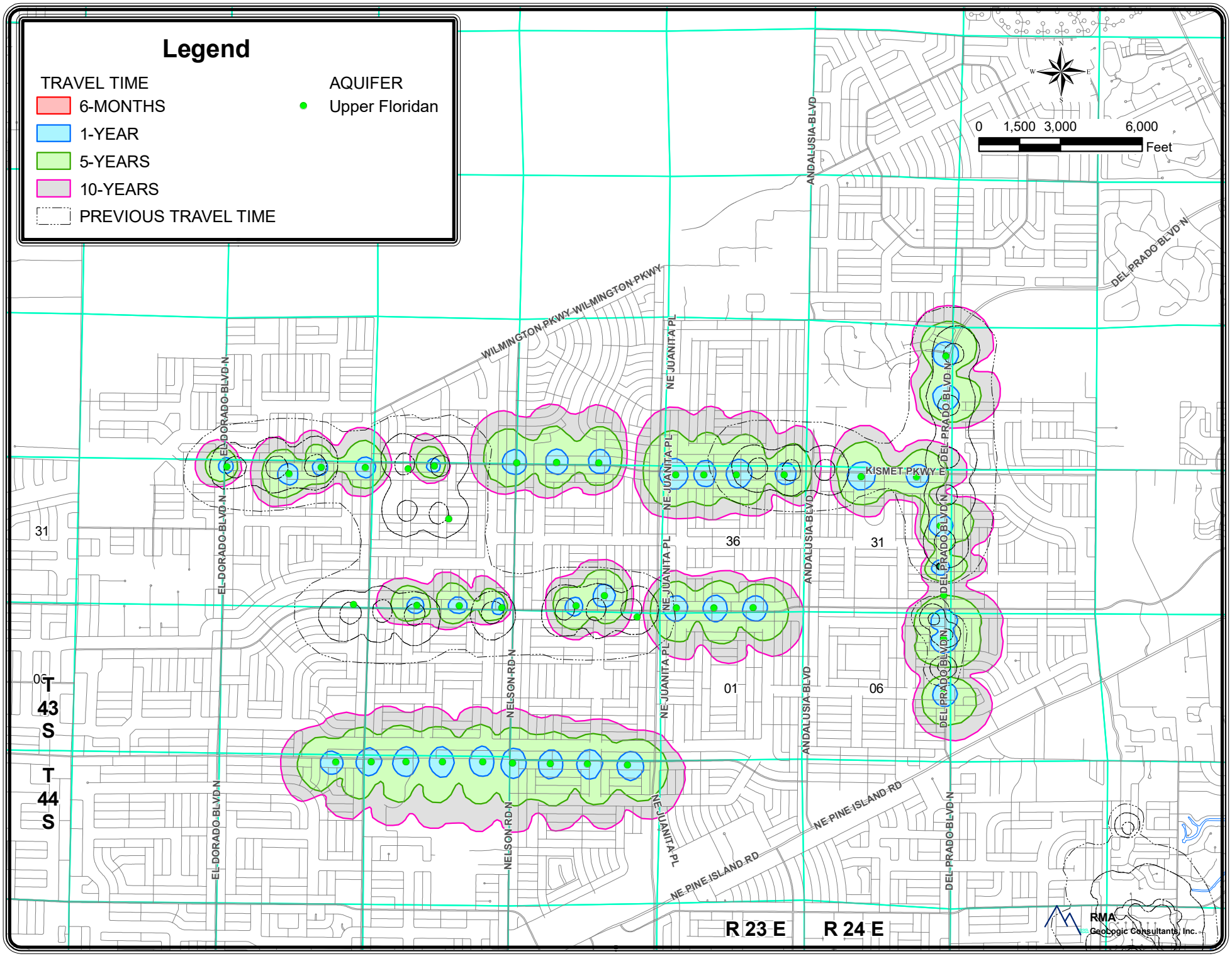


FIGURE 3-5. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR CITY OF CAPE CORAL NORTH WELLFIELD.

6- Water Use Permit 36-00122-W – Lee County Utilities Pinewoods

The water use permit for the Lee County Utilities wellfield was renewed and modified in 2014 after the last update of the protection zones. The modified permit included three additional proposed Lower Hawthorn aquifer production wells and two Sandstone production wells. A summary of the well information data for the Pinewoods wellfield is provided in Table 3-6. The locations of the production wells and new protection zones are shown on Figure 3-6. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

7- Water Use Permit 36-00152-W – Lee County Utilities North Lee County

Water Use Permit 36-00152-W included the North Lee County Lower Hawthorn aquifer (LHA) and the Waterway Estates surficial, Sandstone, Mid Hawthorn, and LHA wellfields. Since the last update of the protection zones for the North Lee County wellfield, the water use permit was modified in 2020. The modification was to add 15 LHA production wells, change the locations of seven proposed wells, and removed the Waterway Estates wellfield production wells and allocations from the permit. All of the Waterway Estates production wells were plugged and abandoned. A summary of the well information data for the North Lee County wellfield is provided in Table 3-7. The locations of the production wells and new protection zones for the North Lee County wellfield are shown on Figure 3-7. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

8- Water Use Permit 36-00166-W – FGUA Lehigh Acres

A renewal and modification to the Florida Governmental Utility Authority (FGUA) water use permit was issued in 2015. The modification included the addition of three production wells and a slight increase of the annual allocation to provide potable needs to the FGUA service area through year 2035. A summary of the well information data for the FGUA wellfield is provided in Table 3-8. The locations of the production wells and new protection zones are shown on Figures 3-8A and 3-8B. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

TABLE3-6. SUMMARY OF WELL INFORMATION DATA FOR LCU PINEWOODS WELLFIELD (WATER USE PERMIT 36-00122-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00122	Lee County Utilities	1	NE SE 36-46-25	26.427273	81.756859	735735	761065	408478	761718	31	16	WT	Existing	284,082	144,020	300,000
36-00122	Lee County Utilities	1A	NE SE 36-46-25	26.427163	81.756818	735749	761025	408491	761678	140	90	SS	Proposed	NA	73,786	75,000
36-00122	Lee County Utilities	2	NE SE 36-46-25	26.426069	81.756637	735809	760628	408548	761280	40	19	WT	Existing	244,008	144,020	260,000
36-00122	Lee County Utilities	3	NE SE 36-46-25	26.424719	81.756598	735823	760137	408558	760789	40	19	WT	OOS	0	144,020	70,000
36-00122	Lee County Utilities	3A	NE SE 36-46-25	26.424749	81.756635	735811	760148	408546	760800	138	85	SS	OOS	0	73,786	75,000
36-00122	Lee County Utilities	4	SE SE 36-46-25	26.423291	81.756585	735828	759618	408559	760270	39	19	WT	Existing	128,729	144,020	135,000
36-00122	Lee County Utilities	5	SE SE 36-46-25	26.421981	81.756748	735775	759141	408503	759794	42	20	WT	Existing	139,580	144,020	140,000
36-00122	Lee County Utilities	5A	SE SE 36-46-25	26.421972	81.756748	735775	759138	408503	759791	140	90	SS	Proposed	NA	73,786	75,000
36-00122	Lee County Utilities	6	SE SE 36-46-25	26.420692	81.756495	735859	758673	408583	759325	32	22	WT	Existing	154,227	144,020	175,000
36-00122	Lee County Utilities	7	SE SE 36-46-25	26.420552	81.757952	735382	758621	408106	759277	39	19	WT	Existing	212,890	144,020	230,000
36-00122	Lee County Utilities	7A	SE SE 36-46-25	26.420559	81.758089	735337	758624	408061	759280	121	96	SS	Existing	0	73,786	75,000
36-00122	Lee County Utilities	8	SE SE 36-46-25	26.420544	81.759412	734905	758618	407628	759277	30	20	WT	Existing	222,767	144,020	250,000
36-00122	Lee County Utilities	9	SW SE 36-46-25	26.420500	81.760884	734423	758601	407146	759264	30	21	WT	OOS	0	144,020	70,000
36-00122	Lee County Utilities	9A	SW SE 36-46-25	26.420500	81.760884	734423	758601	407146	759264	125	85	SS	OOS	0	73,786	75,000
36-00122	Lee County Utilities	10	SW SE 36-46-25	26.420517	81.762418	733921	758606	406644	759273	30	18	WT	Existing	185,463	144,020	200,000
36-00122	Lee County Utilities	11	SW SE 36-46-25	26.420500	81.763634	733523	758599	406246	759269	30	17	WT	OOS	0	144,020	70,000
36-00122	Lee County Utilities	11A	SW SE 36-46-25	26.420499	81.763705	733500	758599	406223	759269	130	94	SS	Existing	0	73,786	75,000
36-00122	Lee County Utilities	12A	SW NW 31-46-26	26.428179	81.755670	736124	761395	408869	762045	130	90	SS	Proposed	NA	NA	75,000
36-00122	Lee County Utilities	14A	NW NW 31-46-26	26.431558	81.755579	736151	762623	408906	763273	130	90	SS	Proposed	NA	NA	75,000
36-00122	Lee County Utilities	RO-1	NE SE 25-46-25	26.440151	81.756784	735751	765746	408530	766399	651	603	LH	Existing	423,153	482,043	612,500
36-00122	Lee County Utilities	RO-2	SE SE 25-46-25	26.436883	81.756717	735775	764558	408545	765211	759	651	LH	Existing	421,696	482,043	612,500
36-00122	Lee County Utilities	RO-3	SW SE 25-46-25	26.437801	81.761551	734193	764889	406965	765554	679	572	LH	Existing	363,088	482,043	612,500
36-00122	Lee County Utilities	RO-4	NW NW 31-46-26	26.431531	81.755402	736209	762614	408964	763263	780	715	LH	Existing	420,553	482,043	612,500
36-00122	Lee County Utilities	RO-5	SW NW 31-46-26	26.428183	81.755435	736201	761397	408946	762046	799	704	LH	Existing	326,323	482,043	612,500
36-00122	Lee County Utilities	RO-6	NE SE 36-46-25	26.424074	81.756676	735797	759903	408531	760555	800	600	LH	Proposed	NA	NA	612,500
36-00122	Lee County Utilities	RO-7	SE SE 36-46-25	26.420662	81.756941	735713	758662	408437	759315	800	600	LH	Proposed	NA	NA	612,500
36-00122	Lee County Utilities	RO-8	SW SE 36-46-25	26.420543	81.761209	734317	758616	407040	759280	800	600	LH	Proposed	NA	NA	612,500
													Total Daily Pumpage (gpd):	**3,526,559**	**4,437,153**	**7,400,000**
													Water-Table Aquifer Daily Pumpage (gpd):	**1,571,746**	**1,584,220**	**1,900,000**
													Sandstone Aquifer Daily Pumpage (gpd):	**0**	**442,715**	**600,000**
													Lower Hawthorn Aquifer Daily Pumpage (gpd):	**1,954,813**	**2,410,217**	**4,900,000**

WTA Permitted Average Allocation (MGD): 1.90
SSA Permitted Average Allocation (MGD): 0.60
LHA Permitted Average Allocation (MGD): 4.90

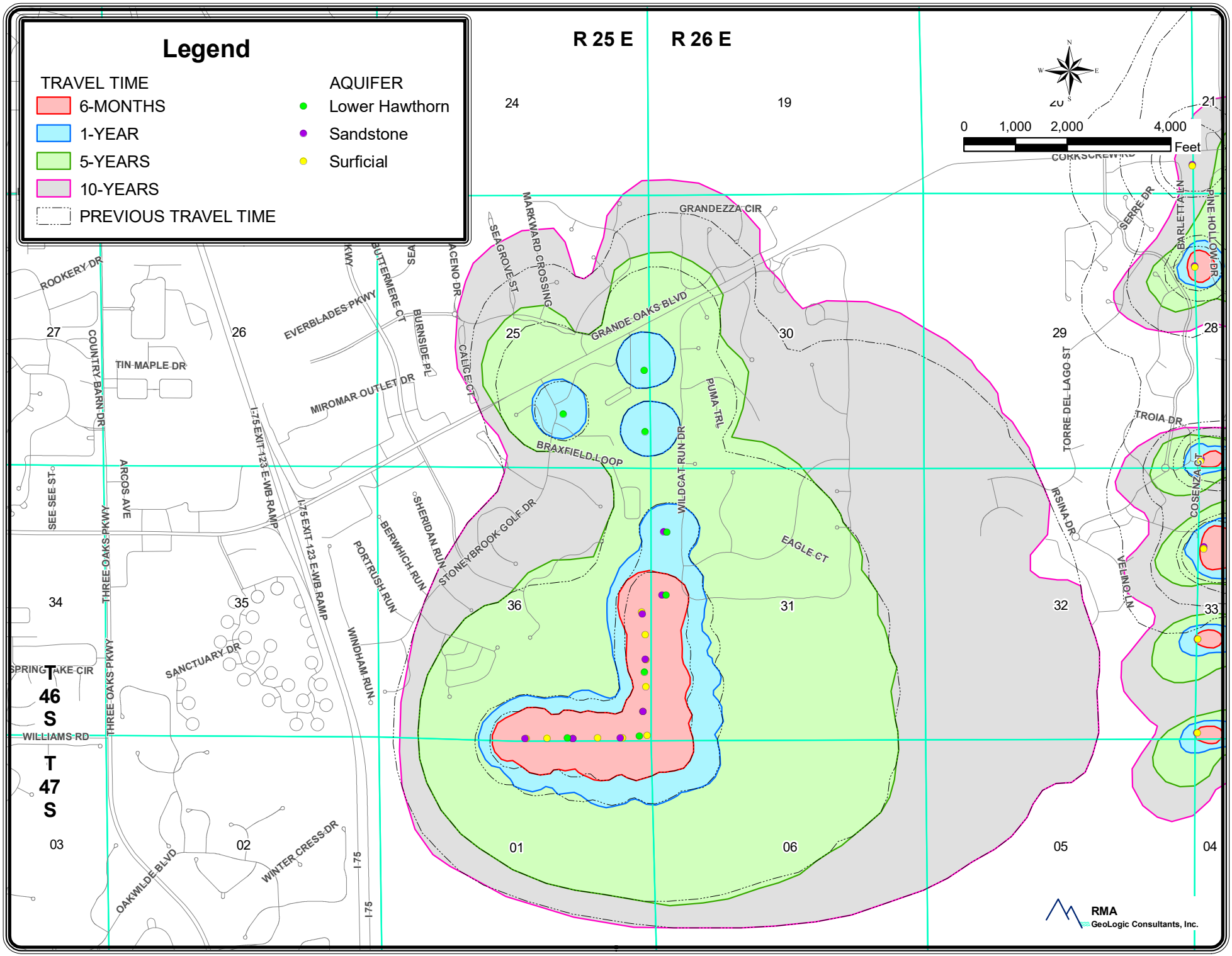


FIGURE 3-6. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR LCU PINEWOODS WELLFIELD.

TABLE 3-7. SUMMARY OF WELL INFORMATION DATA FOR LCU NORTH LEE COUNTY WELLFIELD (WATER USE PERMIT 36-00152-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00152	Lee County Utilities	PW-1	NW SW 14-43-25	26.732944	81.789808	724770	872153	398380	872896	637	500	LH	Existing	169,238	671,918	150,000
36-00152	Lee County Utilities	PW-2	NW SW 14-43-25	26.731165	81.789747	724791	871507	398396	872249	700	493	LH	Existing	328,918	671,918	350,000
36-00152	Lee County Utilities	PW-3	SW SW 14-43-25	26.728536	81.790008	724708	870551	398305	871294	592	441	LH	Existing	494,060	671,918	450,000
36-00152	Lee County Utilities	PW-4	SW SW 14-43-25	26.726395	81.793081	723706	869771	397297	870522	653	451	LH	Existing	244,732	671,918	400,000
36-00152	Lee County Utilities	PW-5	SW SW 14-43-25	26.728723	81.793054	723713	870617	397311	871368	670	500	LH	Existing	226,732	671,918	200,000
36-00152	Lee County Utilities	PW-6	SW SW 14-43-25	26.730027	81.792996	723732	871091	397333	871842	700	475	P&A	P&A	0	0	0
36-00152	Lee County Utilities	PW-7	NW SW 14-43-25	26.732975	81.793114	723691	872163	397301	872914	700	478	LH	Existing	385,600	671,918	400,000
36-00152	Lee County Utilities	PW-8	SW SW 14-43-25	26.727835	81.791948	724075	870295	397670	871043	600	470	LH	Existing	783,468	671,918	580,000
36-00152	Lee County Utilities	PW-9	SW SE 15-43-25	26.726543	81.798657	721886	869822	395477	870587	625	541	LH	OOS	0	0	50,000
36-00152	Lee County Utilities	PW-10	NE NW 22-43-25	26.725645	81.804172	720086	869493	393675	870272	747	538	LH	Existing	430,490	671,918	300,000
36-00152	Lee County Utilities	PW-11	SW SW 15-43-25	26.725736	81.809849	718233	869523	391822	870317	748	538	LH	Existing	579,753	671,918	500,000
36-00152	Lee County Utilities	PW-12	NE NW 21-43-25	26.725818	81.817716	715665	869549	389254	870363	734	530	LH	Existing	443,562	671,918	450,000
36-00152	Lee County Utilities	PW-13	SW SW 16-43-25	26.727589	81.826754	712714	870189	386308	871026	489	457	LH	Existing	0	671,918	50,000
36-00152	Lee County Utilities	PW-14	NW NE 20-43-25	26.725995	81.830842	711381	869607	384970	870455	700	513	LH	Existing	479,233	671,918	400,000
36-00152	Lee County Utilities	PW-15	SE SW 17-43-25	26.728325	81.835898	709729	870452	383325	871313	803	597	LH	Existing	383,589	671,918	400,000
36-00152	Lee County Utilities	PW-16	SE NW 22-43-25	26.719229	81.804368	720026	867160	393596	867940	667	542	LH	Existing	0	671,918	50,000
36-00152	Lee County Utilities	PW-17	NW SW 22-43-25	26.714547	81.805340	719711	865458	393268	866240	500	418	LH	Existing	633,370	671,918	600,000
36-00152	Lee County Utilities	PW-18	SW SW 22-43-25	26.721964	81.807552	718985	868153	392563	868941	800	572	LH	Existing	291,578	671,918	300,000
36-00152	Lee County Utilities	PW-19	NW SW 17-43-25	26.731997	81.838747	708798	871786	382404	872654	700	590	LH	OOS	0	671,918	0
36-00152	Lee County Utilities	PW-20	SW SE 07-43-25	26.743394	81.849952	705136	875924	378774	876821	700	500	LH	Proposed	NA	671,918	450,000
36-00152	Lee County Utilities	PW-21	SE NW 07-43-25	26.749562	81.850795	704858	878166	378514	879065	700	500	LH	Proposed	NA	671,918	450,000
36-00152	Lee County Utilities	PW-22	NW NW 07-43-25	26.754187	81.855269	703396	879845	377065	880756	700	500	LH	Proposed	NA	671,918	450,000
36-00152	Lee County Utilities	PW-23	NW NE 07-43-25	26.755239	81.849434	705300	880230	378972	881126	700	500	LH	Proposed	NA	671,918	450,000
36-00152	Lee County Utilities	PW-24	NE NE 07-43-25	26.754852	81.842959	707413	880092	381084	880971	700	500	LH	Proposed	NA	671,918	450,000
36-00152	Lee County Utilities	PW-25	NE NW 08-43-25	26.754724	81.836719	709449	880048	383120	880911	700	500	LH	Proposed	NA	671,918	450,000
36-00152	Lee County Utilities	PW-26	SW SE 05-43-25	26.758014	81.833403	710529	881245	384210	882100	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-27	NW SE 05-43-25	26.762178	81.833480	710503	882759	384195	883614	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-28	NE NW 09-43-25	26.754932	81.818967	715242	880131	388914	880949	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-29	SE NW 09-43-25	26.752265	81.818721	715324	879162	388988	879979	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-30	SE NW 09-43-25	26.749202	81.819404	715102	878048	388758	878867	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-31	NE NE 09-43-25	26.754500	81.814196	716799	879976	390470	880782	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-32	NW NW 10-43-25	26.754595	81.808114	718784	880014	392455	880804	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-33	NE NW 10-43-25	26.754456	81.803054	720435	879966	394106	880743	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-34	SW SW 07-43-26	26.741070	81.760077	734469	875124	408102	875791	700	500	LH	Proposed	NA	NA	450,000

TABLE 3-7. SUMMARY OF WELL INFORMATION DATA FOR LCU NORTH LEE COUNTY WELLFIELD (WATER USE PERMIT 36-00152-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00152	Lee County Utilities	PW-35	SE SW 07-43-26	26.740675	81.753836	736506	874984	410138	875635	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-36	SE SE 07-43-26	26.740632	81.747776	738484	874973	412116	875608	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-37	SW SW 08-43-26	26.740646	81.741599	740500	874982	414132	875601	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-38	SW SE 08-43-26	26.740651	81.735879	742366	874987	415999	875592	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-39	SE SE 08-43-26	26.740665	81.729925	744309	874997	417942	875586	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-40	SW SW 09-43-26	26.740829	81.723719	746335	875061	419968	875634	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-41	SW SE 09-43-26	26.741170	81.717146	748480	875189	422114	875746	700	500	LH	Proposed	NA	NA	450,000
36-00152	Lee County Utilities	PW-42	SE SW 20-43-25	26.712230	81.838112	709014	864601	382564	865467	642	540	LH	OOS	0	671,918	0
													Total Daily Pumpage (gpd):	**5,874,323**	**16,126,032**	**15,530,000**

Lower Hawthorn Aquifer Permitted Average Allocation (MGD): 15.53

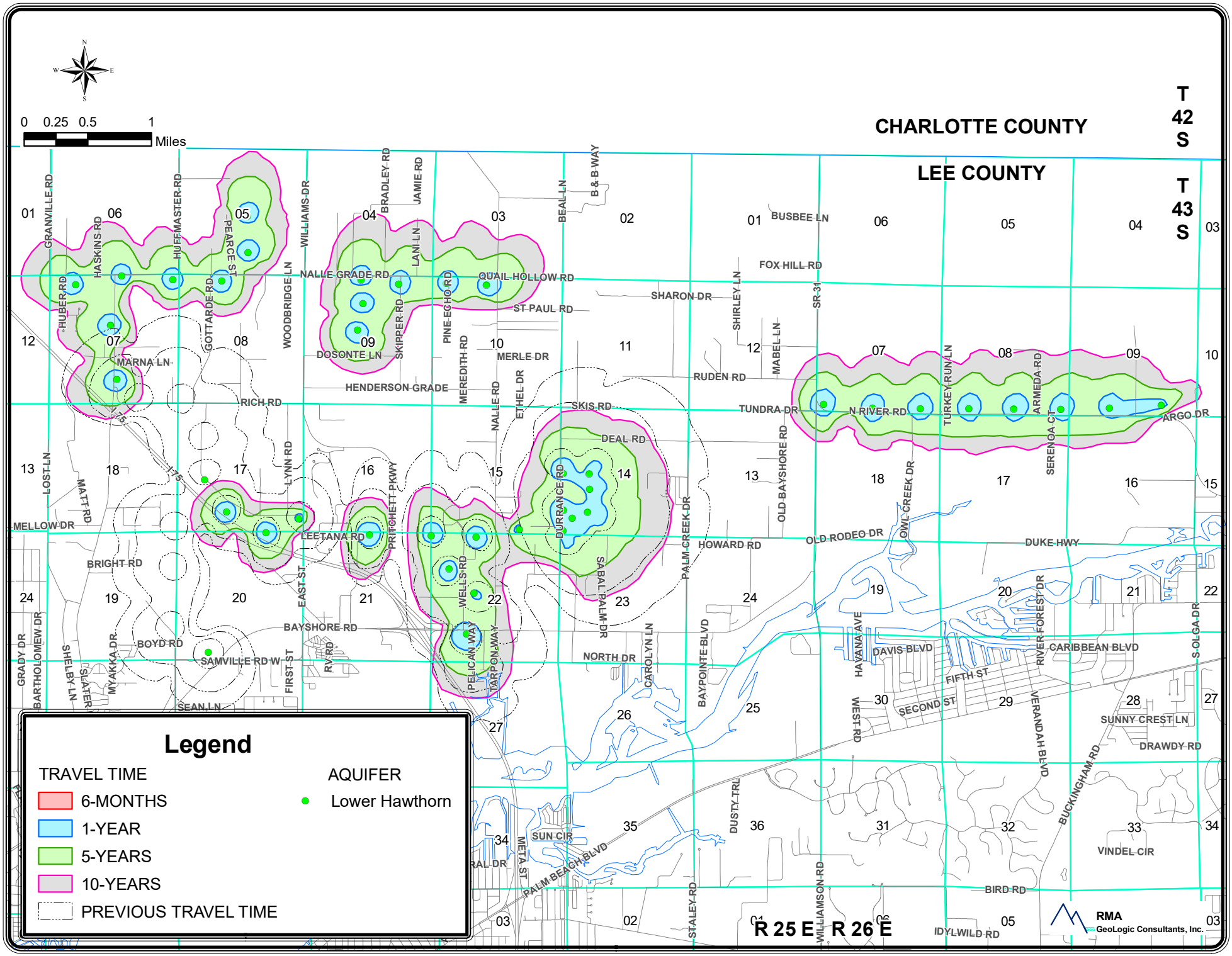


FIGURE 3-7. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR LCU NORTH LEE COUNTY WELLFIELD.

TABLE 3-8. SUMMARY OF WELL INFORMATION DATA FOR FGUA LEHIGH ACRES WELLFIELD (36-00166-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-00166	FL Governmental Utility Authority	WTP-1 #1	SW NE 32-44-27	26.607366	81.635436	775286	826620	448540	826966	65	50	SS	Existing	189,836	194,359	195,000
36-00166	FL Governmental Utility Authority	WTP-1 #2	NE SW 32-44-27	26.603154	81.638503	774288	825086	447530	825440	69	52	SS	Existing	105,518	194,359	110,000
36-00166	FL Governmental Utility Authority	WTP-1 #3	NW SW 32-44-27	26.602677	81.644836	772219	824907	445460	825277	68	58	SS	Existing	380,953	194,359	385,000
36-00166	FL Governmental Utility Authority	WTP-1 #4	SE NW 32-44-27	26.608601	81.641603	773269	827063	446527	827425	85	50	SS	Existing	88,953	194,359	90,000
36-00166	FL Governmental Utility Authority	WTP-1 #5	SE NW 32-44-27	26.606651	81.639019	774116	826357	447368	826712	66	54	SS	Existing	281,696	194,359	285,000
36-00166	FL Governmental Utility Authority	WTP-1 #6	SW NW 32-44-27	26.606976	81.644318	772384	826470	445637	826839	62	52	SS	Existing	64,540	194,359	70,000
36-00166	FL Governmental Utility Authority	WTP-1 #7	SW SE 32-44-27	26.602101	81.634691	775535	824707	448774	825051	85	57	SS	Existing	254,162	194,359	255,000
36-00166	FL Governmental Utility Authority	WTP-1 #8	SE SW 32-44-27	26.599958	81.640236	773725	823923	446958	824281	80	62	SS	Existing	105,260	194,359	110,000
36-00166	FL Governmental Utility Authority	WTP-1 #9A	SW SW 32-44-27	26.599169	81.643151	772773	823633	446004	823999	80	63	SS	Existing	127,490	194,359	130,000
36-00166	FL Governmental Utility Authority	WTP-1 #10	SW SE 32-44-27	26.599315	81.636361	774992	823693	448223	824041	62	55	SS	Existing	293,269	194,359	295,000
36-00166	FL Governmental Utility Authority	WTP-1 #19	SW NE 33-44-27	26.607834	81.634701	775526	826791	448781	827135	90	55	SS	Existing	127,986	194,359	130,000
36-00166	FL Governmental Utility Authority	WTP-1 #20	NE SW 32-44-27	26.604485	81.638691	774225	825570	447471	825924	90	55	SS	Existing	152,274	194,359	155,000
36-00166	FL Governmental Utility Authority	WTP-1 #21	SW NE 33-44-27	26.607799	81.633902	775787	826779	449042	827121	100	60	SS	Existing	341,071	194,359	345,000
36-00166	FL Governmental Utility Authority	WTP-2 P-1	NW NW 23-45-27	26.555576	81.595682	788335	807834	461442	808078	180	150	SS	Existing	0	0	85,000
36-00166	FL Governmental Utility Authority	WTP-2 P-2	NW NW 23-45-27	26.554349	81.595606	788361	807388	461465	807632	180	150	SS	Existing	0	0	85,000
36-00166	FL Governmental Utility Authority	WTP-2 P-3	NW NW 23-45-27	26.554536	81.594276	788796	807458	461900	807698	180	165	SS	Existing	0	0	85,000
36-00166	FL Governmental Utility Authority	Well 22	NW NW 23-45-27	26.555721	81.595726	788320	807887	461428	808131	180	70	SS	Existing	0	194,359	85,000
36-00166	FL Governmental Utility Authority	Well 23	NW NW 23-45-27	26.554032	81.595742	788317	807273	461420	807517	180	80	SS	Existing	0	194,359	85,000
36-00166	FL Governmental Utility Authority	Well 24	NW NW 23-45-27	26.554070	81.594001	788886	807288	461989	807528	180	80	SS	Existing	0	194,359	85,000
36-00166	FL Governmental Utility Authority	Well 25	NW NW 23-45-27	26.554074	81.594846	788610	807289	461713	807531	180	80	SS	Existing	0	194,359	85,000
													Total Daily Average (gpd):	**2,513,008**	**3,304,110**	**3,150,000**

Sandstone Aquifer Permitted Average Allocation (MGD): 3.15

FIGURE 3-8A. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR FGUA NORTH LEHIGH WELLFIELD.

FIGURE 3-8B. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR FGUA SOUTH LEHIGH WELLFIELD.

9- Water Use Permit 36-07687-W – Lee County Utilities Bartow

The water use permit for the Lee County Utilities Bartow wellfield was renewed in 2017 after the last update of the protection zones. However, no changes to the production wells or allocations were included in the renewal. Therefore, no changes to the protection zones for the Bartow wellfield are included in the current update. A summary of the well information data for the Bartow wellfield is provided in Table 3-9. The locations of the production wells and new protection zones are shown on Figure 3-9. A CD containing the GIS shape files for the protection zones and the production wells is provided in Appendix A.

TABLE 3-9. SUMMARY OF WELL INFORMATION DATA FOR LEE COUNTY UTILITIES BARTOW WELLFIELD (WATER USE PERMIT 36-07687-W).

Permit #	Permitee	Well #	Location (Qtr. Qtr. Sec-T-R)	Latitude	Longitude	FL Planar West X83	FL Planar West Y83	FL Planar East X83	FL Planar East Y83	Total Depth (Ft.)	Cased Depth (Ft.)	Aquifer	Status	Average Pumping Rate 12 Months (gpd)	Average Pumping Rate Last Update (gpd)	Proposed Average Pumping Rate (gpd)
36-07687	Lee County Utilities	Well-6	SW SE 10-46-25	26.479200	81.797400	722428	779916	395316	780674	40	18	WTA	Existing	71,795	435,160	435,160
36-07687	Lee County Utilities	Well-7	NE SW 10-46-25	26.484900	81.797600	722359	781988	395264	782746	41	19	WTA	Existing	0	435,160	435,160
36-07687	Lee County Utilities	Well-8	NE SW 10-46-25	26.482300	81.797670	722349	781043	395247	781801	45	22	WTA	Existing	0	435,160	435,160
36-07687	Lee County Utilities	Well-9	SW SE 10-46-25	26.478820	81.797040	722433	779583	395319	780340	42	21	WTA	Existing	50,855	435,160	435,160
36-07687	Lee County Utilities	Well-10A	NE SW 15-46-25	26.469770	81.797670	722357	776488	395218	777245	32	12	WTA	Existing	838	435,160	435,160
36-07687	Lee County Utilities	Well-11	SW NE 15-46-25	26.471843	81.793785	723625	777244	396493	777992	40	14	WTA	Existing	102,614	435,160	435,160
													Total Daily Pumpage (gpd):	**226,101**	**2,610,960**	**2,610,960**

WTA Permitted Average Allocation (MGD): 2.61

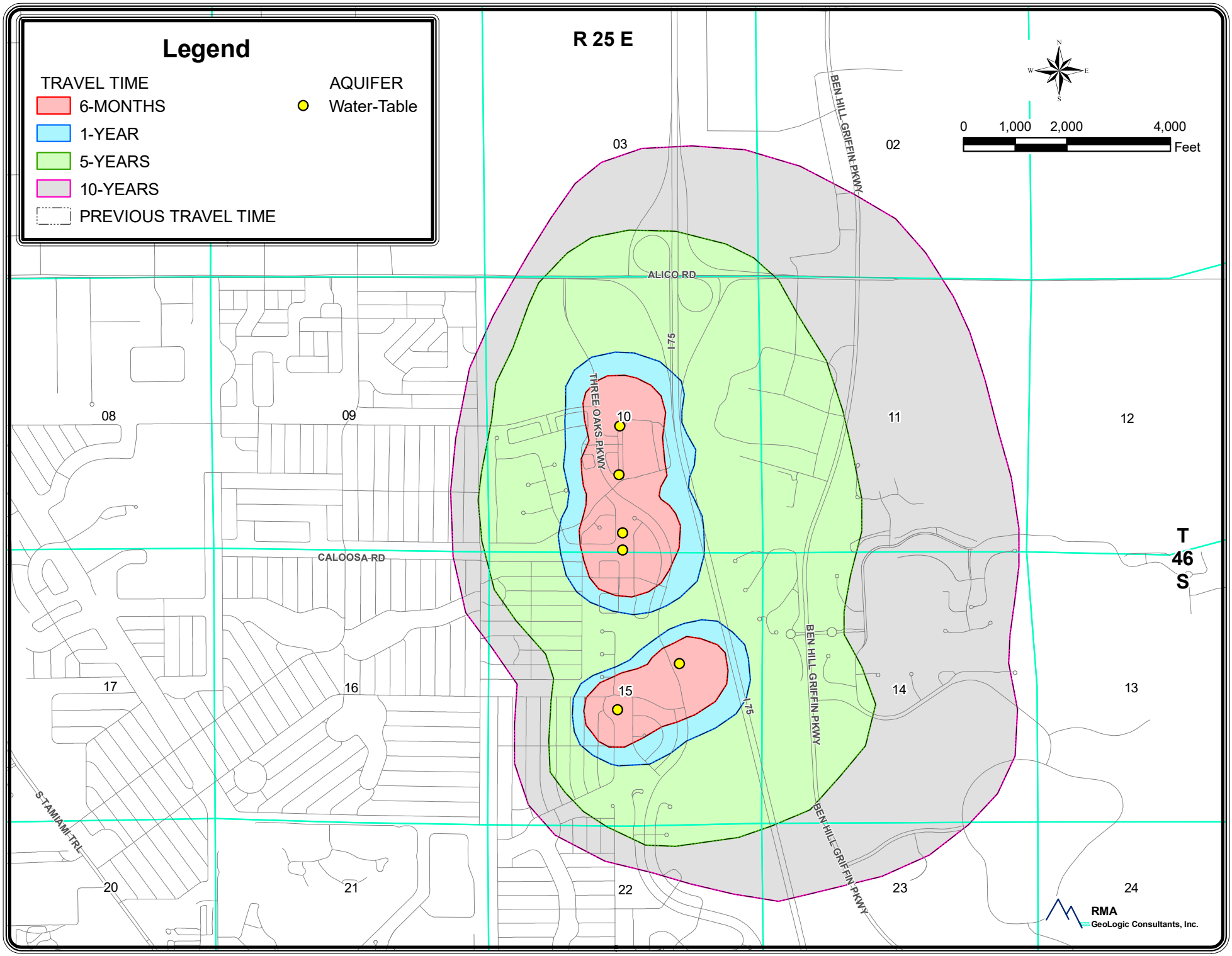


FIGURE 3-9. MAP SHOWING PRODUCTION WELLS AND ISO-TIME CONTOURS FOR LCU BARTOW WELLFIELD.

IV. REFERENCES

Harbaugh, A.W., Banta, E.R., Hill, M.C., and McDonald, M.G., 2000, MODFLOW-2000, the U.S. Geological Survey modular ground-water model-user guide to modularization concepts and the ground-water flow process, United States Geological Survey, Open-File Report 00-92, 130 p.

McDonald, M.G. and Harbaugh, A.W., 1988, A modular three-dimensional finite difference groundwater flow model (MODFLOW), United States Geological Survey Techniques of Water Resource Investigations, Book 6, Chapter A1, 586 p.

RMA GeoLogic Consultants, 2009, Supporting Documentation for the Update of the Lee County Wellfield Protection Zones, report prepared for Lee County, 41 p.

RMA GeoLogic Consultants, 2010A, Assessment, Evaluation, Computer Modeling, and Operation and Management Plan to Attain Regulatory Compliance for Lee County Utilities Corkscrew Water Treatment Plant Aquifer Storage and Recovery System, report prepared for Lee County Utilities, 206 p.

RMA GeoLogic Consultants, 2010B, Assessment, Evaluation, Computer Modeling, and Operation and Management Plan to Attain Regulatory Compliance for Lee County Utilities Olga Water Treatment Plant Aquifer Storage and Recovery System, report prepared for Lee County Utilities, 134 p.

RMA GeoLogic Consultants, 2014, Documentation for the Update of the Lee County Wellfield Protection Zones, prepared for Lee County.

Pollock, D.W., 1994, User's guide for MODPATH/MODPATH-PLOT, Version 3: A particle tracking post-processing package for MODFLOW, the U.S. Geological Service finite-difference ground-water flow model, United States Geological Survey, Open-File Report 94-464, 249 p.

Water Resource Solutions, 2005, Hydrogeological Analyses, Computer Modeling, and Supporting Documentation for the Lee County Wellfield Protection Ordinance Update, report prepared for Lee County, 93 p and 8 Plates.

APPENDIX A

CD CONTAINING GIS SHAPEFILES