



**CHARLOTTE COUNTY
COMMUNITY DEVELOPMENT DEPARTMENT**

**APPLICATION for
LARGE SCALE PLAN AMENDMENT (MAP)**

Date Received: 10/17/12	Time Received:
Date of Log-in:	Petition #: PA-12-10-14-LS Accela #: PAL-12-00001
Receipt #:	Amount Paid:

1. PARTIES TO THE APPLICATION

Name of Applicant: Calusa Growers LC

Mailing Address: P.O. Box 8188

City: Melrose Park State: IL Zip Code: 60161

Phone Number: Fax Number:

Email Address:

Name of Agent: Geri L. Waksler; McCrory Law Firm

Mailing Address: 150 Laishley Ct., Ste. 122

City: Punta Gorda State: FL Zip Code: 33950

Phone Number: (941) 205-1122 Fax Number: (941) 205-1133

Email Address: geri@mccrorylaw.com

Name of Engineer/Surveyor: Southwest Engineering & Design, Inc./Banks Engineering

Mailing Address: 660 Charlotte St., Ste. 8/12653 SW County Road 769, Ste. B

City: Punta Gorda/Lake Suzy State: FL Zip Code: 33950/34269

Phone Number: (941) 637-1149/(941) 625-1165 Fax Number:

Email Address: gbayne@sedfl.com/trebol@bankseng.com

Name of Property Owner (if more than one property owner, attach a separate sheet with a list of all owners):

Same as applicant

Mailing Address:

City: State: Zip Code:

Phone Number: Fax Number:

Email Address:

2. PROPERTY INFORMATION

If more than one account number exists, attach a separate sheet listing all information required by this section

Property Account #: 402718100001		
Section: 18	Township: 40 South	Range: 27 East
Parcel/Lot #:	Block #:	Subdivision:
Total acreage or square feet of the property: 661.28± acres		

3. SURVEY: PROVIDED

- For unplatted property, provide one original boundary survey that is **signed and sealed** by a registered land surveyor and an accurate legal description (including acreage) of the property.
- For platted land, provide one original surveyor’s sketch that is **signed and sealed** by a registered land surveyor and an accurate legal description (including acreage) of the property.

4. PROOF OF LAND OWNERSHIP: Provide a recent *Ownership and Encumbrance Report* or *Title Insurance Policy* on the subject property. **PROVIDED**

5. NOTARIZED AUTHORIZATION: PROVIDED

- If the applicant is not the owner of the property, a written, notarized authorization from each owner must be provided with this application – use Form A, attached. Property owner authorization is required. If the property owner withdraws permission at any point during the review and approval process, the application is considered null and void.
- If an agent is submitting the application for the applicant – authorization from the applicant is required – use Form B, attached.

6. RESTRICTIONS: Provide a copy of any covenants, easements or restrictions that have been recorded for the subject site. **SEE PROVIDED TITLE POLICY**

7. EXISTING LAND USE DESIGNATIONS

Future Land Use Map (FLUM) designation(s)	Acreage
Agriculture	661.28±
Zoning District(s)	Acreage
Agriculture	661.28±

8. APPLICANT’S PROPOSED CHANGE(S):

Amend the Prime Aquifer Recharge Area map (Map No. 6) to delete the subject property. A revised map has been provided as part of the application.

If the proposed change involves an increase in density, which of the Receiving Zone criteria does the property meet, or would this be an exemption consistent with a Revitalization Plan?

N/A

9. REASON FOR PROPOSED CHANGE(S) (attach additional sheets if necessary):

The property provides zero to de minimus recharge to the Upper Floridan Aquifer and is, therefore, incorrectly included in a map depicting Prime Recharge.

See Narrative in Support of Map Amendment for a more complete discussion of the basis for this request.

10. CURRENT LAND USE OF SUBJECT PROPERTY (example: house, vacant land, barn, etc.):

Mostly vacant with a small area replanted with citrus trees

11. SURROUNDING LAND USES:

North: Vacant pasture used for grazing

South: Formerly planted with citrus, now vacant

East: Formerly planted with citrus, now vacant

West: Formerly planted with citrus, now vacant

12. ENVIRONMENTAL ASSESSMENT: NOT APPLICABLE TO REQUEST

- Provide an *Environmental Assessment Report*, conducted within one year or less from the date of submittal, that includes:
 - Maps and surveys of the subject site illustrating the existing land cover according to Level 3 of the FLUCCS
 - Locations of listed flora and fauna species, if present.
 - If any wetlands are identified on site, provide a survey showing delineations of any wetlands, acreages, and the wetland Category (ENV Policy 3.1.3) under which they fall.
 - If the property is adjacent to any Federal, State, or County wildlife management areas, parks, preserves or reserves, supply a science-based analysis of possible impacts to the environmental resources of these lands and the manner in which these impacts can be eliminated. Where elimination is not possible, the analysis shall detail how these impacts can be reduced and mitigated.

13. INFRASTRUCTURE:

A. Roadway

- i. List the roads or streets upon which vehicles may travel to gain access to the site (generally within ¼ mile radius):

Chiquita Drive (Private); Neal Road, C.R. 74

ii. *Traffic Impact Analysis*: This study must be authored by a registered professional engineer in the State of Florida. Provide a study showing the impacts development of the subject site, at the maximum buildout allowed, under the proposed FLUM designation(s) would have on the surrounding roadway network. Where traffic impacts reduce LOS below 'D', provide a proportionate fair share assessment for those impacted roadways. If buildout is voluntarily restricted by the applicant, the report may utilize the restricted buildout numbers.

- *Hurricane Evacuation Study*: For any property that is even partially located in a Coastal High Hazard Area, or which generates trips wherein the majority of those trips would utilize a roadway that runs through a Coastal High Hazard Area, a *Hurricane Evacuation Study* must accompany any *Traffic Impact Analysis*.

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NEITHER A TIS NOR A HURRICANE EVACUATION STUDY IS APPLICABLE TO THIS REQUEST.

B. Potable Water and Sanitary Sewer and other Utility Services NOT APPLICABLE

- Submit a letter from any water or sewer utilities that will be serving the subject site stating availability of utility service to the property.
- Attach an *Estimated Potable Water and Sanitary Sewer Usage Report*: provide a report showing the gallons per day that may be generated by development of the subject site at the maximum buildout allowed under the proposed FLUM designation(s). If buildout is voluntarily restricted by the applicant, the report may utilize the restricted buildout numbers.

14. HISTORICAL OR ARCHEOLOGICAL SITES: The applicant must submit an *Archeological/Historical Memo* indicating that a review of the National Register of Historic Places, the Florida Master Site File and the Local Historic Register (when available) has been performed and the results of that review. If the subject site contains any object listed in these resources, the applicant must provide an *Archeological/Historical Survey* performed by a professional archeologist licensed in the State of Florida. **NOT APPLICABLE**

15. ADJACENT PROPERTY OWNERS INFORMATION: PROVIDED

Provide an *electronic text file (.txt)* that includes the names and addresses of all property owners within 200 feet of the subject property (excluding street right-of-ways), and a map indicating which properties are included in the address list. The Adjacent Property Owner List must be based upon the latest available property records of the Property Appraiser's Office. The list shall include property owner's name, mailing address, and parcel(s) or lot(s) description or account number so each parcel can be referenced on the Adjacent Property Owner Map. Refer to the Geographic Information System Internet site for mapping and owner information at <http://www.ccgis.com/>. (Use a buffer of 250 feet or larger in order to account for right-of-ways, canals, etc.) Every property owner within 200 feet of every parcel of land involved will be notified of the schedule of public hearings

Narrative in Support of Map Amendment

Determination of “*Prime Recharge Areas*” is a technical matter and is based upon specific hydrogeologic characteristics. However, the term also has a basis in Florida statute, Florida water policy and rules. Therefore, the following information is provided for context.

Legislative Direction – “Prime Recharge Areas”

Section 373.0397 F.S. discusses the legislative intent of the Prime Recharge Area designation, and specifically identifies only two aquifers to which this designation is intended to apply, namely the Floridan and Biscayne Aquifers. Since the Biscayne Aquifer is not present within Charlotte County, the only aquifer of consideration as it relates to the statutory use of the term “Prime Recharge Area” is the Floridan Aquifer System.

FDEP Water Resource Implementation Rule – “Prime” and “High Recharge” Areas

Chapter 62-40.210 (16) of FDEP’s Water Resource Implementation Rule defines “*High Recharge Areas*” as those “areas contributing significant volumes of water which add to the storage and flow of an aquifer through vertical movement from the land surface. The term significant will vary geographically depending on the hydrologic characteristics of that aquifer.” Chapter 62-40.210 (22) of the Water Resource Implementation Rule, defines “*Prime Recharge Areas*” as “areas that are generally within *high recharge areas* and are significant to present and future ground water uses including protection and maintenance of natural systems and water supply.”

PUBLIC AGENCY REPORTS REGARDING FLORIDAN AQUIFER RECHARGE

Progressive Water Resources (PWR) has extensive experience with the hydrogeology of Charlotte County and has undertaken considerable technical research and compiled scientific literature and data from public agencies such as the South Florida Water Management District (SFWMD), Southwest Florida Water Management District (SWFWMD), and the United States Geological Survey (USGS) to characterize the subsurface conditions of the site. This effort was undertaken to objectively document the general understanding of the scientific community regarding Floridan Aquifer recharge potential and contamination susceptibility characteristics in the area of the proposed project.

PWR’s research indicates that substantial amounts of data have been collected and public agency documents published, which are directly relevant to the subject matter of this map amendment request. Reference to such information is made herein.

Three of the most pertinent documents regarding the potential for recharge to the Upper Floridan Aquifer in Charlotte County were published by the SWFWMD and the USGS approximately 25 years ago. The SWFWMD documents were developed in direct response to legislative directives to assess issues such as Upper Floridan Aquifer recharge and contamination susceptibility, and to share their findings with local governments for use in their comprehensive planning processes.

In the mid-1980s the Florida legislature directed the state's Water Management Districts to conduct *Groundwater Basin Resource Availability Inventories*. Among other information, the Groundwater Basin Resource Availability Inventories were specifically required to identify areas within the state that should be deemed as "Prime Recharge Areas" and those that should be deemed as being prone to contamination. Upon completion, copies of the Groundwater Basin Resource Availability Inventories were to be submitted to each affected municipality, county, and regional planning agency and reviewed for consistency with the local government's comprehensive plans, and to be considered in future revisions of such plans. It appears that Charlotte County's Future Land Use Element Map #6, entitled "Prime Aquifer Recharge Areas", resulted from this legislative directive to the state's Water Management Districts and related technical studies.

Due to the fact that Charlotte County is divided between the SFWMD and SWFWMD, it appears from historical documents that, rather than duplicating efforts, a decision was made that the Charlotte County Groundwater Basin Resource Availability Inventory report would be published by the SWFWMD. As part of their effort, SWFWMD published two reports in response to the identified statutory direction, and each were provided to Charlotte County for incorporation into their Comprehensive Plan process as directed by the legislature. A third and concurrent document by the USGS is also pertinent. These supporting documents are included as Attachment 1, Attachment 2, and Attachment 3.

The SWFWMD's 1987 Prime Recharge technical report discussed the development of the term "Prime Recharge Area" and provides a background discussion of groundwater concepts and hydrogeologic conditions in the SWFWMD. SWFWMD and the USGS both found that the general area of the subject property is characterized as having "no recharge to very low recharge". This finding is consistent with Charlotte County's Future Land Use Element Map #6, entitled "Prime Aquifer Recharge Areas", which appears to be derived from the Aucott 1988 information provided as Attachment 3. As shown in Attachment 3, the region in which the map amendment request is being made is within the area identified as having less than 1.0 inch per year of recharge to the Upper Florida Aquifer.

PWR's Professional Geologic Opinion Regarding "Prime Recharge" to the Upper Floridan Aquifer

PWR's Professional Geologic opinion regarding whether the subject site should be considered as a "Prime Recharge Area" is consistent with the above-referenced public agency reports which clearly document that the subject area provides "no recharge to very low recharge (0.0 to 1.0 inches per year) to the Upper Florida Aquifer" as stated in the County's own FLUM Map #6. To further confirm our understanding of the nature of the site, PWR undertook its own independent analyses of more recent available information which is presented below for your consideration.

The subject property is due east of the jurisdictional boundaries between the Southwest and South Florida Water Management Districts, within the South Florida Water Management District (SFWMD). More specifically the project is located in Section 18, Township 40 South, Range 27 East, as shown in the attached **Figure 1**. The attached **Figure 2** identifies two SWFWMD Regional Observation Monitoring Points (ROMP) well sites located approximately six miles to the northeast and northwest of the subject project. **Figures 3** and **4** include hydrographs for monitoring wells at the two ROMP sites. It should be noted that the potentiometric surface of the Upper Floridan Aquifer is consistently higher than land

surface elevation at ROMP 12 (Figure 3) indicating that the Upper Floridan Aquifer exerts an upward gradient on overlying aquifer systems, including the Surficial Aquifer System (i.e. water table aquifer).

Therefore, a well penetrating into the Upper Floridan Aquifer near ROMP 12 will discharge under artesian pressure, which indicates the ROMP 12 area is properly characterized as a “discharge area” rather than a “recharge area”. Conversely, the potentiometric surface of the Upper Floridan Aquifer is approximately 15 to 20 feet below land surface at ROMP 13 (Figure 4) indicating a downward water level gradient from the Surficial Aquifer System towards the underlying UFA as this location, which indicates the ROMP 13 area exhibits some degree of recharge. The subject site in question is considered to exhibit hydrologic conditions somewhere between the two ROMP sites.

To further the understanding of the site’s hydrogeologic characteristics, PWR used Geographic Information Systems (GIS) shapefiles to compare the September 2009 and May 2010 Upper Floridan Aquifer potentiometric surfaces with land surface elevations near the site, producing an approximate flowing-artesian boundary, as shown in Figure 5. As the figure indicates, the Upper Floridan Aquifer potentiometric surface is above land surface, i.e., exhibits discharge characteristics, immediately west of the project site. As expected, the approximate flowing artesian boundary developed through GIS, oscillates based hydrologic conditions and moves easterly as water levels increase during the wet season.

The proximity of the project site to this estimated flowing-artesian boundary is also depicted in Figure 6. This figure is taken from the USGS Scientific Investigations Report 2006-5013, indicates that the project site is located virtually on top of the “hinge-line” between identified discharge and recharge areas. Figure 6 further supports the conclusions of the attached agency technical reports that the subject area is characterized as having “no recharge to very low recharge” potential.

Site Specific Investigation and Testing

PWR also reviewed detailed Drillers Completion Reports for nearby irrigation and monitoring wells to obtain specific information as to the nature and thicknesses of sediments overlying the Floridan Aquifer System. Based on this review, it appears that the Upper Floridan is approximately 625 feet below land surface and overlain by a complex series of clays, clayey sands, clayey dolostones and sandy limestones. Collectively these sediments comprise the “confining unit” above the Upper Florida aquifer. The physical properties of these sediments play a critical role in characterizing the recharge potential between the Surficial and Upper Floridan Aquifers.

Additionally, site specific subsurface conditions at the project site were explored through ten (10) Standard Penetration Test (SPT) borings (S-1 to S-10) advanced to depths of 50 feet below existing grade. The locations and pertinent information regarding the SPT and soil borings have been provided in Table 1. SPT borings were performed in accordance with ASTM D-1586 procedures, with continuous sampling performed above a depth of 10.5 feet, to detect slight variations in the soil profile at shallow depths.

The bottom of the Surficial Aquifer System is determined by the presence of low permeability sediments constituting the upper contact of the first confining unit. The upper contact of the first confining unit (i.e. clay) was observed in the lower section of all 10 SPT borings, and seven (7) thin wall tube (Shelby-Tube) samples were extracted from depths ranging from 25 to 43 feet bls at test borings S-1, S-3, S-4, S-5, S-8, S-9 and S-10. The SPT jar samples recovered from the soil test borings were returned to a laboratory, visually examined by an engineer and compared to the field descriptions.

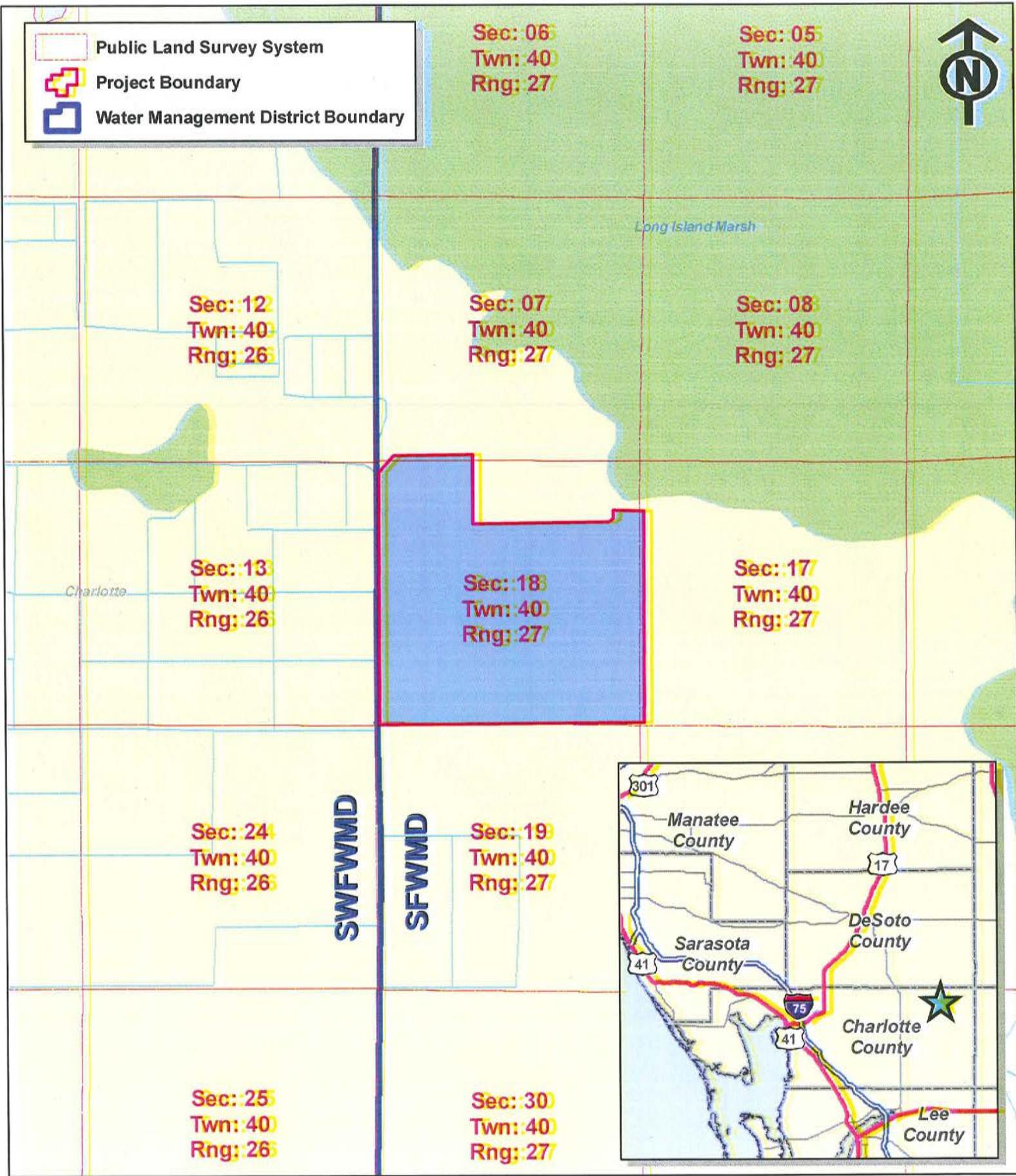
Representative soil samples were selected for laboratory testing consisting of twenty-one (21) wash <200 sieve analyses, twenty-one (21) moisture content tests, seven (7) triaxial permeability tests and seven (7) unit weight tests. The test were performed to aid in classifying the soils and to help evaluate the general engineering and permeability characteristics of the site. Site specific testing of the clay unit indicated low vertical permeabilities, ranging from 1.47×10^{-7} to 1.53×10^{-6} centimeters per second (cm/sec). Using onsite and adjacent property water level data for the Surficial and Upper Floridan Aquifers, depth determinations of the Upper Floridan Aquifer from Driller's Completion Reports and SWFWMD ROMP sites, and the site specific vertical permeabilities; a calculated recharge rate of 0.139 inches per year was determined.

This very low site specific recharge value provides further support that the project site does not meet the definition of "High" under the FDEP's Water Resource Implementation Rule and should not be characterized as being located within "Prime Recharge Area" as identified under Section 373.0397 F.S.

Summary and Conclusion

In summary, the subject site appears to provide very little, if not zero, recharge to the Upper Floridan Aquifer, with recharge best described as either de minimis or nonexistent. PWR is of the opinion that the above-referenced public agency documents, regional observation monitoring well information, and the available site-specific hydrogeologic data indicate that the subject property is clearly not located within a "Prime Aquifer Recharge Area" for the Floridan Aquifer, as that term was intended for use by the Florida Legislature and as defined by the FDEP. All of the information collected to date indicates that the site appears to be underlain by low permeability sediments that collectively form the confining unit below the Surficial Aquifer System and above the limestones associated with the Upper Floridan Aquifer System, which occur at a depth of over 600 feet below land surface. The physical characteristics of the confining sediments in conjunction with the minor water level differentials between the aquifers, result in a very low to no potential for the downward movement of groundwater (i.e. recharge). As such, this amendment seeks to correct the currently inaccurate designation of this area of the County as representing a "Prime Aquifer Recharge Area" for the Floridan Aquifer.

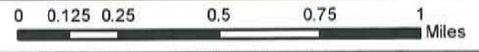
 Public Land Survey System
 Project Boundary
 Water Management District Boundary



Scale: 1:30,000

10/16/2012

Image: 2011 SWFWMD Aerial



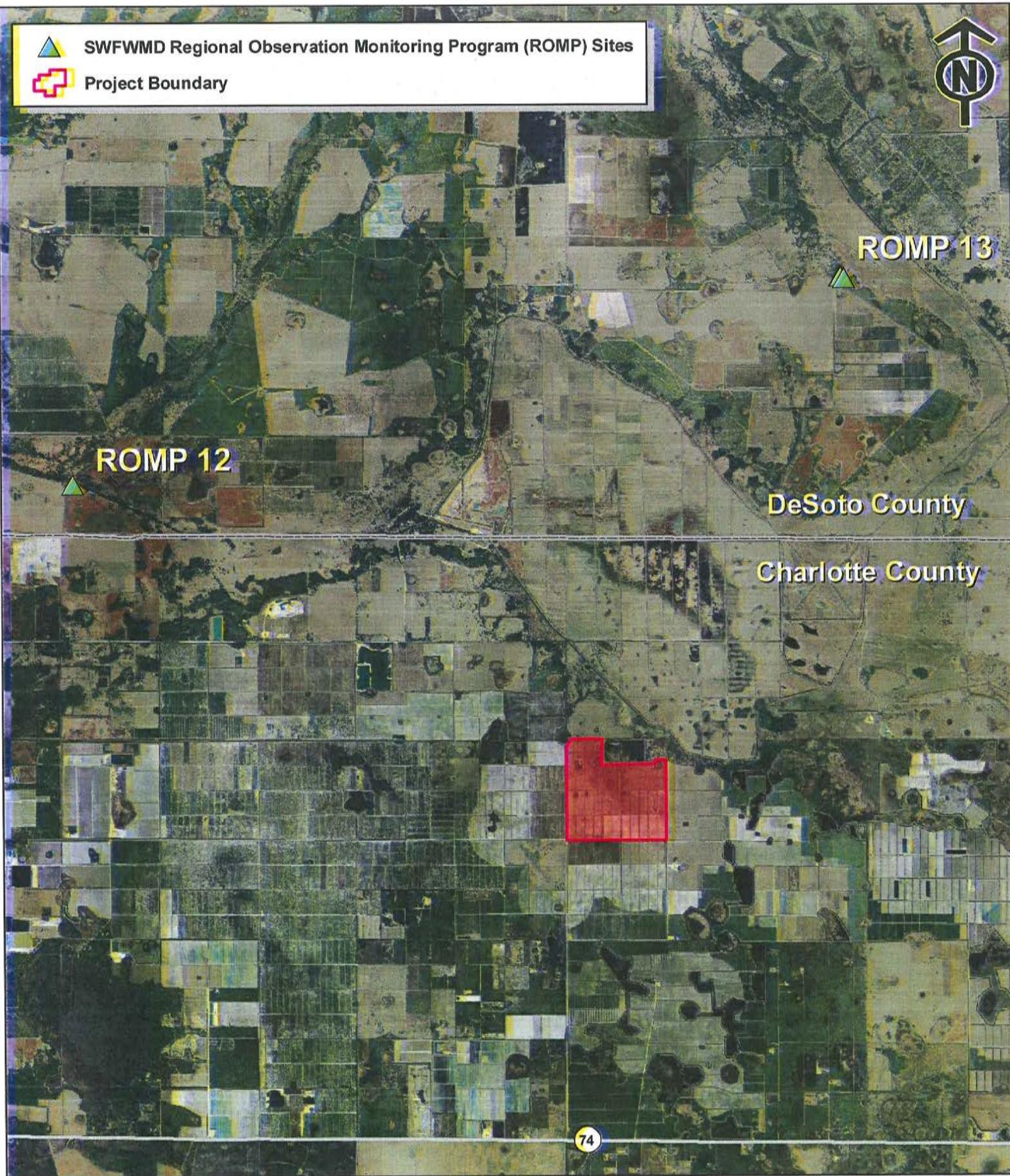
Progressive Water Resources has provided the images or data presented in this map for informational purposes only. This data is not intended to be used in lieu of official survey data provided by a Professional Surveyor licensed by the State of Florida

Figure 1
 Project Location Map



Progressive Water Resources
 Integrated Water Resource Consultants

 SWFWMD Regional Observation Monitoring Program (ROMP) Sites
 Project Boundary



Scale: 1:80,000

10/16/2012

Image: 2011 SWFWMD Aerial

0 0.25 0.5 1 1.5 2 Miles

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Figure 2
ROMP Wellsite Locations

Figure 3
 Regional Observation Monitoring Program (ROMP) Site 12
 Aquifer Water Levels 2001 to 2012

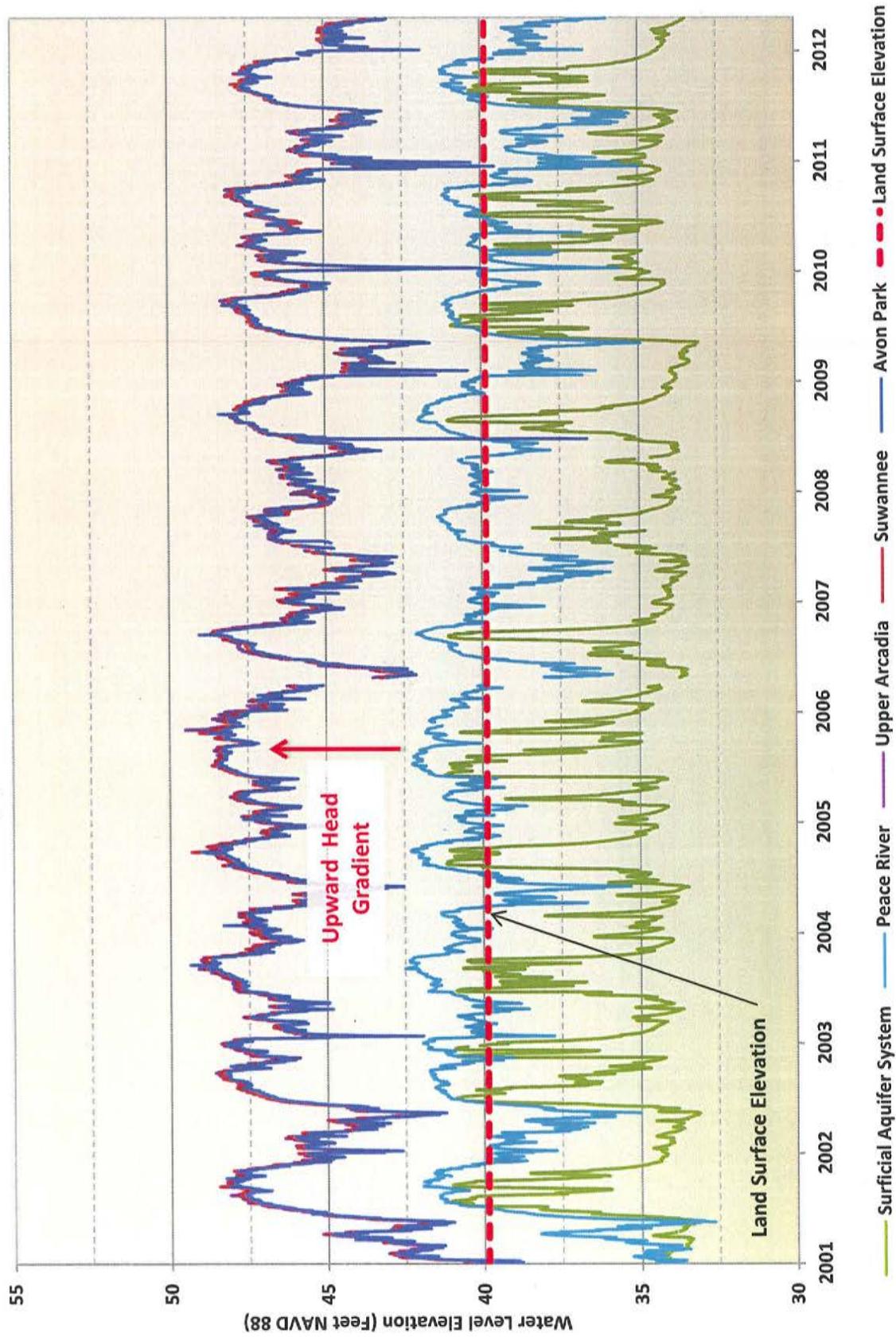
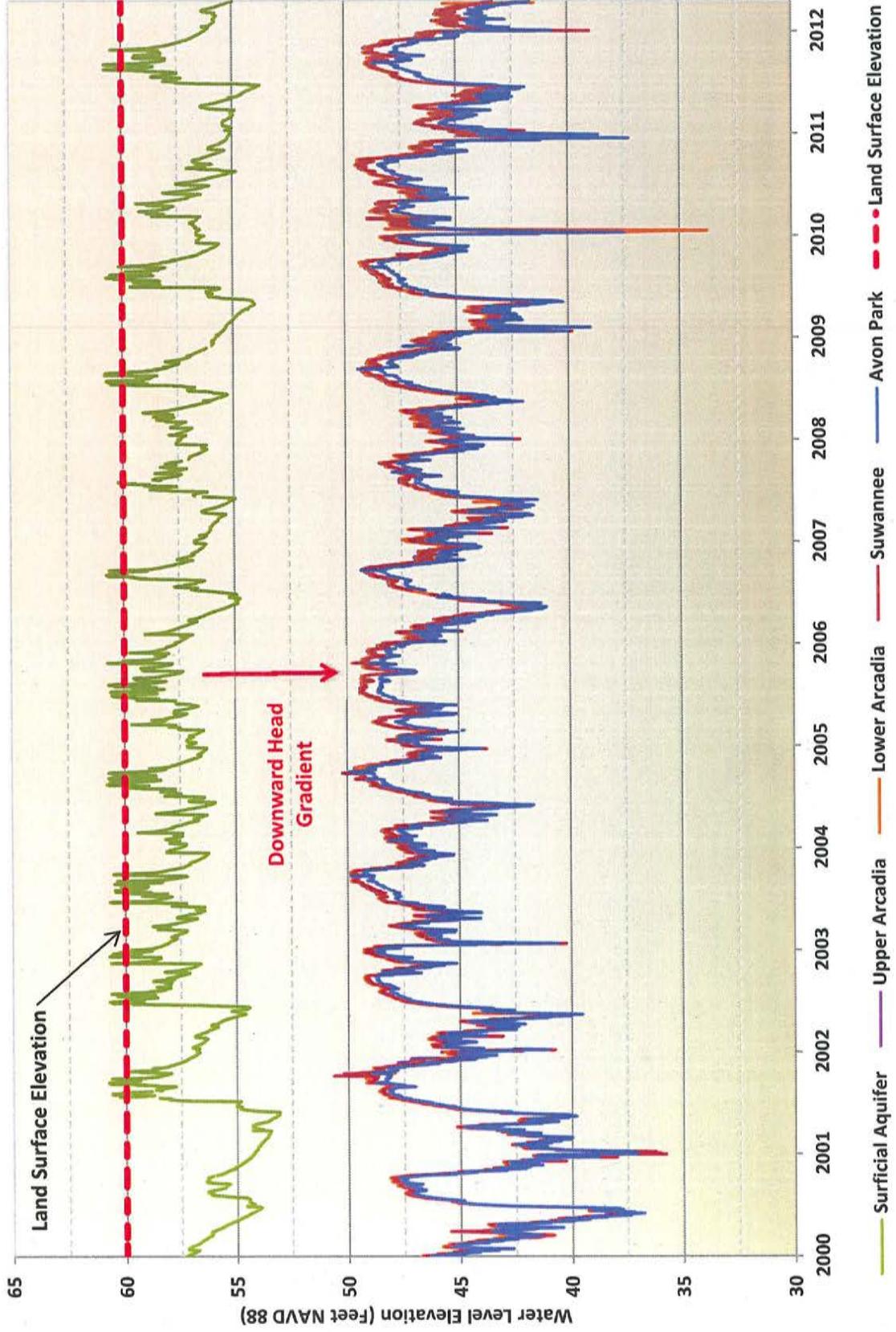
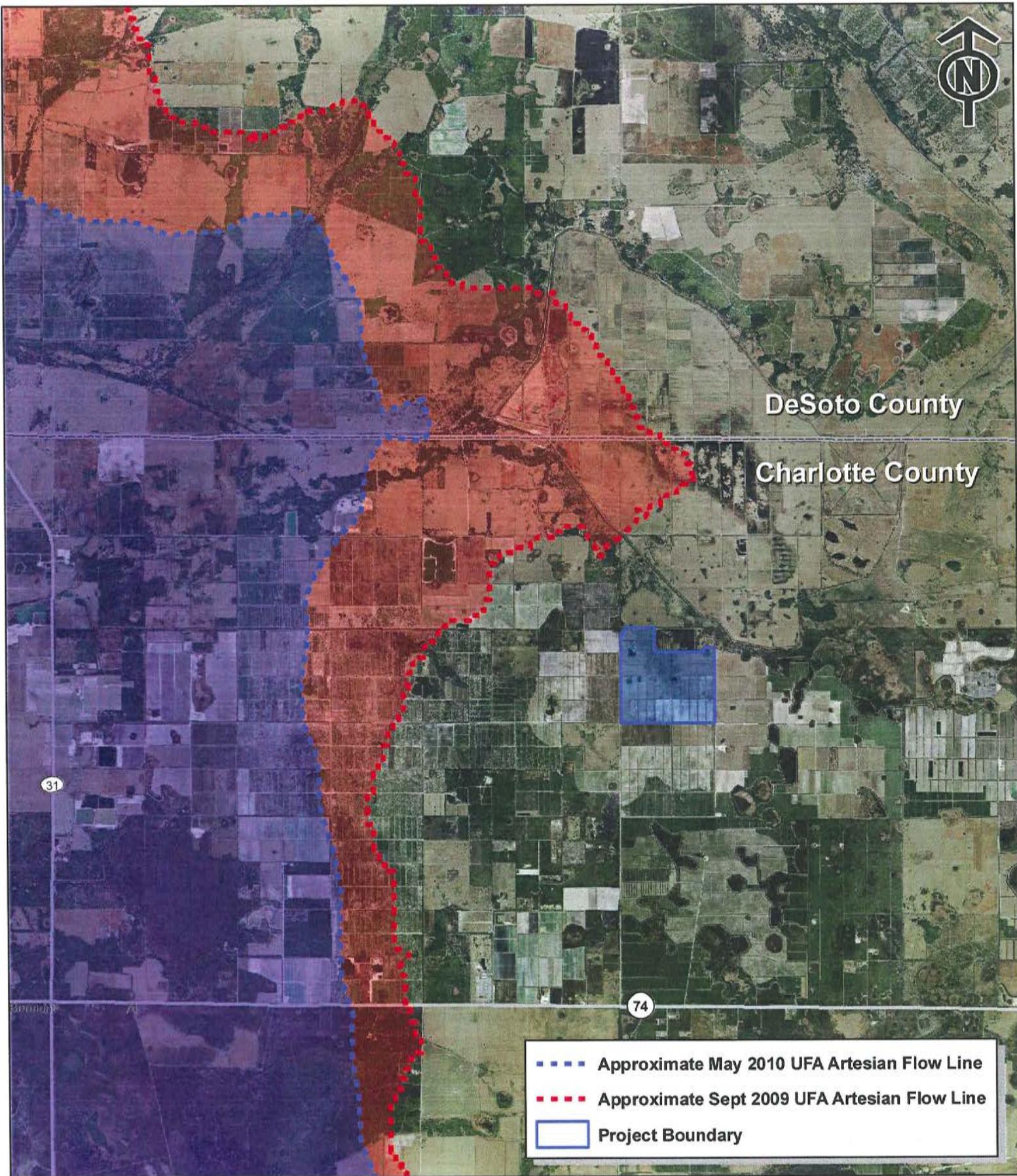


Figure 4
 Regional Observation Monitoring Program (ROMP) Site 13
 Aquifer Water Levels (2000 to 2012)





Scale: 1:85,000

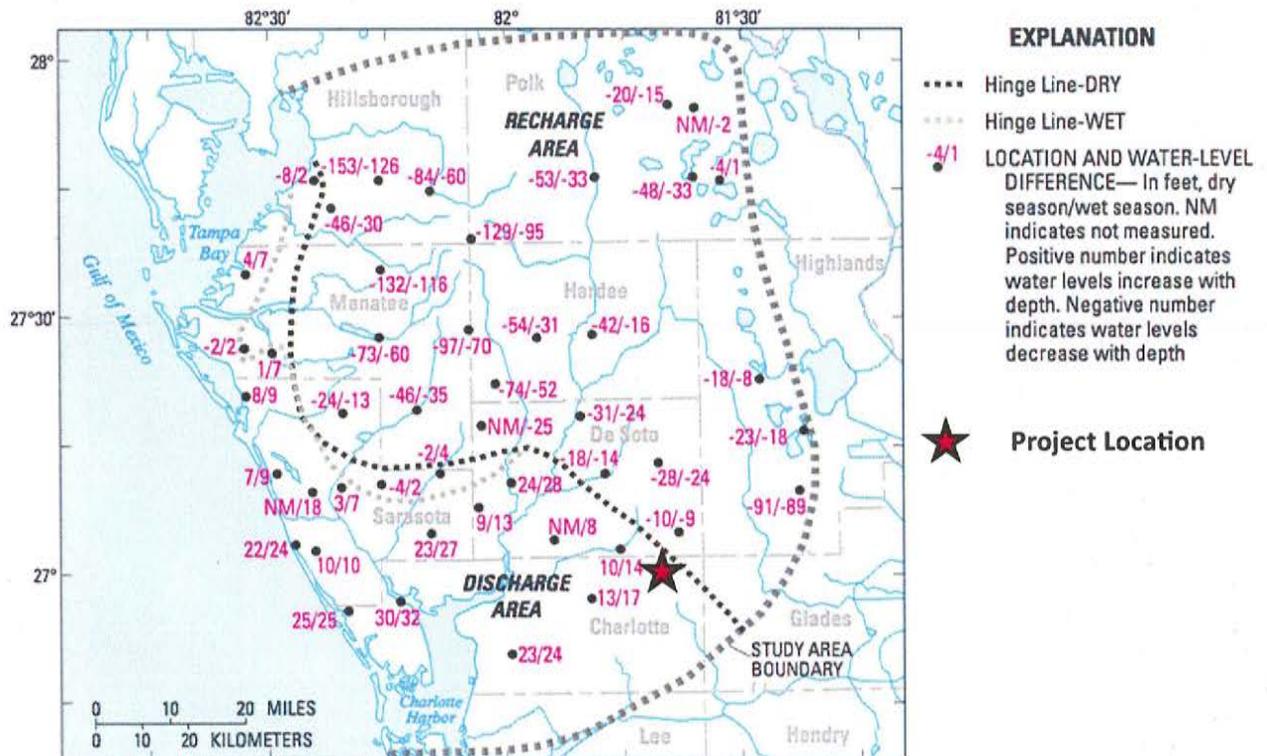
10/16/2012

Image: 2011 SWFWMD Aerial

0 0.25 0.5 1 1.5 2 2.5 Miles

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Figure 5
Generalized UFA Seasonal Artesian Flow Boundary (UFA Water Level at or above Land Surface)



Base from U.S. Geological Survey digital data, 1:2,000,000, 1972
 Albers Equal-Area Conic projection
 Standard Parallels 29°30' and 45°30'; central meridian -83°00'

Recharge and discharge areas and magnitude of water-level differences between the surficial aquifer system and the Upper Floridan aquifer during the wet and dry seasons, 2001

Source: Knochenmus, L.A., 2006. *Regional Evaluation of the Hydrogeologic Framework, and Chemical Characteristics of the Intermediate Aquifer System underlying Southern West-Central, Florida*, United States Geological Survey (USGS) Scientific Investigations Reports 2006-5013, p. 26, Reston, VA.

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Figure 6
 Recharge and Discharge Areas
 of the Upper Floridan Aquifer



Table 1
Soil Boring Information

<i>Standard Penetration Test / Soil Boring Locations</i>							
Name	Type	Latitude	Longitude	Land Surface Elevation (Feet NAVD 88)	Boring Depth (Feet)	Depth of Clay Unit (Feet)	Top of Clay Unit (Feet NAVD 88)
S-1	SPT Boring	26° 59' 56.59" N	81° 39' 17.18" W	57.19	50	27	30.19
S-2	SPT Boring	26° 59' 56.24" N	81° 39' 07.23" W	57.13	50	23	34.13
S-3	SPT Boring	26° 59' 56.64" N	81° 38' 57.84" W	57.33	50	23	34.33
S-4	SPT Boring	26° 59' 47.79" N	81° 38' 47.83" W	58.73	50	23	35.73
S-5	SPT Boring	26° 59' 47.73" N	81° 38' 57.73" W	57.06	50	23	34.06
S-6	SPT Boring	26° 59' 47.83" N	81° 39' 07.43" W	56.36	50	23	33.36
S-7	SPT Boring	26° 59' 47.66" N	81° 39' 17.36" W	57.09	50	28	29.09
S-8	SPT Boring	26° 59' 38.89" N	81° 39' 07.47" W	58.78	50	21	37.78
S-9	SPT Boring	26° 59' 38.92" N	81° 38' 57.64" W	58.55	50	22	36.55
S-10	SPT Boring	26° 59' 37.98" N	81° 38' 48.61" W	57.24	50	23	34.24

Calusa Growers LC

Application for Large Scale Plan Amendment

Notarized Authorizations

FORM B. APPLICANT AUTHORIZATION TO AGENT

I, the undersigned, being first duly sworn, depose and say that I am the applicant for this PLAN AMENDMENT of the property described and which is the subject matter of the proposed hearing.

I give authorization for Geri Waksler, McCrory Law Firm to be my agent for this application.

STATE OF Texas, COUNTY OF Kendall

The foregoing instrument was acknowledged before me this 15th day of October, 2012 by

who is ~~personally known to me or~~ has/have produced Texas Drivers License # 26634676 as identification and who did/did not take an oath.

Jozell Lane
Notary Public Signature

Jozell Lane
Notary Printed Signature

Title

Commission Code



Calusa Growers LC

Henry Lang
Signature of Applicant

Henry Lang

Printed Signature of Applicant

P.O. Box 8188

Address

Melrose Park, IL 60161

City, State, Zip

(941) 639-2518

Telephone Number

AFFIDAVIT

I, the undersigned, being first duly sworn, depose and say that I am the owner or agent of the property described and which is the subject matter of the proposed hearing; that all answers to the questions in this application, and all sketches, data and other supplementary matter attached to and made a part of the application are honest and true to the best of my knowledge and belief. I understand this application must be complete and accurate before the hearing can be advertised, and that if I am not the owner of the property I have attached a notarized authorization from the owner(s) to submit this application. I acknowledge that all items listed in the application must be submitted concurrent at the time the County accepts the application. I swear that the attached list of adjacent property owners is complete, including all property owners within 200 feet of the subject properties (excluding right-of-ways), that it is correct, providing addresses as listed in the County Tax Roll.

STATE OF Texas, COUNTY OF Kendall

The foregoing instrument was acknowledged before me this 15th day of October, 20 12, by

who is ~~personally known to me or~~ has/have produced Texas Driver License #26634676 as identification and who did/~~did not~~ take an oath.

Jozell Lane
Notary Public Signature

Jozell Lane
Notary Printed Signature

Calusa Growers, LC

Henry S. Lang
Signature of Applicant or Agent

Henry Lang, Managing Member

Printed Signature of Applicant or Agent

P.O. Box 8188

Title

Address

Commission Code

Melrose Park, IL 60161

City, State, Zip

(941) 639-2518

Telephone Number

