



Palm Beach County Water Utilities Department  
Advisory Board Meeting  
Customer Service Center  
9045 Jog Road, Boynton Beach, FL 33437



October 25, 2019  
9:30 A.M. - 11:00 A.M.

**AGENDA**

- I. Call to Order**
- II. Roll Call**
- III. Pledge of Allegiance**
- IV. Approval of:**
  - Minutes for the meeting of September 27, 2019
- V. Agenda Approval**
- VI. Presentation:**
  - ISO Update – John Acton
- VII. Staff Reports**
- VIII. Items from the Board**
- IX. Old Business (Responses to Items from the Board)**
- X. Matters by the Public**
- XI. Adjournment**

*\*Group photo will be taken following the meeting*

**NEXT MEETING:**

**December 6, 2019, 9:30 A.M.**

**Central Region Operations Center, Admin & Engineering Building  
8100 Forest Hill Blvd., West Palm Beach, FL 33413**



**PALM BEACH COUNTY  
WATER UTILITIES DEPARTMENT  
ADVISORY BOARD MEETING**



**September 27, 2019  
9:30 am – 11:00 am**

**MINUTES**

**I. CALL TO ORDER**

Beverly Scott called the meeting to order at 9:30 a.m.

Members Present:

Rob Hawkins, Carlos Cedeño, Myrna Rosoff, Carolyn Pomeranz, Arnold Katz, Bernard Castleman and William Nuss

Members not in Attendance:

Clara Murvin, Frank Matthews and Edwin Wechsler

PBC Water Utilities Staff Present:

Jim Stiles, Hassan Hadjimiry, Kenny Rampersad and Claudia Coyne

Guests Present:

Danna Ackerman-White, Vice Mayor Kerner's Aide, Ted Winsberg, Susan Nuss

**II. APPROVAL OF MINUTES**

- Rob Hawkins / Arnold Katz moved to approve the 7/26/2019 meeting minutes. The motion carried unanimously

**III. APPROVAL OF AGENDA**

- Carolyn Pomeranz / Arnold Katz moved to approve the 9/27/2019 agenda. The motion carried unanimously

**IV. PRESENTATIONS**

- Jim Stiles provided a presentation on the future expansion of Green Cay.
  - Jim introduced Mr. Ted Winsberg to the Advisory Board

**V. STAFF REPORTS**

- Jim Stiles shared a news report on the Royal Palm Beach line break
- Kenny Rampersad mentioned that Myrna Rosoff and Bernard Castleman had been reappointed for another three-year term to the Advisory Board at the September 10<sup>th</sup> Board of County Commissioner’s Meeting
- Kenny also stated that the following had been approved at the September 16<sup>th</sup> Budget Meeting:
  - FY2020 Water Utilities Budget
  - 3 Customer Service Positions
  - 6 Chief Operator Positions
- Shawn Reed asked the Board to wear their Water Utilities polo shirts to the next Advisory Board meeting on October 25 for a group photo

**VI. ITEMS FROM THE BOARD**

- Rob Hawkins shared a consumer report on bottled water
- William Nuss shared experience with AMI meter installation

**VII. UNFINISHED BUSINESS**

- None

**VIII. ITEMS FROM THE PUBLIC**

- None

**IX. ADJOURNMENT**

- There being no further business to discuss, Rob Hawkins / Carolyn Pomeranz moved to adjourn the meeting at 10:55 a.m. The motion carried unanimously

**Attachment:**

- Green Cay Wetlands Update - Jim Stiles



# Green Cay Wetlands Update Past, Present and Future.....

September 27, 2019

# Presentation Outline

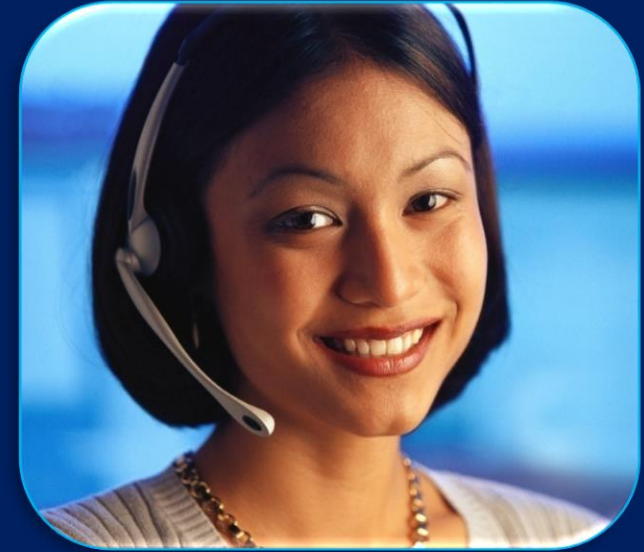
- 🔥 Why the Wetland was created
- 🔥 What benefits does it provide?
- 🔥 Current issues
- 🔥 Future plan



# Water Utilities Motto:

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- 🔥 ***Best Water***
- 🔥 ***Best Customer Service***
- 🔥 ***Best Environmental Stewardship***



In line with our Vision, Mission and Strategic Plan to successfully map our future



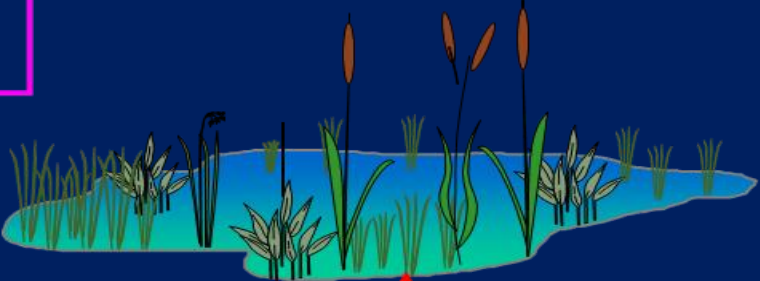
# Existing Effluent Management Plan

**SRWRF  
30 MGD**



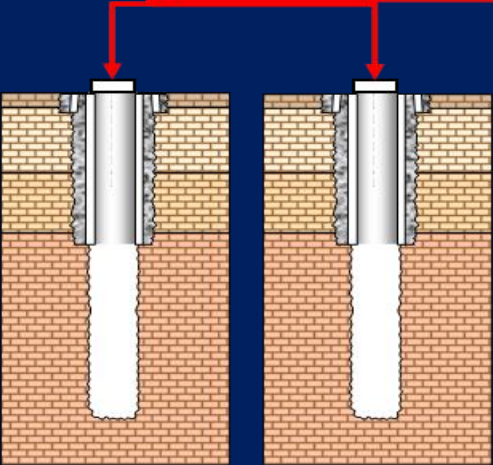
**Reuse  
22 MGD**

**Reclaimed  
Water**

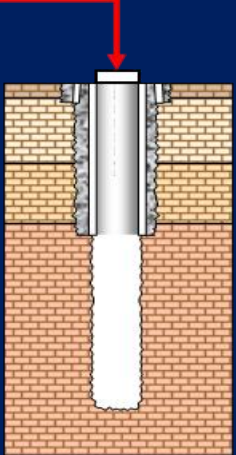


**Wetlands  
2 MGD**

**Secondary Treated Effluent**



**Deep Injection Wells  
34.5 MGD**





# Wetlands Purpose:

Useful Created Green Space



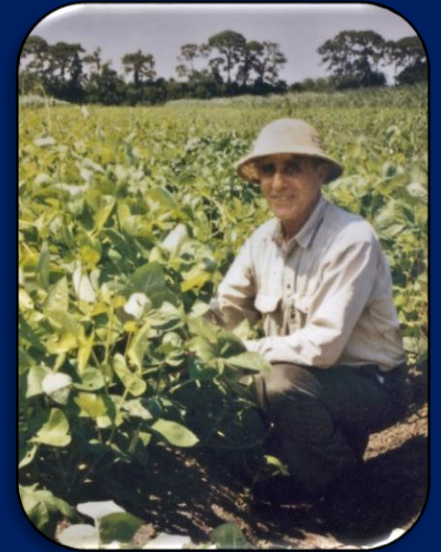
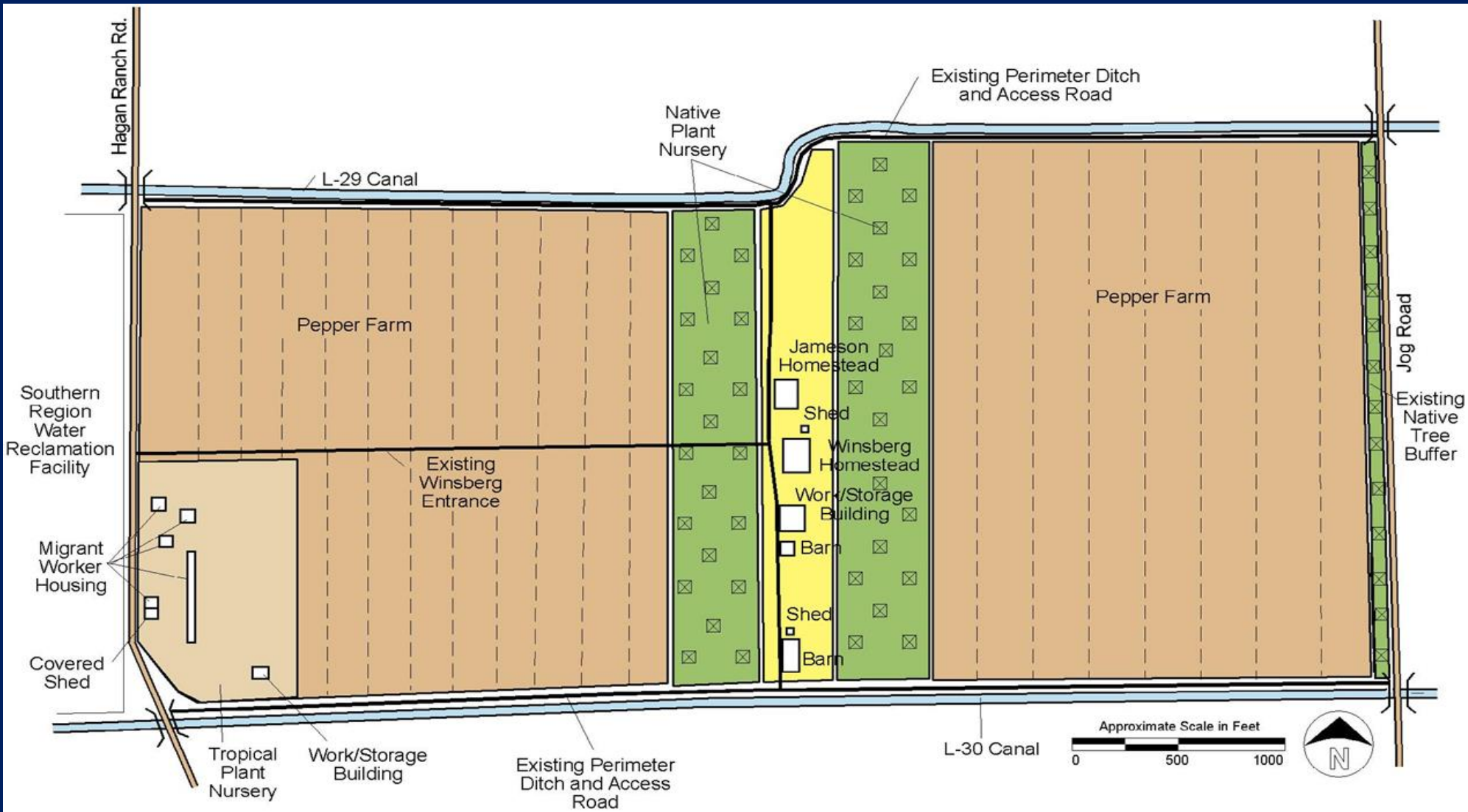
Effluent Disposal

Sustainable Future

Groundwater Recharge



# Green Cay Farms, Inc. (1957 – 1997)



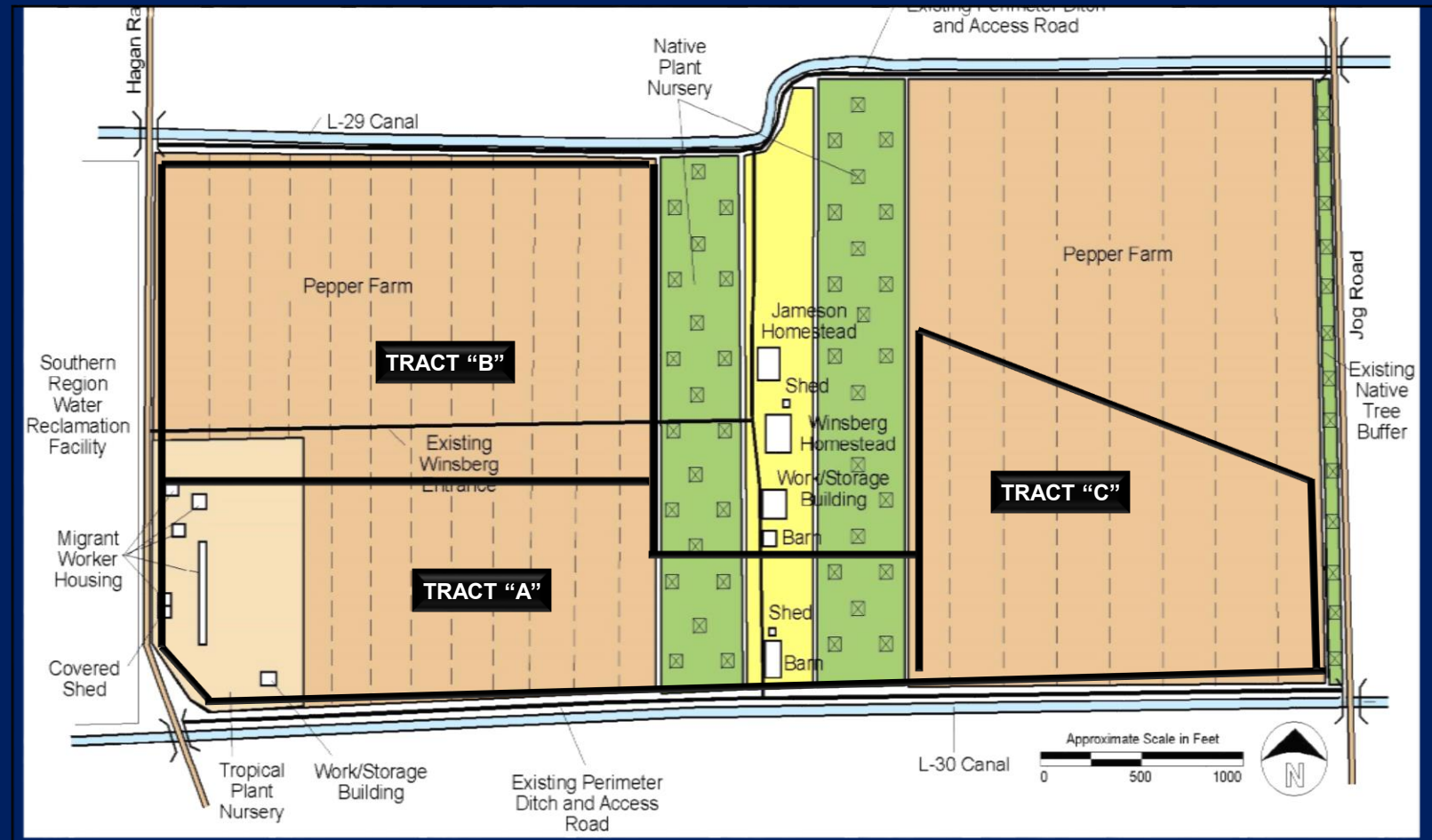
Ted and Trudy Winsberg

# Winsberg Farm Land Purchase

175 acres - \$2.7M

🔥 Tract "C" - July 1999

🔥 Tracts "A" & "B" - May 2000



# Green Cay Wetlands



## Land Purchase (175 acres)

**\$2.7M**

- 🔥 Tract "C"
- 🔥 Tracts "A" & "B"

July 1999

May 2000

## Construction Completed

**December 2004**

### Construction Cost:

- 🔥 Wetlands
- 🔥 Interpretive Center

\$14.5M

\$ 2.3M

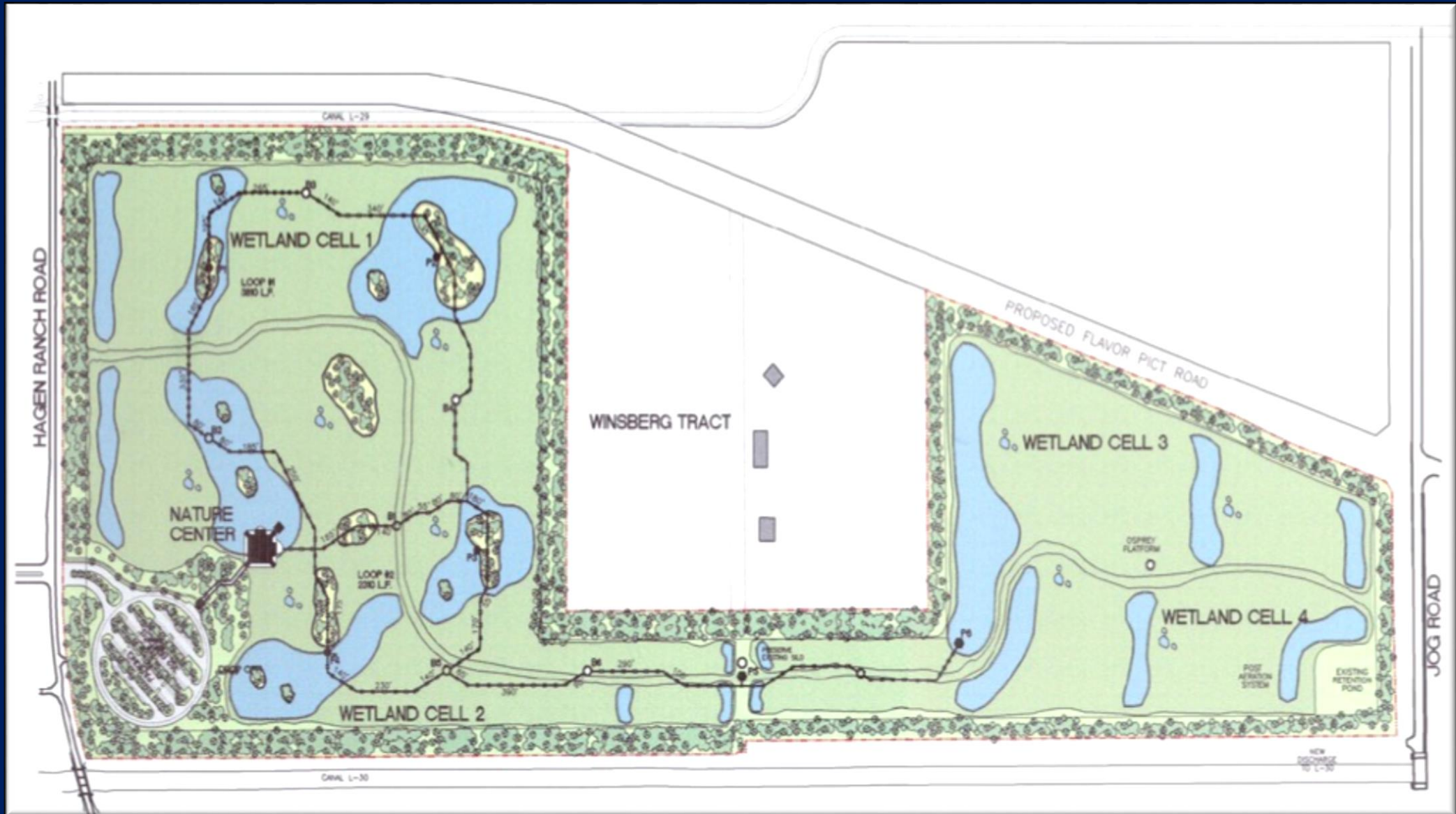
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## Total Cost:

**\$19.5M**

**Amendments 1-4 set forth terms of annual Lease Amendments  
with termination date of 05/01/2020**

# Green Cay Wetlands Original Site Plan



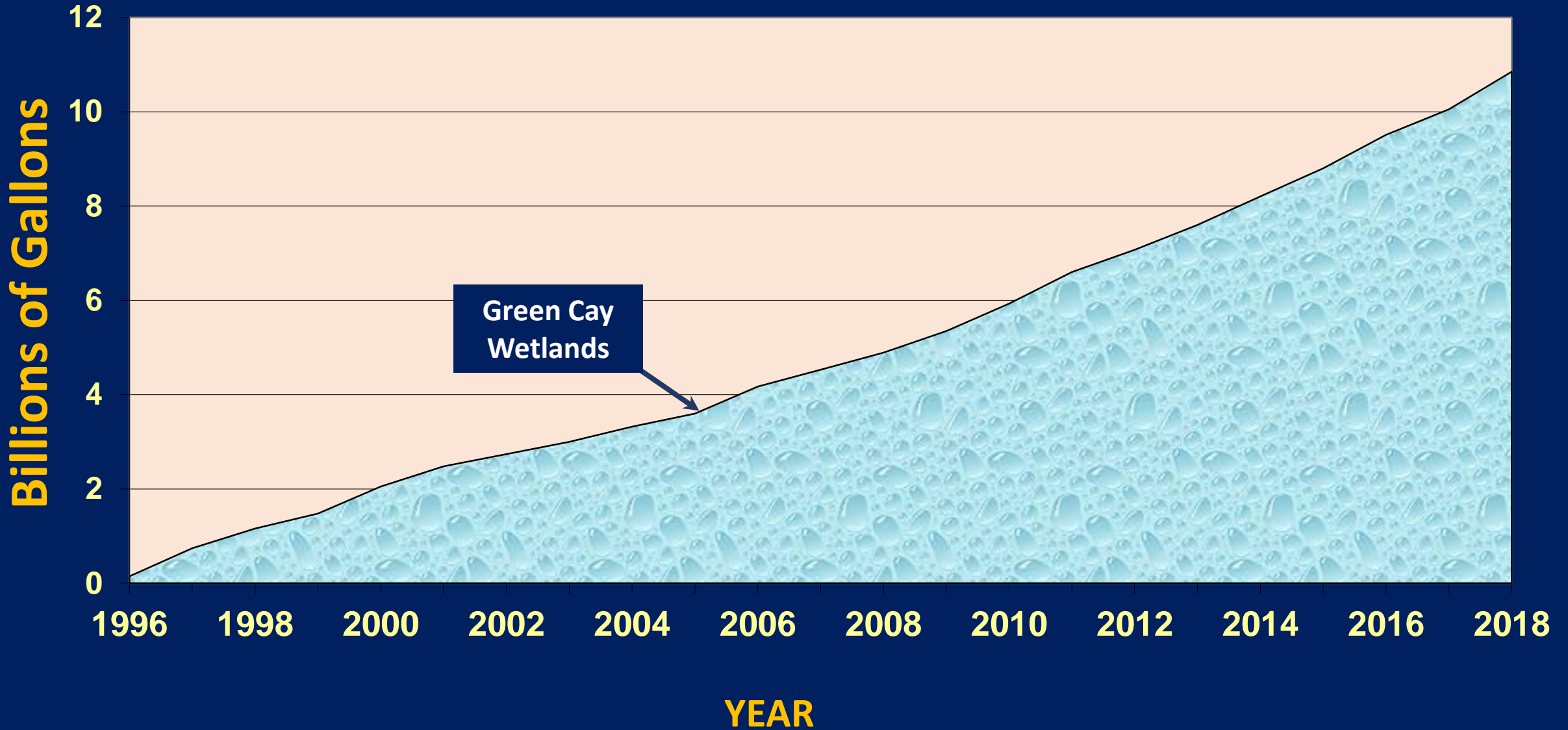
# Green Cay Wetlands

WUD completed construction of 100 acres at Green Cay Wetlands Phase – 1 in February 2004 at a cost of \$17M



Phase – 2 to be constructed in the near future

# Wetlands flow has reused 11B Gals for environmental benefit

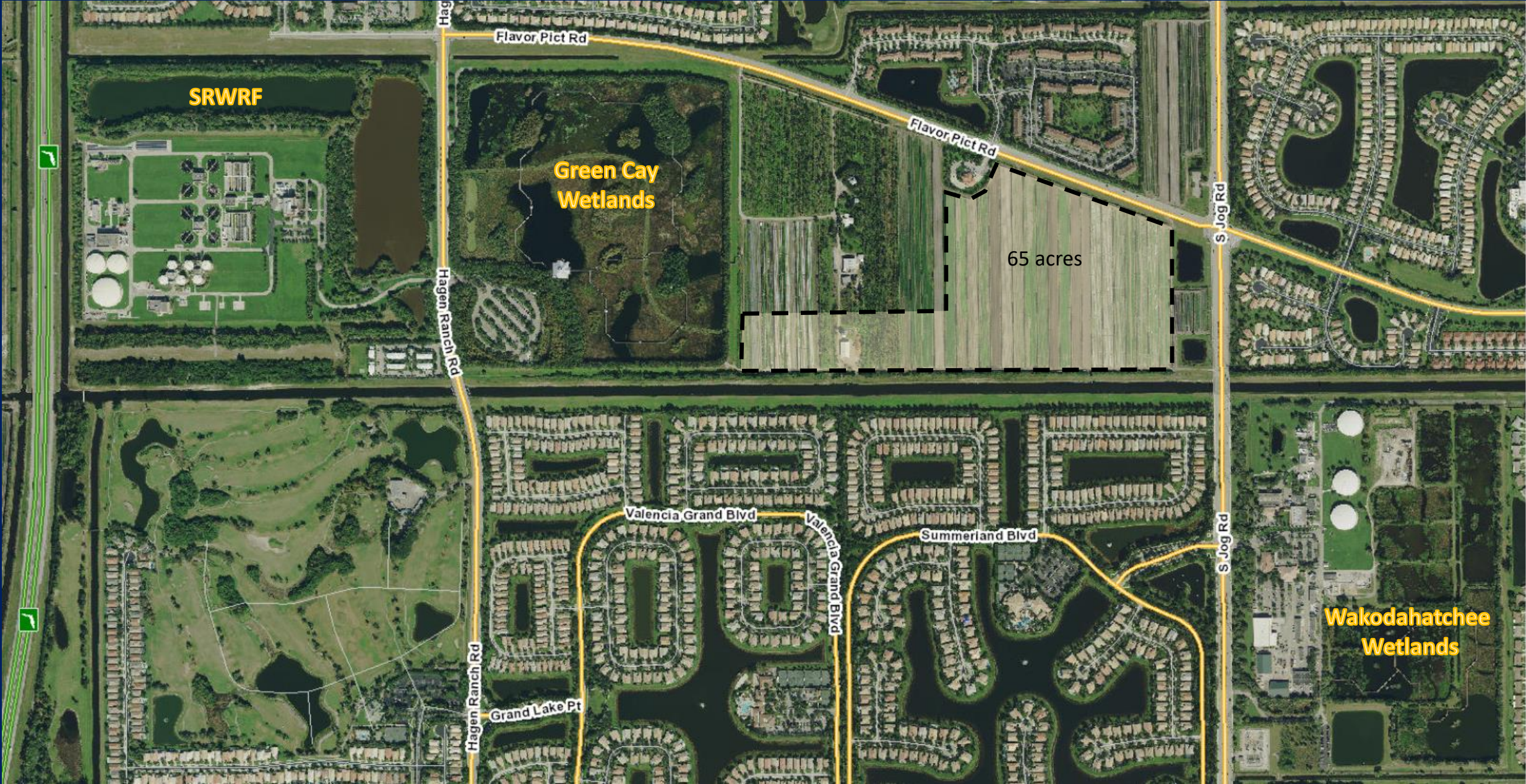


# Wetlands by the Numbers

- 600 million gallons are recycled through the wetlands each year
- 1.3 million annual visitors
- 178 different species of birds have been identified
- Wakodahatchee Named “Best Park” in Florida by *Money Magazine* in June 2018
- 150 acres of wetlands habitat in buffer zone between restoration areas and suburban development, passive recreation space free for public use & enjoyment
- The vegetation removes 75% of the nitrogen and 50% of the phosphorous in the recycled water, further purifying it before recharging groundwater
- Area building developers use proximity to the Wetlands as a key selling point in their marketing materials
- Consistently rated ‘5 Stars’ by visitors on Trip Advisor and Google reviews.
- Audubon recommends Wakodahatchee as part of the *Great Florida Birding Trail’s South* region for bird watching



# Upcoming Phase II



**SRWRF**

Flavor Pict Rd

**Green Cay Wetlands**

65 acres

Existing 24" effluent main

**Wakodahatchee Wetlands**

Hag

Hagen Ranch Rd

Flavor Pict Rd

S Jog Rd

Valencia Grand Blvd

Valencia Grand Blvd

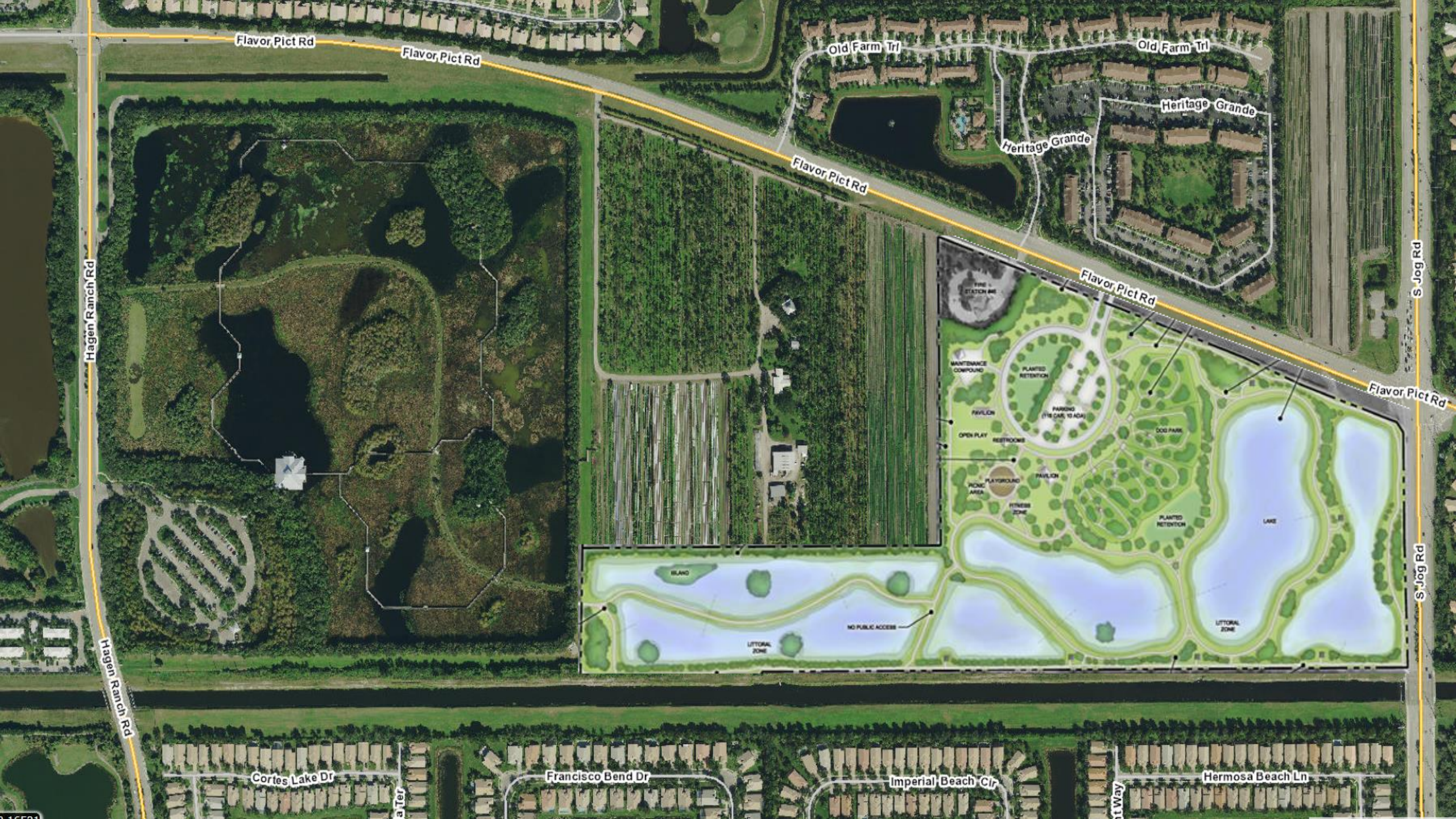
Summerland Blvd

S Jog Rd

Grand Lake Pt

Hagen Ranch Rd





Flavor Pict Rd

Flavor Pict Rd

Old Farm Trl

Old Farm Trl

Heritage Grande

Heritage Grande

Flavor Pict Rd

Hagen Ranch Rd

S Jog Rd

Flavor Pict Rd

Flavor Pict Rd

Hagen Ranch Rd

S Jog Rd

FIRE STATION Bldg

MAINTENANCE COMPOUND

PAVILION

OPEN PLAY

RESTROOMS

PICNIC AREA

PLAYGROUND

FITNESS ZONE

PAVILION

PLANTED RETENTION

PARKING (118 CAR, 10 ADA)

DOG PARK

PLANTED RETENTION

LAKE

LITTORAL ZONE

ISLAND

NO PUBLIC ACCESS

LITTORAL ZONE

LITTORAL ZONE

Cortes Lake Dr

a Ter

Francisco Bend Dr

Imperial Beach Cir

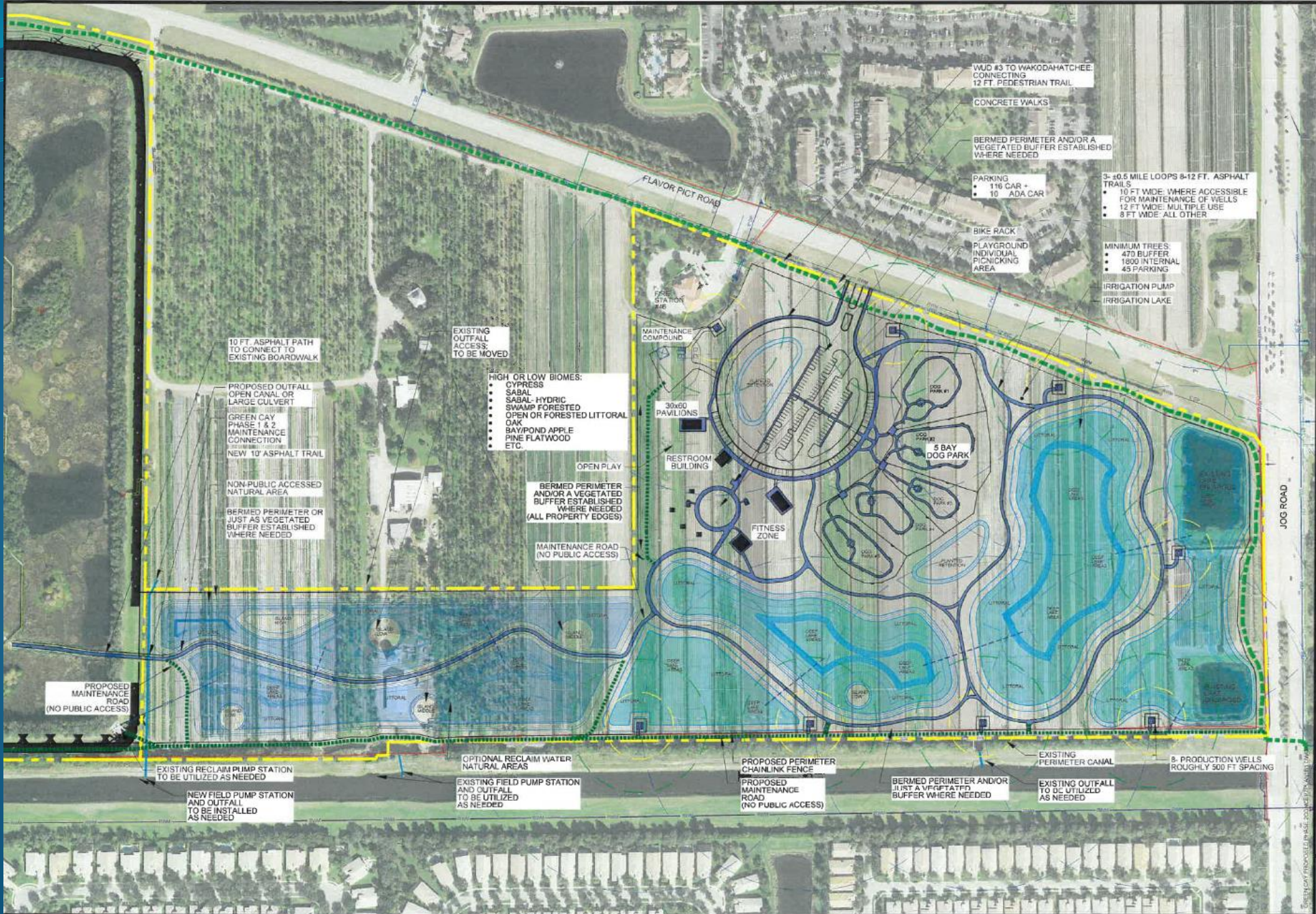
at Way

Hermosa Beach Ln





**Thank you!**



WUD #3 TO WAKODAHATCHEE  
CONNECTING  
12 FT. PEDESTRIAN TRAIL

CONCRETE WALKS

BERMED PERIMETER AND/OR A  
VEGETATED BUFFER ESTABLISHED  
WHERE NEEDED

PARKING  
• 116 CAR +  
• 10 ADA CAR

BIKE RACK  
PLAYGROUND  
INDIVIDUAL  
PICNICING  
AREA

3-±0.5 MILE LOOPS 8-12 FT. ASPHALT  
TRAILS  
• 10 FT WDE. WHERE ACCESSIBLE  
FOR MAINTENANCE OF WELLS  
• 12 FT WDE. MULTIPLE USE  
• 8 FT WDE. ALL OTHER

MINIMUM TREES:  
• 470 BUFFER  
• 1800 INTERNAL  
• 45 PARKING

IRRIGATION PUMP  
IRRIGATION LAKE

10 FT. ASPHALT PATH  
TO CONNECT TO  
EXISTING BOARDWALK

EXISTING  
OUTFALL  
ACCESS  
TO BE MOVED

PROPOSED OUTFALL  
OPEN CANAL OR  
LARGE CULVERT

GREEN CAY  
PHASE 2  
MAINTENANCE  
CONNECTION  
NEW TO ASPHALT TRAIL

NON-PUBLIC ACCESSED  
NATURAL AREA

BERMED PERIMETER OR  
JUST AS VEGETATED  
BUFFER ESTABLISHED  
WHERE NEEDED

HIGH OR LOW BIOMES:  
• CYPRESS  
• SABAL  
• SABAL-HYDRIC  
• SWAMP FORESTED  
• OPEN OR FORESTED LITTORAL  
• OAK  
• BAY/POND APPLE  
• PINE FLATWOOD  
ETC.

OPEN PLAY

BERMED PERIMETER  
AND/OR A VEGETATED  
BUFFER ESTABLISHED  
WHERE NEEDED  
(ALL PROPERTY EDGES)

MAINTENANCE ROAD  
(NO PUBLIC ACCESS)

PROPOSED  
MAINTENANCE  
ROAD  
(NO PUBLIC ACCESS)

EXISTING RECLAIM PUMP STATION  
TO BE UTILIZED AS NEEDED

NEW FIELD PUMP STATION  
AND OUTFALL  
TO BE INSTALLED  
AS NEEDED

OPTIONAL RECLAIM WATER  
NATURAL AREAS

EXISTING FIELD PUMP STATION  
AND OUTFALL  
TO BE UTILIZED  
AS NEEDED

PROPOSED PERIMETER  
CHAINLINK FENCE

PROPOSED  
MAINTENANCE  
ROAD  
(NO PUBLIC ACCESS)

BERMED PERIMETER AND/OR  
JUST AS VEGETATED  
BUFFER WHERE NEEDED

EXISTING PERIMETER CANAL

EXISTING OUTFALL  
TO BE UTILIZED  
AS NEEDED

8. PRODUCTION WELLS  
ROUGHLY 500 FT SPACING



PALM BEACH COUNTY  
PARKS & RECREATION DEPARTMENT

APPROVED BY:  
B. HAMILTON  
05/15/2019  
MAP DATE:  
5/15/2019

DESIGNED BY:  
B. HAMILTON  
DRAWN BY:  
R. HEDDLUND  
IMAGE DATE:  
05/15/2019  
MAP DATE:  
5/15/2019

# GREEN CAY PHASE 2 PROPOSED IMPROVEMENTS CONCEPTUAL SITE PLAN OPT. 1B1

REVISIONS

NORTH



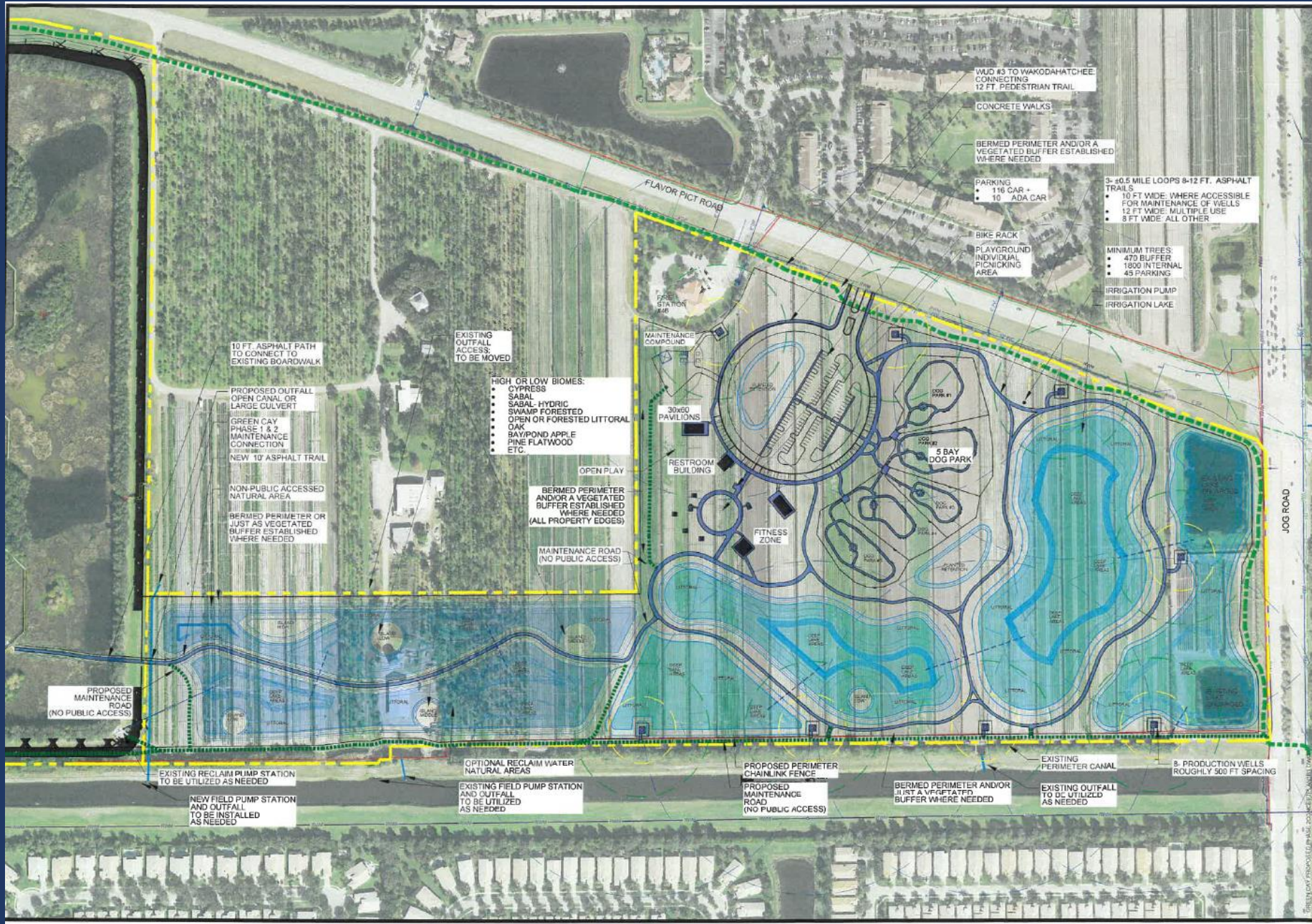
0' 120' 240'

SHEET NO.

1 OF 1

GREEN CAY PHASE 2 OPT. 1B1 (REV. 5/15/2019)





10 FT. ASPHALT PATH TO CONNECT TO EXISTING BOARDWALK

PROPOSED OUTFALL OPEN CANAL OR LARGE CULVERT  
GREEN CAY PHASE 1 & 2 MAINTENANCE CONNECTION  
NEW 10' ASPHALT TRAIL

NON-PUBLIC ACCESSED NATURAL AREA  
BERMED PERIMETER OR JUST AS VEGETATED BUFFER ESTABLISHED WHERE NEEDED

PROPOSED MAINTENANCE ROAD (NO PUBLIC ACCESS)

NEW FIELD PUMP STATION AND OUTFALL TO BE INSTALLED AS NEEDED

EXISTING OUTFALL ACCESS: TO BE MOVED

- HIGH OR LOW BIOMES:
- CYPRESS
  - SABAL
  - SABAL-HYDRIC SWAMP FORESTED
  - OPEN OR FORESTED LITTORAL
  - OAK
  - BAYPOND APPLE
  - PINE FLATWOOD
  - ETC.

OPEN PLAY

BERMED PERIMETER AND/OR A VEGETATED BUFFER ESTABLISHED WHERE NEEDED (ALL PROPERTY EDGES)

MAINTENANCE ROAD (NO PUBLIC ACCESS)

OPTIONAL RECLAIM WATER NATURAL AREAS  
EXISTING FIELD PUMP STATION AND OUTFALL TO BE UTILIZED AS NEEDED

PROPOSED PERIMETER CHAIN LINK FENCE  
PROPOSED MAINTENANCE ROAD (NO PUBLIC ACCESS)

BERMED PERIMETER AND/OR JUST A VEGETATED BUFFER WHERE NEEDED

EXISTING OUTFALL TO BE UTILIZED AS NEEDED

WUD #3 TO WAKODAHATCHEE CONNECTING 12 FT. PEDESTRIAN TRAIL  
CONCRETE WALKS

BERMED PERIMETER AND/OR A VEGETATED BUFFER ESTABLISHED WHERE NEEDED

PARKING  
• 116 CAR +  
• 10 ADA CAR

BIKE RACK  
PLAYGROUND  
INDIVIDUAL PICNICING AREA

- 3-50.5 MILE LOOPS 8-12 FT. ASPHALT TRAILS
- 10 FT WIDE: WHERE ACCESSIBLE FOR MAINTENANCE OF WELLS
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MINIMUM TREES:  
• 470 BUFFER  
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IRRIGATION PUMP  
IRRIGATION LAKE



PALM BEACH COUNTY  
PARKS & RECREATION DEPARTMENT

DESIGNED BY: B. HAMILTON  
DATE: 05/15/2019  
MAP DATE: 05/15/2019

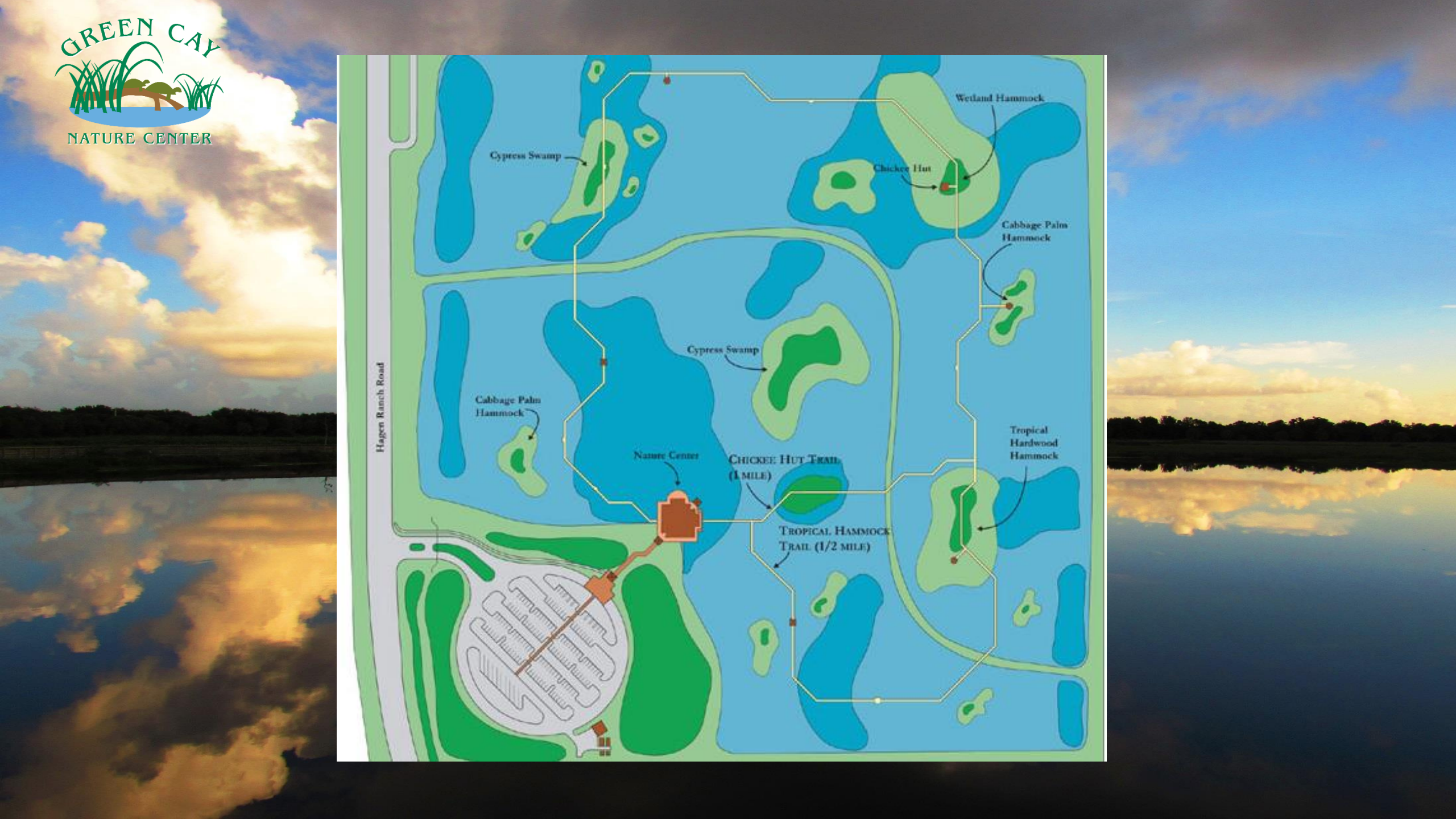
APPROVED BY: B. HAMILTON  
DATE: 05/15/2019

# GREEN CAY PHASE 2 PROPOSED IMPROVEMENTS CONCEPTUAL SITE PLAN OPT. 1B1

REVISIONS



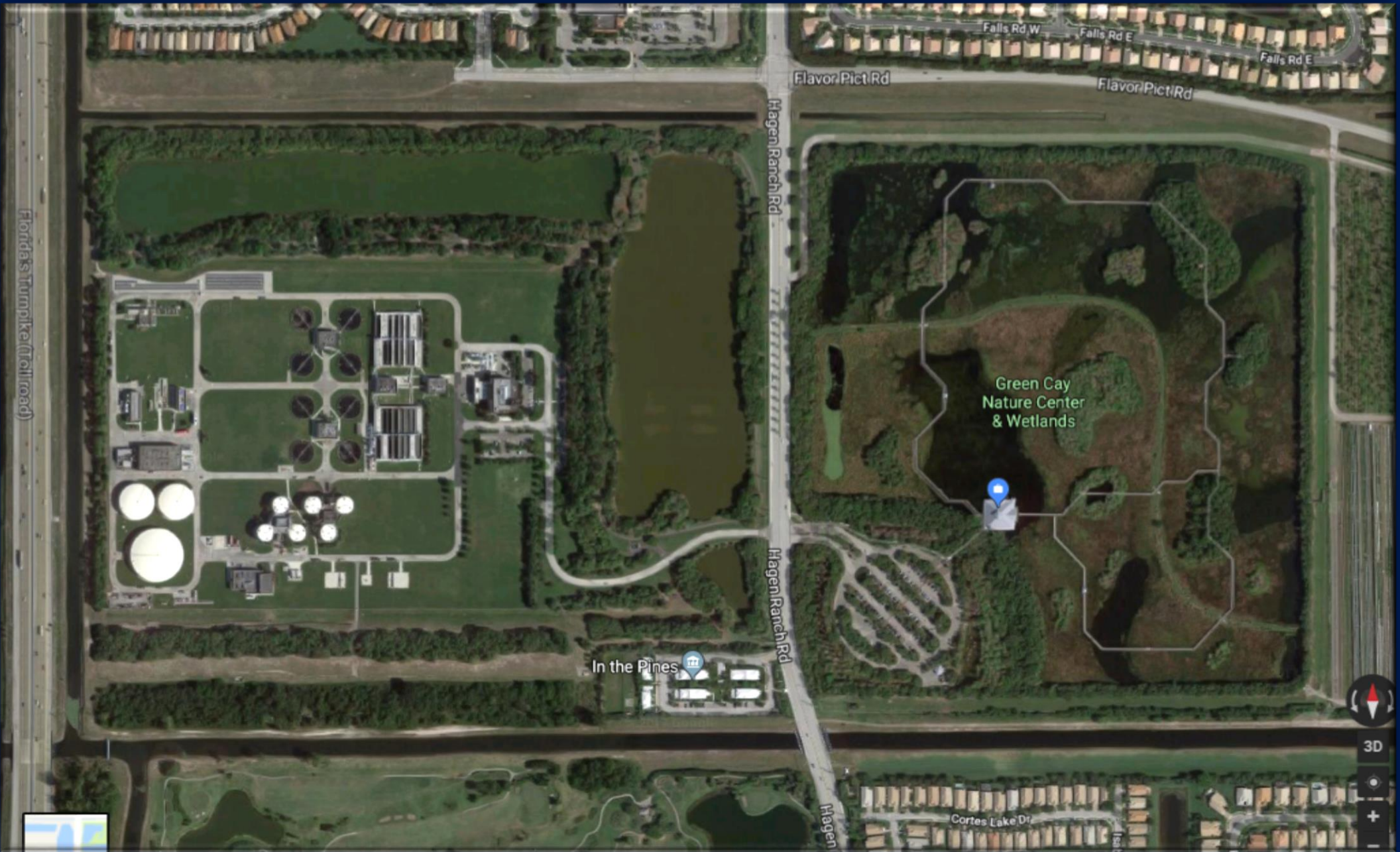
SHEET NO.  
1 OF 1





# Green Cay site – January 2005





Florida's Turnpike (Toll road)

Flavor Pict Rd

Flavor Pict Rd

Falls Rd W

Falls Rd E

Falls Rd E

Hagen Ranch Rd

Hagen Ranch Rd

Hagen

Green Cay Nature Center & Wetlands

In the Pines

Cortes Lake Dr

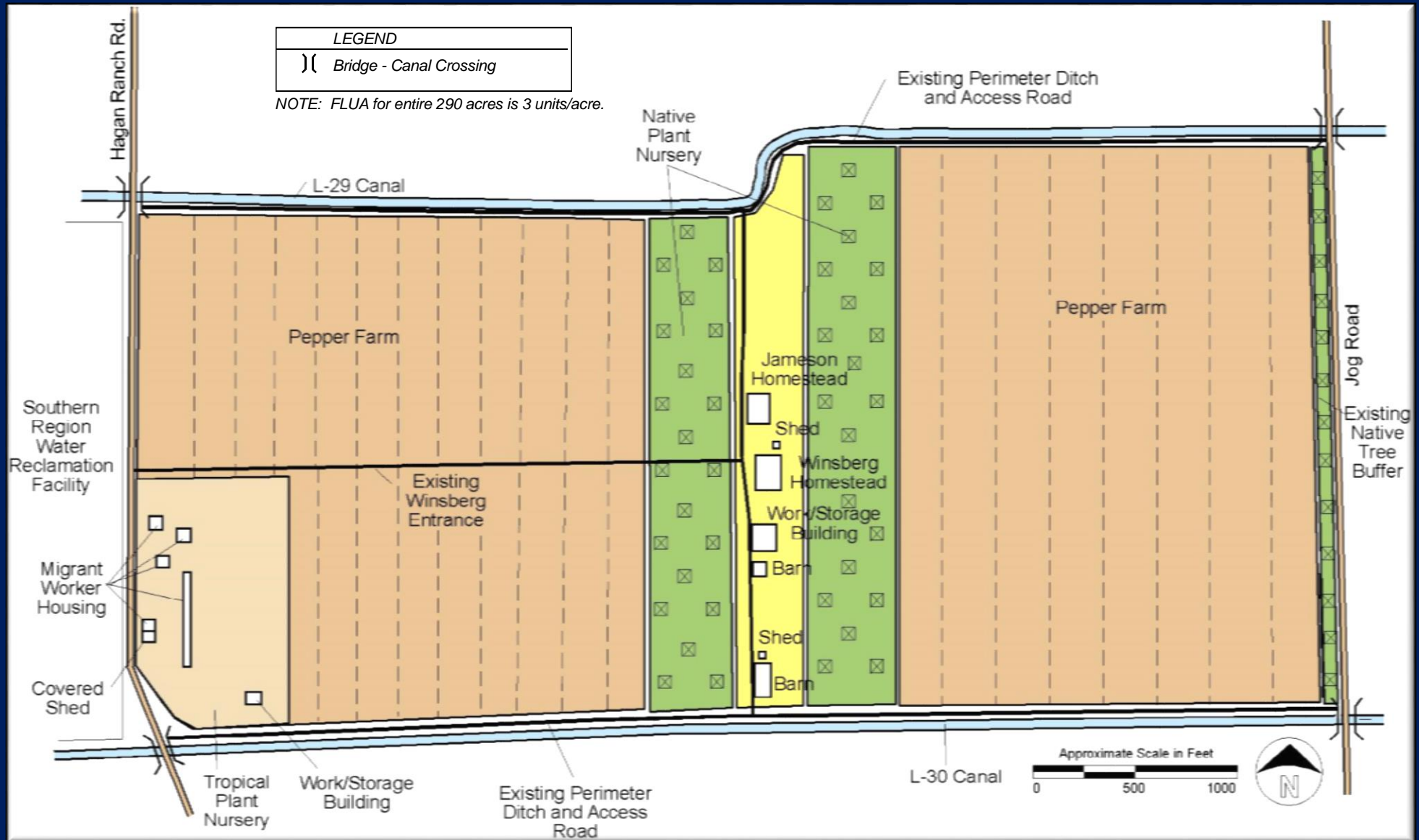
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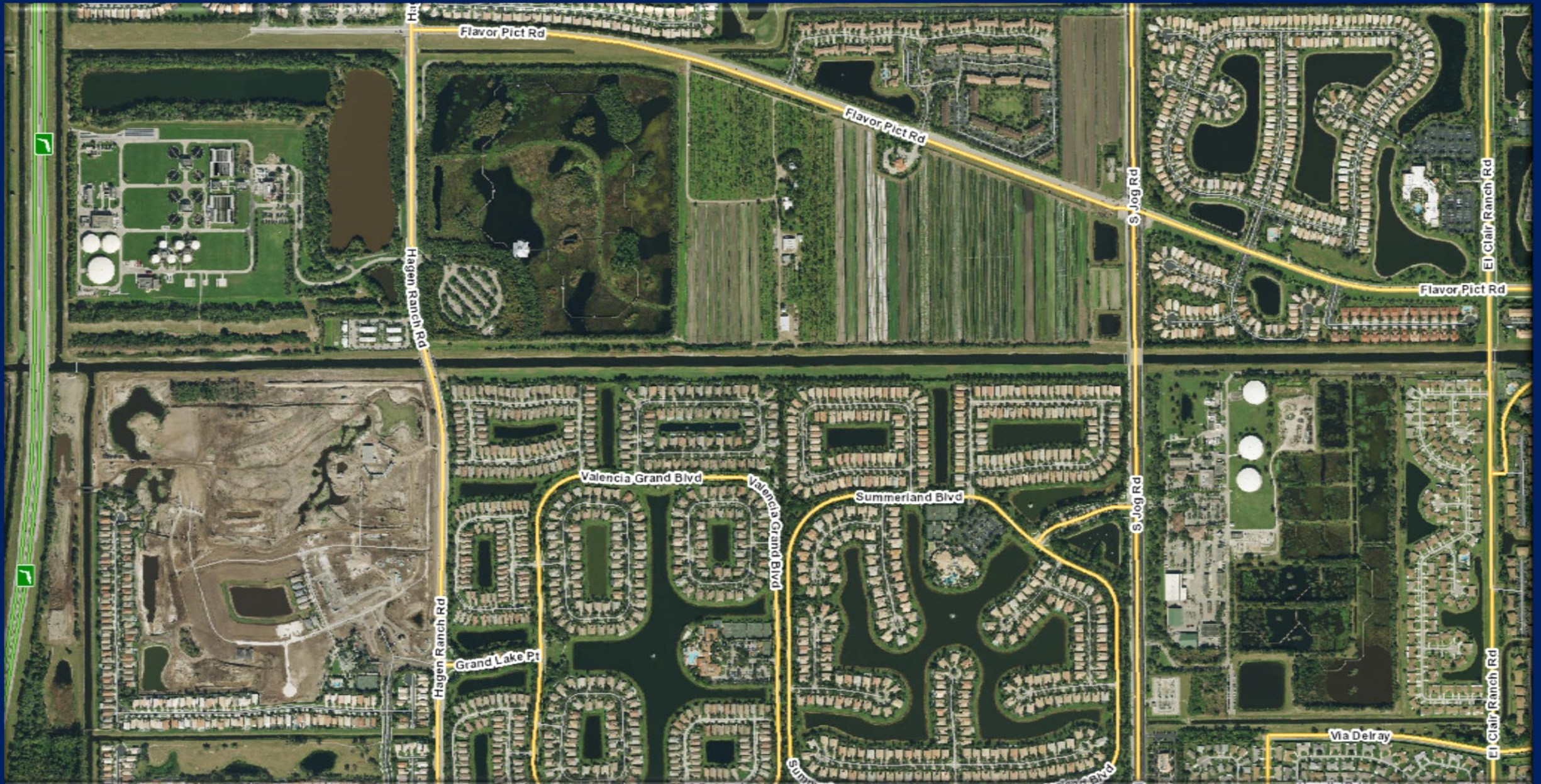
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# Winsberg Farm





# Wetlands Benefits Since 1995

- 🔥 **Reduced Reliance on Deep Well Injection**
- 🔥 **Increased Local Water Supplies**
- 🔥 **Enhanced Wildlife Habitat and Suburban Green Space**
- 🔥 **Elevated WUD's Public Image in Community**
- 🔥 **Established Wetland Design Criteria for the Utility Industry**



# Upcoming Phase II

