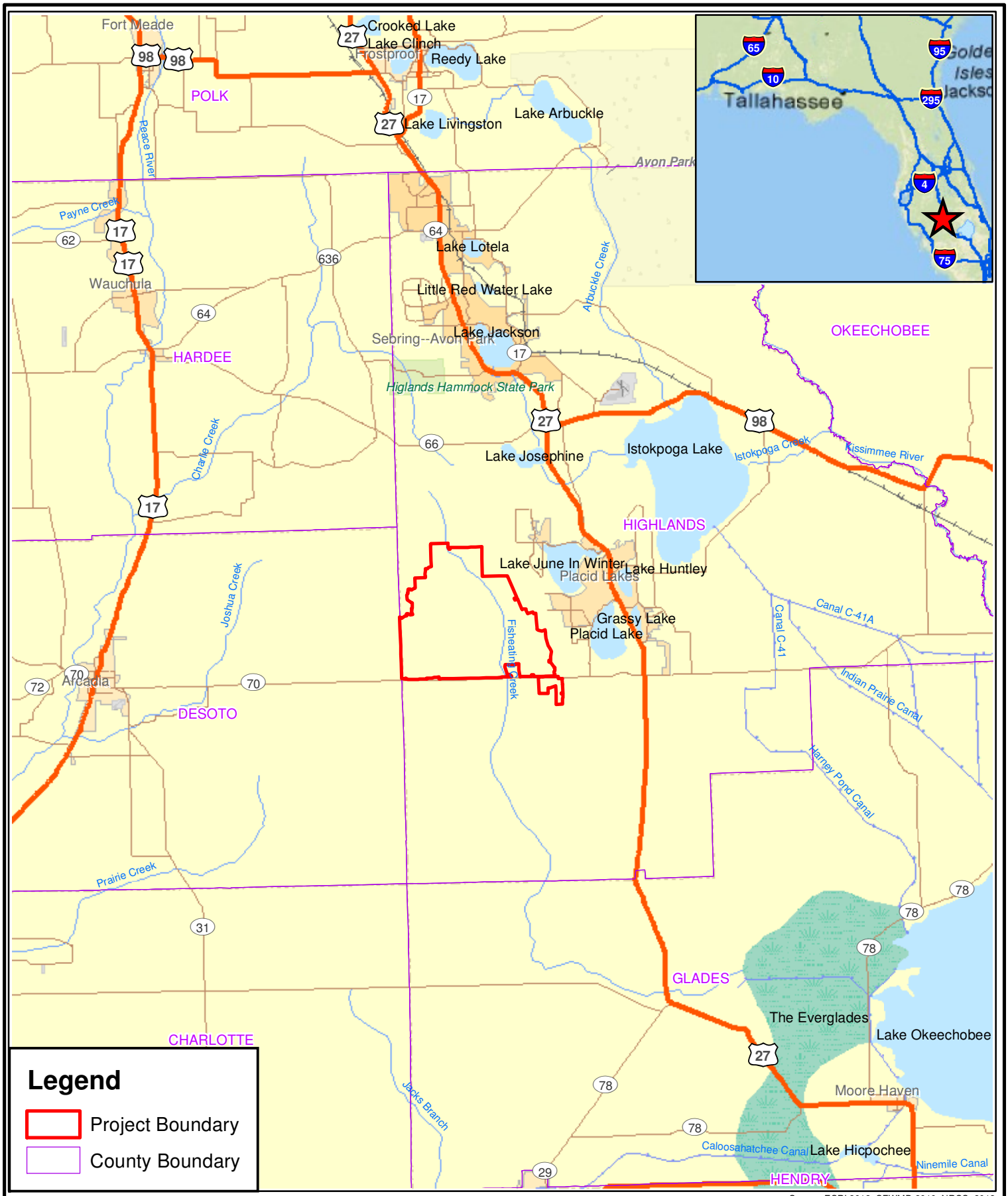
Appendix A1
Figures



Source: ESRI 2012; SFWMD 2010; NRCS, 2012

N

0 5 10 Miles

USDA NRCS - Fisheating Creek WRPO

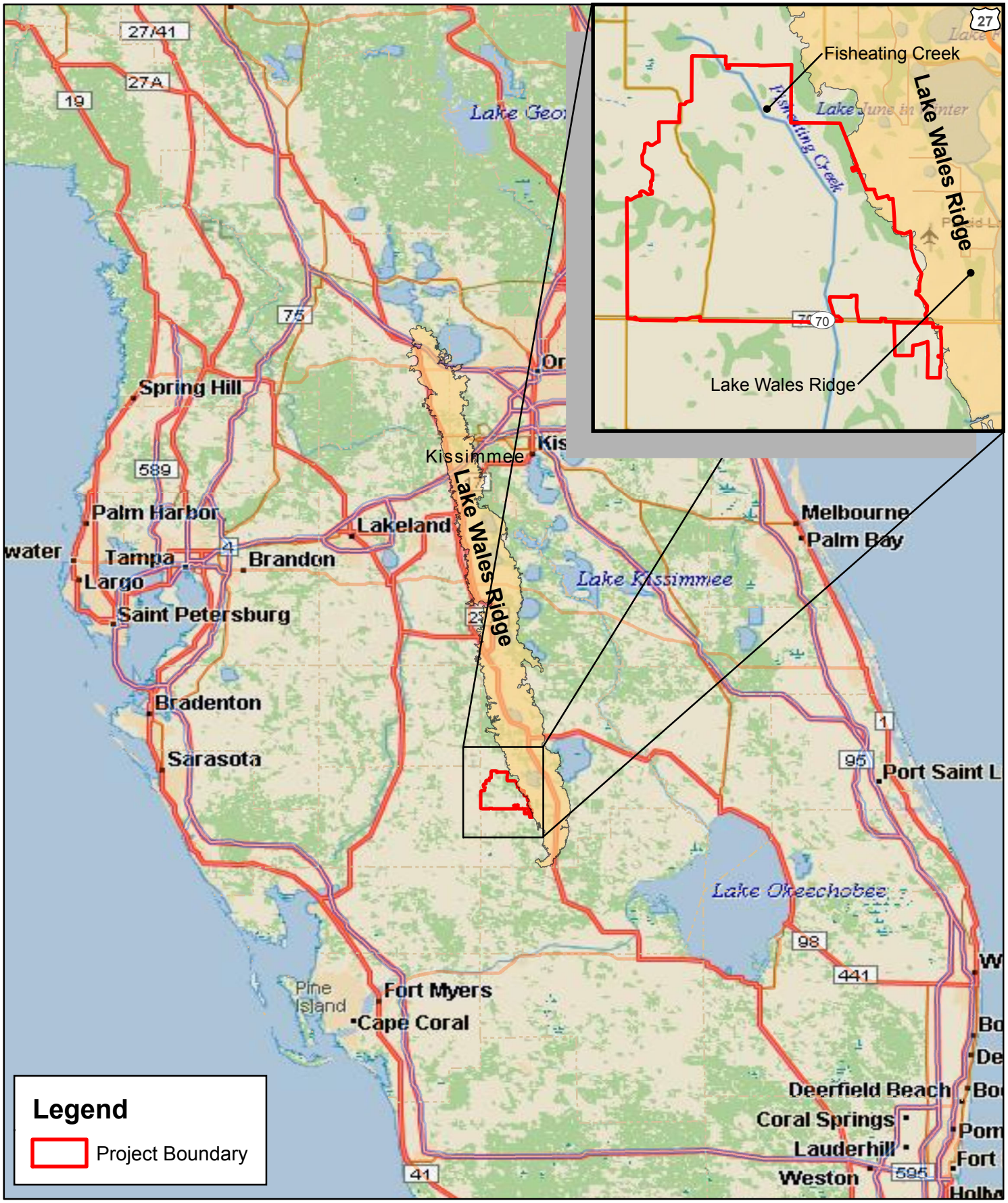
VICINITY MAP

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 1



Source: ESRI 2012;NRCS, 2013

N

0 15 30 Miles

USDA NRCS - Fisheating Creek WRPO

PROJECT LOCATION MAP

Drawn	Date
DLA	04/08/2013
Checked	Date
TGD	04/08/2013

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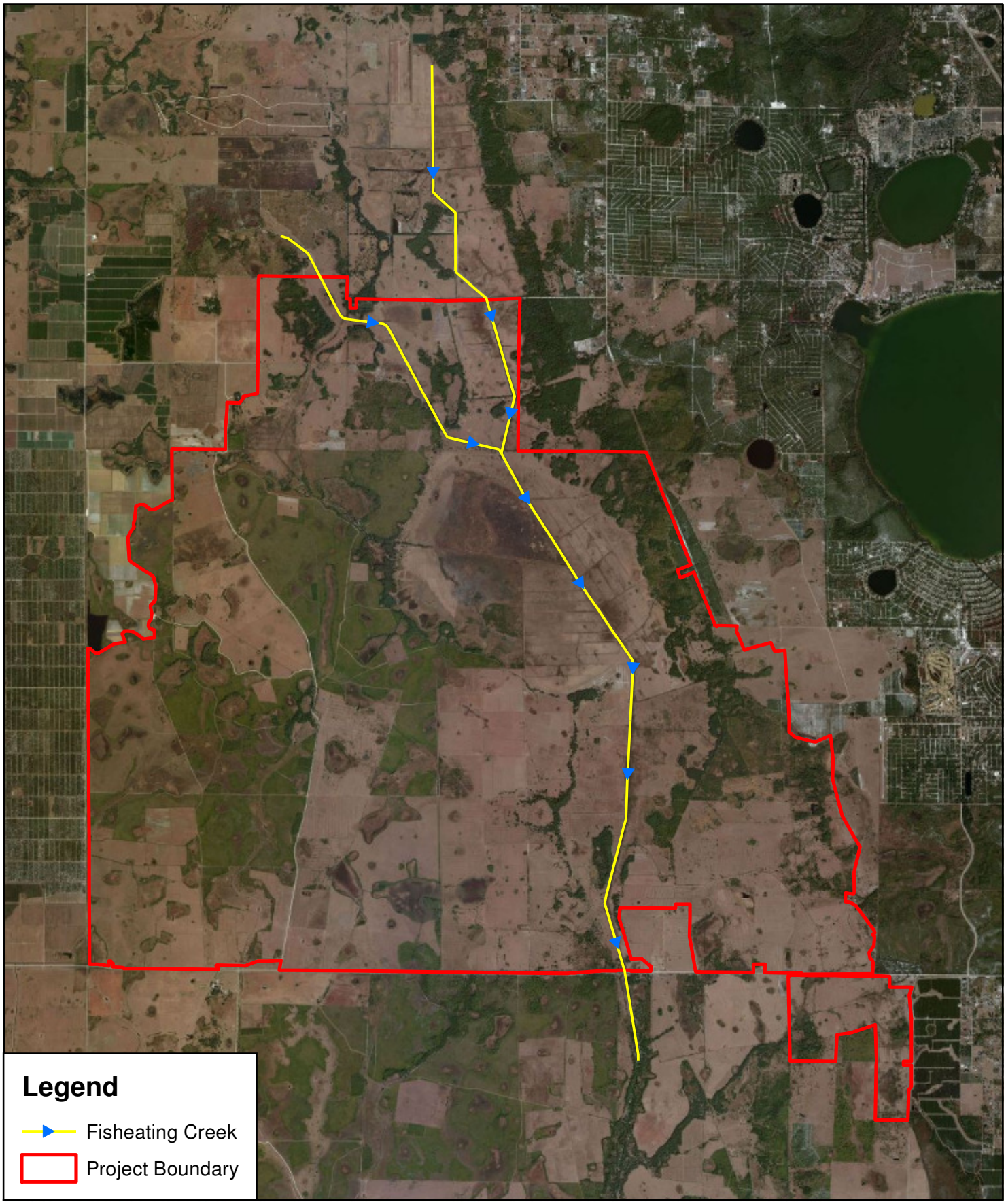
Gainesville, FL
Project # 6063-11-0200

Figure 2



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

CURRENT AERIAL PHOTOGRAPH

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

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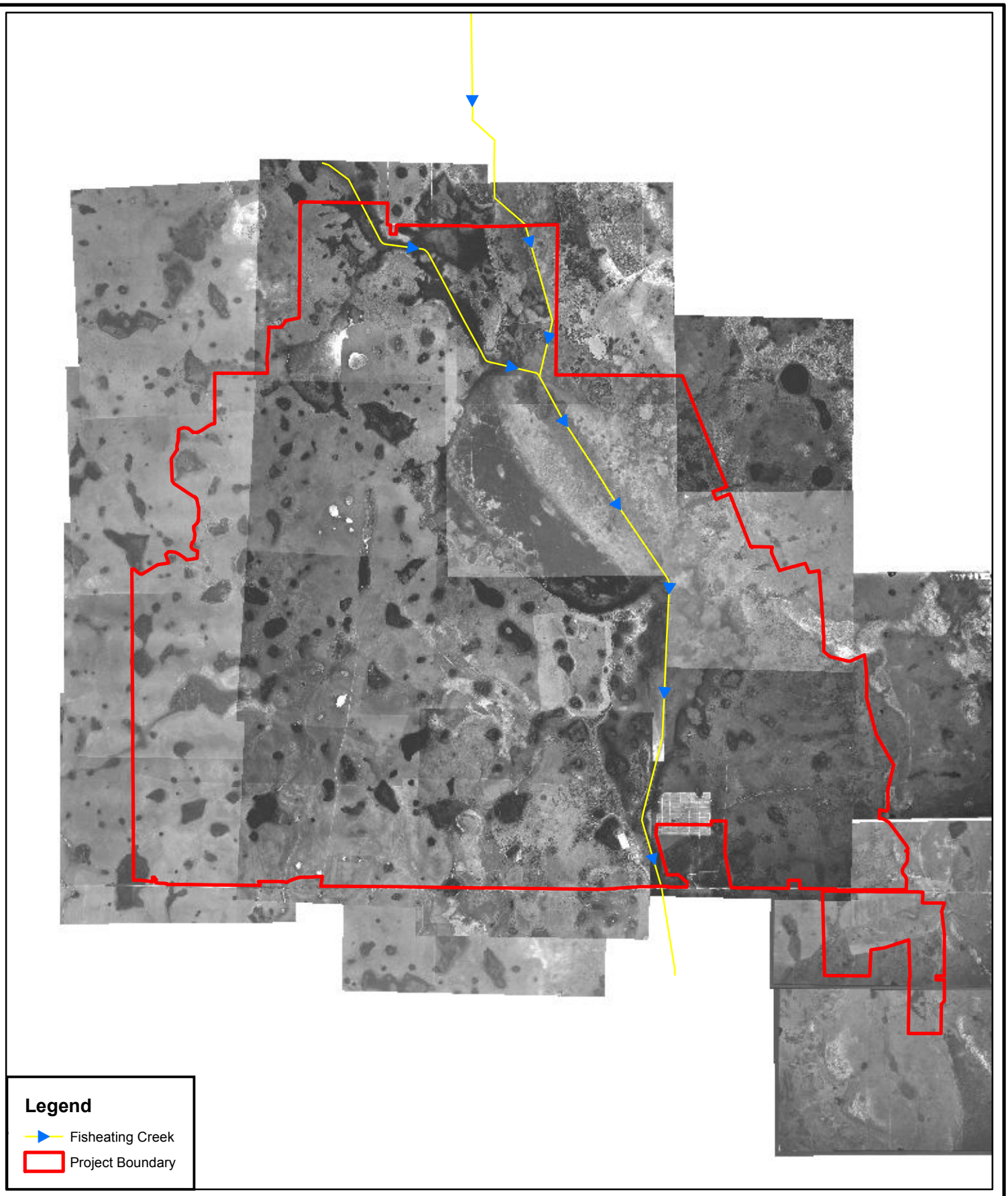
Project # 6063-11-0200

Figure 3



Source: SFWMD, 2012;
NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

HISTORIC AERIAL 1953-1957

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

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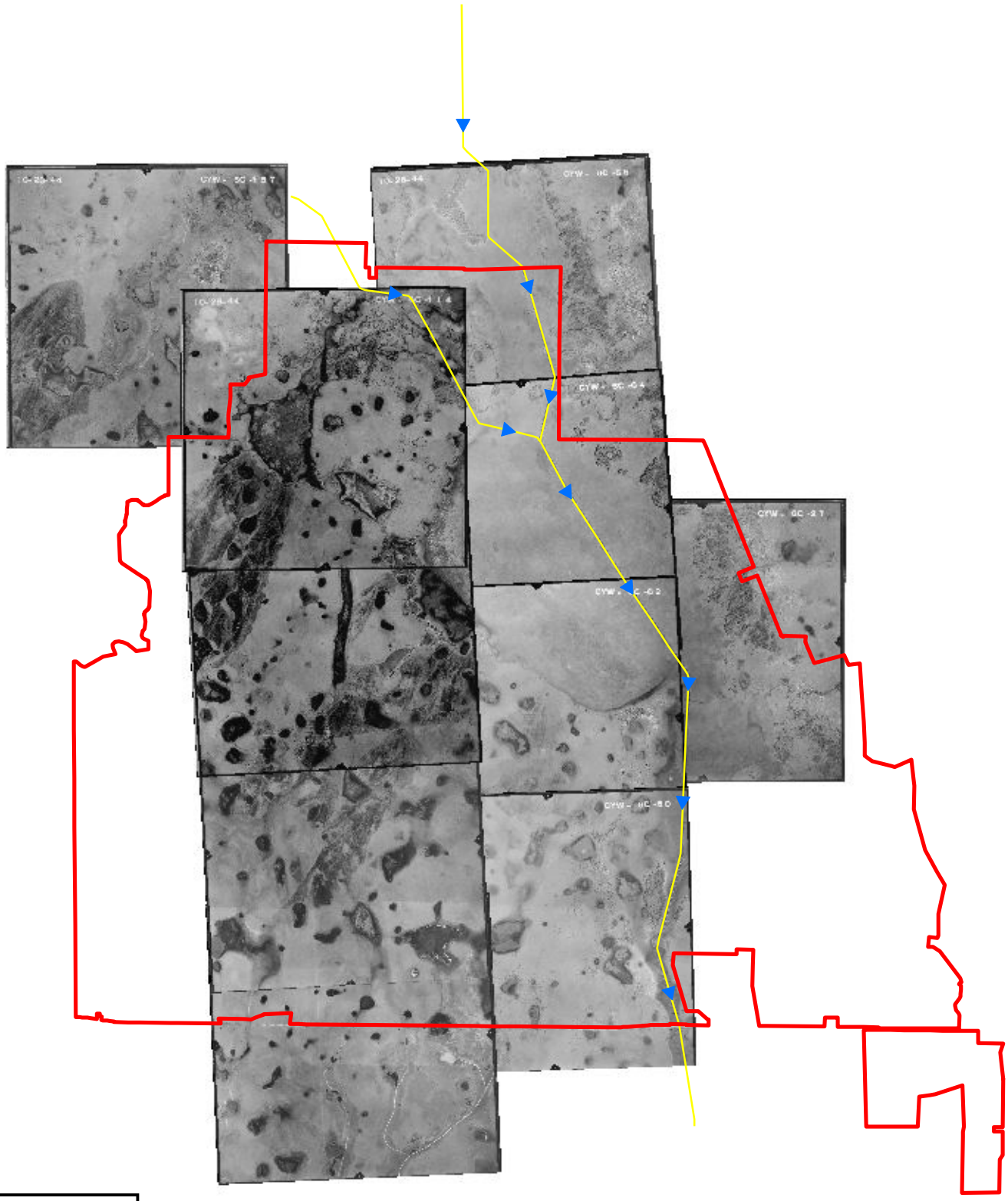
Gainesville, FL
Project # 6063-11-0200

Figure 4



Legend

- Fisheating Creek
- Project Boundary

Source: SFWMD, 2012; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

HISTORIC AERIAL 1944

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

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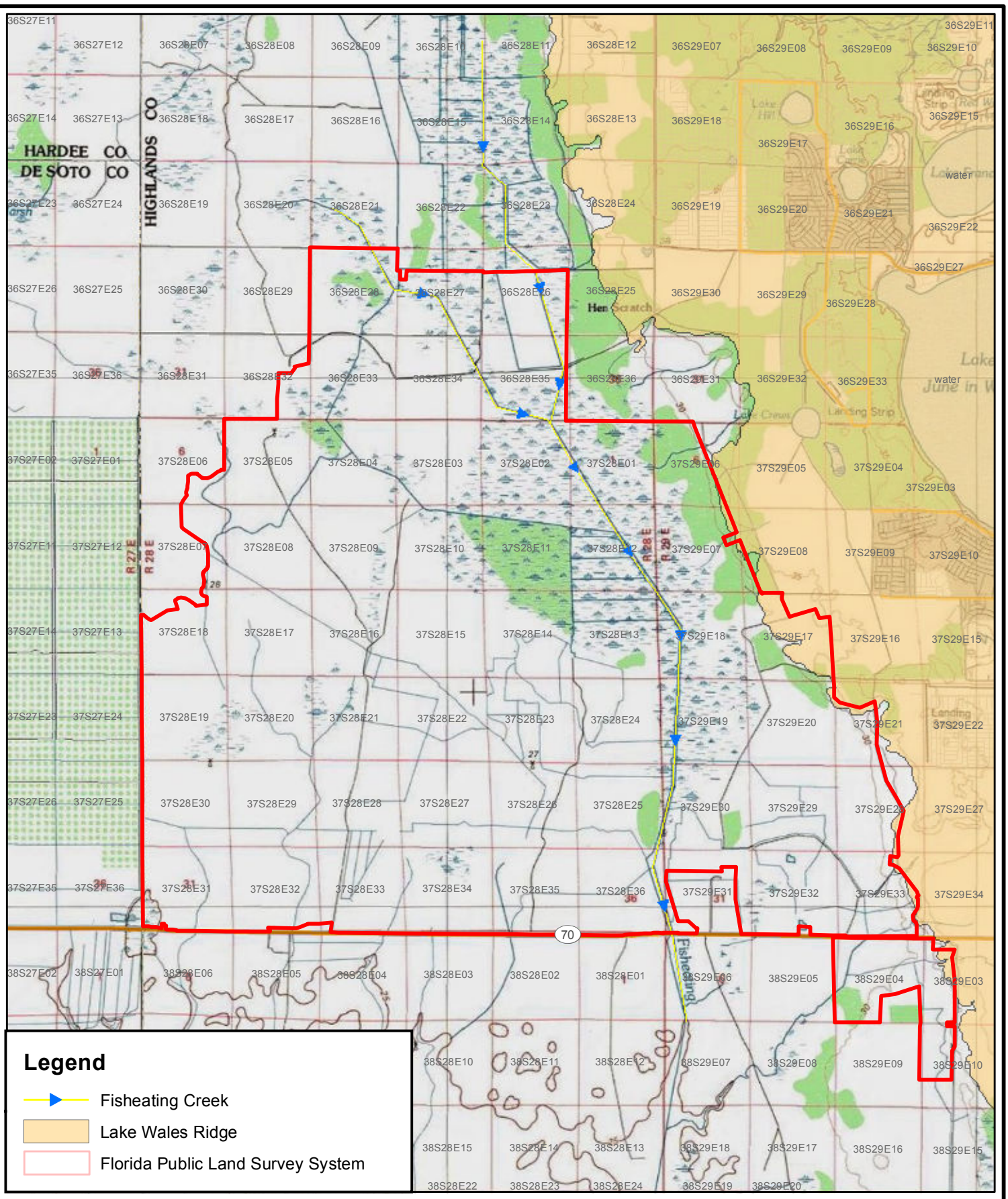
Project # 6063-11-0200

Figure 5



Source: SFWMD, 2010; NRCS, 2012; AMEC, 2013; FGDL 2012

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

USGS TOPOGRAPHIC MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

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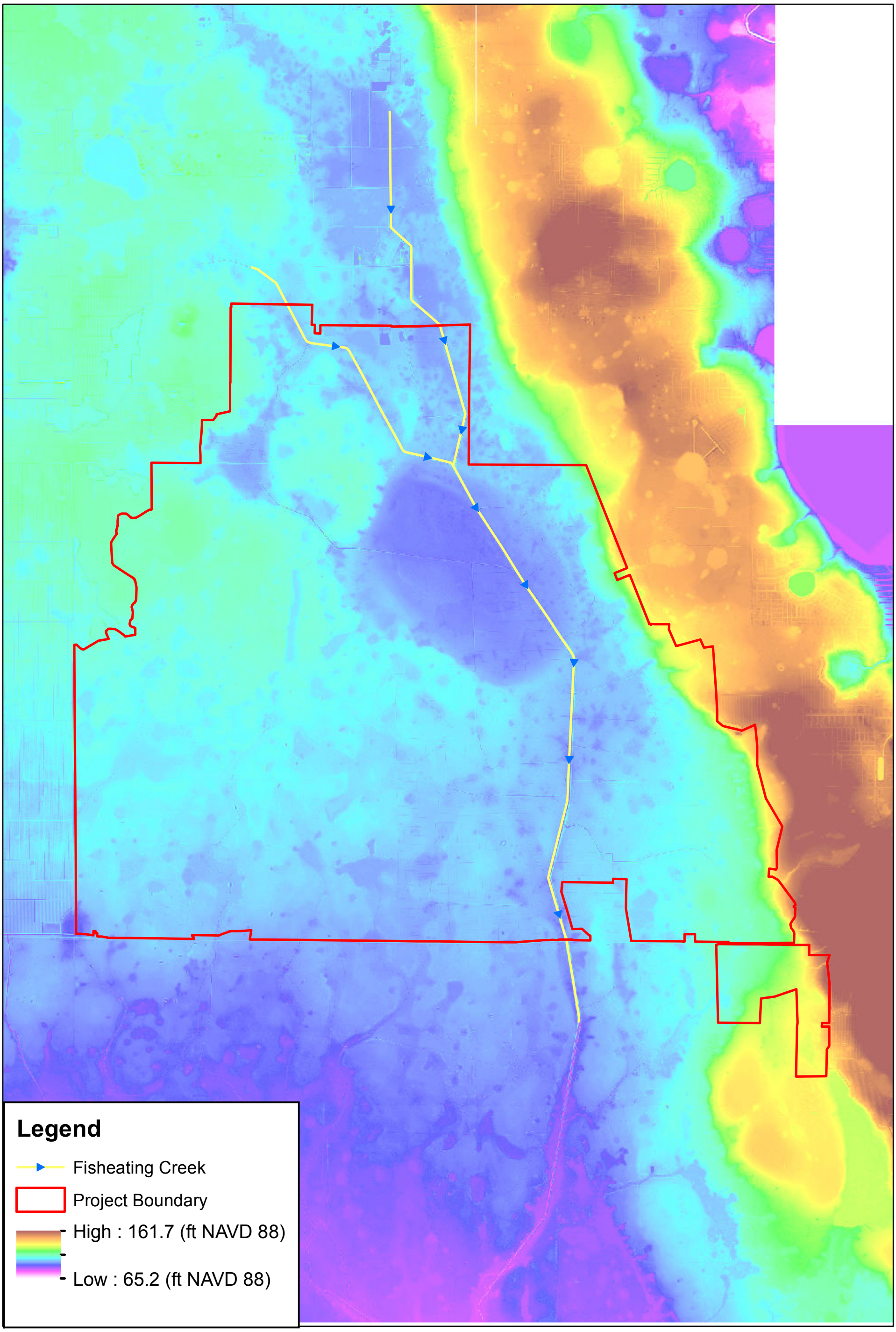
Gainesville, FL
Project # 6063-11-0200

Figure 6



Source: AMEC 2013; SFWMD 2011

N

1 inch = 6,000 feet

0 6,000 12,000 Feet

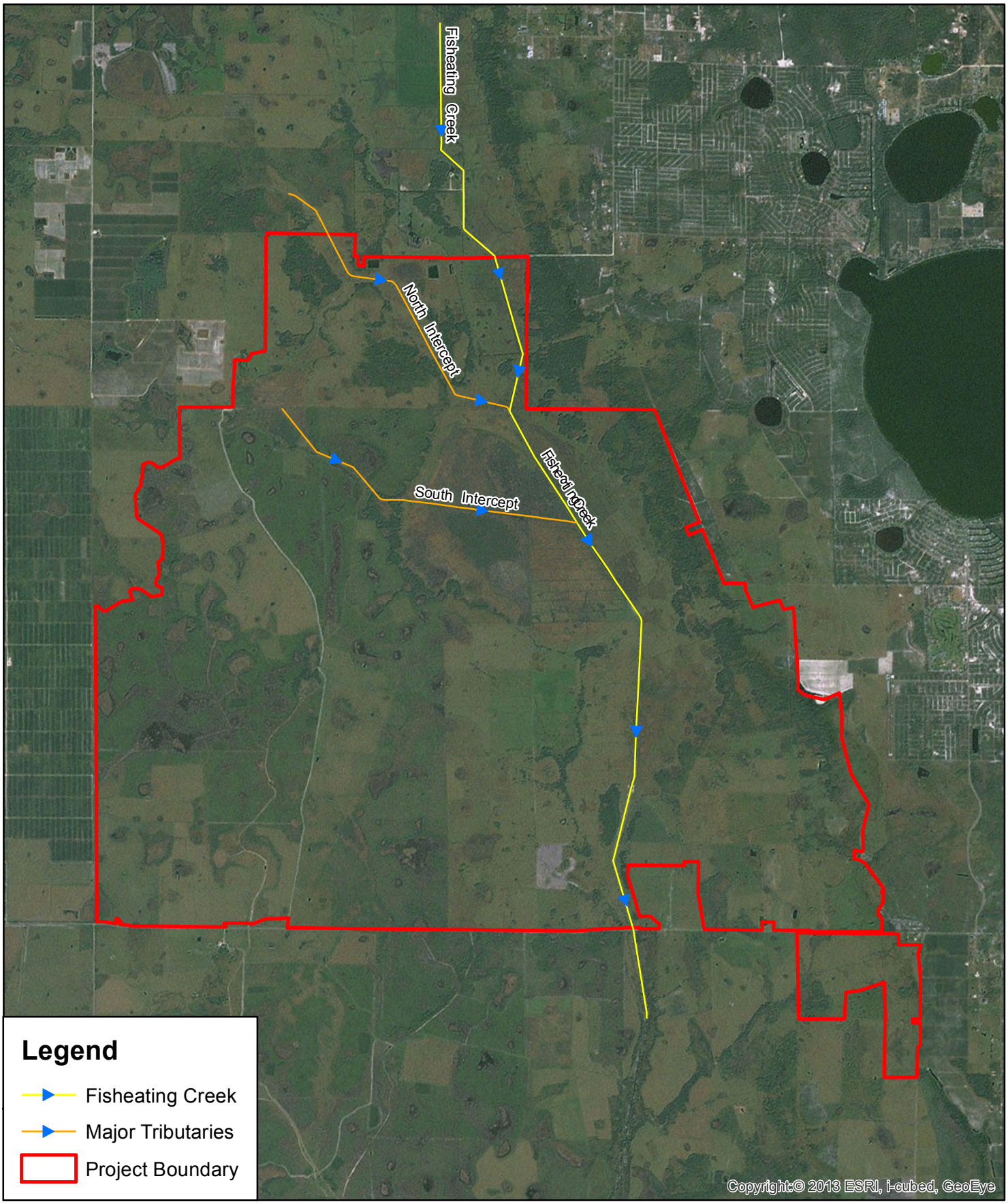
LiDAR TOPOGRAPHY MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
6a



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

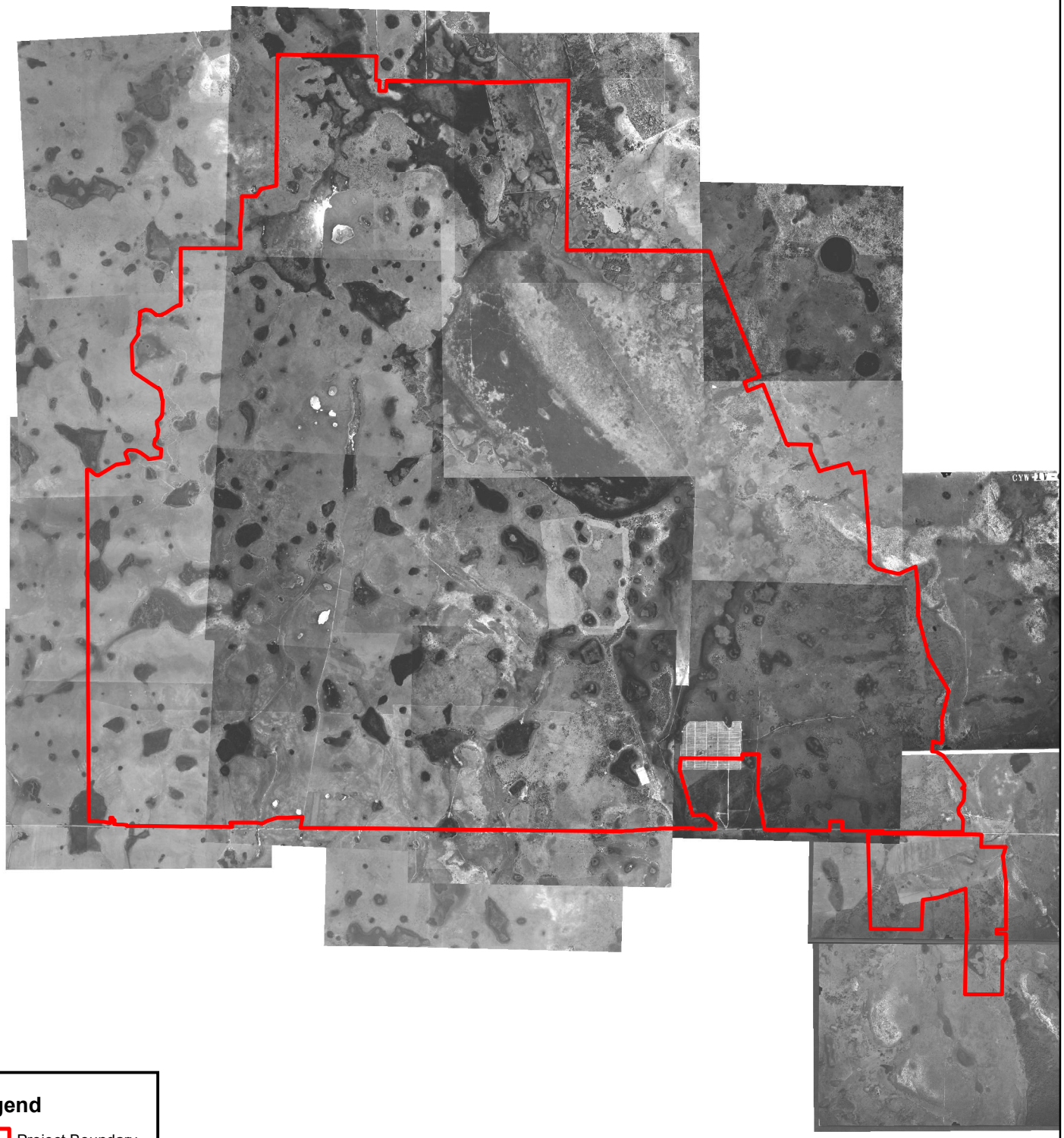
RECENT AERIAL PHOTOGRAPH

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 3



Legend

Project Boundary

Source: SFWMD, 2012;
NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

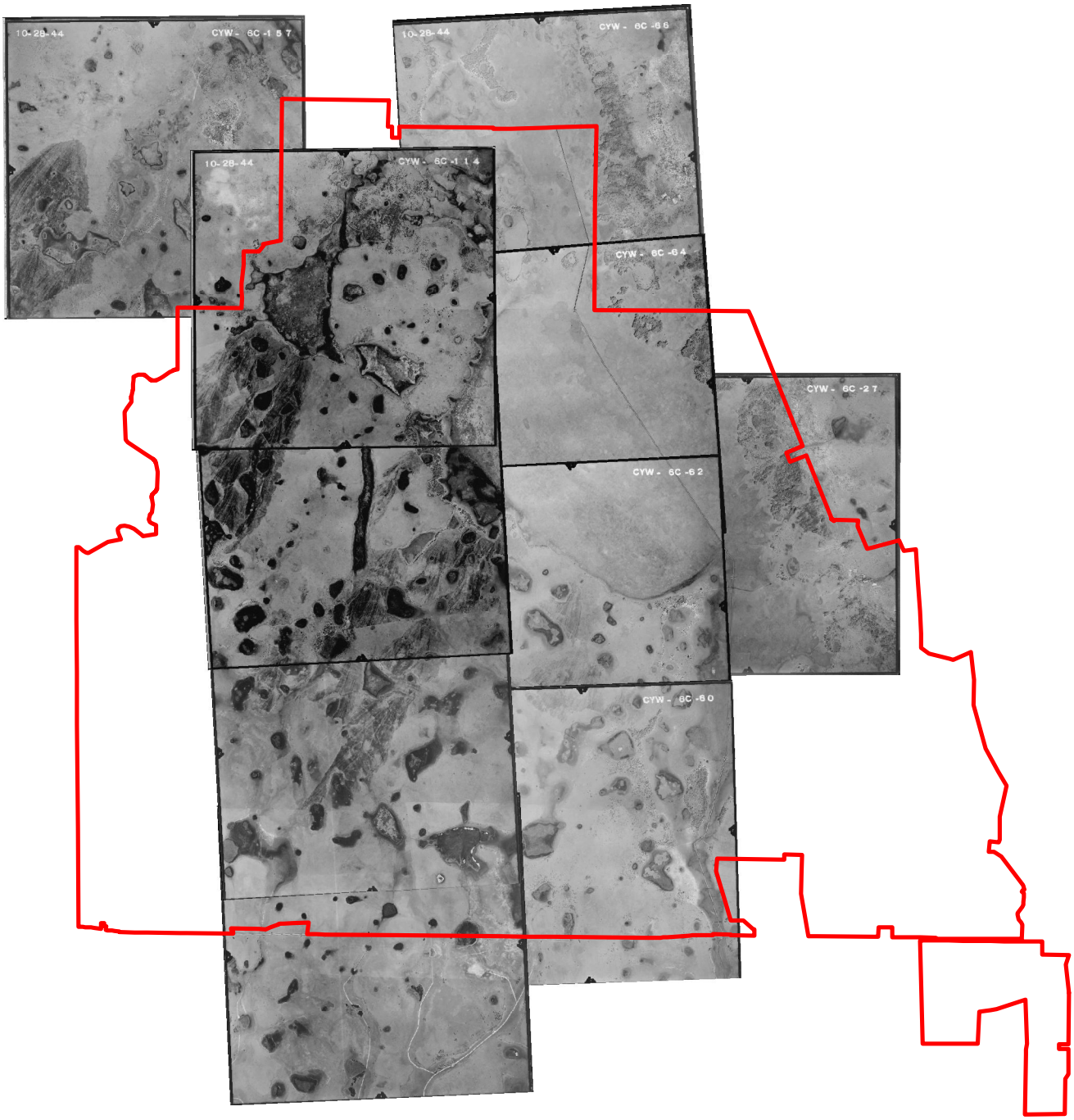
HISTORIC AERIAL 1953-1957

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 4



Legend

Project Boundary

Source: SFWMD, 2012; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

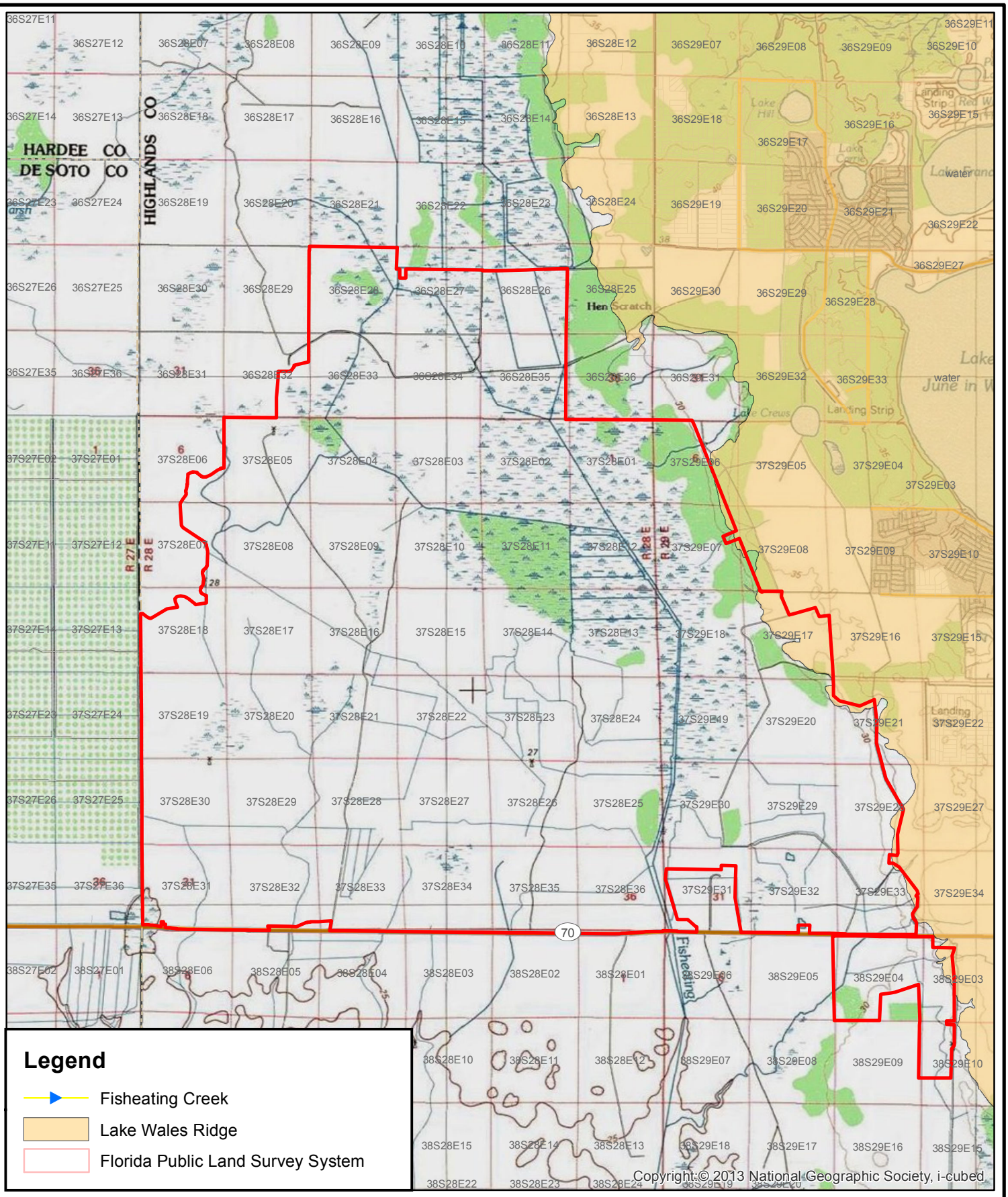
HISTORIC AERIAL 1944

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 5



Source: SFWMD, 2010; NRCS, 2012; AMEC, 2013; FGDL 2012

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

USGS TOPOGRAPHIC MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

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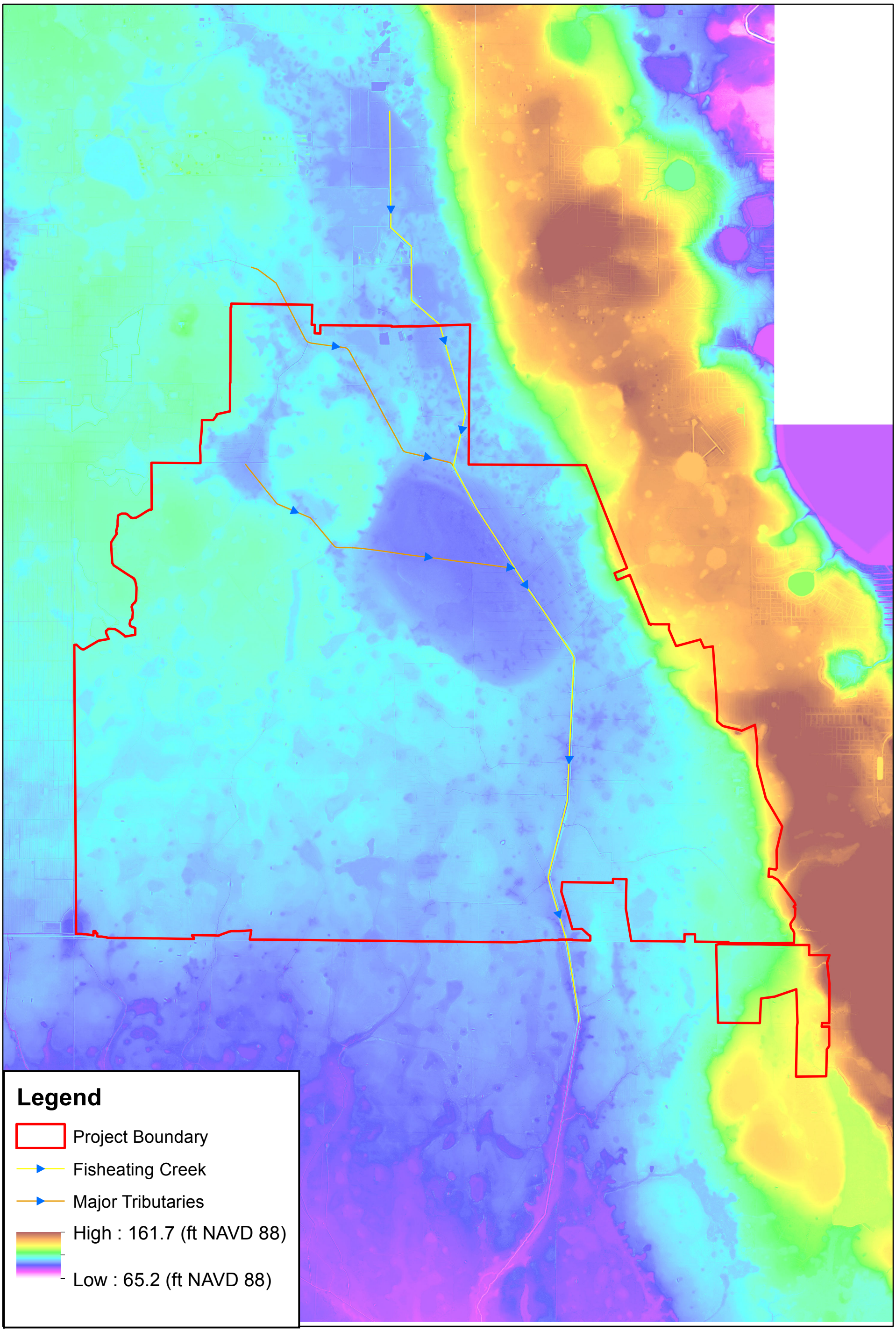
Project # 6063-11-0200

Figure 6



Source: AMEC 2013; SFWMD 2011

N

1 inch = 6,000 feet

0 6,000 12,000 Feet

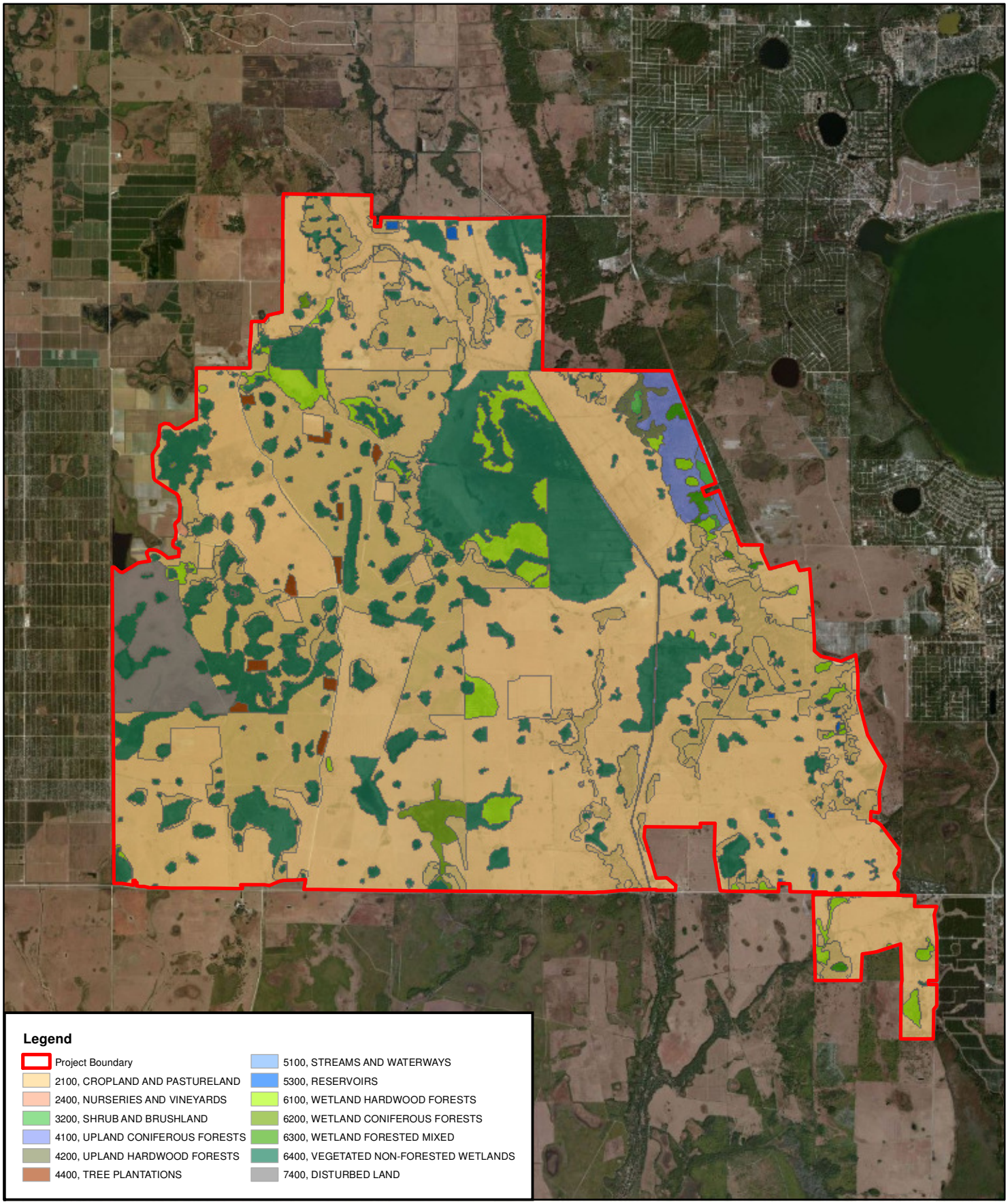
LiDAR TOPOGRAPHY MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
6a



Source: ESRI, 2010; SFWMD 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

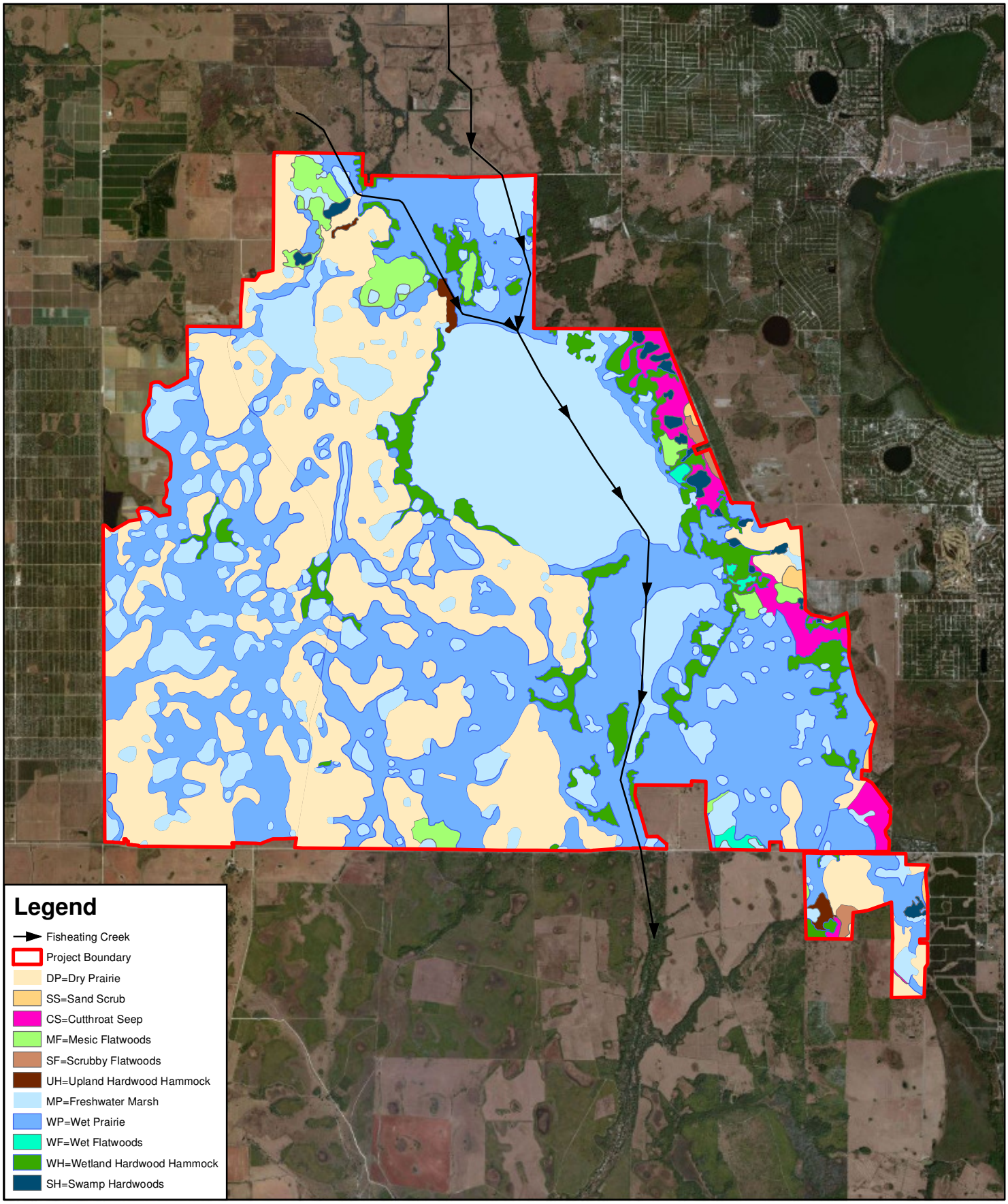
FLUCCS LAND USE MAP

Drawn	Date
DLA	04/08/2013
Checked	Date
TGD	04/08/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 7



Source: ESRI 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

HISTORICAL ECOLOGICAL COMMUNITIES

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

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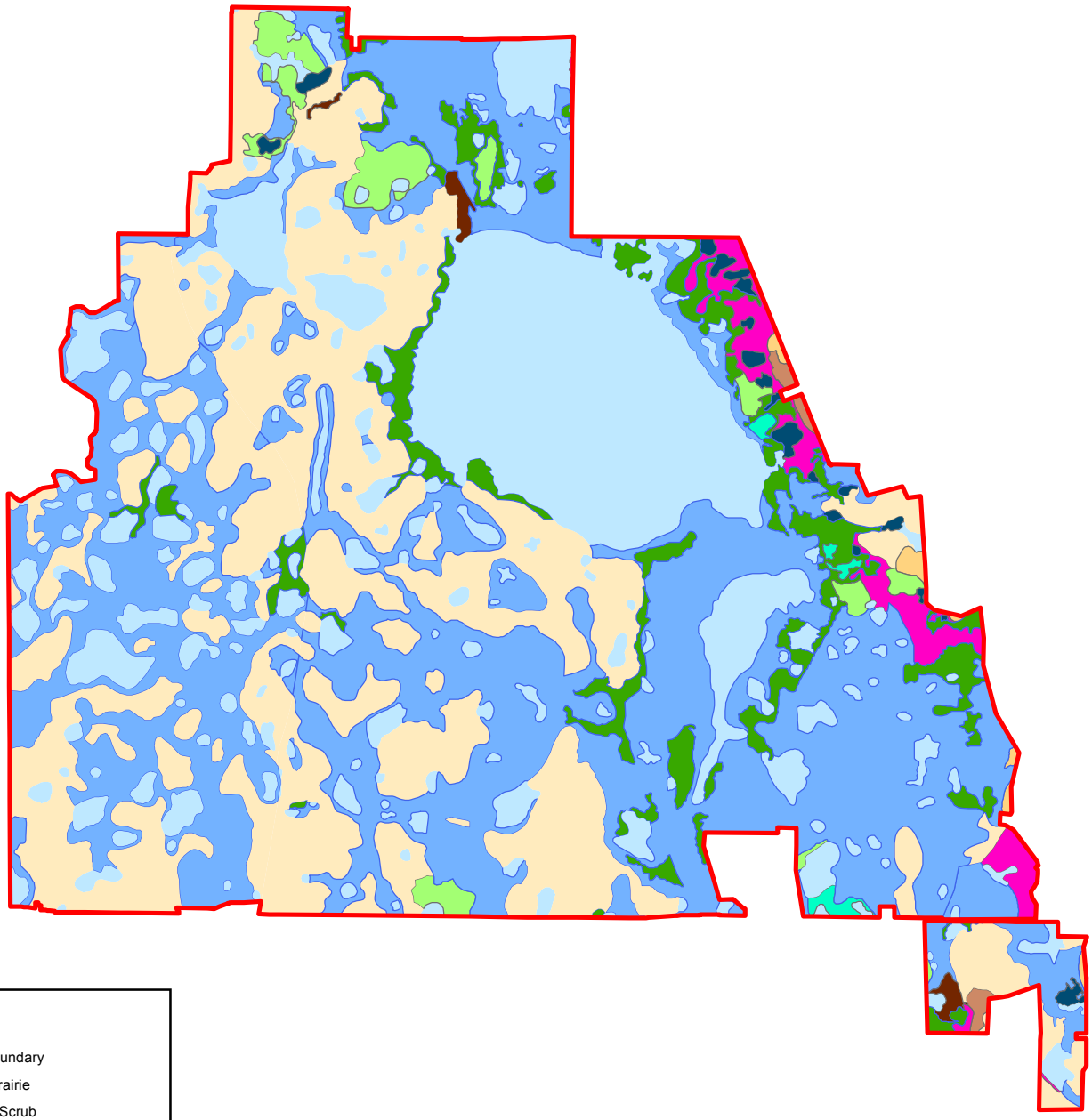
Project # 6063-11-0200

Figure 8



Legend

- Project Boundary
- DP=Dry Prairie
- SS=Sand Scrub
- CS=Cutthroat Seep
- MF=Mesic Flatwoods
- SF=Scrubby Flatwoods
- UH=Upland Hardwood Hammock
- MP=Freshwater Marsh
- WP=Wet Prairie
- WF=Wet Flatwoods
- WH=Wetland Hardwood Hammock
- SH=Swamp Hardwoods

Source: ESRI 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

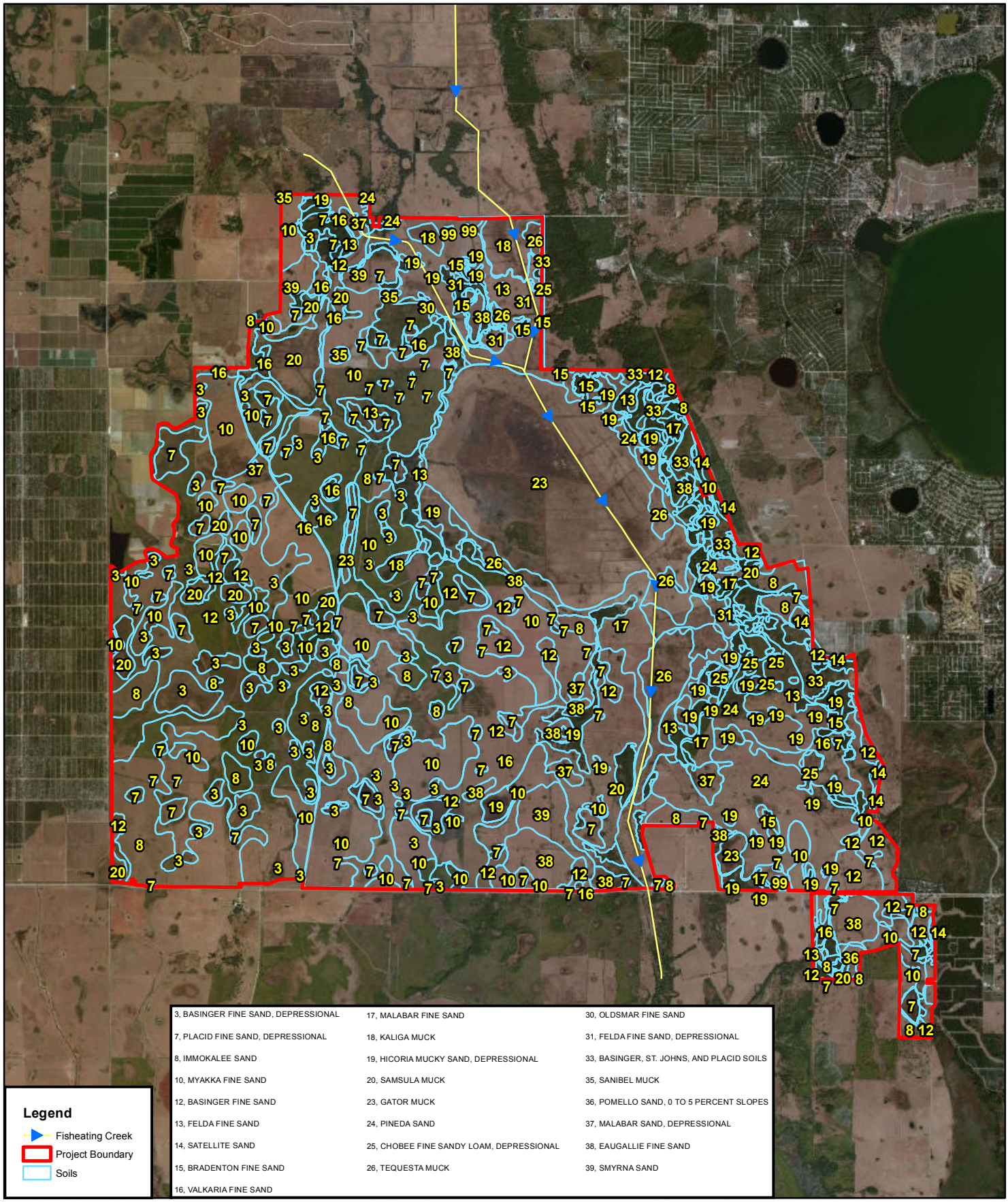
HISTORICAL ECOLOGICAL COMMUNITIES

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 8



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

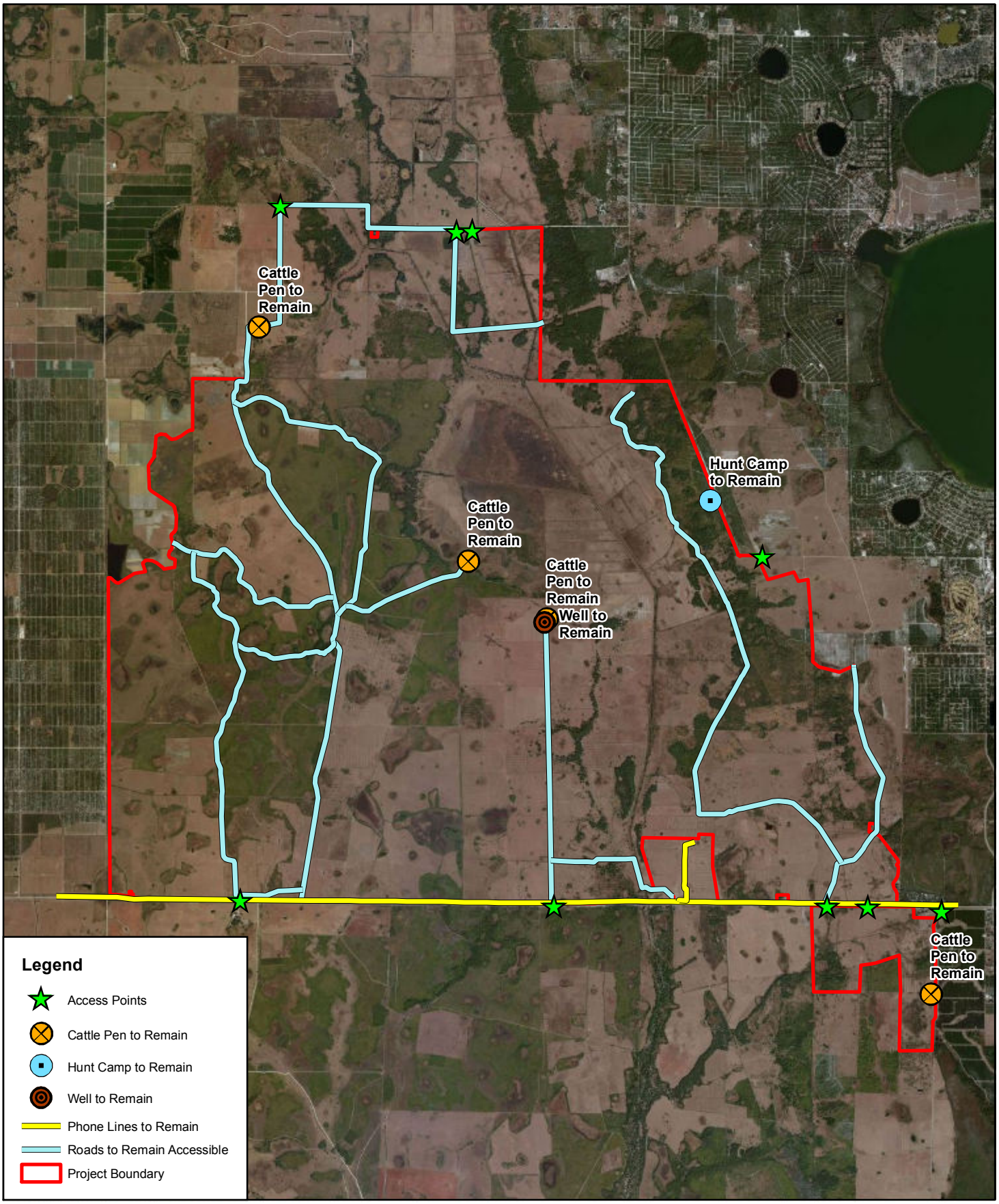
NRCS SOILS MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 9



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013; SFWMD 2010(Utility Locations)

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

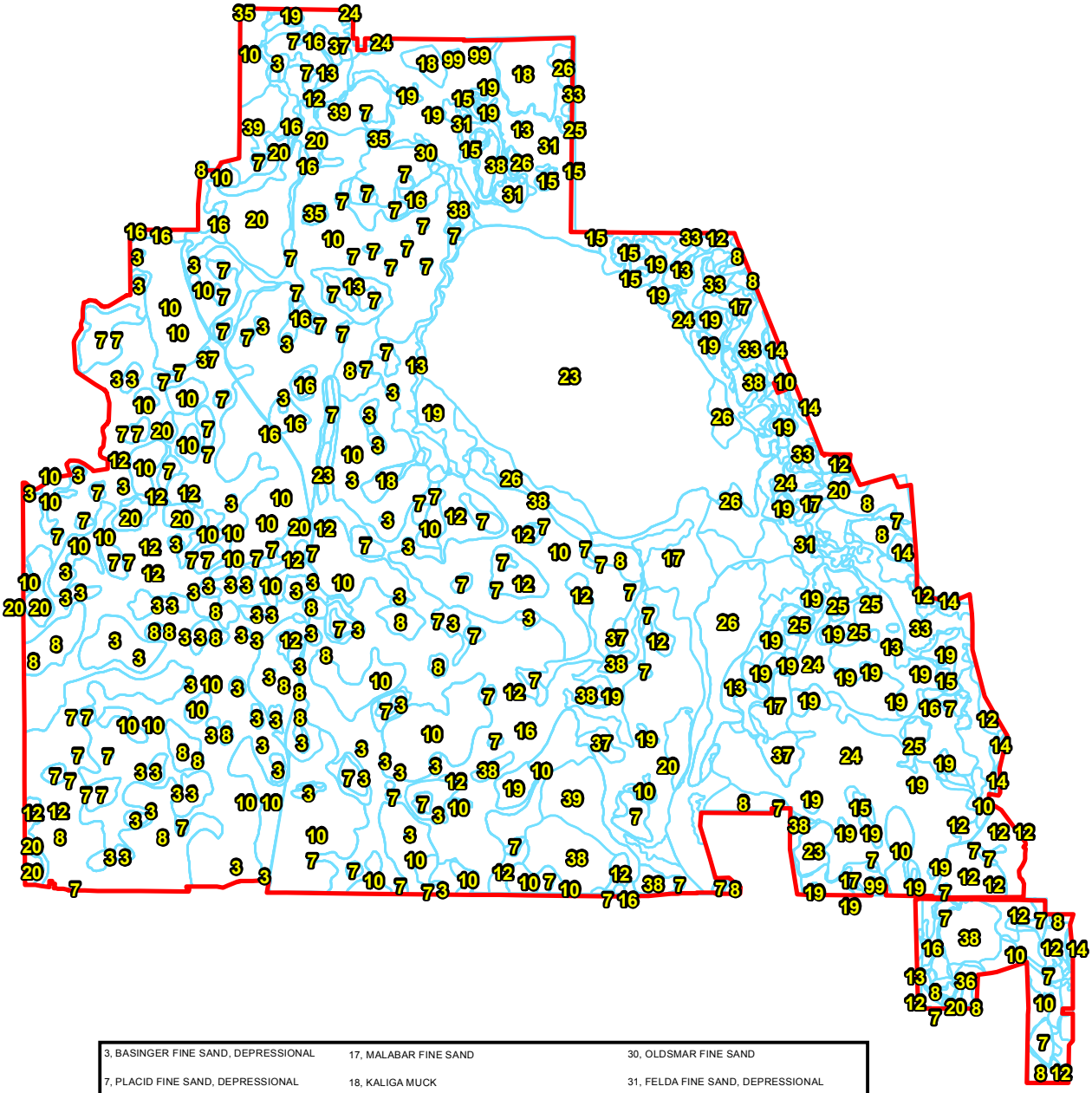
LANDOWNER PREFERENCES

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	07/02/2012

amec

Gainesville, FL
Project # 6063-11-0200

Figure 10



3, BASINGER FINE SAND, DEPRESSIONAL	17, MALABAR FINE SAND	30, OLDSMAR FINE SAND
7, PLACID FINE SAND, DEPRESSIONAL	18, KALIGA MUCK	31, FELDA FINE SAND, DEPRESSIONAL
8, IMMOKALEE SAND	19, HICORIA MUCKY SAND, DEPRESSIONAL	33, BASINGER, ST. JOHNS, AND PLACID SOILS
10, MYAKKA FINE SAND	20, SAMSULA MUCK	35, SANIBEL MUCK
12, BASINGER FINE SAND	23, GATOR MUCK	36, POMELLO SAND, 0 TO 5 PERCENT SLOPES
13, FELDA FINE SAND	24, PINEDA SAND	37, MALABAR SAND, DEPRESSIONAL
14, SATELLITE SAND	25, CHOBEE FINE SANDY LOAM, DEPRESSIONAL	38, EAUGALLIE FINE SAND
15, BRADENTON FINE SAND	26, TEQUESTA MUCK	39, SMYRNA SAND
16, VALKARIA FINE SAND		

Legend

- Project Boundary
- Soils

Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

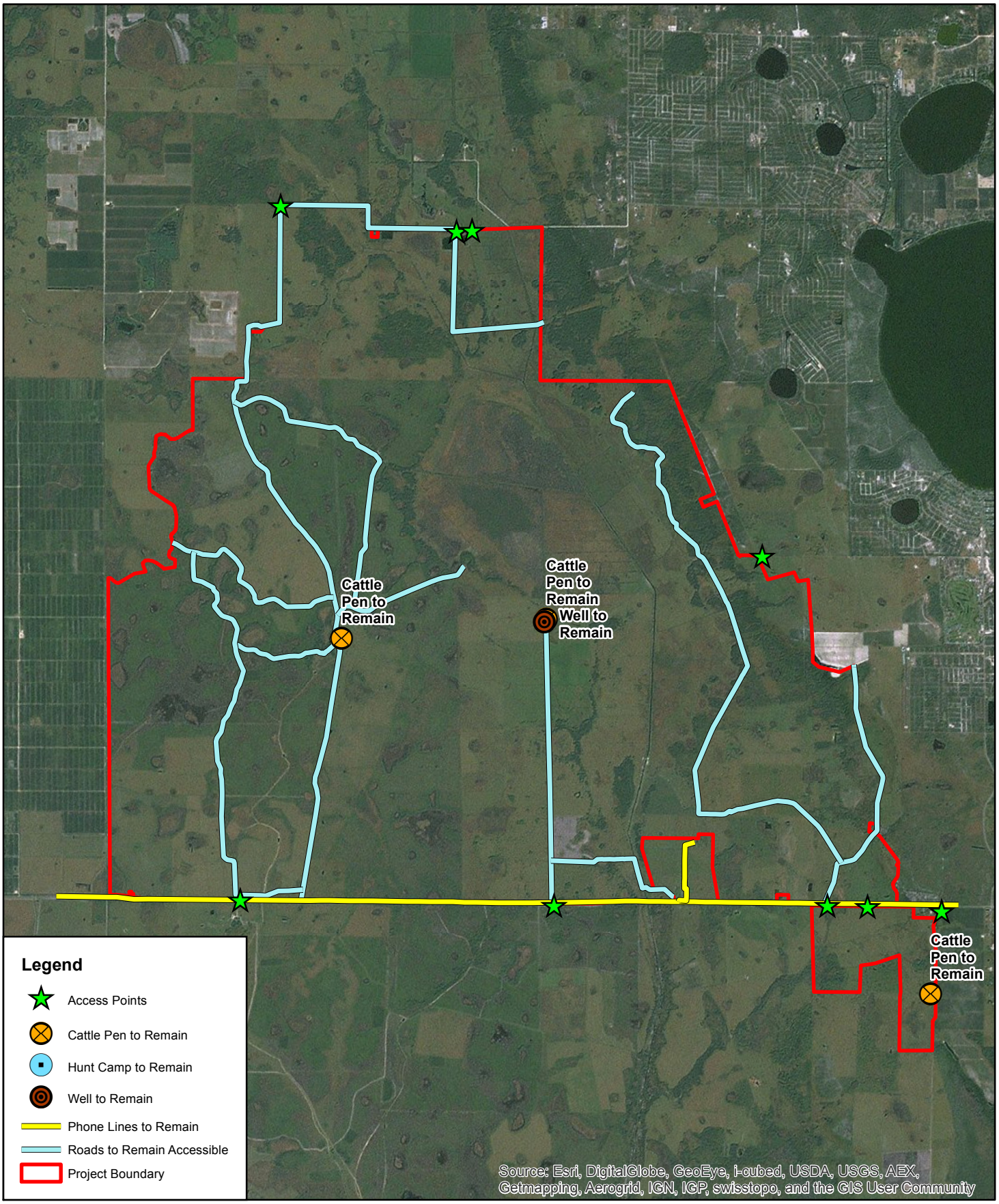
NRCS SOILS MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 9



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013; SFWMD 2010(Utility Locations)

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

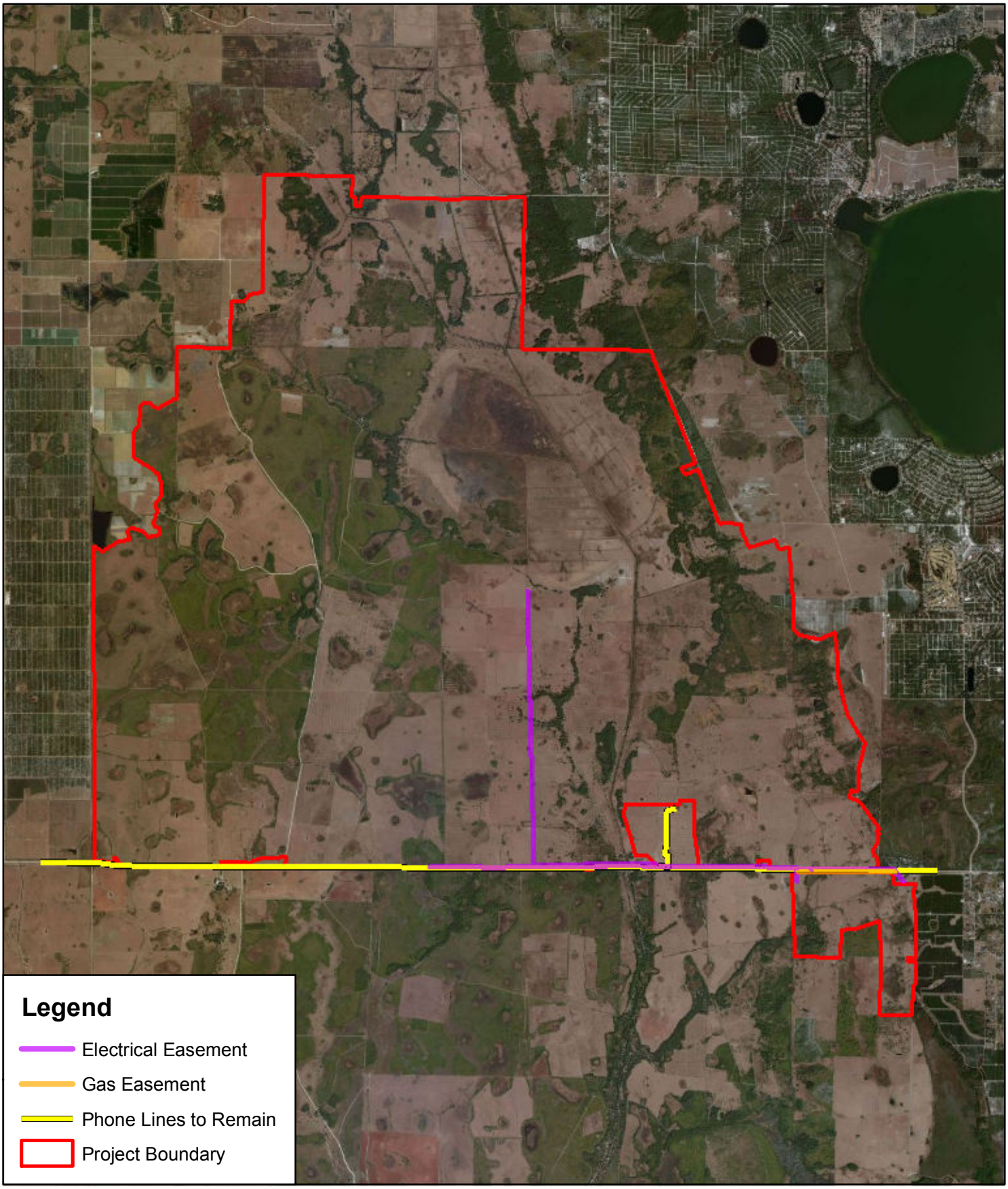
LANDOWNER PREFERENCES

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	07/02/2012

amec

Gainesville, FL
Project # 6063-11-0200

Figure 10



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013; SFWMD, 2010(Utility Locations)

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

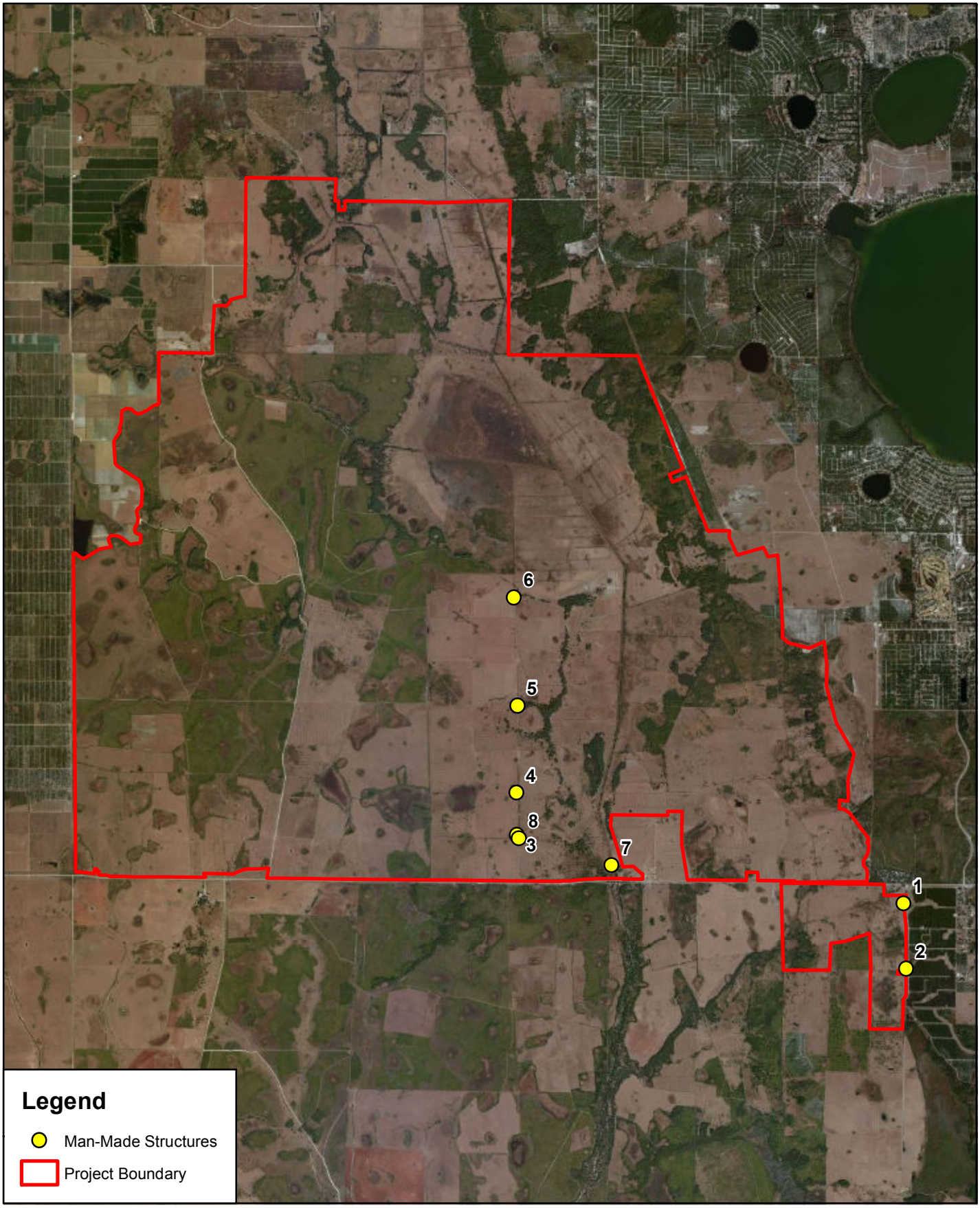
UTILITY LOCATIONS

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 11



Source: ESRI, 2010 (aerial); NRCS, 2012; AMEC, 2013

N

1 inch = 8,000 feet

8,000 4,000 0 8,000 Feet

USDA NRCS - Fisheating Creek WRPO

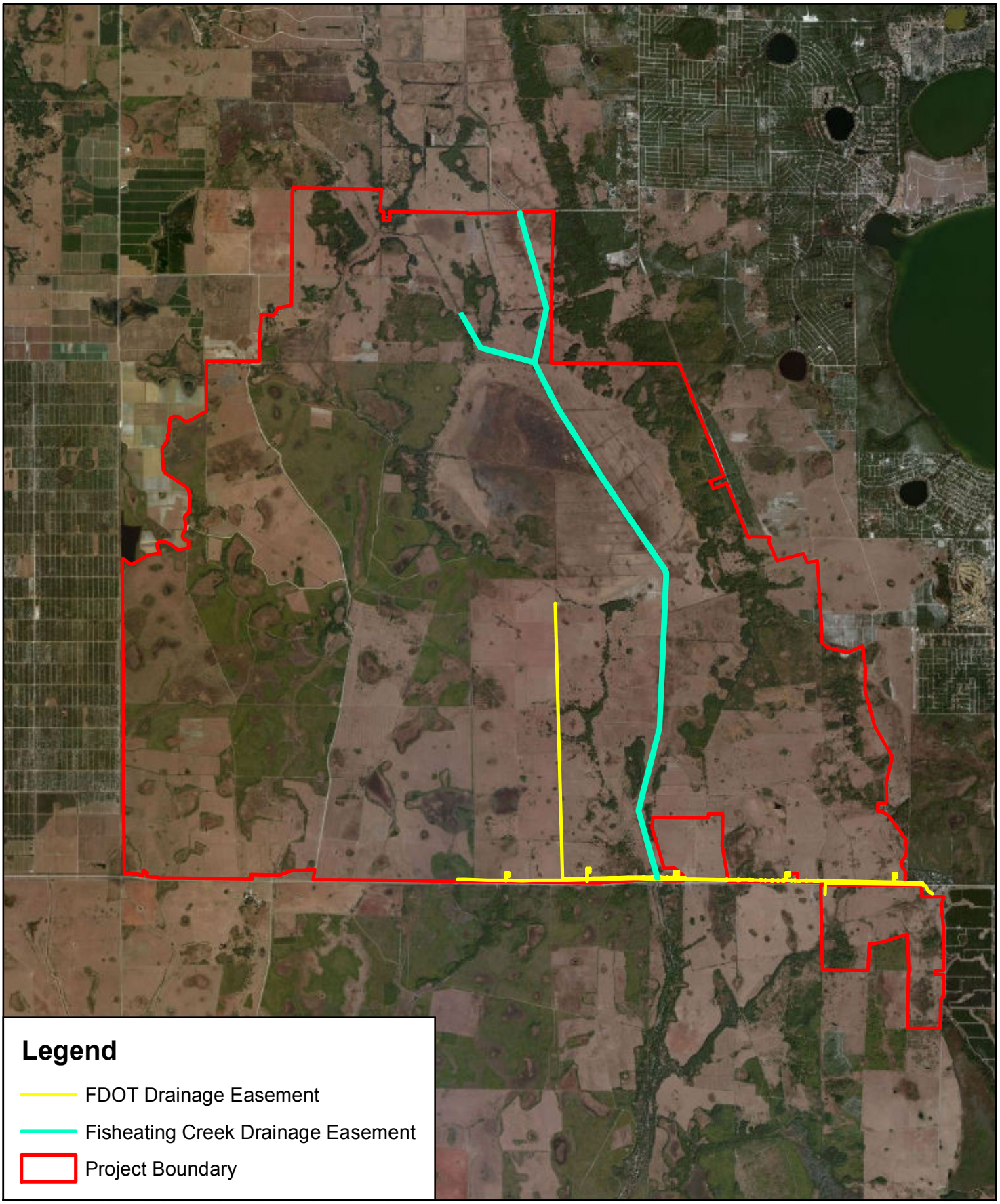
MAN-MADE STRUCTURES

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 12



Source: ESRI, 2011; NRCS, 2012; AMEC, 2013; SFWMD 2010(Easement Locations)

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

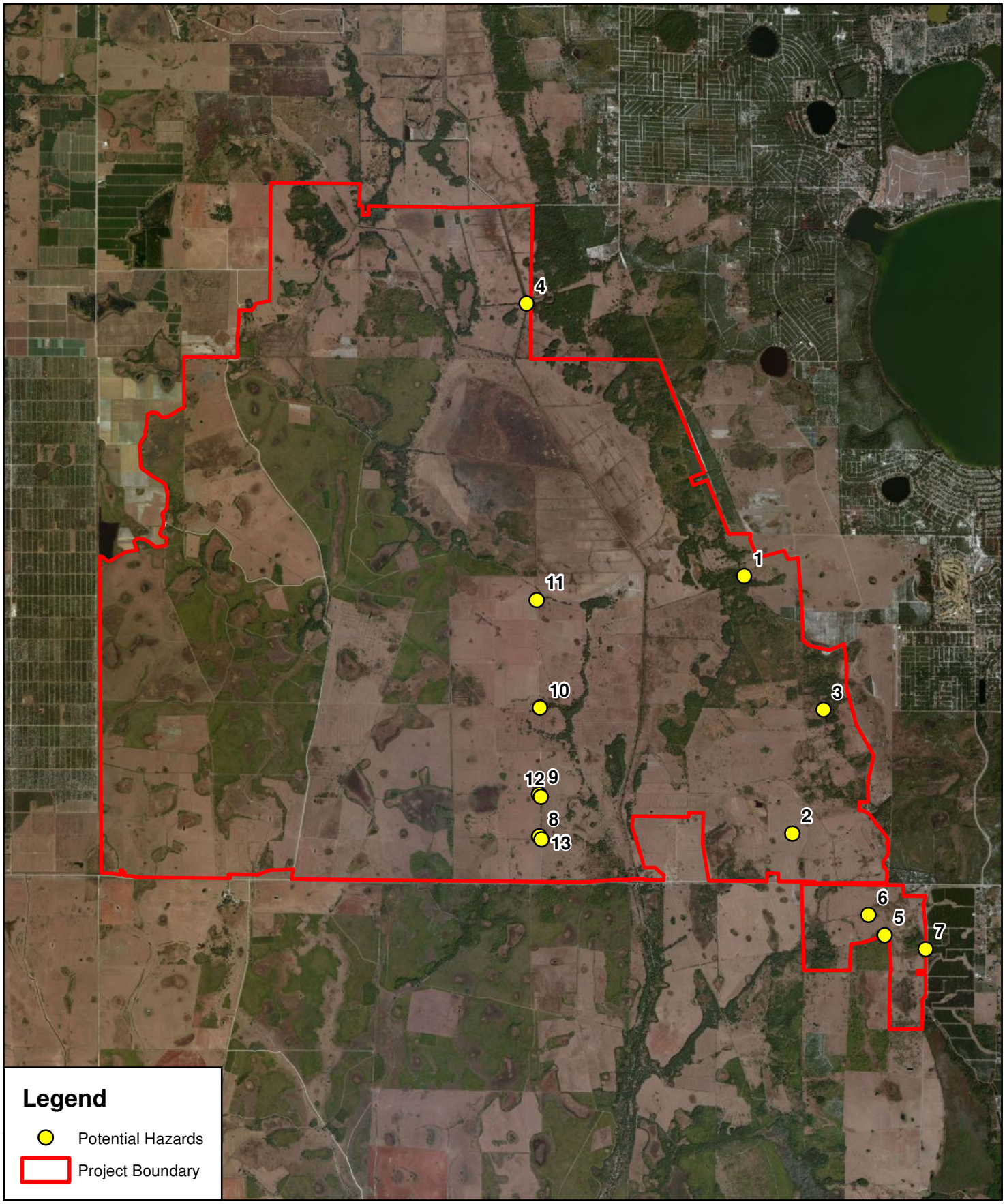
PUBLIC AND PRIVATE DRAINAGE SYSTEMS

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 13



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

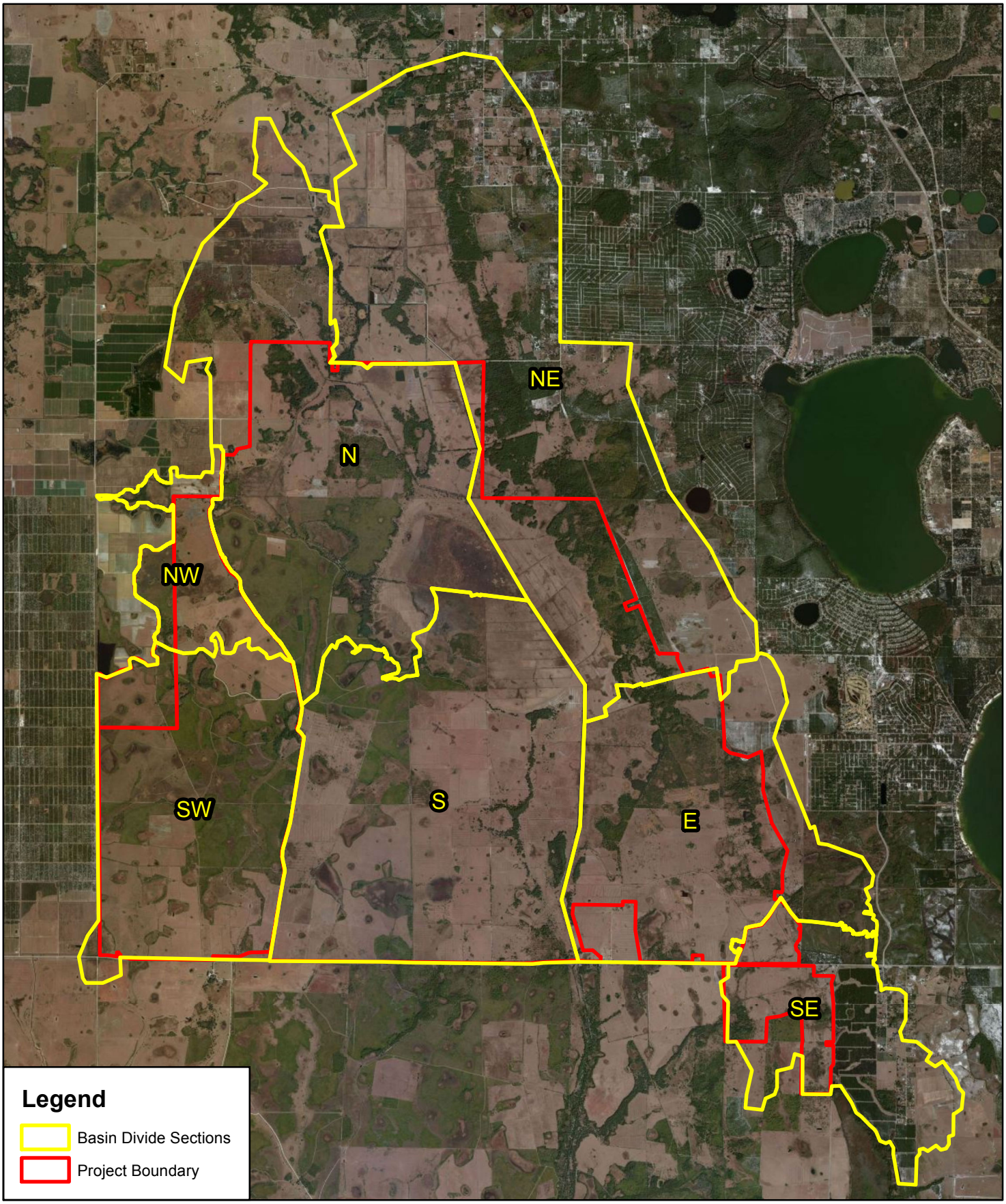
POTENTIAL HAZARDOUS SITES

Drawn	Date
NMG	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 13a



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 9,000 feet

N

0 4,500 9,000 18,000 Feet

USDA NRCS - Fisheating Creek WRPO

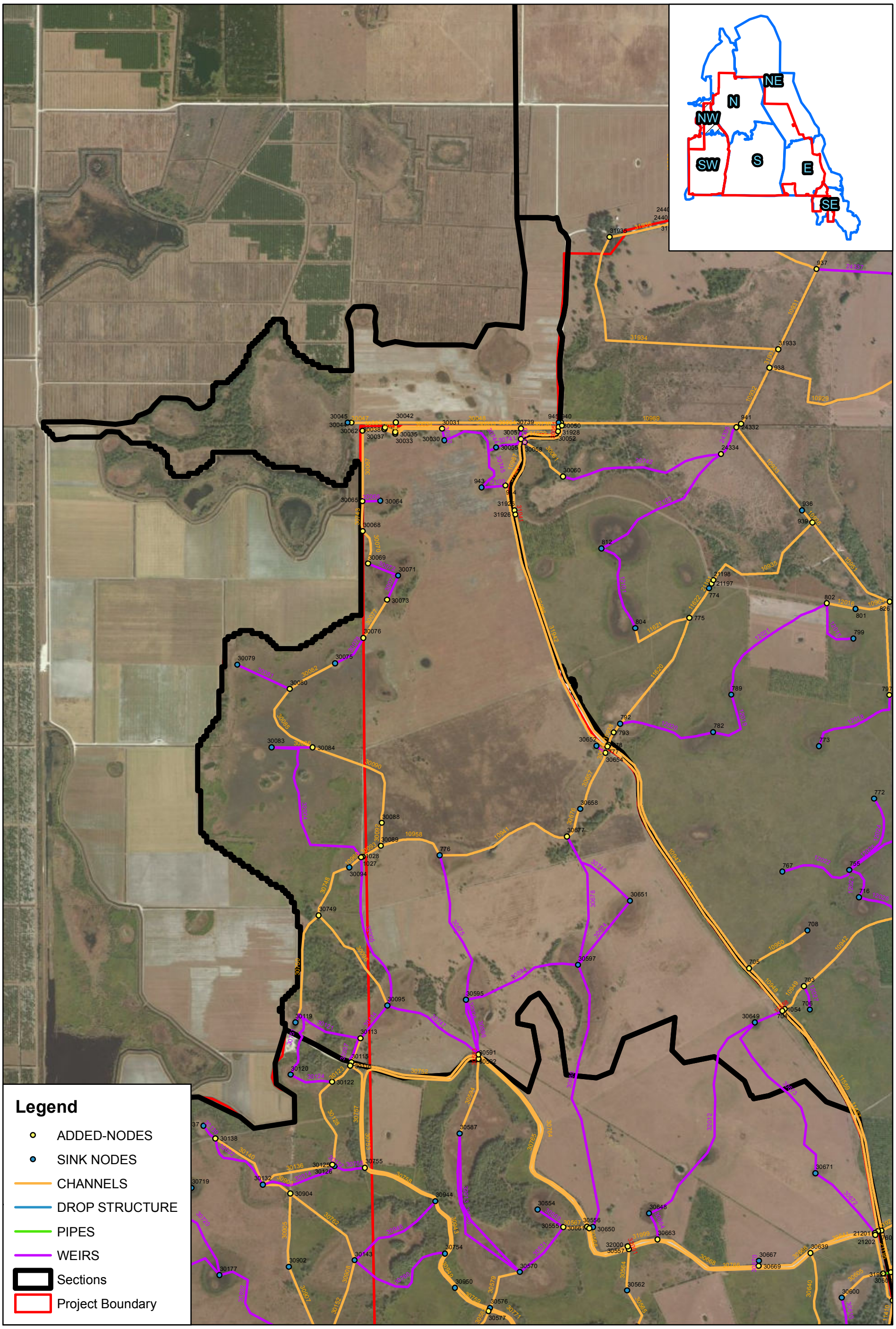
SITE SECTION MAP

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 14



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 1,500 feet

0 1,500 3,000 Feet

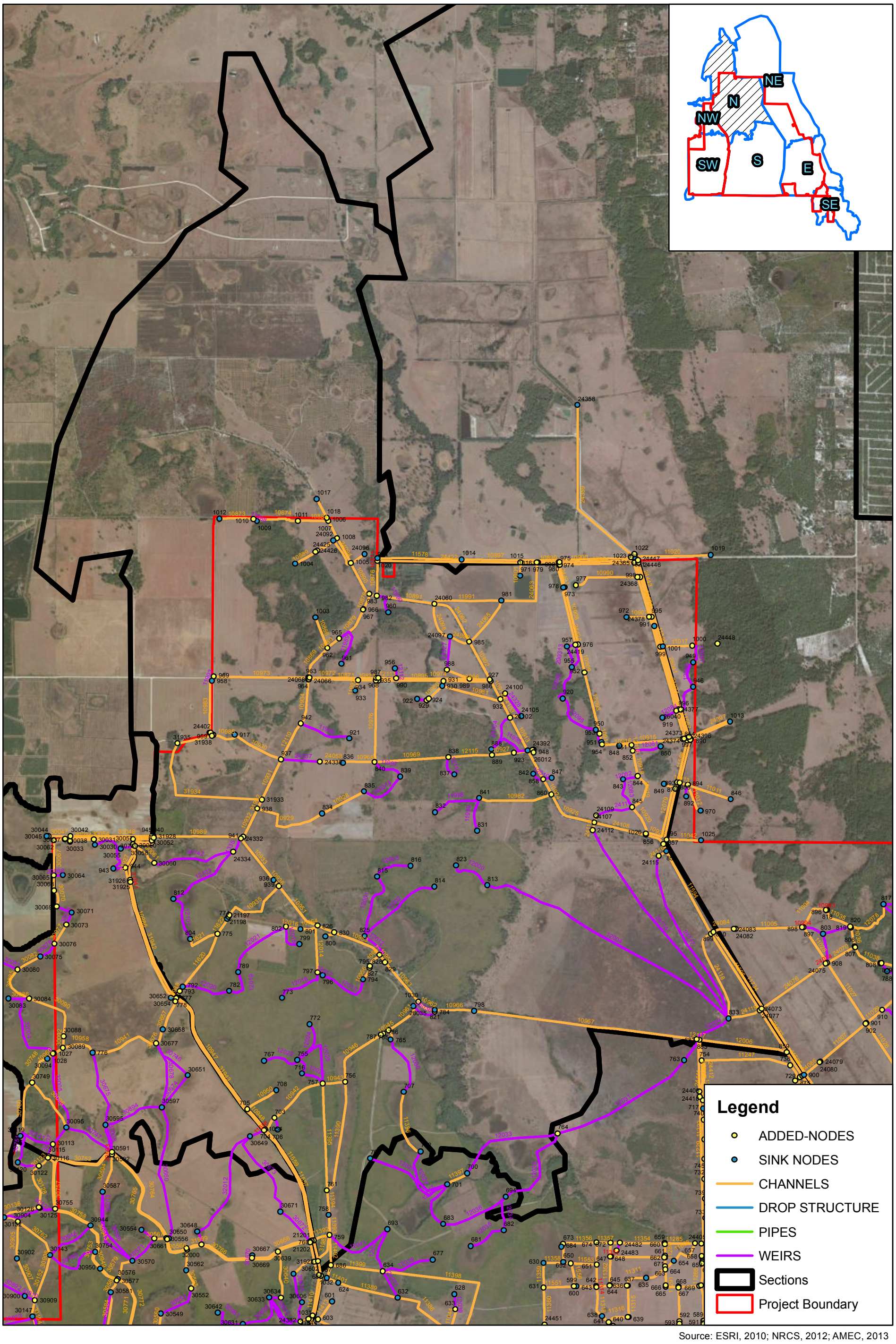
EXISTING ICPR NETWORK NORTHWEST

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
14A



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 3,000 feet

0 3,000 6,000 Feet

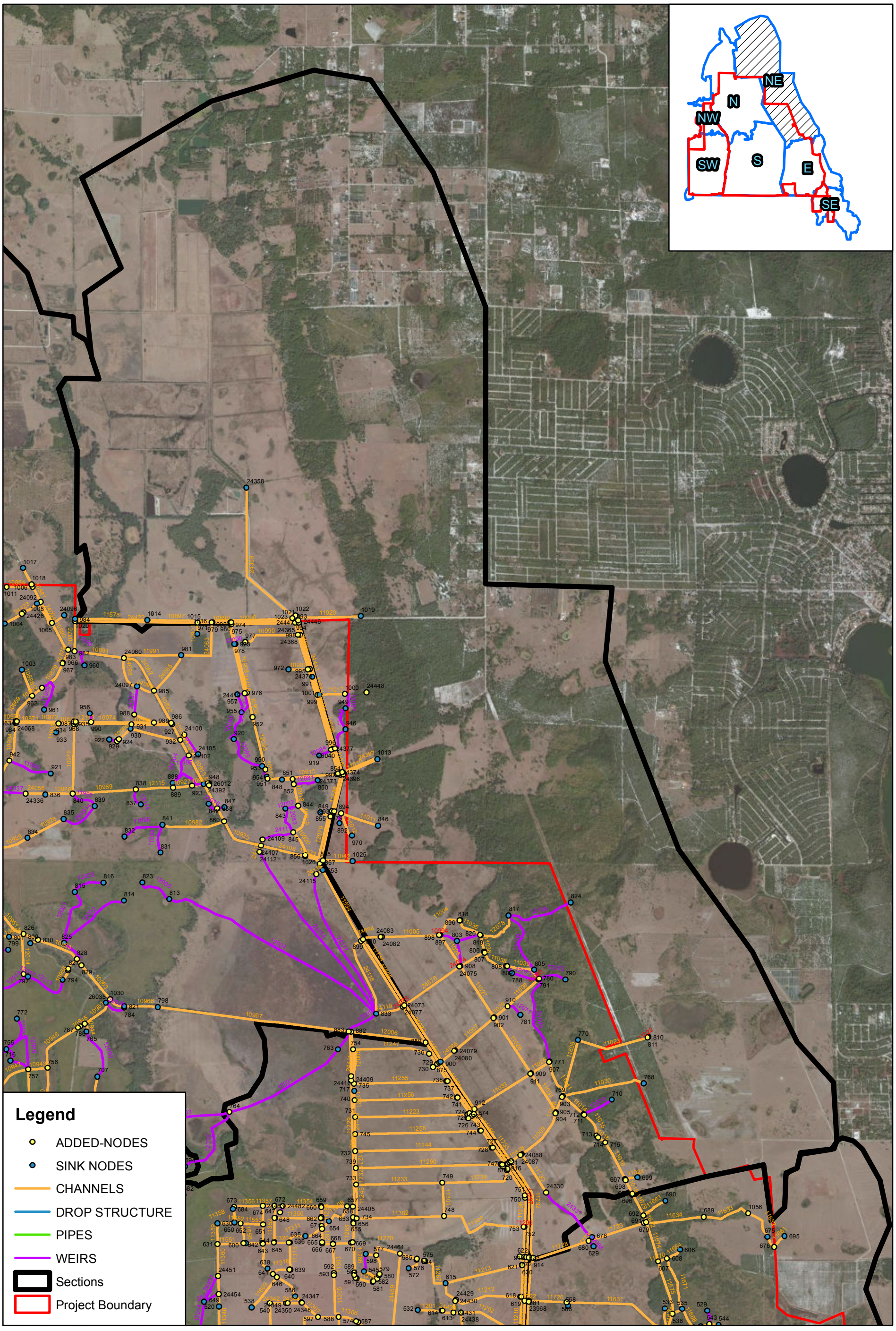
EXISTING ICPR NETWORK NORTH

Drawn	Date
NMG	04/08/2103
Checked	Date
TGD	04/08/2103

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
14B



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 3,500 feet

0 3,500 7,000 Feet

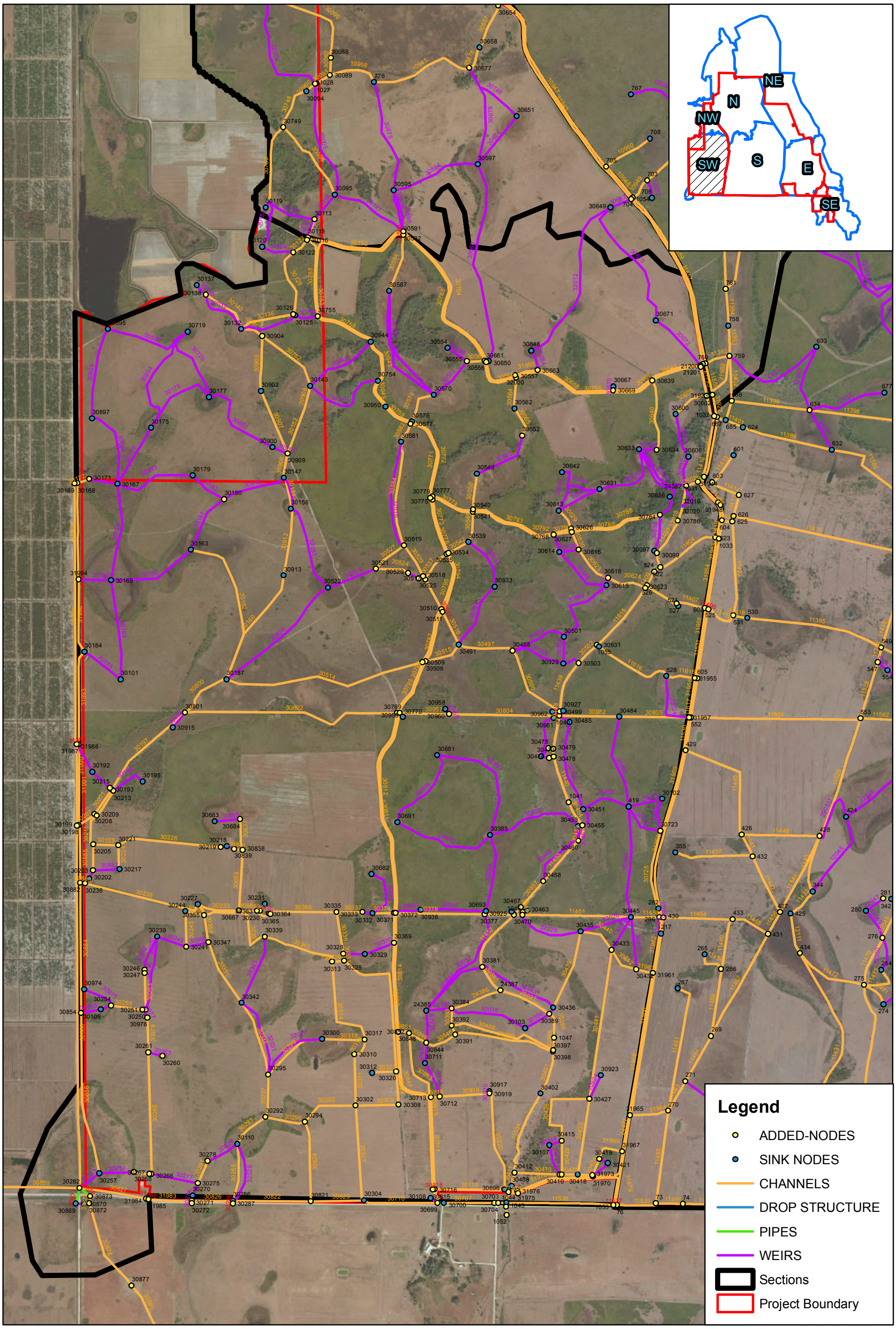
EXISTING ICPR NETWORK NORTHEAST

Drawn	Date
NMG	04/08/2103
Checked	Date
TGD	04/08/2103

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
14C



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 2,000 feet

0 2,000 4,000 Feet

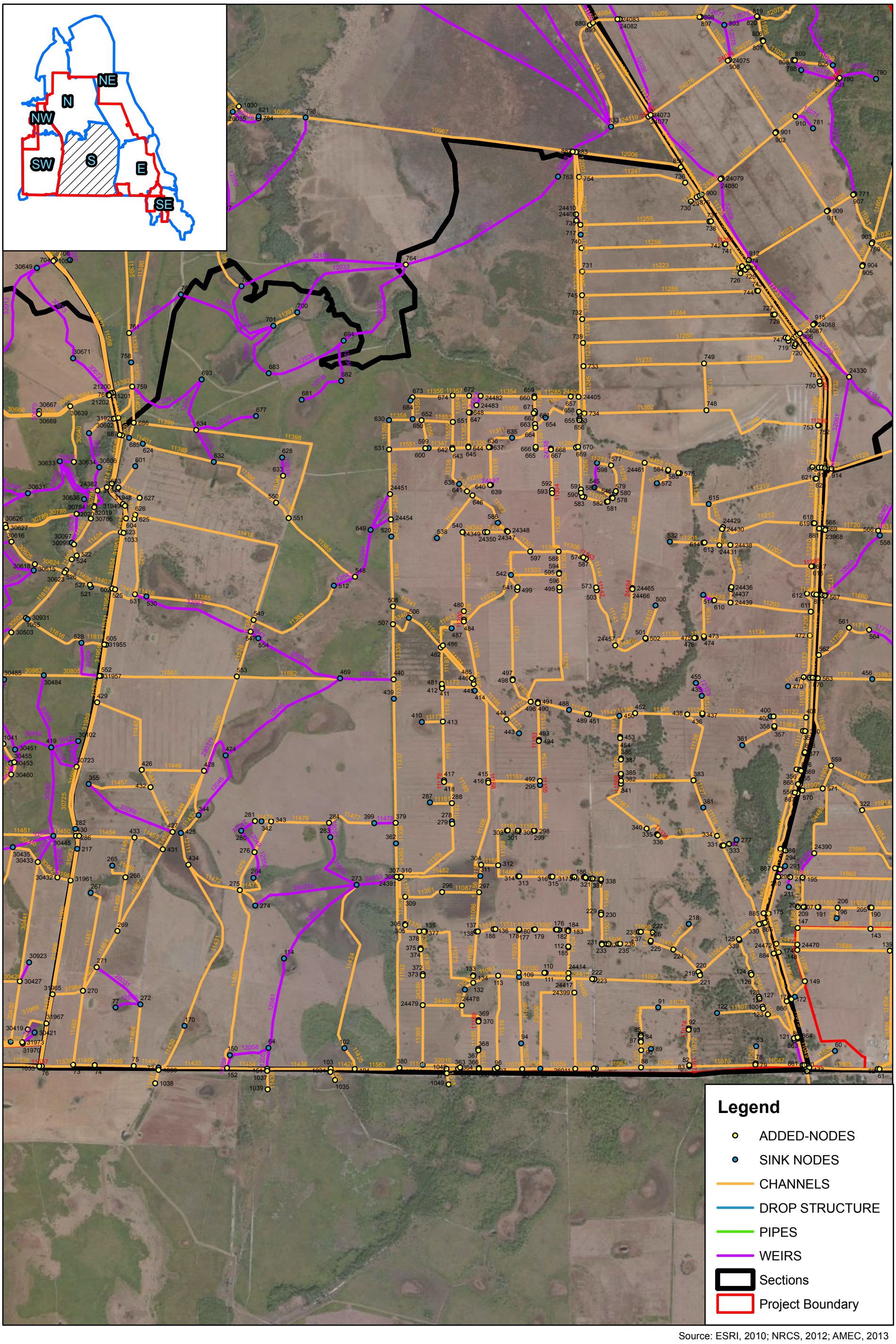
EXISTING ICPR NETWORK SOUTHWEST

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure 14D



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 2,500 feet

0 2,500 5,000 Feet

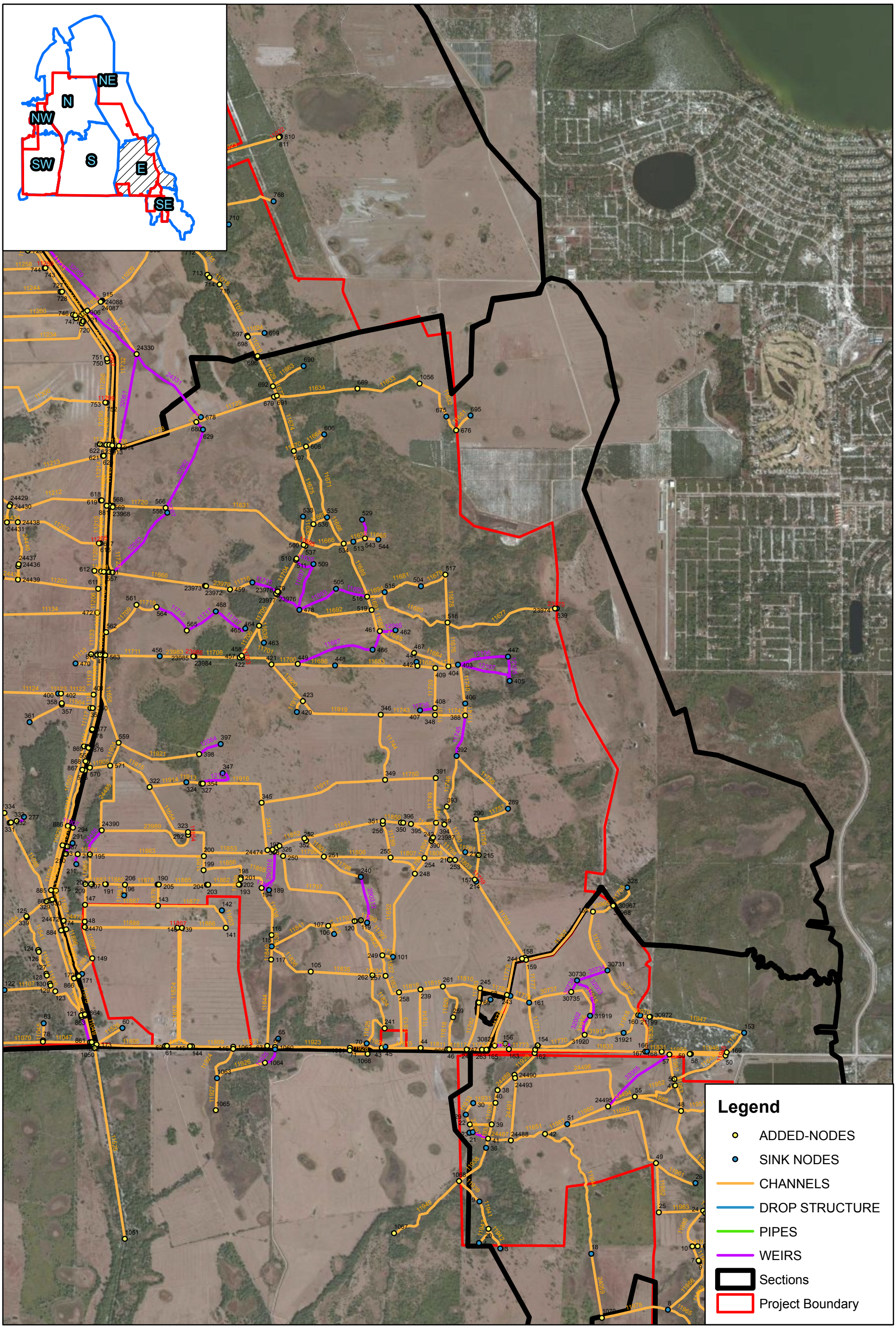
EXISTING ICPR NETWORK SOUTH

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
14E



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 2,500 feet

0 2,500 5,000 Feet

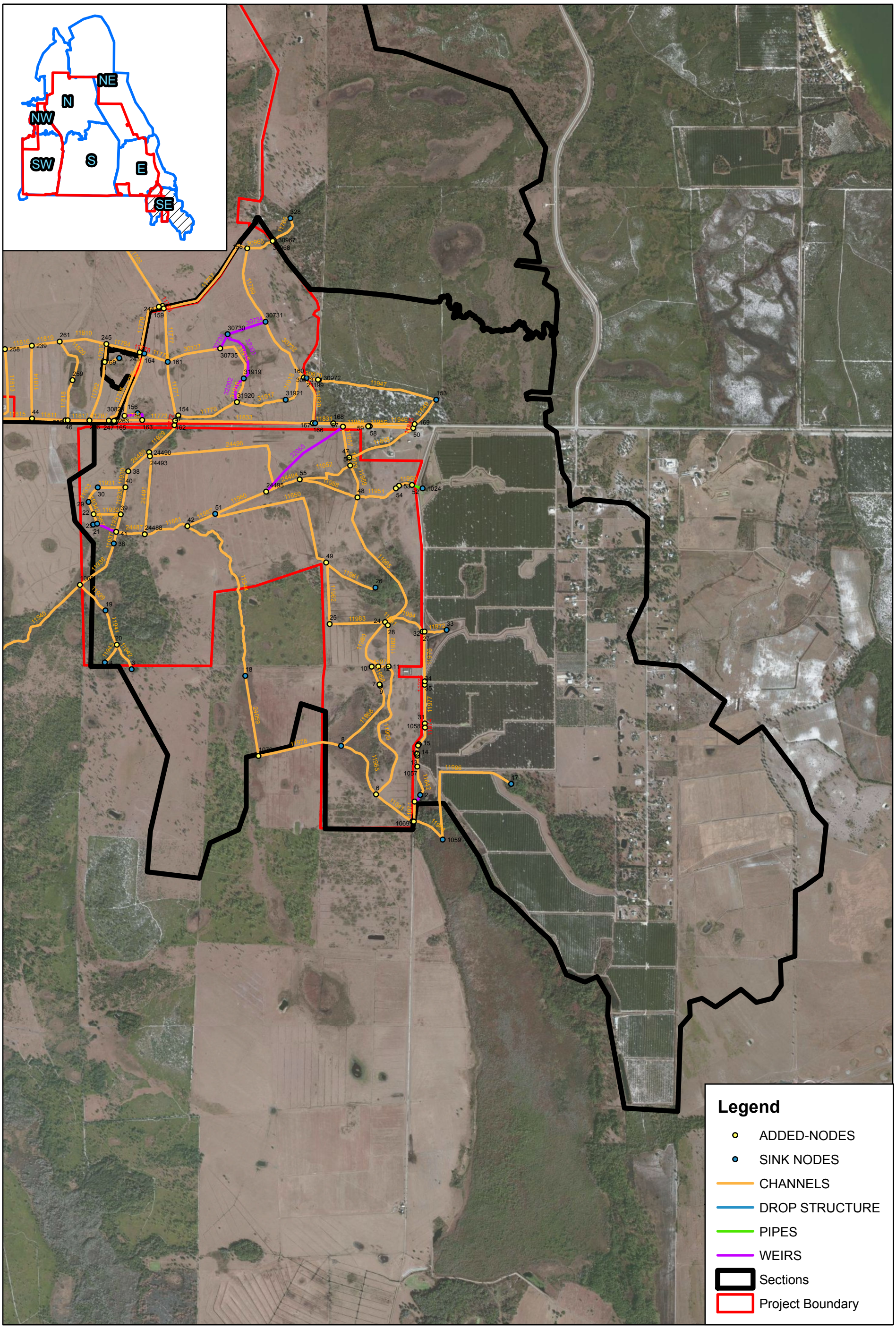
EXISTING ICPR NETWORK EAST

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
14F



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

N

1 inch = 2,000 feet

0 2,000 4,000 Feet

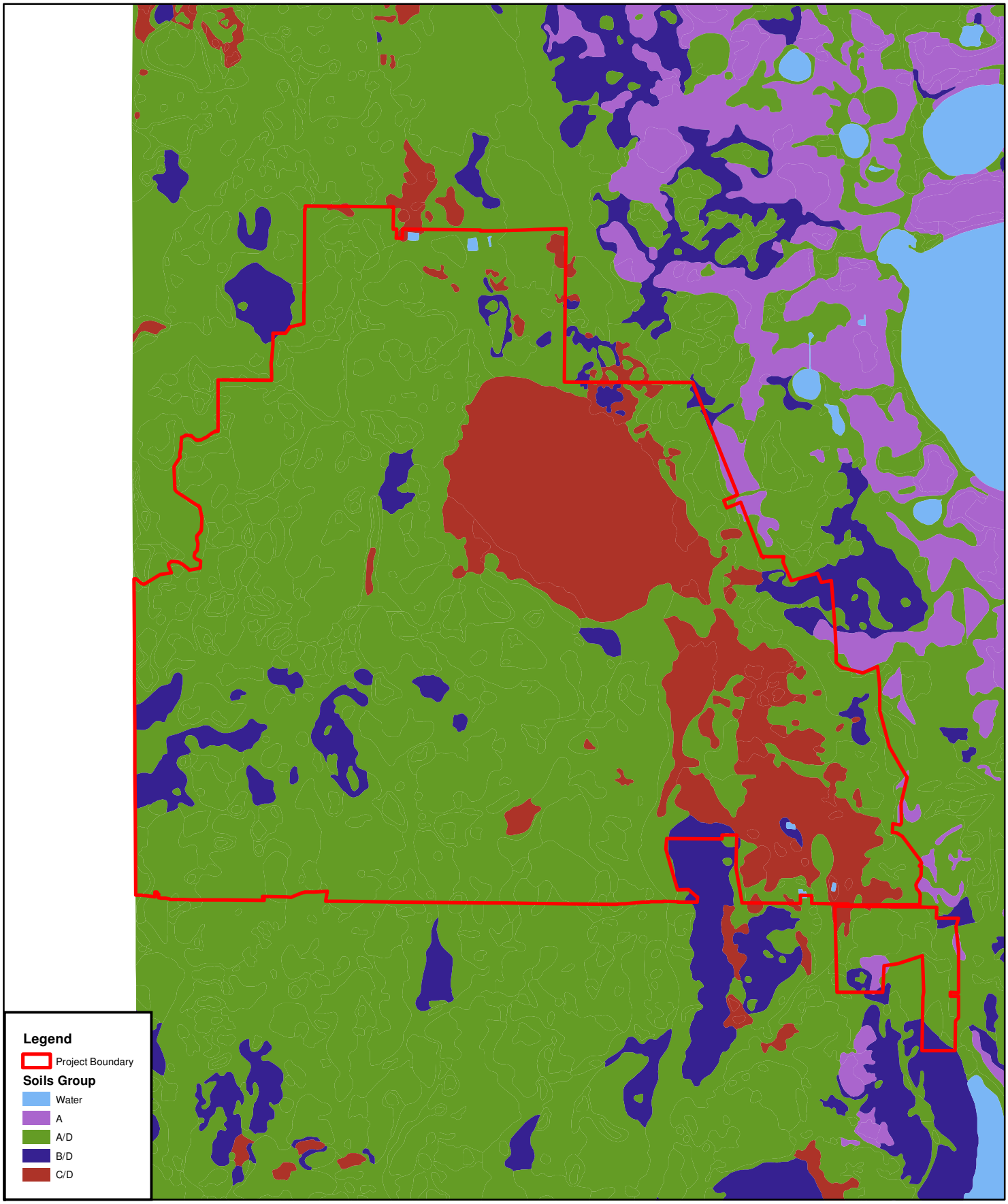
EXISTING ICPR NETWORK SOUTHEAST

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
14G



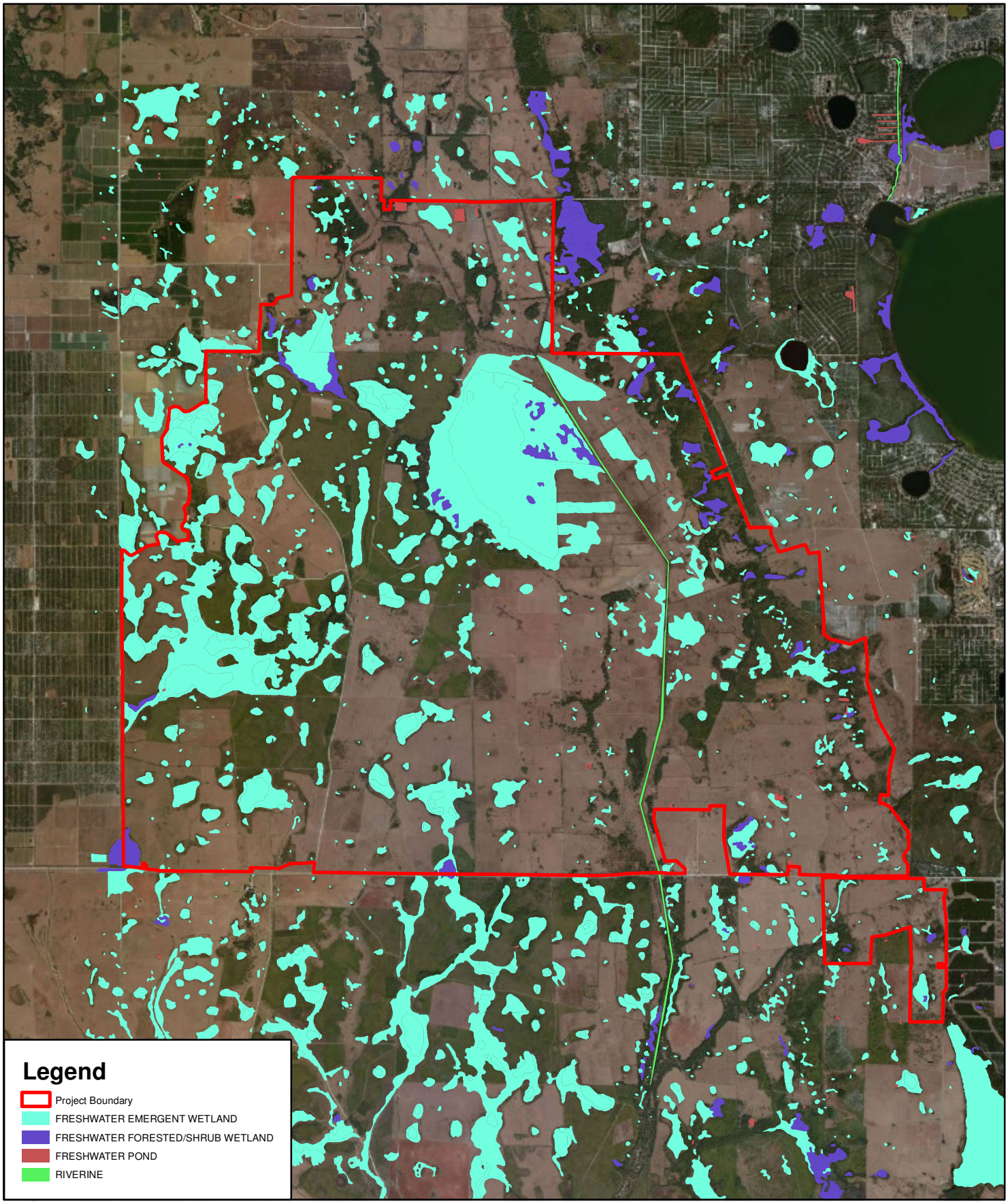
Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO				
HYDROLOGIC SOILS MAP				
Drawn	Date	amec	Gainesville, FL Project # 6063-11-0200	Figure 15
DLA	04/09/2013			
Checked	Date			
TGD	04/09/2013			



Source: ESRI 2010;USFWS 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

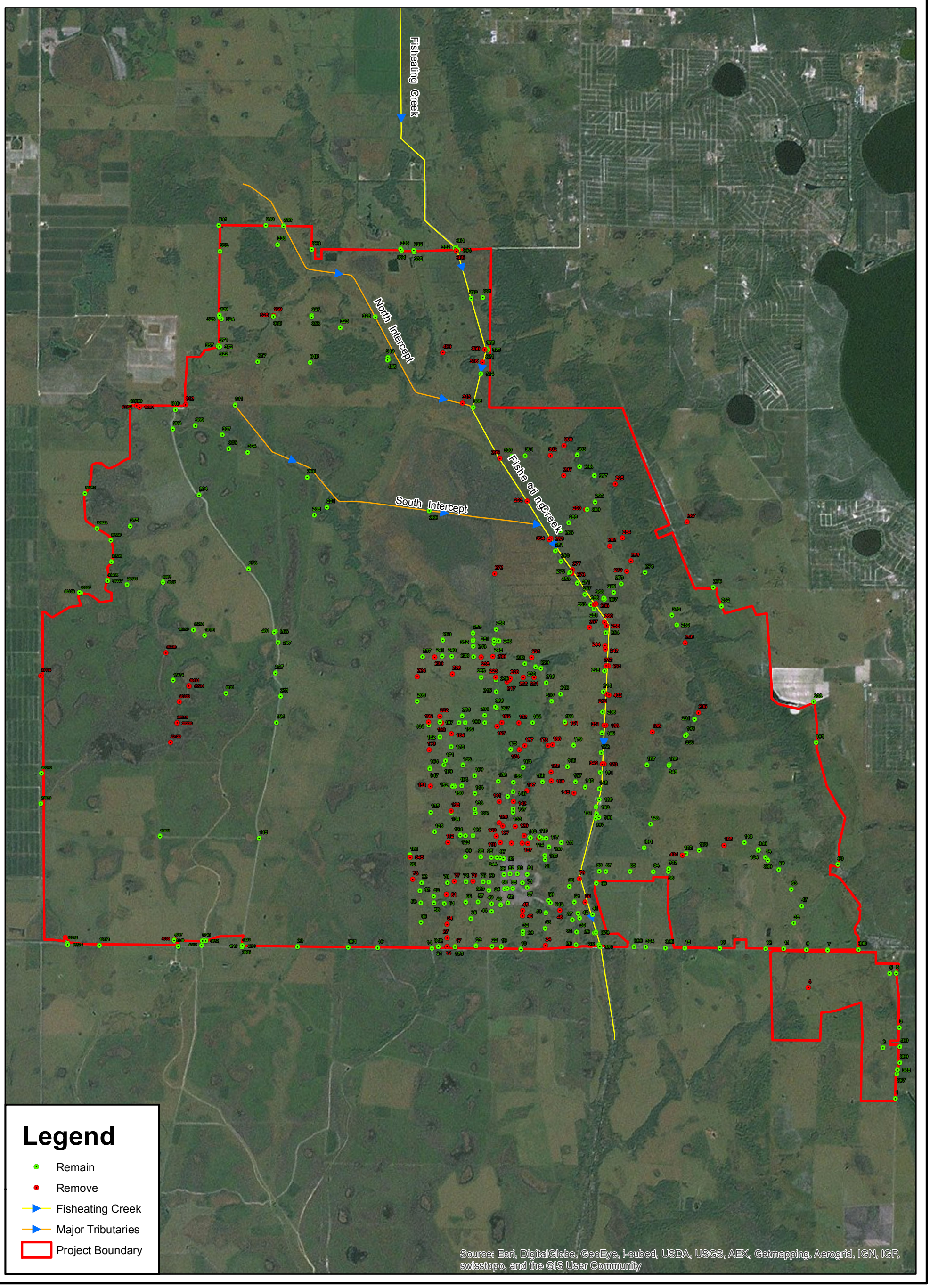
NATIONAL WETLAND INVENTORY MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 16



Source: ESRI, 2010; SFWMD 2010; NRCS, 2012; AMEC, 2013

N

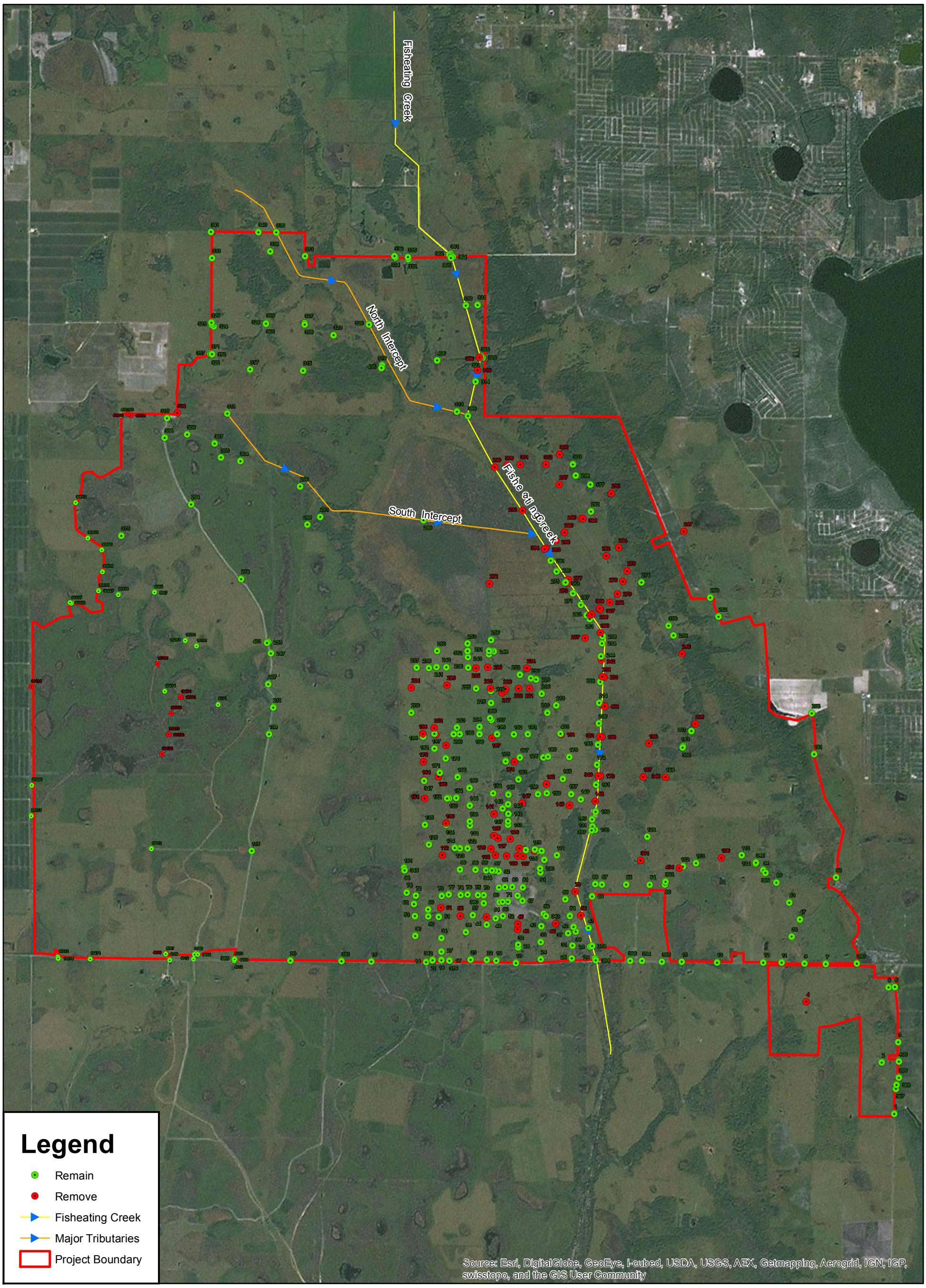
1 inch = 1 miles

0 0.5 1 2 Miles

USDA NRCS - Fisheating Creek WRPO

Existing Hydrologic Structures Alterative 2

Drawn	Date			
DLA	04/01/2014	amec	*Gainesville, FL* *Project # 6063-11-0200*	**Figure 17a**
Checked	Date			
TGD	04/01/2014			



Source: ESRI, 2010; SFWMD 2010; NRCS, 2012; AMEC, 2013

N

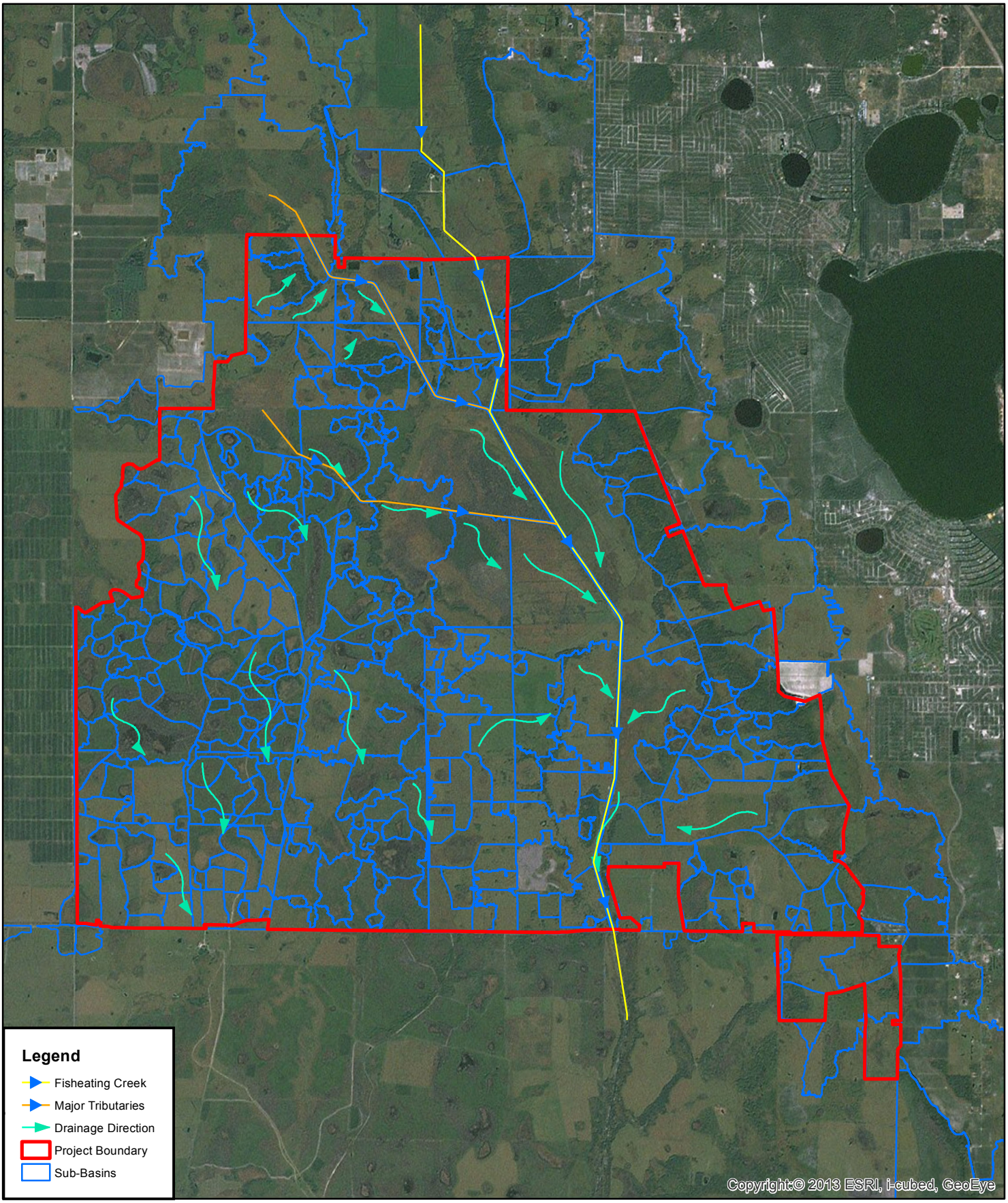
1 inch = 1 miles

0 0.5 1 2 Miles

USDA NRCS - Fisheating Creek WRPO

Existing Hydrologic Structures Alterative 3

Drawn	Date			
DLA	04/01/2014	amec	*Gainesville, FL* *Project # 6063-11-0200*	**Figure 17b**
Checked	Date			
TGD	04/01/2014			



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

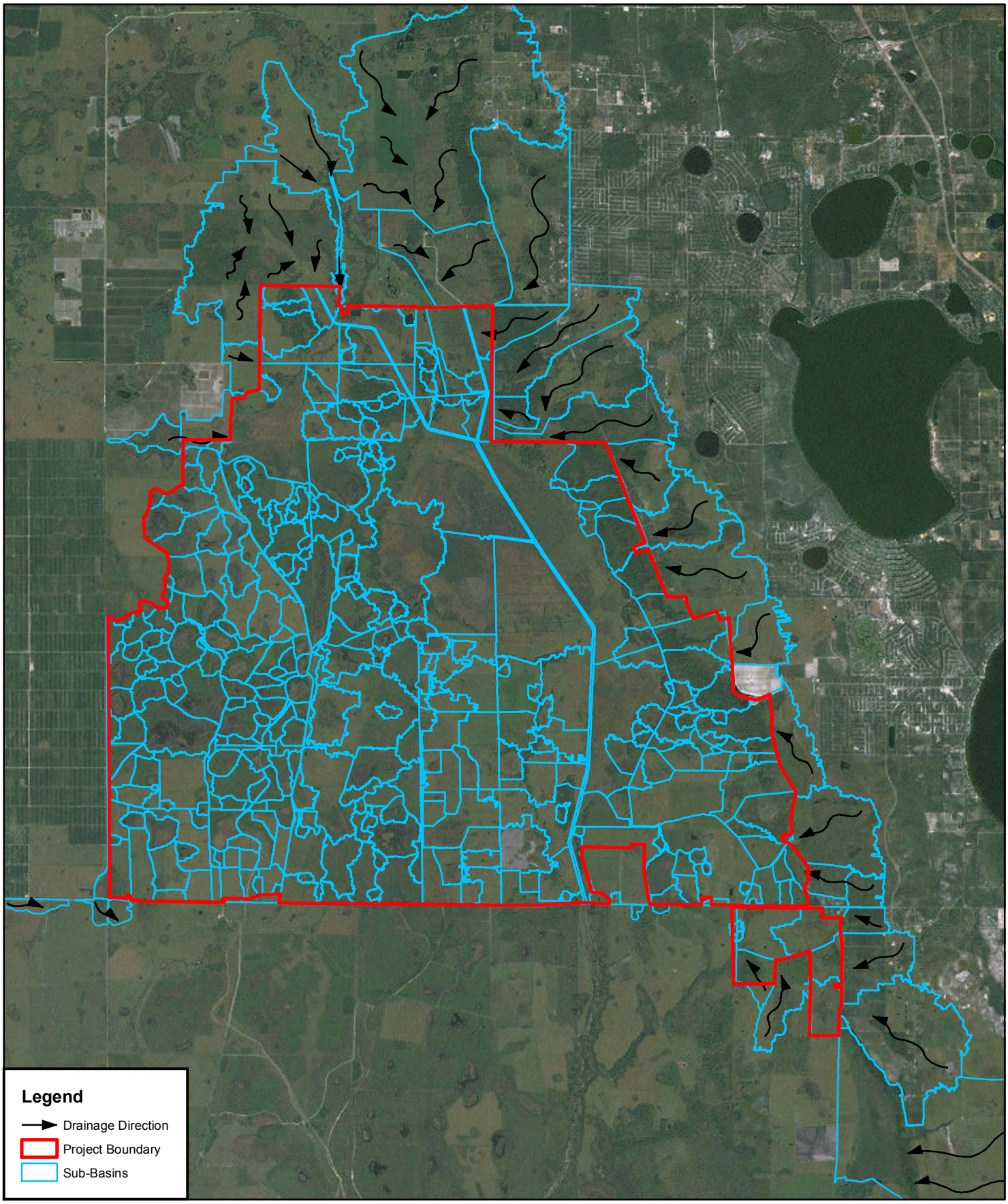
SUB-BASIN DELINEATION MAP

Drawn	Date
NMG	04/01/2014
Checked	Date
TGD	04/01/2014

amec

Gainesville, FL
Project # 6063-11-0200

Figure 18



Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 9,000 feet

N

0 4,500 9,000 18,000 Feet

USDA NRCS - Fisheating Creek WRPO

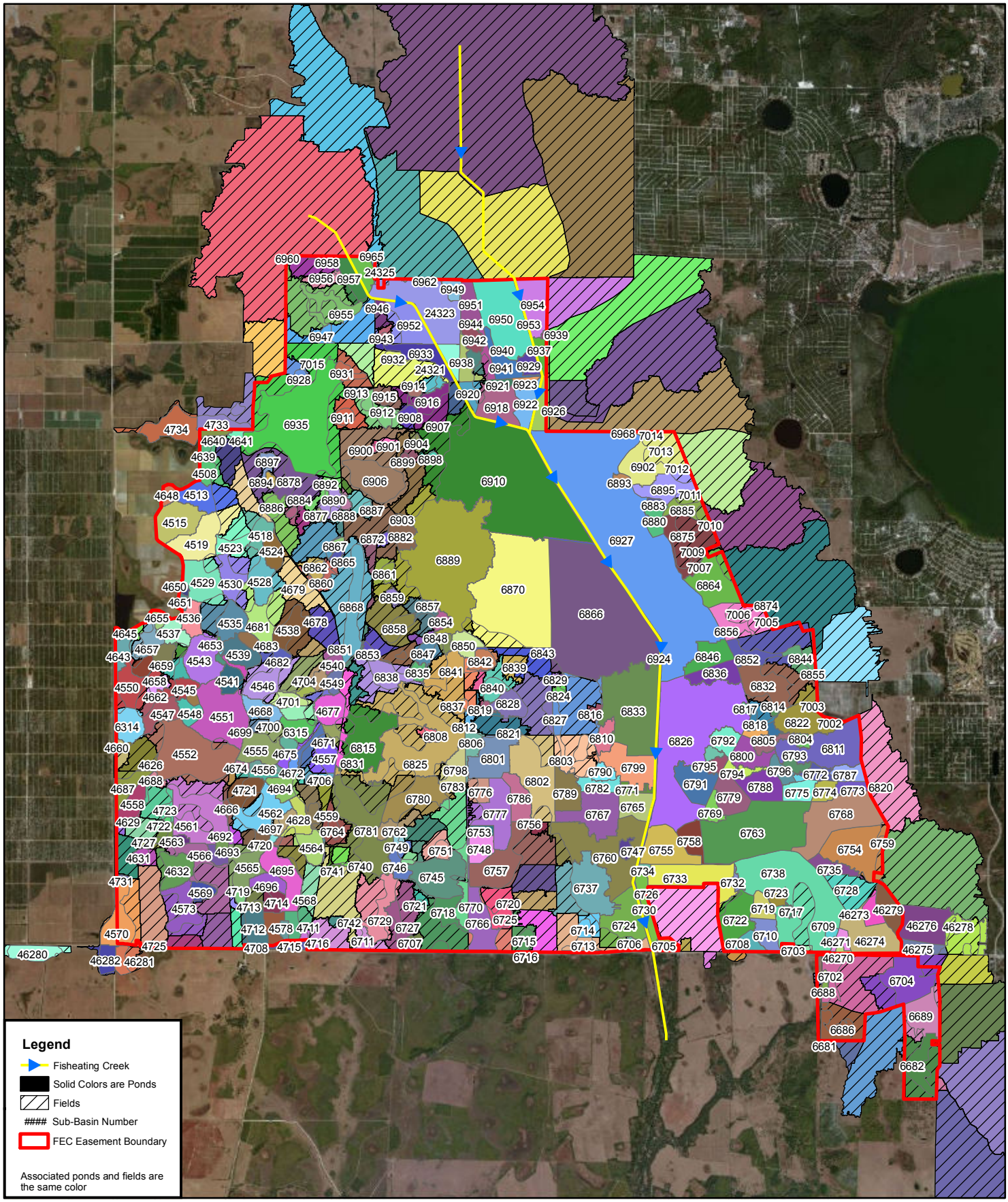
OFFSITE DRAINAGE MAP

Drawn	Date
NMG	04/08/2013
Checked	Date
TGD	04/08/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 18a



Source: ESRI, 2010; SFWMD 2011; AMEC 2013;NRCS 2012

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

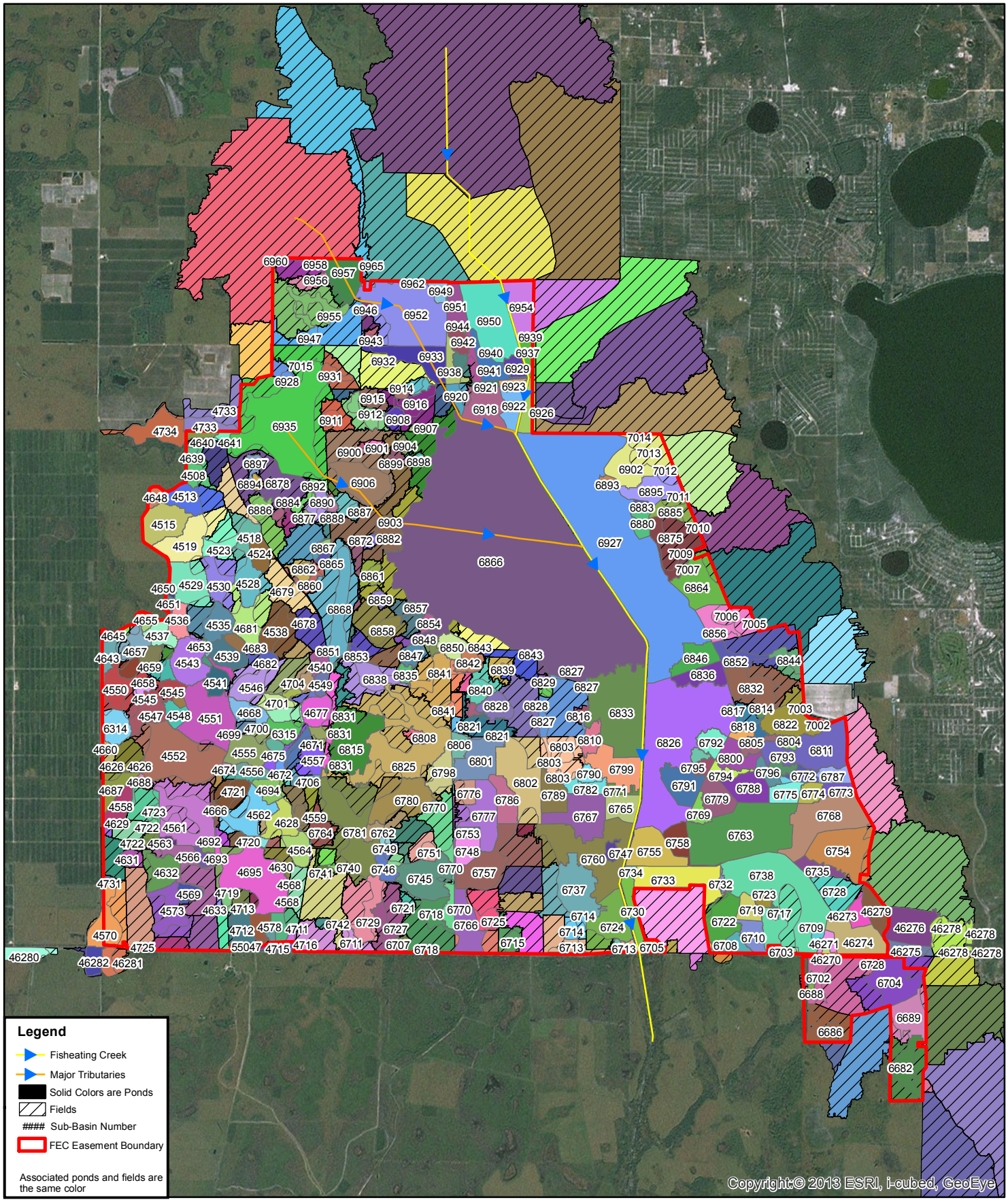
EXISTING FIELDS AND PONDS FOR SPAW MODEL

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 19a



Source: ESRI, 2010; SFWMD 2011; AMEC 2013;NRCS 2012

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

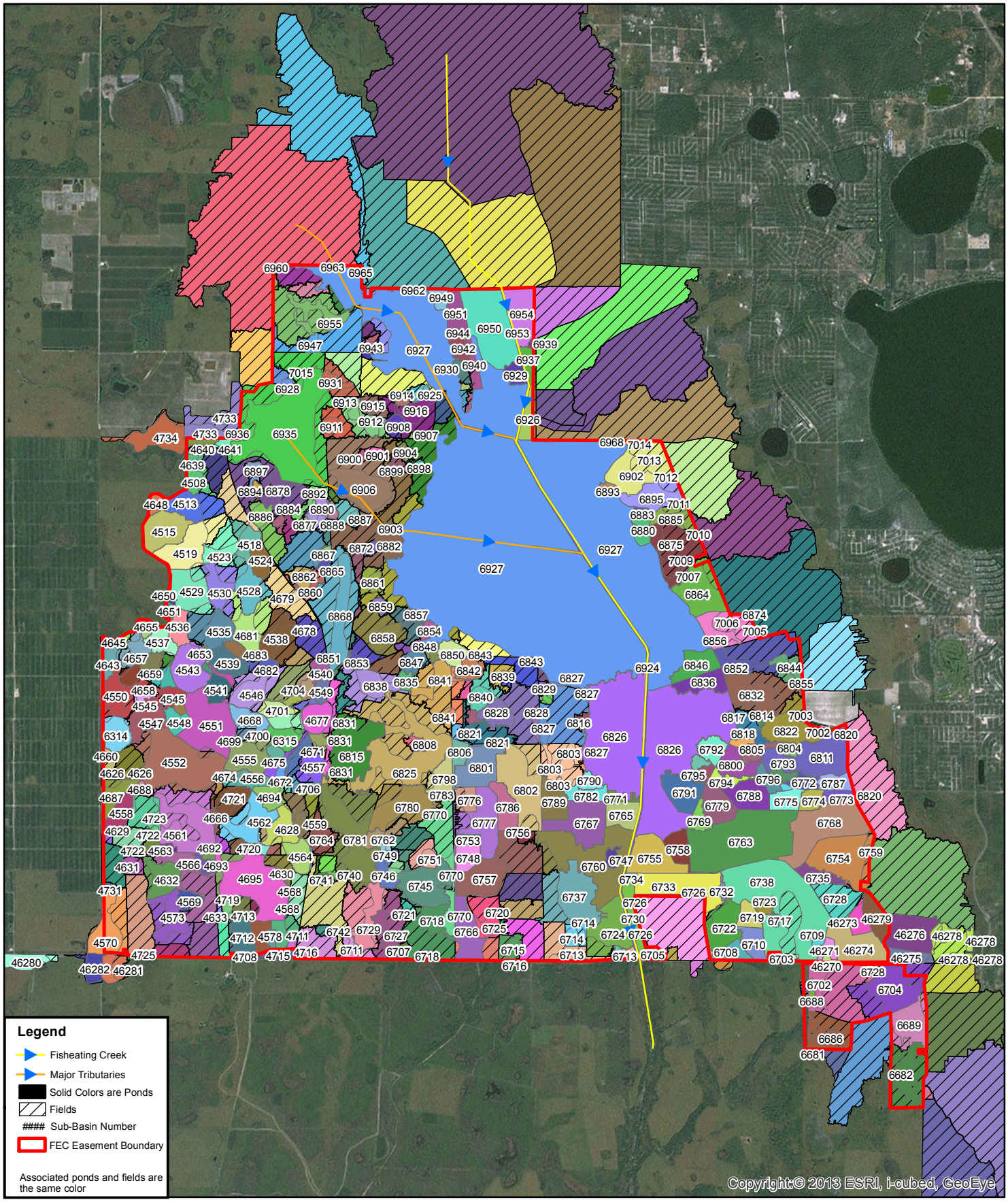
ALTERNATIVE 2 FIELDS AND PONDS FOR SPAW MODEL

Drawn	Date
DLA	04/01/2014
Checked	Date
TGD	04/01/2014

amec

Gainesville, FL
Project # 6063-11-0200

Figure 19b



Source: ESRI, 2010; SFWMD 2011; AMEC 2013;NRCS 2012

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

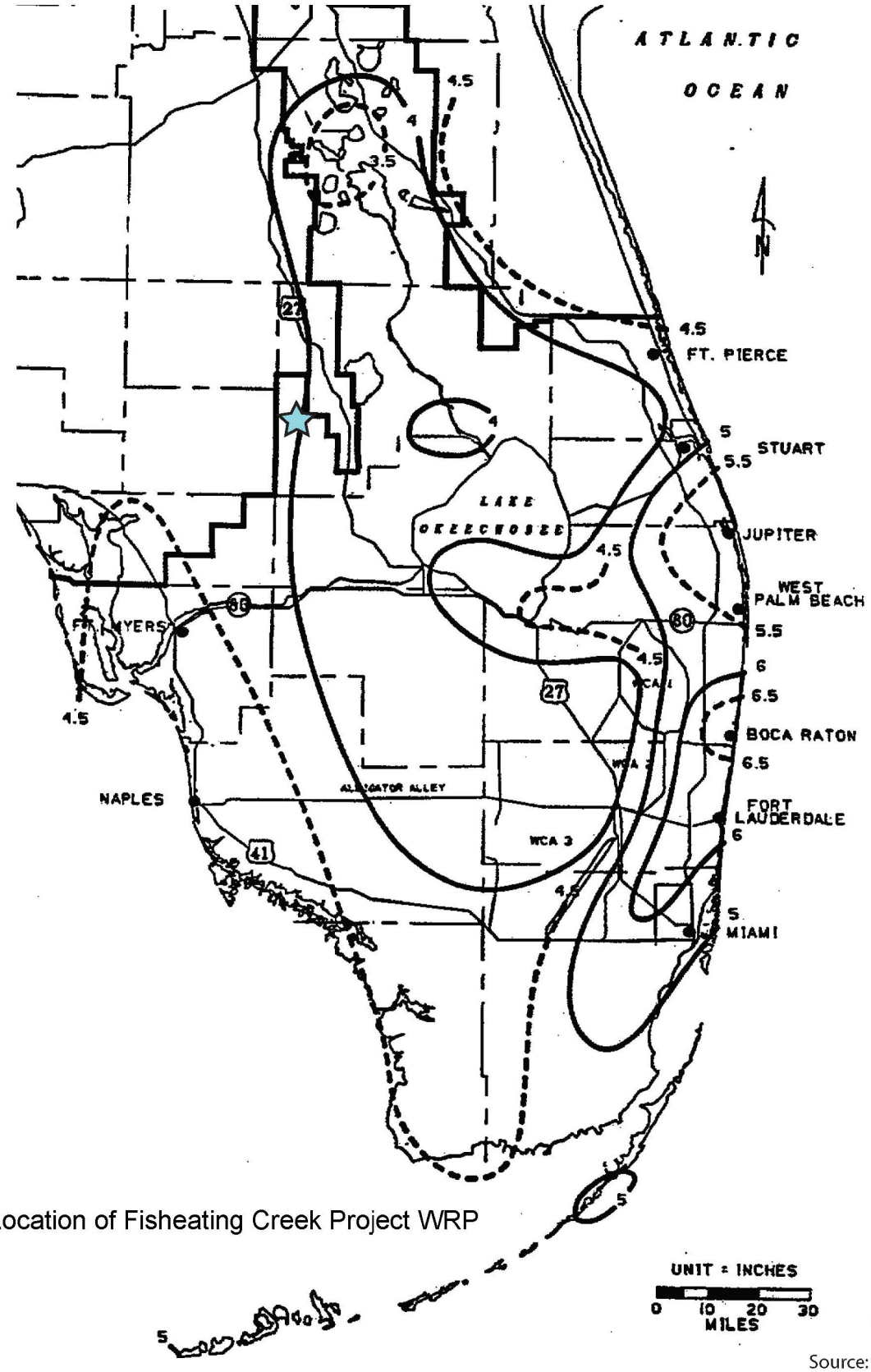
ALTERNATIVE 3 FIELDS AND PONDS FOR SPAW MODEL

Drawn	Date
DLA	04/01/2014
Checked	Date
TGD	04/01/2014

amec

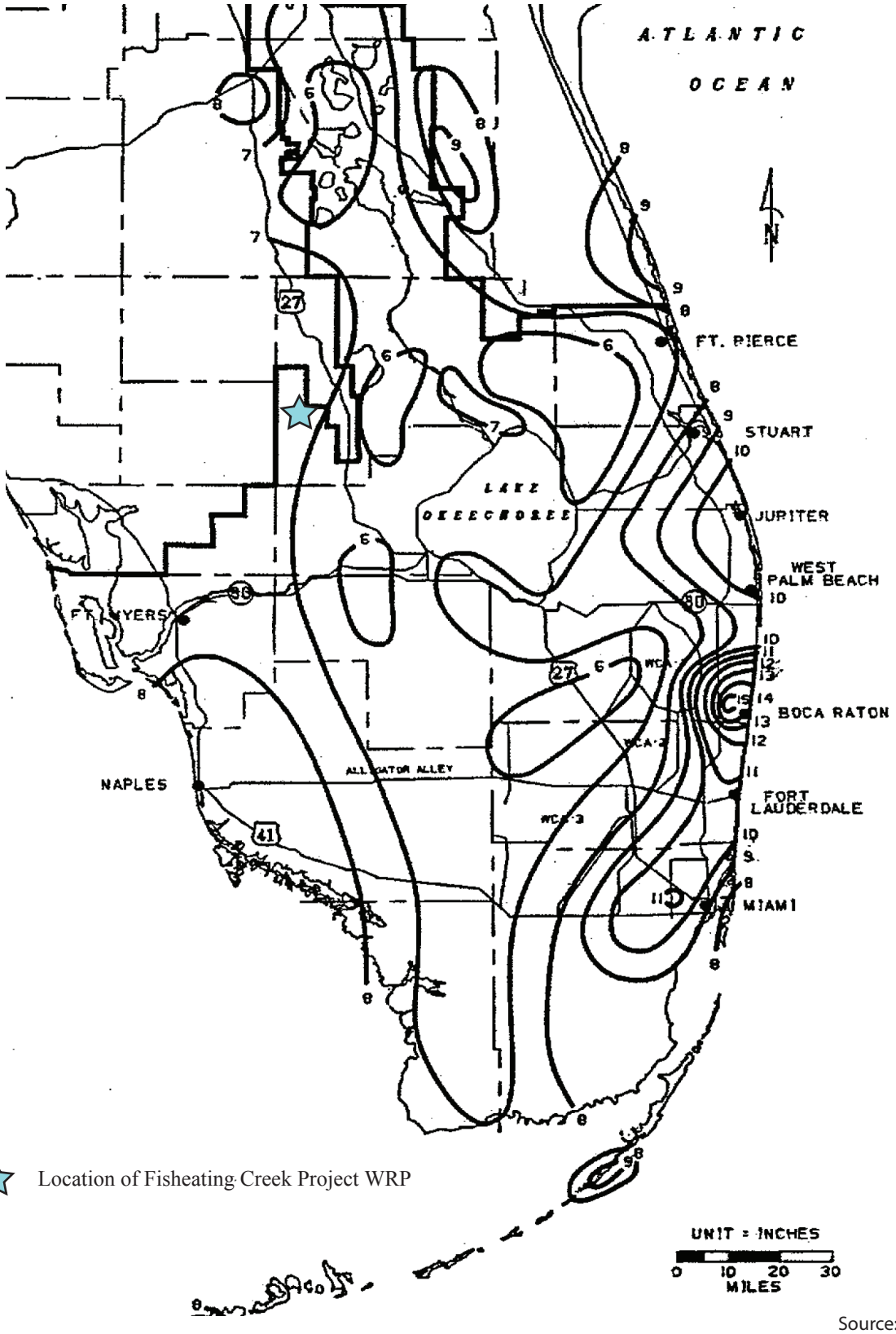
Gainesville, FL
Project # 6063-11-0200

Figure 19c



Source: SFWMD, 2010

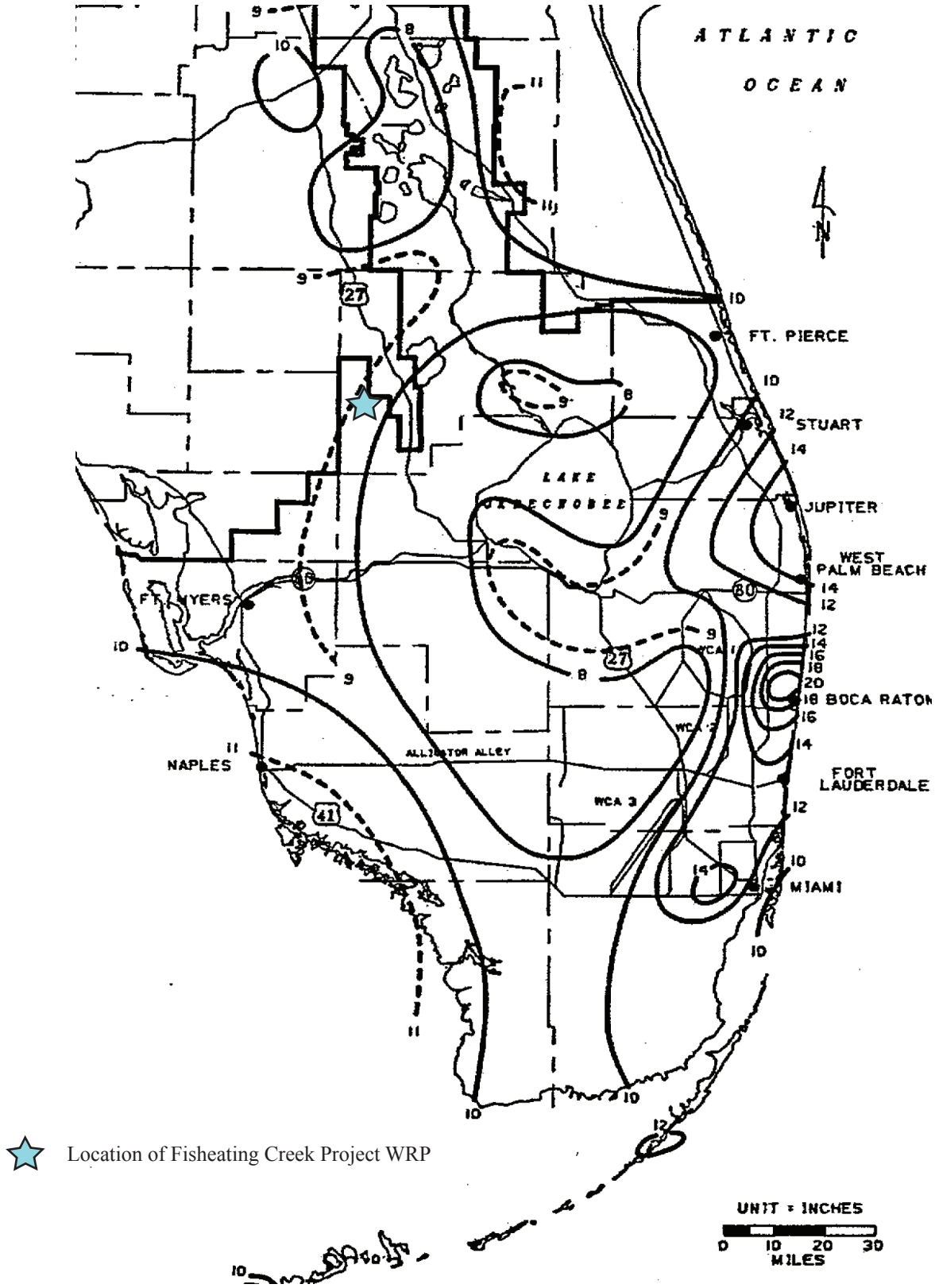
Fisheating Creek WRP	amec	**Figure 20a**
Prepared/Date: 06/19/12 Checked/Date: 06/19/12	*AMEC Project Number 6063-11-0200*	24-Hour Mean Annual Return Period Rainfall Map



Location of Fisheating Creek Project WRP

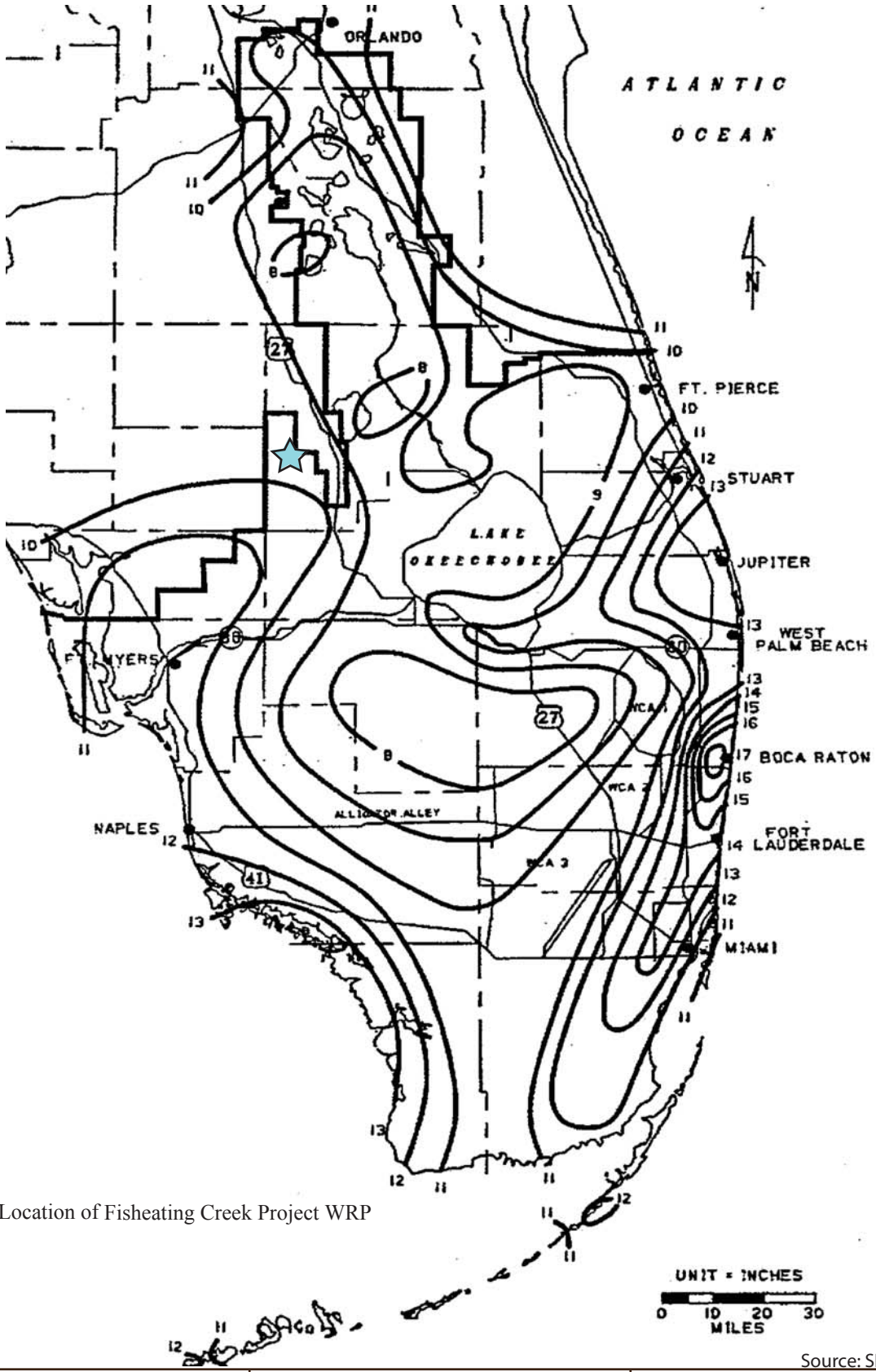
Source: SFWMD, 2010

Fisheating Creek, WRP	amec AMEC Project Number 6063-11-0200	**Figure 20b** 24-Hour 25-Year Return Period Rainfall Map
Prepared/Date: 06/19/12 Checked/Date: 06/19/12		



Source: SFWMD, 2010

Fisheating Creek WRP	amec	**Figure 20c**
Prepared/Date: 06/19/12 Checked/Date: 06/19/12	*AMEC Project Number 6063-11-0200*	24-Hour 100-Year Return Period Rainfall Map



Location of Fisheating Creek Project WRP

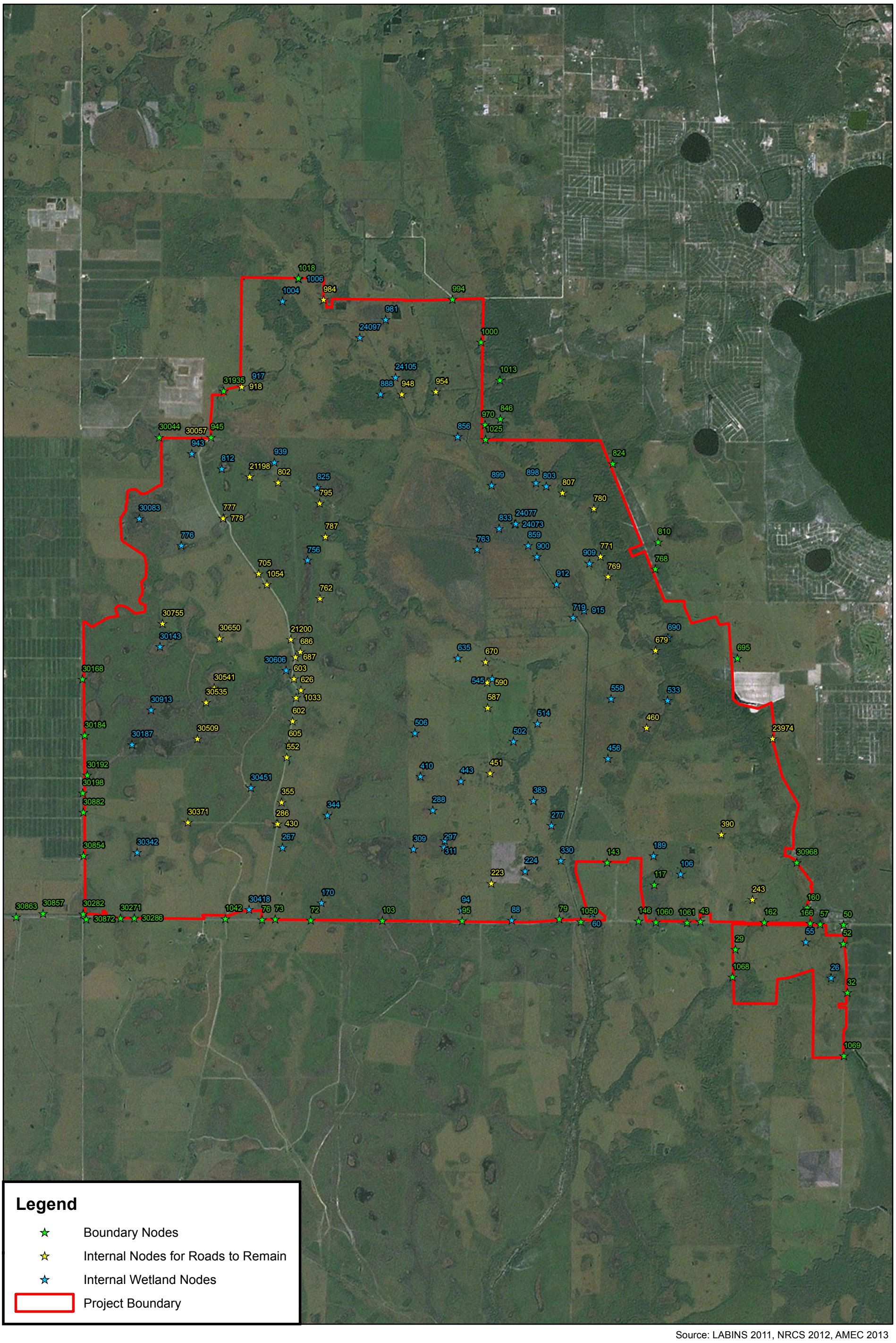
Source: SFWMD, 2010

Fisheating Creek WRP

Prepared/Date: 06/19/12
Checked/Date: 06/19/12

AMEC Project Number 6063-11-0200

Figure 20d
3-Day 25-Year
Return Period Rainfall Map



Source: LABINS 2011, NRCS 2012, AMEC 2013

N

1 inch = 6,000 feet

0 6,000 12,000 Ft

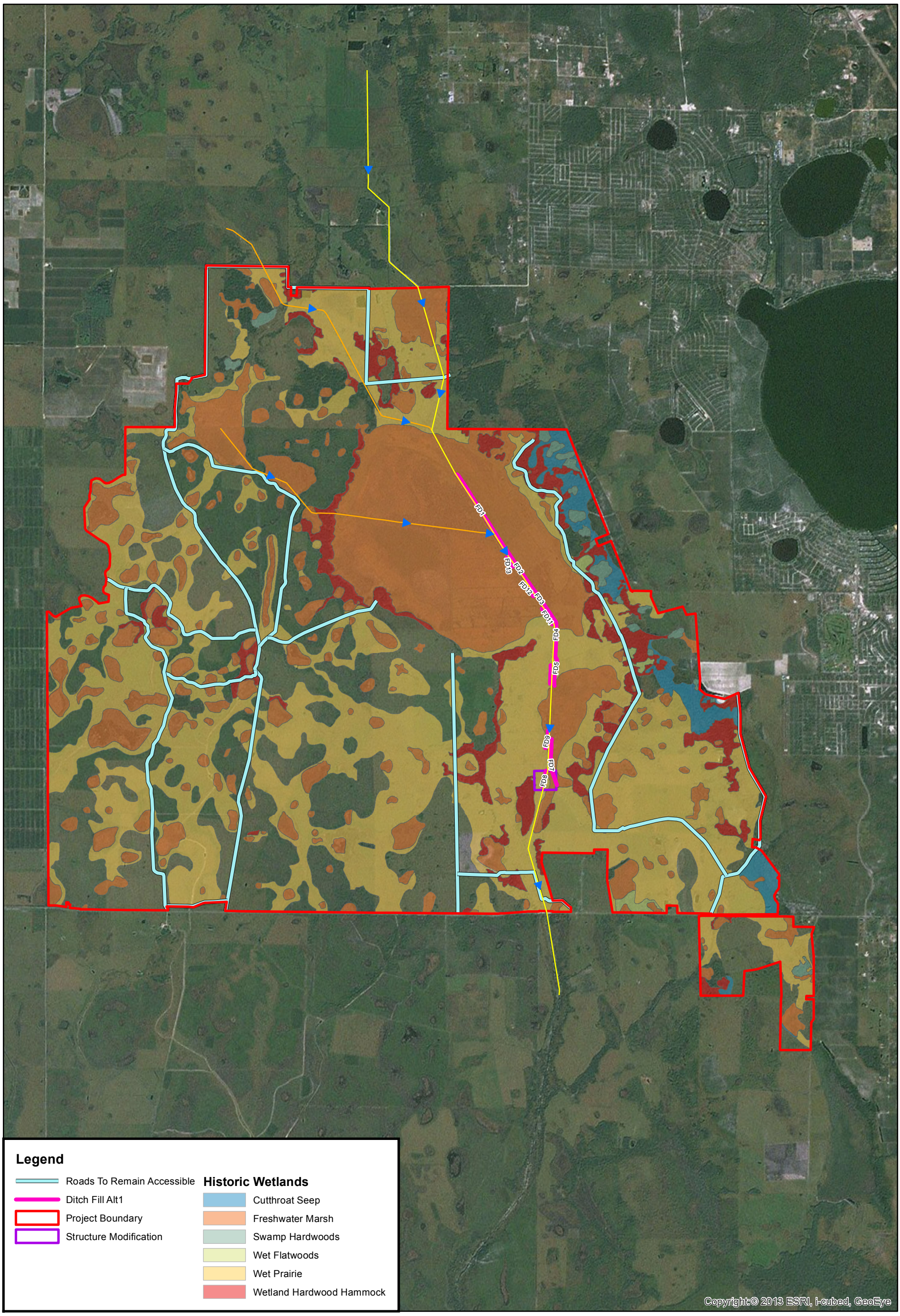
SITE BOUNDARY CONDITIONS NODE LOCATIONS

Drawn	Date
DLA	07/26/2013
Checked	Date
TGD	07/26/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure 21



Source: ESRI 2010; AMEC 2013; NRCS 2012

1 inch = 6,000 feet

N

0 3,000 6,000 12,000 Feet

USDA NRCS - Fisheating Creek WRPO

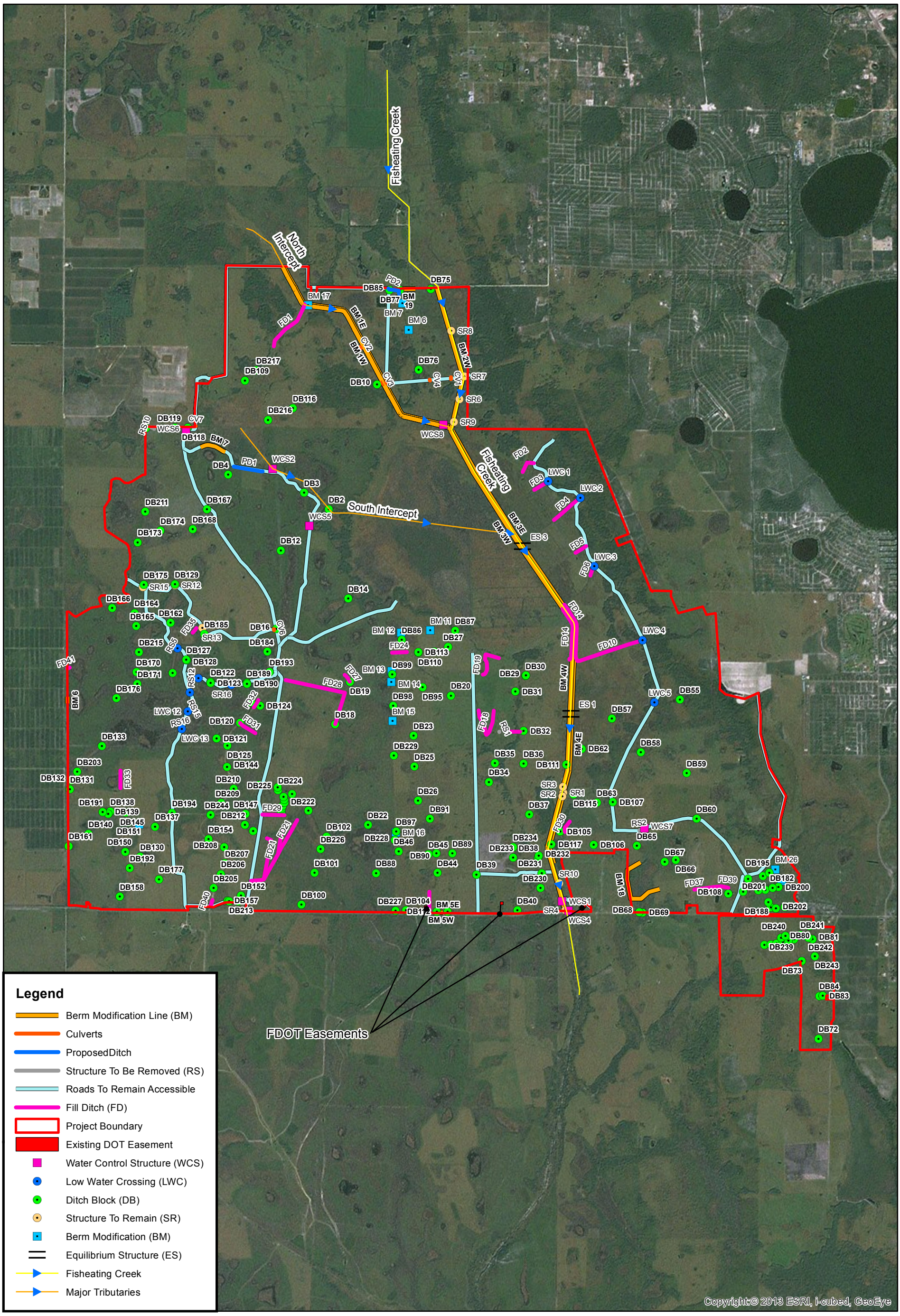
ALTERNATIVE 1

Drawn	Date
DLA	04/01/2014
Checked	Date
TGD	04/01/2014

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
22a



Source: ESRI 2010; AMEC 2013; NRCS 2012

1 inch = 6,000 feet

N

0 3,000 6,000 12,000 Feet

USDA NRCS - Fisheating Creek WRPO

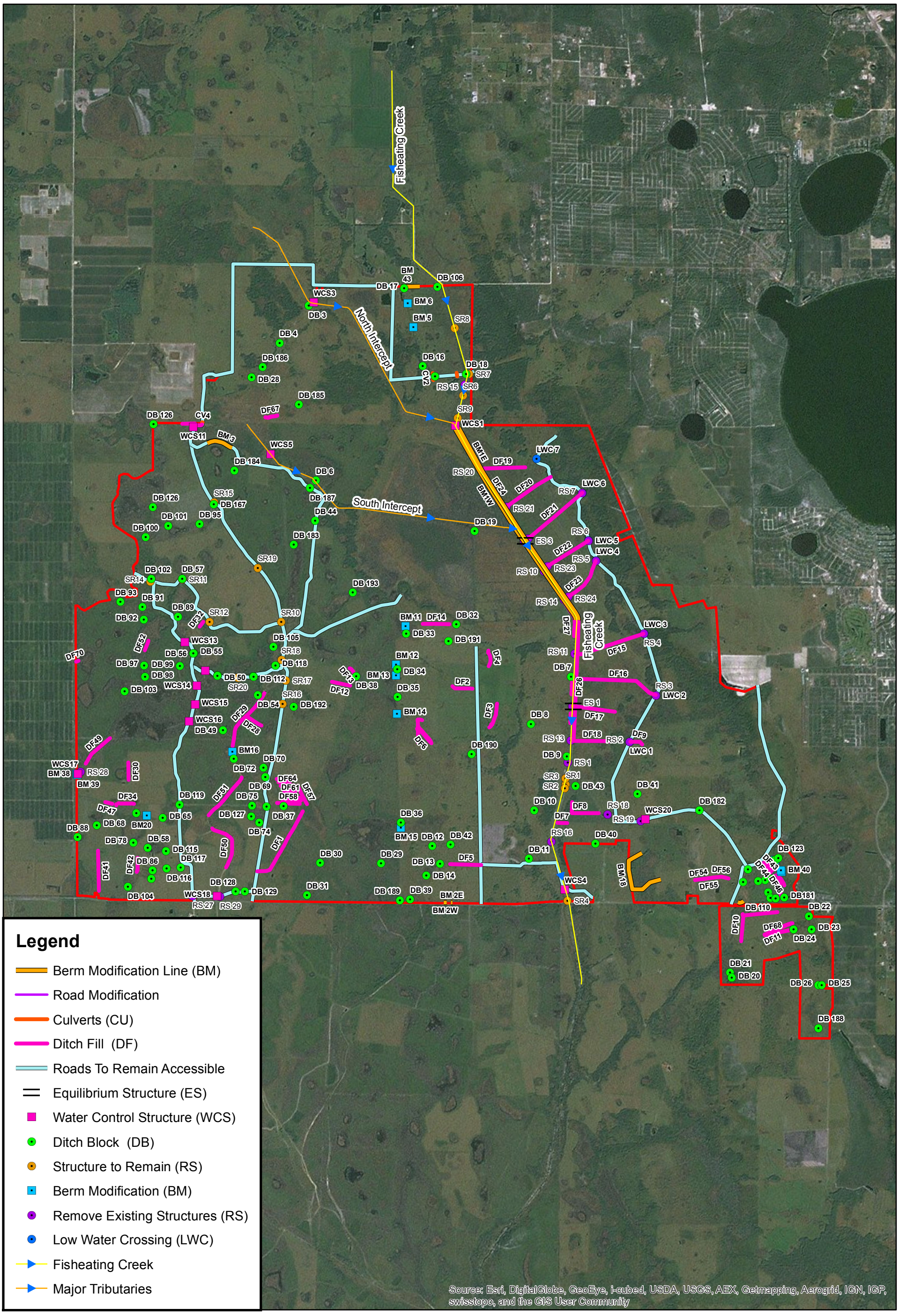
ALTERNATIVE 2

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
22b



Source: ESRI 2010; AMEC 2013; NRCS 2012

1 inch = 6,000 feet

N

5,900 2,950 0 5,900 Feet

USDA NRCS - Fisheating Creek WRPO

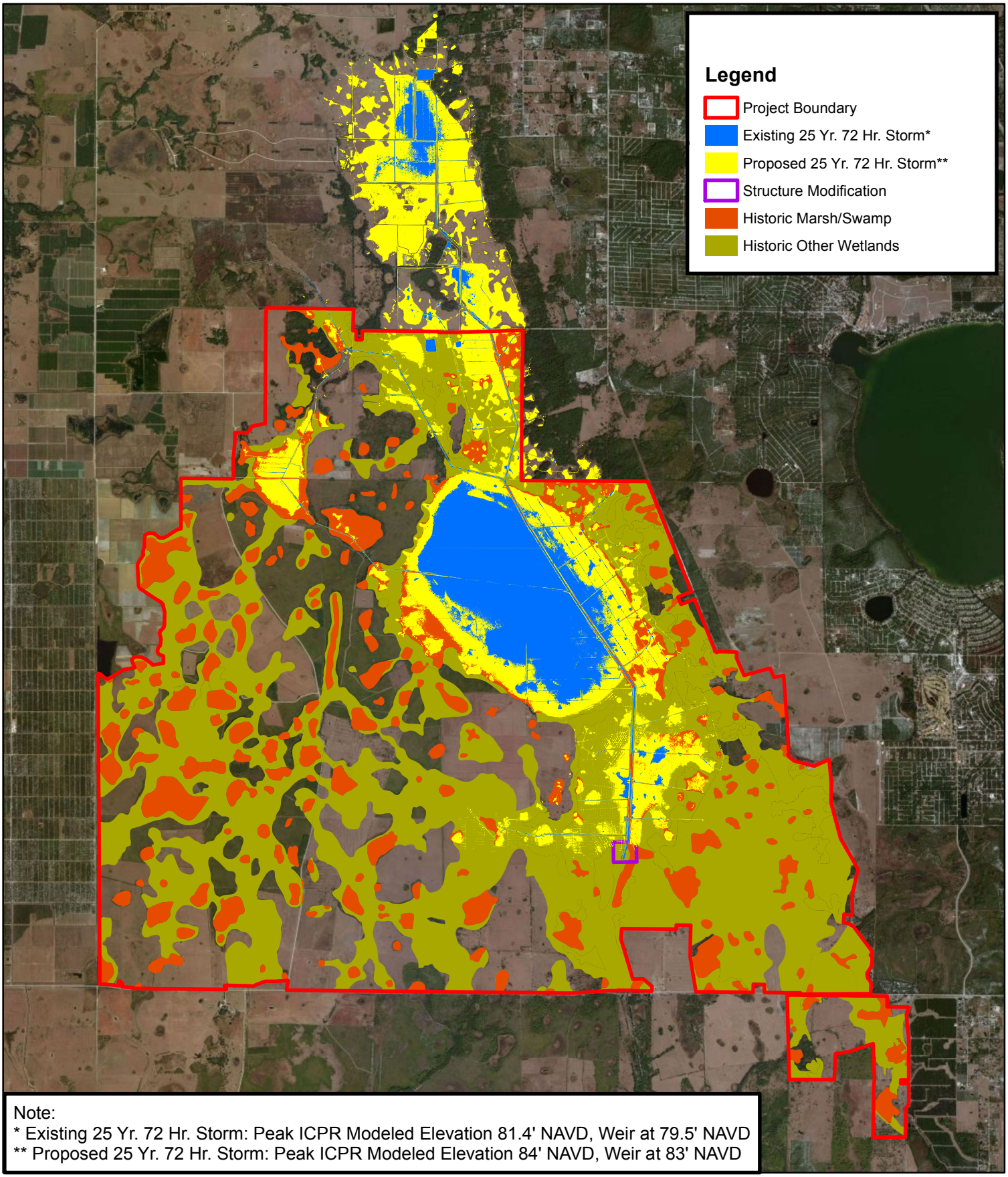
ALTERNATIVE 3

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
22c



Note:
* Existing 25 Yr. 72 Hr. Storm: Peak ICPR Modeled Elevation 81.4' NAVD, Weir at 79.5' NAVD
** Proposed 25 Yr. 72 Hr. Storm: Peak ICPR Modeled Elevation 84' NAVD, Weir at 83' NAVD

Source: ESRI 2010;NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

0 4,000 8,000 16,000 Feet

USDA NRCS - Fisheating Creek WRPO

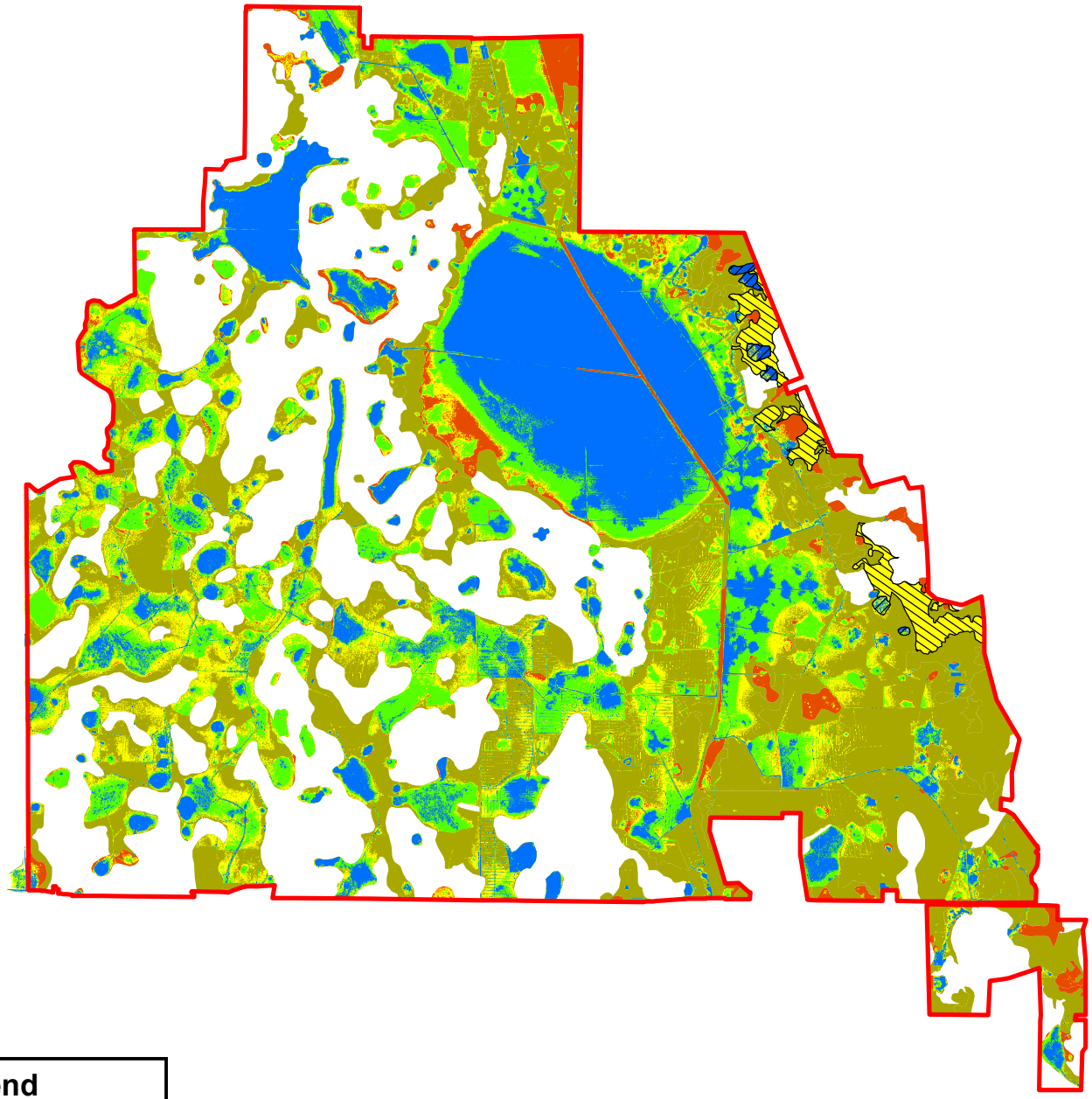
Alternative 1 Improved Hydrology-Weir at Elevation 83

Drawn	Date
DLA	07/31/2013
Checked	Date
TGD	

amec

Gainesville, FL
Project # 6063-11-0200

Figure 23



Legend

- Project Boundary
- Alt 2 Wet > 180 days/yr
- Alt 2 Wet > 20 days/yr
- Consistent with > 180 days/yr
- Consistent with > 20 days/yr
- Historic Marsh/Swamp (MP, SH)
- Historic Other Wetlands (CS, MF, WF, WH, WP)

Source: ESRI, 2010; NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

8,000 4,000 0 8,000 Feet

USDA NRCS - Fisheating Creek WRPO

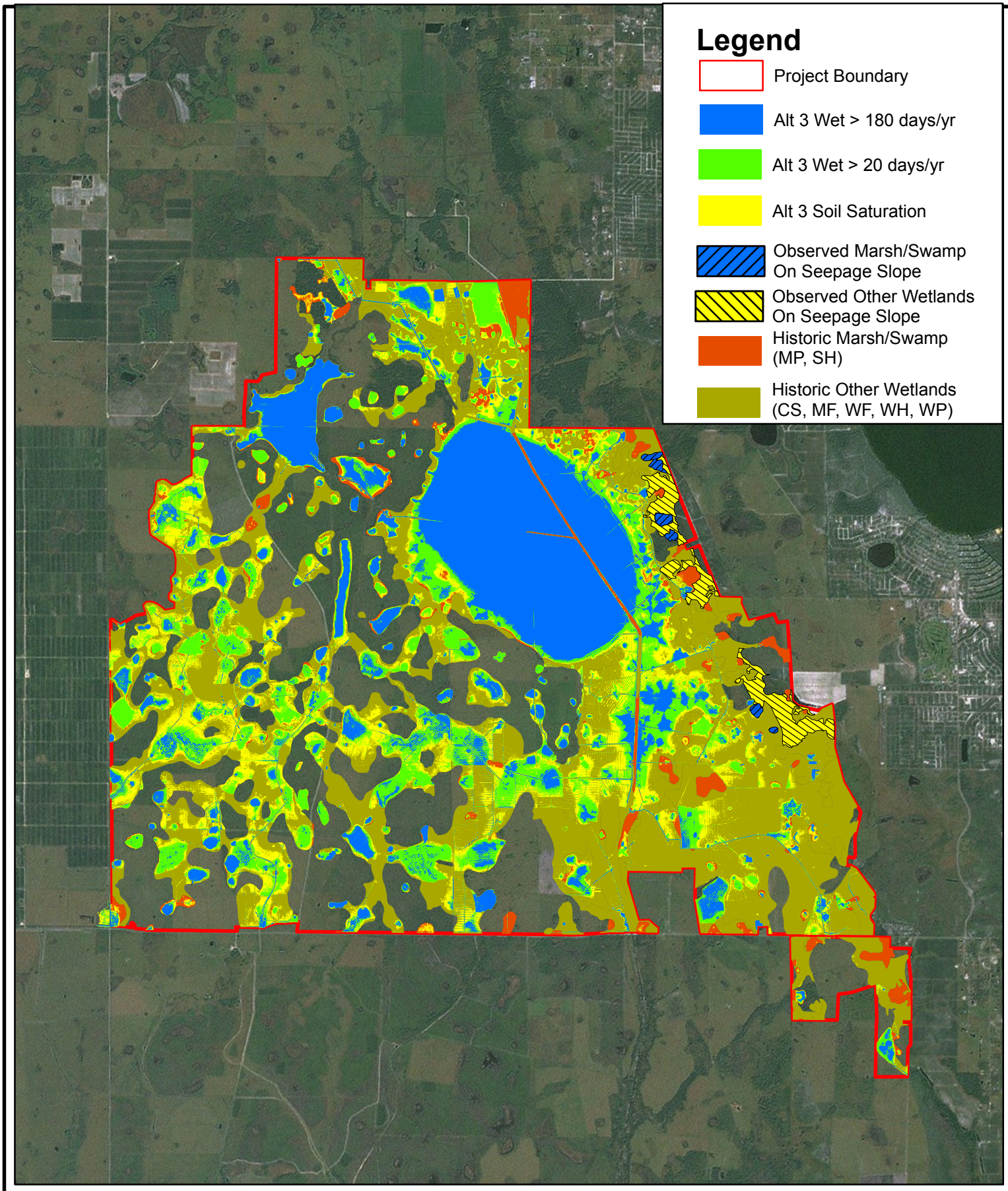
ALTERNATIVE 2 IMPROVED HYDROLOGY

Drawn	Date
DLA	04/01/2014
Checked	Date
TGD	04/01/2014

amec

Gainesville, FL
Project # 6063-11-0200

Figure 24



Source: SFWMD, 2004 (aerial); NRCS, 2010; AMEC, 2013

N

1 inch = 8,000 feet

0 2,000 4,000 8,000 Feet

USDA NRCS - Fisheating Creek WRPO

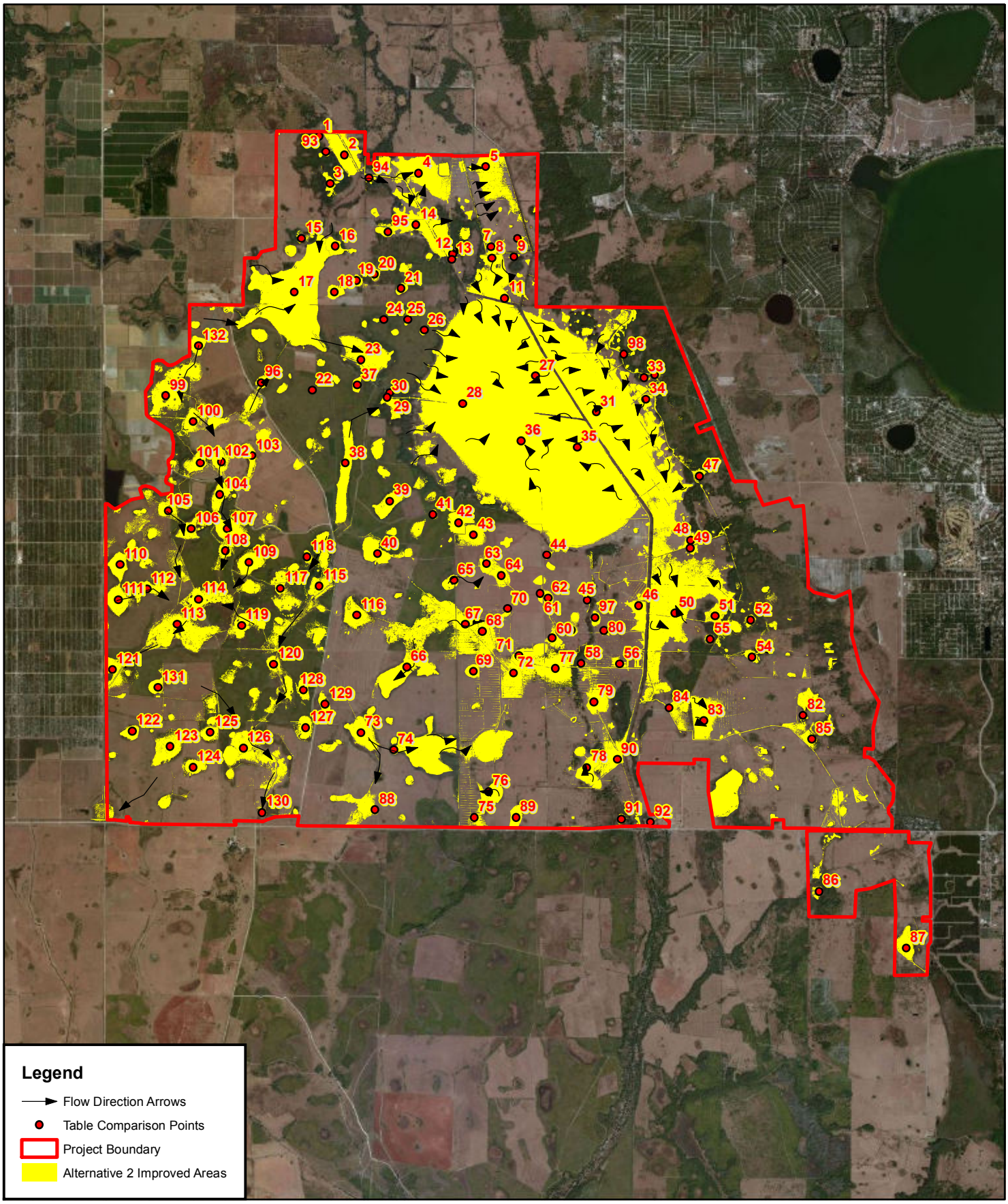
ALTERNATIVE 3 IMPROVED HYDROLOGY

Drawn	Date
DLA	01/15/2013
Checked	Date
TGD	01/15/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 25



Source: ESRI 2010 (aerial); NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

8,000 4,000 0 8,000 Feet

USDA NRCS - Fisheating Creek WRPO

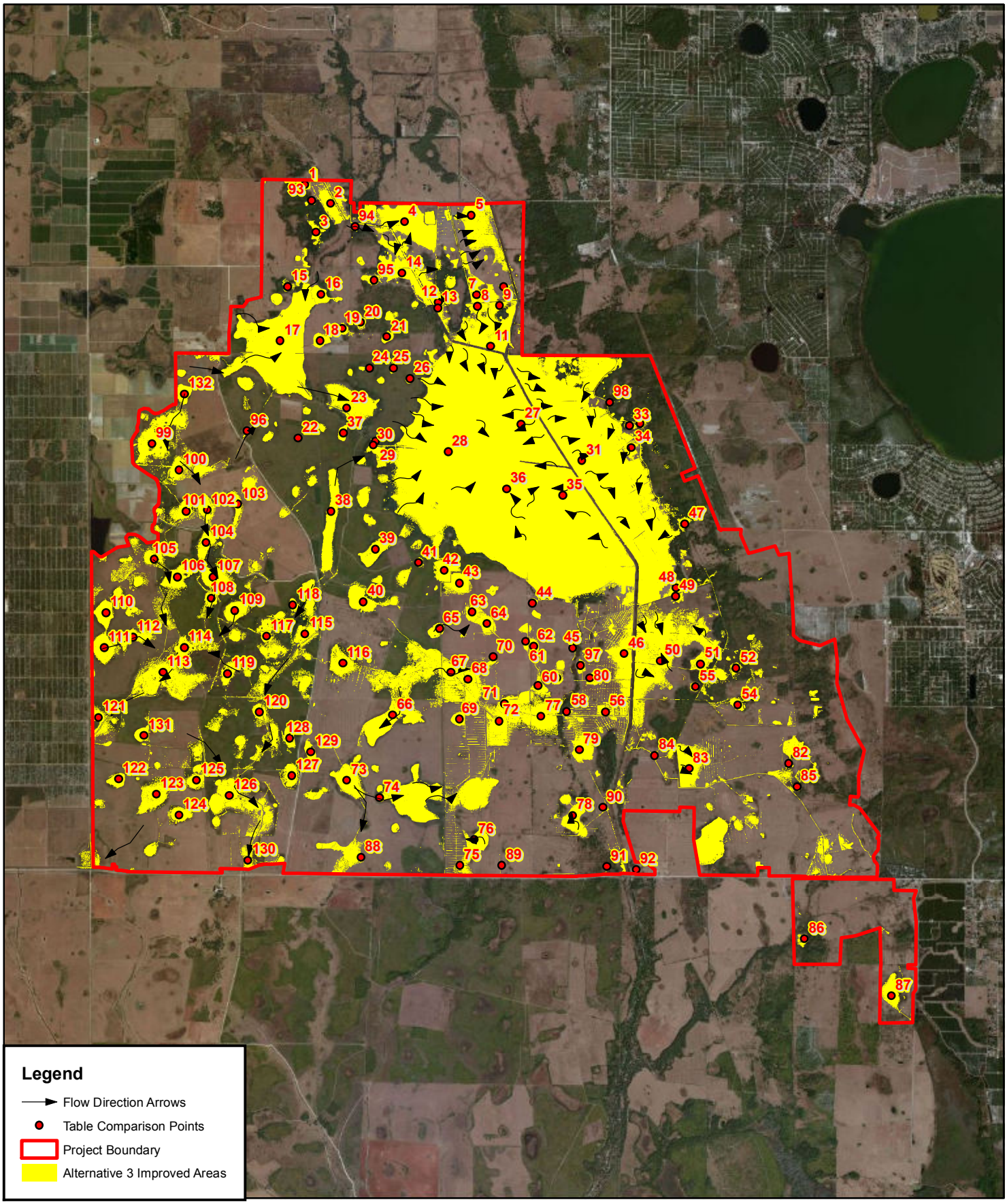
ALTERNATIVE 2 FLOW COMPARISON MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 26



Source: ESRI 2010 (aerial); NRCS, 2012; AMEC, 2013

1 inch = 8,000 feet

N

8,000 4,000 0 8,000 Feet

USDA NRCS - Fisheating Creek WRPO

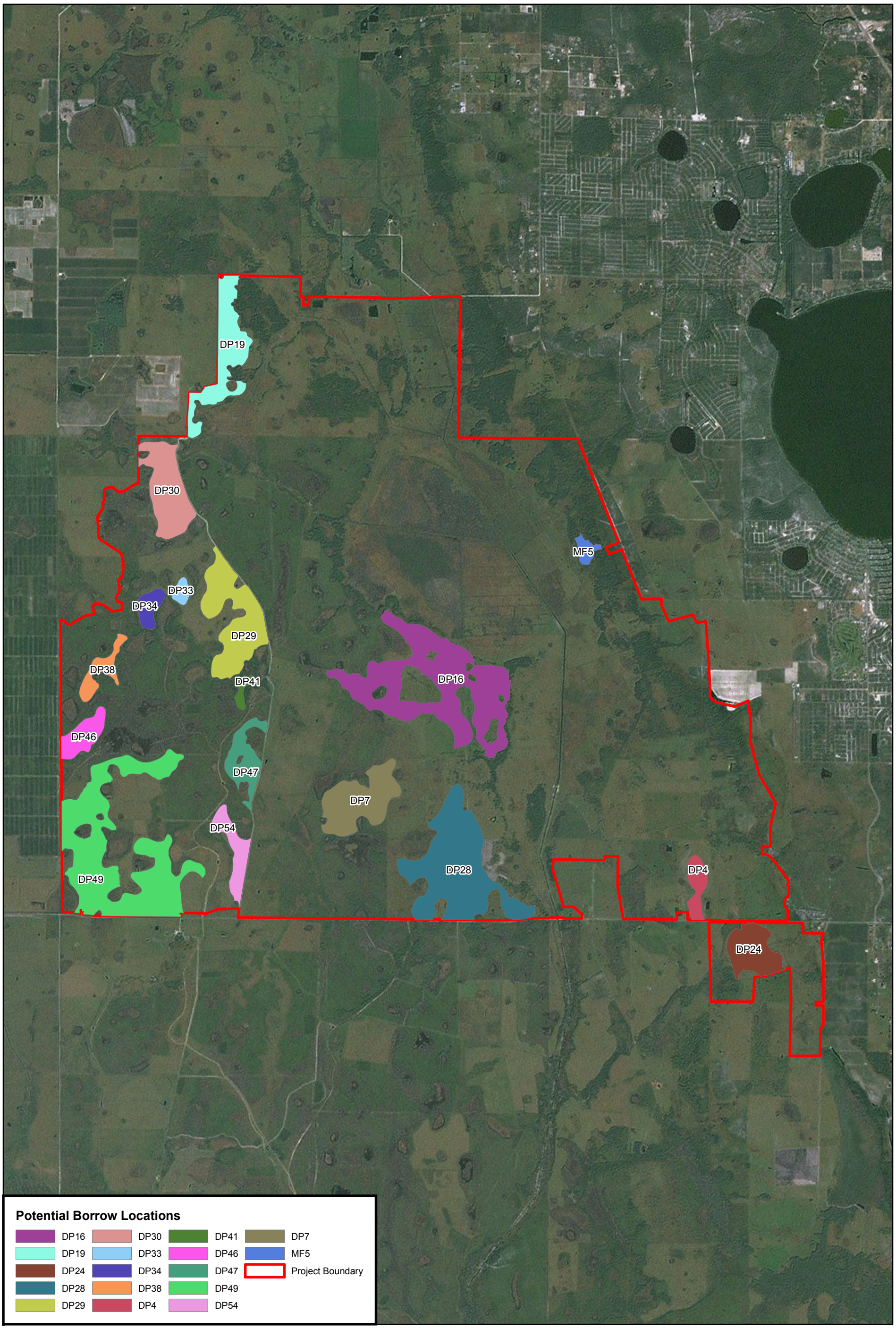
ALTERNATIVE 3 FLOW COMPARISON MAP

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

Gainesville, FL
Project # 6063-11-0200

Figure 27



Source: LABINS 2011, NRCS 2012, AMEC 2013

N

1 inch = 6,000 feet

0 6,000 12,000 Ft

POTENTIAL BORROW SOURCE LOCATIONS

Drawn	Date
DLA	04/09/2013
Checked	Date
TGD	04/09/2013

amec

USDA-NRCS
FISHEATING CREEK WRPO
6063110200

Figure
28