



SR 400 (I-4) Project Development and Environment (PD&E) Study  
FM No.: 432100-1-22-01

# Florida Scrub-Jay Survey Technical Memorandum

Segment 4: from east of SR  
15/600 (US 17/92) to ½ mile  
east of SR 472

Volusia County (79110)

July 2015



**BEYOND** the  
**ULTIMATE**

**Stantec**  
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Suite 248  
Lake Mary, FL 32746

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610 Crescent Executive Court  
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Lake Mary, FL 32746



# FLORIDA SCRUB-JAY SURVEY

## TECHNICAL MEMORANDUM

Date: July 2015

To: FDOT District 5 through HNTB Corporation

From: Stantec Consulting Services, Inc.

Subject: PD&E Study for Interstate 4 Beyond the Ultimate Segment 4: from east of SR 15/600 (US 17/92) to ½ mile east of SR 472

Re: Florida Scrub-Jay Survey

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### Project Description

The Florida Department of Transportation (FDOT) is proposing to reconstruct and widen I-4 as part of the I-4 Beyond the Ultimate (BtU) concept. This involves the build-out of I-4 to its ultimate condition through Central Florida, including segments in Polk, Osceola, Orange, Seminole, and Volusia Counties. The concept design under evaluation in this Project Development and Environment (PD&E) study proposes the addition of two (2) new express lanes in each direction giving it a total of ten (10) dedicated lanes.

Segment 4 of this study is from east of SR 15/600 (US 17/92) to ½ mile east of SR 472 and includes the interchanges at Dirksen Drive/DeBary Avenue, Saxon Boulevard, and SR 472 (Howland Boulevard) and provides for the required stormwater treatment with a number of potential pond sites and treatment swales along the corridor (see **Figure 1**). The typical section developed includes a 44-foot transit envelope and will be contained within the existing right-of-way in nearly all areas with the exception of the proposed interchange at Rhode Island Avenue and some of the proposed pond sites.

This project is currently undergoing an analysis of the effects of the proposed roadway improvements. As part of this evaluation, it was determined that the habitats within and adjacent to the corridor could potentially be occupied by the Florida scrub-jay (*Aphelocoma coerulescens*). As such, species-specific surveys were conducted in October 2014 and April 2015 to evaluate the corridor for occurrences of this species. The purpose of this technical memorandum is to summarize the results of this survey.

### Species Description

The Florida scrub-jay is listed as threatened by both the US Fish and Wildlife Service (USFWS) and Florida Fish and Wildlife Conservation Commission (FWC). This bird is similar to the common blue jay in size and shape, but with a pale blue crestless head, nape, wings, and tail. Sexes cannot be distinguished by plumage; however, immature birds have a dusty brown head and neck.

The scrub-jay is a habitat specialist, primarily inhabiting xeric oak scrub habitats. Other habitats utilized include sand pine scrub, xeric pines, and agricultural or residential lands where scrub oaks have been retained. Scrub-jays prefer areas with open sandy patches to cache large quantities of scrub oak acorns.

Nesting for this species occurs from late February through June. Nests typically have one to five eggs and incubate for 17 days. Scrub-jay young remain with the parents to help as part of a cooperative family group. Family groups use an average of 25 acres of habitat and aggressively defend their territory from other family groups.

### Background

The project corridor is within the USFWS Consultation Area for the scrub-jay. The Consultation Area for this species ranges from Collier and Palm Beach Counties in the south to Marion, Putnam and Flagler Counties in the north. The largest populations of this species are presently found in Brevard, Highlands and Marion Counties. Populations of scrub-jays were documented within remnant scrub communities in Deltona adjacent to the I-4 corridor during the FWC 1992-1993 statewide scrub-jay survey (see **Figure 2**). Additional data was also provided by the Volusia County Environmental Management Office, which tracks scrub-jay populations and has potential and occupied habitat data sets that were provided for this study (see **Figure 2A**).

A scrub-jay survey was conducted during the original PD&E Study (Final Environmental Impact Statement (FEIS) for I-4 from SR 528 Beachline Expressway to SR 472, completed in May 2000 with field work from 1996 – 1998) within this alignment corridor. Stations were sampled for the presence of scrub-jays at the Saxon Boulevard interchange, along both sides of the highway between Saxon Boulevard and SR 472, and at the interchange at SR 472. Scrub-jays were observed at fifteen of the call stations during the investigation.

Cursory surveys for scrub-jays were conducted for this project in September and October of 2013 (see **Figure 2B**) to evaluate the potential presence of this species. During these reviews, at least four scrub-jays were observed to respond to a call-back recording north of Saxon Boulevard adjacent to I-4 eastbound, and two more responded when the call was played in the northeast quadrant of the interchange at SR 472. Two scrub-jays were observed at Pond Site 409 A1/A2 as well. As suitable habitat still exists within the corridor, a formal scrub-jay survey was scheduled and conducted in the fall of 2014.

### Habitat Types

Prior to establishing scrub-jay call stations, the roadway corridor was field reviewed for scrub habitat, which included an evaluation of soil types, vegetative strata, and management activities. The most important aspect of the habitat assessment was the locations and type of scrub oak species within and adjacent to the corridor. Areas in or adjacent to the presence of scrub oak species were further assessed to ascertain the most suitable locations and offsets for call stations. **Figure 3** depicts the mapped habitat community types based on St. Johns River Water Management District (SJRMD) Land Use GIS Layers and field reviews.

The following habitat types were observed along the corridor to contain scrub oak species and therefore were included in the survey sample group. Habitat assessment data for each habitat type is included in **Appendix A**.

Improved Pastures (FLUCFCS 2110), Woodland Pastures (FLUCFCS 2130), Herbaceous Upland Non-Forest (FLUCFCS 3100)

These areas are non-forested areas that are, or were recently, pasture areas or areas that are mowed with no obvious intended use. The primary ground cover is bahia grass (*Paspalum notatum*). Portions of these areas were included in the survey because they either had minor amounts of scrub oak, bordered scrub habitat or were identified by Volusia County as scrub habitat.

Shrub and Brushland (FLUCFCS 3200), Mixed Non-forested Uplands (FLUCFCS 3300), Disturbed Land (FLUCFCS 7400)

These areas are non-forested areas that in their current condition are dominated by a prominent shrub layer. Along the I-4 corridor, these are areas that were clear-cut and are currently transitioning into forested areas. A primary component of the shrub layer is composed of immature pines and oaks. Portions of these areas were included in the survey because they either had minor amounts of scrub oak, bordered scrub habitat or were identified by Volusia County as scrub habitat.

Longleaf Pine-Xeric Oak (FLUCFCS 4120), Sand Pine (FLUCFCS 4130), Xeric Oak (FLUCFCS 4210)

These areas have a vegetative composition that includes sand pine (*Pinus clausa*), sand live oak (*Quercus geminata*), longleaf pine (*Pinus palustris*), myrtle oak (*Quercus myrtifolia*), and Chapman's oak (*Quercus chapmanii*) as a canopy component. Midstory and groundcover components within these communities also observed included rusty lyonia (*Lyonia ferruginea*), rosemary (*Ceratiola ericoides*), and gopher apple (*Licania michauxii*). Note that these communities were included in the survey but are primarily overgrown and fire suppressed and do not have the low growing scrub oak with sparse overstory that well-managed "classic" scrub habitat would exhibit.

Mixed Upland Hardwood/Conifers (FLUCFCS 4340)

These areas were primarily overgrown, fire suppressed, and dominated by laurel oak (*Quercus laurifolia*) and slash pine (*Pinus elliottii*) with a thick understory of saw palmetto (*Serenoa repens*), American beautyberry (*Callicarpa americana*), gallberry (*Ilex glabra*), and catbrier (*Smilax* spp.). These areas were included within the survey area based on the presence of sand live oak, myrtle oak, and Chapman's oak observed in the understory.

## Methods

Prior to the development, design and placement of the call stations, Stantec biologists consulted with Casey Lyon, FDOT District Five Environmental Permit Coordinator. With her assistance and input, the survey station placement and survey method was determined. Following the development of the survey, Stantec biologists solicited comments from Jane Monaghan of the USFWS (in October 2014). She confirmed that the call station placement and survey method were consistent and conforming to the standard survey protocol.

Based on the size of the vegetative stratum, a 200 meter grid was mapped through habitat that contained scrub species and additional areas adjacent to scrub habitat. A total of 101 stations were established along the entire roadway corridor. **Figure 4** depicts the locations of the call stations. The scrub-jay surveys were conducted in the fall (October) to take advantage of the territorial displays that are most frequent at this time of the year. Surveys were carried out by qualified biologists experienced in the surveying and behavior of this species.

Following design changes that occurred in November 2014, additional survey stations were set in areas that had not been included at the time of the October survey. Eighteen (18) additional stations were placed at four proposed pond sites along SR 472 / Howland Blvd. and Dr. Martin Luther King Blvd (**Sheets 4 and 7 of Figure 4**). Surveys at these stations were carried out in the manner previously described, and took place during the week of April 20, 2015.

## Survey Results

The scrub-jay calls were conducted on October 7-13, 19-22, 28, and 30 of 2014, and April 20 – 24, 2015. Scrub-jay territorial scolding was broadcasted at each approved call station for a minimum of one minute in all four cardinal directions. Broadcasts were halted once a scrub-jay was observed, in order to observe, count and record data for each group. Notes on scrub-jay behavior were collected on type of responses, number, and whether the specimens were juveniles or adults. Surveys were suspended in instances where predatory bird species such as hawks or eagles were observed in the region. Additionally, surveys were not conducted when winds exceeded 8 mph or if conditions were not conducive for observations such as rain or fog. Surveys began approximately 1 hour after sunrise and were stopped prior to the mid-day heat (~11:30 am).

All of the assigned survey stations were sampled for a minimum of five days. Several additional call stations and transects were established to aid in the development of territory boundaries outside of the project limits. Scrub-jay calls were played at each call station a minimum of 5 times between October 7 and October 28, 2014 (and at the additional stations in April 2015). At some call stations an additional biologist was utilized to simultaneously play calls at adjacent call stations/areas to establish and confirm territory boundaries within FDOT right-of-way. After the call station draft data was analyzed, an additional reconnaissance field event was conducted on October 30, 2014, playing calls outside of the territory boundaries to verify the data. **Appendix B** provides a summary table of the data collected for each of the call stations. **Figure 5** depicts the survey areas where scrub-jays intersected the existing or proposed FDOT right-of-way and pond sites.

Based on the results of the survey, scrub-jays were observed at 15 of the 119 stations. These scrub-jays comprise five (5) separate families of which four (4) intersect with the existing or proposed FDOT right-of-way (including pond sites). The remaining scrub-jays are either outside the right-of-way or were single incidental observations as discussed below:

*Family 1:* This family was observed from Stations G12-L and G14-A on two separate days. This family is comprised of two adults who likely utilize a portion of the clover-leaf at the Saxon Boulevard Interchange as part of their territory. **Figure 5, Sheet 1** depicts the flight path and the approximate 0.9 acres utilized by scrub-jays within the existing FDOT right-of-way.

On both observation days, this family was observed flying from the adjacent sand pine habitat to the east. Supplemental surveys around the Saxon Boulevard Interchange clover-leaf were conducted to determine whether these individuals were using any additional areas of the right-of-way; however, these birds did not return to the area. In addition, these birds did not respond to adjacent stations G12-K or G12-J.

*Family 2:* This family was observed from Stations G11-H and G11-J, as well as during supplemental surveys from additional stations around Pond Site 409 A1/A2 in order to determine the approximate territory size. **Figure 5, Sheet 2** depicts the flight path and supplemental call stations. This family is comprised of two adults that are utilizing approximately 1.3 acres within the FDOT right-of-way. This family was observed crossing over I-4 during one of the survey events. Families 2 and 3 were determined to be separate and have abutting territories. This determination is based on observations of each family alert to calls at stations G11-H and G11-H2 but on opposite sides of the associated Pond Site 409 A1/A2. The families were never observed together, and each family could not be called to defend the same location.

*Family 3:* This family was observed from Stations G11-H, G11-H2, G12-G, and G12-F. This family is comprised of three adults that are utilizing approximately 4.0 acres within the FDOT right-of-way. This family likely utilizes the side slopes of the Pond Site 409 A1/A2 for acorn cache. In addition, this family was also observed within the neighborhood along

Galveston Avenue. **Figure 5, Sheet 2** which depicts the flight path and supplemental call stations. This family was observed crossing over I-4 to respond to calls at stations G12-G and G12-F. Families 2 and 3 were determined to be separate and have abutting territories. This determination is based on observations of each family alert to calls at stations G11-H and G11-H2 but on opposite sides of the associated Pond Site 409 A1/A2. The families were never observed together, and neither individual family could be called to defend the same location.

*Family 4:* This family was observed from Stations G15-A, G15-B, G15-C, and G15-F adjacent to Howland Blvd. and E. Graves Avenue, east of I-4. The family is composed of two adults and one juvenile and appears to be utilizing approximately 2.3 acres of the pond site. **Figure 5, Sheet 4** depicts the observed flight path and dates. These birds appear to be using the fringe of this dry pond, primarily along the southern side of the pond, and did not respond to calls from the front (northern side) of the pond. The birds may also be utilizing a small patch of sand pine to the southeast of the pond site.

*Family 5:* This family was observed from Stations G3-L and G3-K along SR 472 east of I-4. This family is comprised of three adults. Please refer to **Figure 5, Sheet 4** which depicts the flight path and dates. This family is likely outside of the proposed improvements within the FDOT right-of-way associated with this project.

*Individual Observation 1:* A single adult scrub-jay was observed on two separate dates south of Station G1-F, within Pond 414. Please refer to **Figure 5, Sheet 5** which depicts the flight path and dates. Supplemental surveys in the area did not find this bird or additional birds. It is assumed that this bird does not consider Pond 414 a part of its territory.

*Individual Observation 2:* A single adult scrub-jay was observed south of Station G9-D. This bird was observed moving around the survey station investigating the auditory calls. Supplemental surveys in the area did not find this bird or additional birds. Please refer to **Figure 5, Sheet 3** which depicts the flight path and dates.

## SURVEY SUMMARY

Specific species surveys for the scrub-jay occurred during the months of October 2014 and April 2015. Based on the results of the survey, scrub-jays were observed at 15 of the 119 stations. These scrub-jays comprise five (5) separate families, of which four (Families 1, 2, 3, and 4) intersect the proposed or existing FDOT right-of-way (including pond sites), and three (Families 1, 2, and 3) of these families would be subject to impacts by the project (**Figure 6**). The other two families (Families 4 and 5) would not have impacts to their existing habitat as the project is currently designed. The potential impacts for the recommended alternative as proposed would be: Family 1 at the westbound off-ramp from I-4 to Saxon Blvd would have **0.90 acres** of occupied territory impacted, Family 2 along eastbound I-4 at Pond Site 409 A1/A2 would have **1.22 acres** of occupied territory impacted, and Family 3 along I-4 eastbound at Pond Site 409 A1/A2 would have **2.56 acres** of occupied territory impacted. Based upon the results of this survey, the project is anticipated to impact a total of **4.68 acres** of occupied Florida scrub-jay territory within the existing and/or proposed FDOT Right-of-Way and proposed recommended pond sites.

## **FIGURES**

**FIGURE 1**  
**PROJECT LOCATION MAP**





**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Ponds (11/18/14)

0 5,000 10,000  
Feet

20242301.68

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4 - Project Location Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 2015/01/22  
 Technical Review by: mDrauer 2015/01/22  
 Independent Review by: jMoore 2015/01/22

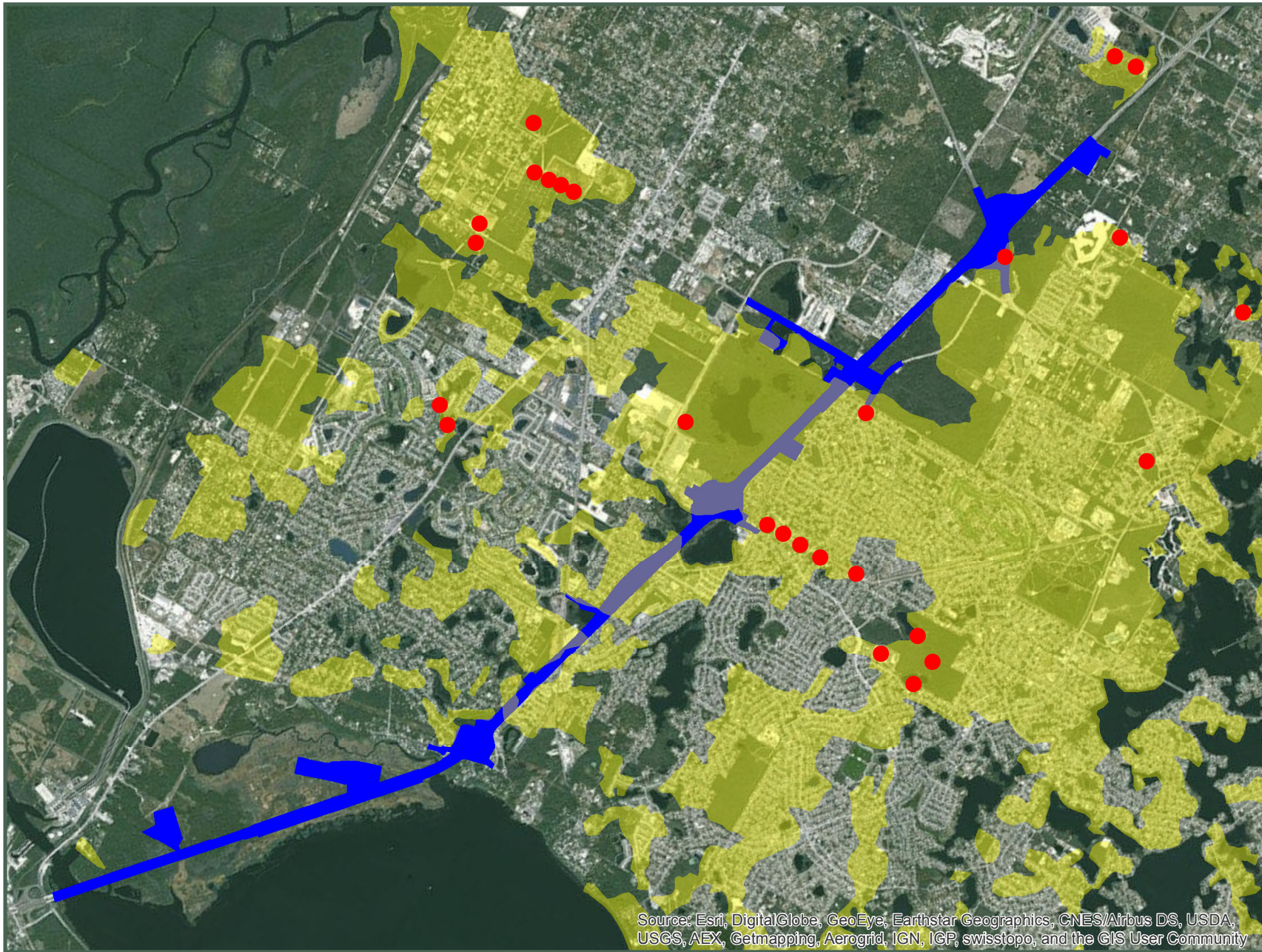
Figure 1 -Project Location Map

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



1" = 10,000'

**FIGURE 2**  
**FWC HISTORIC SCRUB-JAY OCCURRENCE AND HABITAT MAP**



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Florida Scrub-Jay Habitat (FWC) 1993
- Florida Scrub-Jay Occurrences (FWC 1992-1993)

**Data Notes:**  
 The 1992-1993 Scrub-Jay data was obtained from Florida Geographic Data Library (FGDL). The accuracy of the data has not been verified by Stantec. Stantec does not warrant the data and is intended to be used as a planning tool.

0      3,000      6,000  
 Feet


20242301.68

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: FWC Historic Scrub-Jay Occurrence/Habitat Map

**Client/Project:**  
 Florida Department of Transportation- D5 SR 400 (I-4) Beyond the Ultimate PD&E Study Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 [Begin] - MP 0.086  
 STA 3118+46.00 [End] - MP 10.227

Prepared by: mLeonard 6/3/2015  
 Technical Review by: mDrauer 6/3/2015  
 Independent Review by: mMoore 6/3/2015

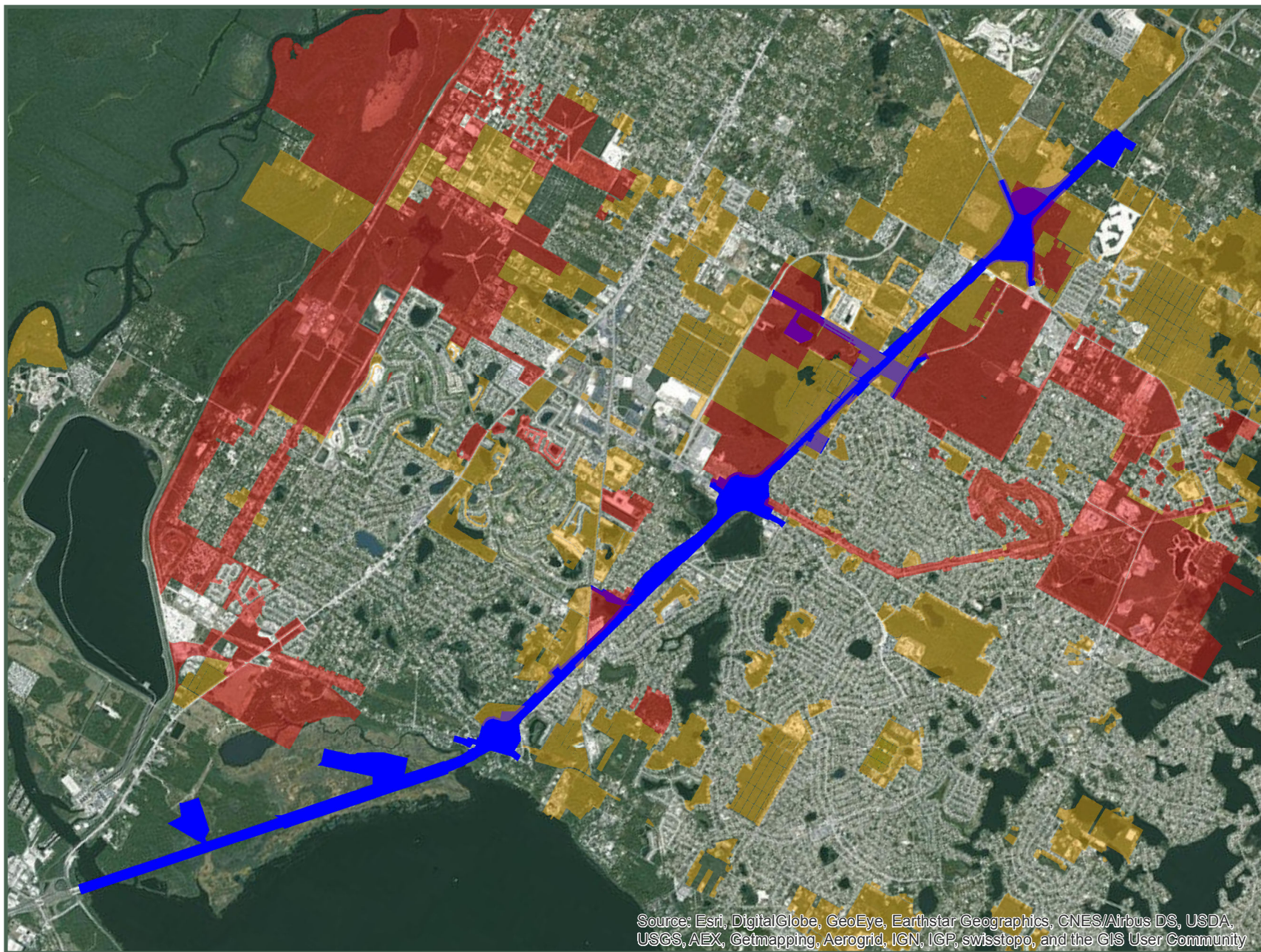


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

Figure 2 - FWC Historic Scrub-Jay Occurrence/Habitat Map

**FIGURE 2A**  
**VOLUSIA COUNTY 2012 SCRUB-JAY HABITAT MAP**



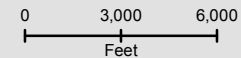
**Map Key**

SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way

**Volusia County Scrub-Jay Data (2012)**

- Natrual Community (Scrub Habitat)
- Occupied Territory (2012)

**Data Notes:**  
 The Volusia County Scrub-Jay data was provided by Volusia County. The accuracy of the data has not been verified by Stantec. Stantec does not warranty the data and is intended to be used as a planning tool.



20242301.68

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Volusia County Scrub-Jay Habitat Map- 2012

**Client/Project:**  
 Florida Department of Transportation- D5 SR 400 (I-4) Beyond the Ultimate PD&E Study Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 [Begin] - MP 0.086  
 STA 3118+46.00 [End] - MP 10.227

Prepared by: mLeonard 6/3/2015  
 Technical Review by: mDrewer 6/3/2015  
 Independent Review by: jMoore 6/3/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

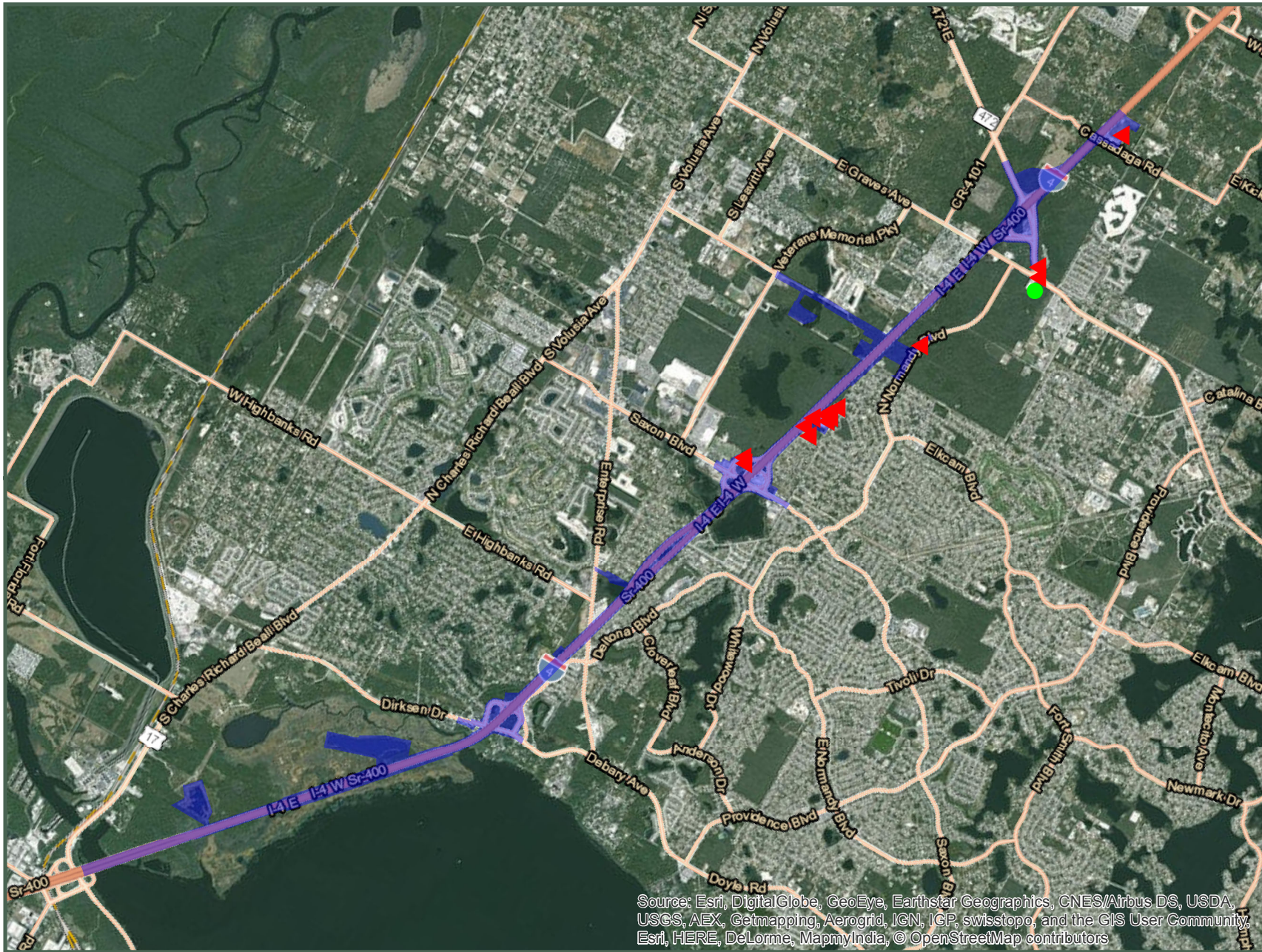
Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 2A - Volusia County Scrub-Jay Habitat Map-2012

1" = 6,000'

**FIGURE 2B**  
**SCRUB-JAY OCCURRENCE MAP**



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- ▲ Florida Scrub-Jay Observation (Stantec) 2013-2014
- Florida Scrub-Jay Observations (Stantec 2015)

0 3,000 6,000  
 Feet

20242301.68

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: 2013-2015 Scrub-Jay Occurrence Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mLeonard 6/4/2015  
 Technical Review by: mDrauer 6/4/2015  
 Independent Review by: jMoore 6/4/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 2B - 2013-2015 Scrub-Jay Occurrence Map

1" = 6,000'

**FIGURE 3**  
**LAND USE AND HABITAT MAP**



FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM: Segment 4 - Land Use and Habitat Map  
 SR 400 (I-4) from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472 - Volusia County (79110)



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Ponds (11/18/14)
- Additional Ponds (2015)
- Other Land Use and Habitats

**Potentially Utilized Natural Habitats**

- 3100: Herbaceous upland nonforested
- 3200: Shrub and brushland
- 4130: Sand pine
- 4340: Upland mixed coniferous/hardwood

0 400 800  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Land Use and Habitat Map

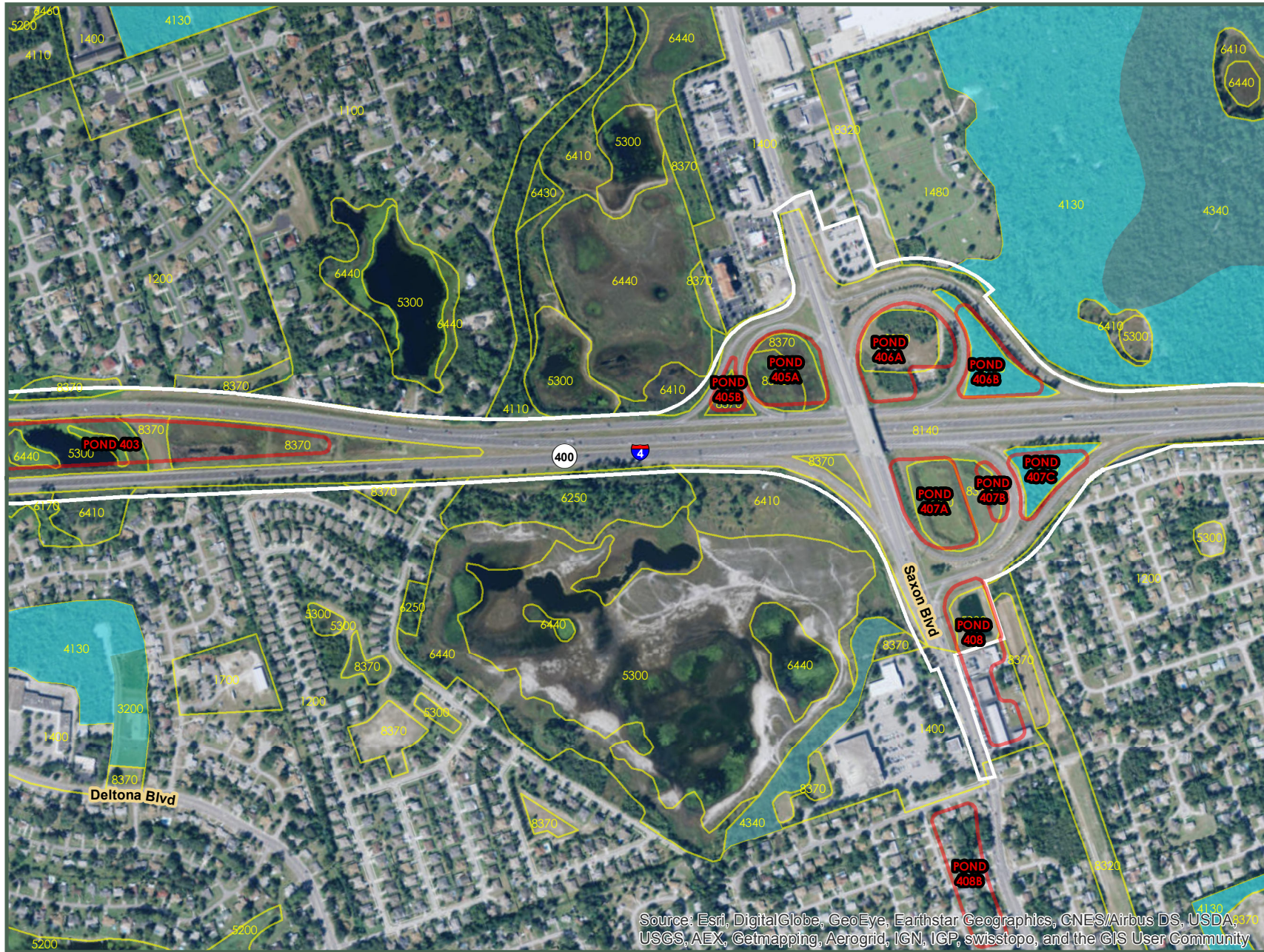
**Client/Project:**  
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 to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mleonard 2015/01/22  
 Technical Review by: mDrauer 2015/01/22  
 Independent Review by: jMoore 2015/01/22

Figure 3 : Sheet 1 of 7 - Land Use and Habitat Map

1" = 800'



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Ponds (11/18/14)
- Additional Ponds (2015)
- Other Land Use and Habitats

**Potentially Utilized Natural Habitats**

- 3200: Shrub and brushland
- 4130: Sand pine
- 4340: Upland mixed coniferous/hardwood

0 400 800  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Land Use and Habitat Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
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**Project Location:**  
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 STA 3118+46.00 (End) - MP 10.227

Prepared by: mleonard 2015/01/22  
 Technical Review by: mDrauer 2015/01/22  
 Independent Review by: jMoore 2015/01/22

Figure 3 : Sheet 2 of 7 - Land Use and Habitat Map

1" = 800'

FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM: Segment 4 - Land Use and Habitat Map

SR 400 (I-4) from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472 - Volusia County (79110)



### Map Key

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Ponds (11/18/14)
- Additional Ponds (2015)
- Other Land Use and Habitats

### Potentially Utilized Natural Habitats

- 3200: Shrub and brushland
- 3300: Mixed upland nonforested
- 4130: Sand pine
- 4340: Upland mixed coniferous/hardwood

0 400 800  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
**FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:**  
**Segment 4: Land Use and Habitat Map**

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
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**Project Location:**  
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Prepared by: mleonard 2015/01/22  
 Technical Review by: mDrauer 2015/01/22  
 Independent Review by: jMoore 2015/01/22

Figure 3 : Sheet 3 of 7 - Land Use and Habitat Map

1" = 800'



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Ponds (11/18/14)
- Additional Ponds (2015)
- Other Land Use and Habitats

**Potentially Utilized Natural Habitats**

- 3300: Mixed upland nonforested
- 4120: Longleaf pine-xeric oak
- 4130: Sand pine
- 4340: Upland mixed coniferous/hardwood
- 7400: Disturbed land

0 400 800  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Land Use and Habitat Map

**Client/Project:**  
 Florida Department of Transportation- D5  
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Prepared by: mleonard 2015/01/22  
 Technical Review by: mDrauer 2015/01/22  
 Independent Review by: jMoore 2015/01/22

Figure 3 : Sheet 4 of 7 - Land Use and Habitat Map

1" = 800'

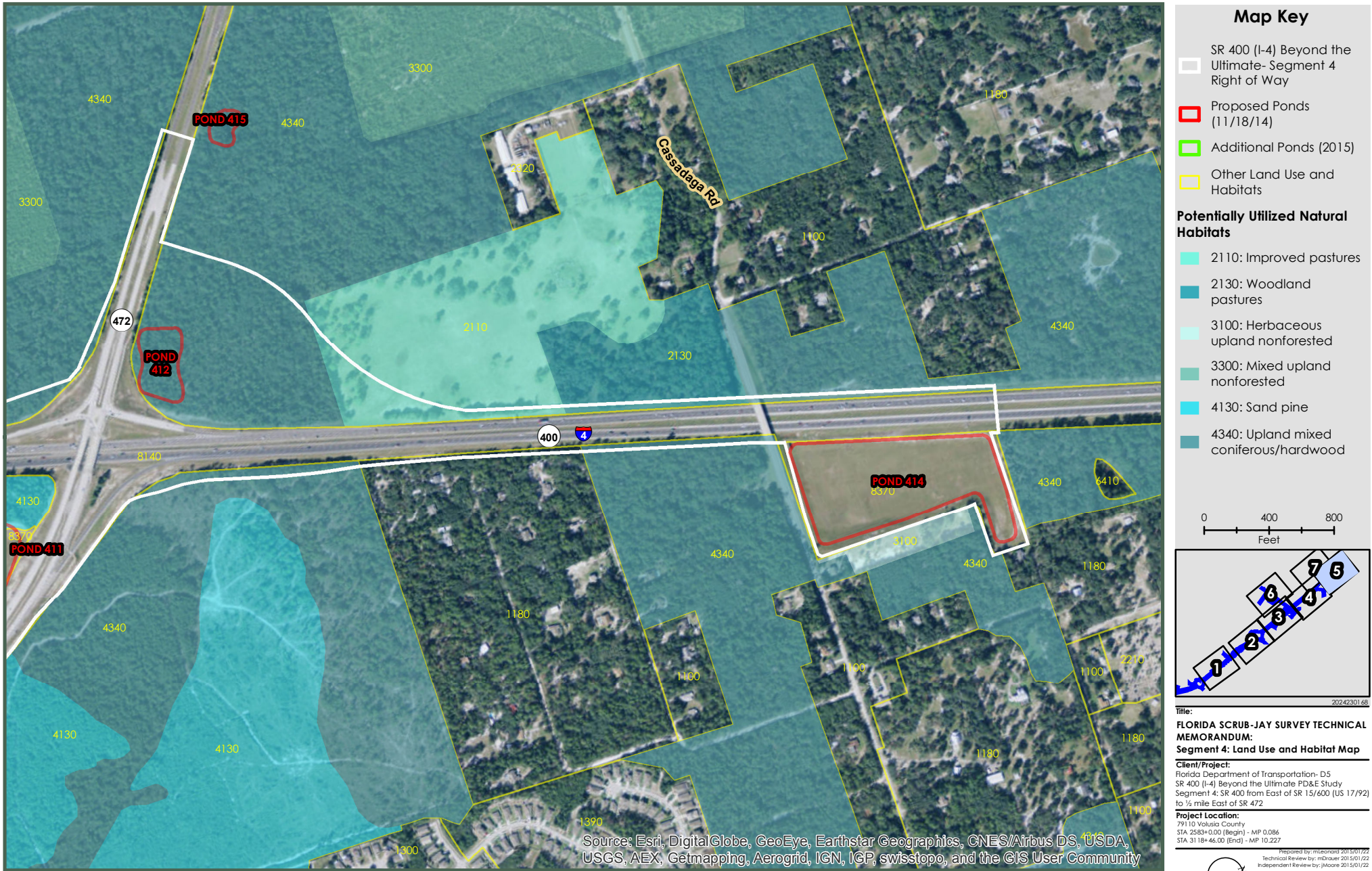


Figure 3 : Sheet 5 of 7 - Land Use and Habitat Map

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

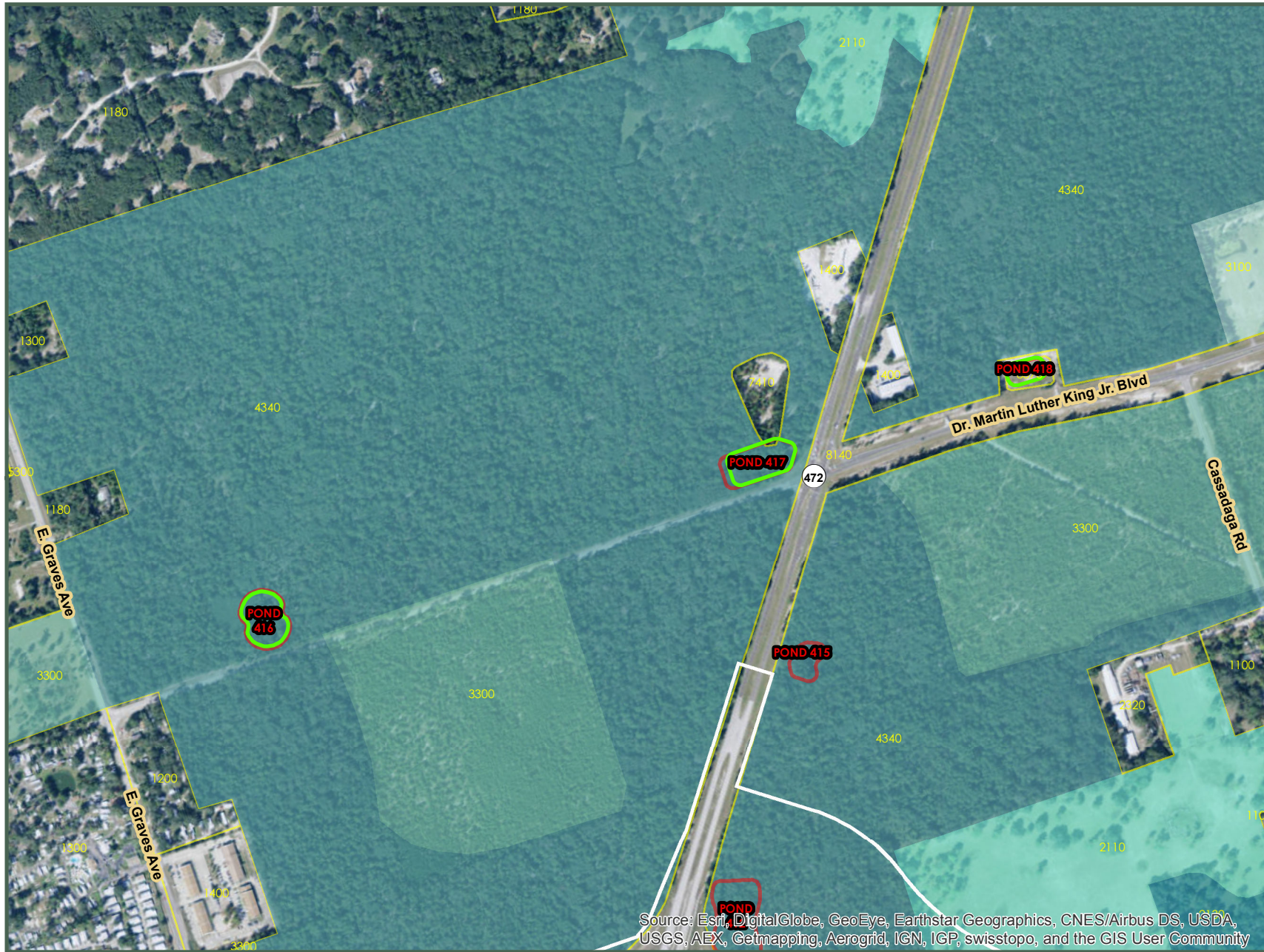


1" = 800'



Figure 3 : Sheet 6 of 7 - Land Use and Habitat Map

1" = 800'



### Map Key

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Ponds (11/18/14)
- Additional Ponds (2015)
- Other Land Use and Habitats

### Potentially Utilized Natural Habitats

- 2110: Improved pastures
- 2130: Woodland pastures
- 3100: Herbaceous upland nonforested
- 3300: Mixed upland nonforested
- 4340: Upland mixed coniferous/hardwood

0 400 800  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Land Use and Habitat Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mMoore 2015/01/22  
 Technical Review by: mMoore 2015/01/22  
 Independent Review by: mMoore 2015/01/22

Figure 3 : Sheet 7 of 7 - Land Use and Habitat Map

1" = 800'

**FIGURE 4**  
**SCRUB-JAY CALL STATION MAP**



FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM: Segment 4 - Scrub-Jay Call Station Map  
 SR 400 (I-4 )from East of SR 15/600 (US 17/92) to ½ mile East of SR 472 - Volusia County (79110)

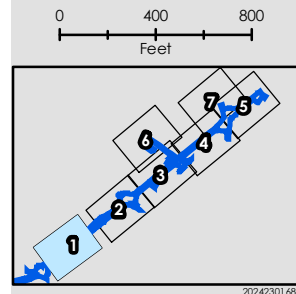


**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Pond Sites (11/18/14)
- Additional Ponds (2015)

**Call Stations**

- Scrub-jay Call Stations 2014
- Scrub-jay Call Stations 2015



**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Scrub-Jay Call Station Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: jmoore 6/3/2015  
 Technical Review by: jmoore 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 4: Sheet 1 of 7 - Scrub-Jay Call Station Map

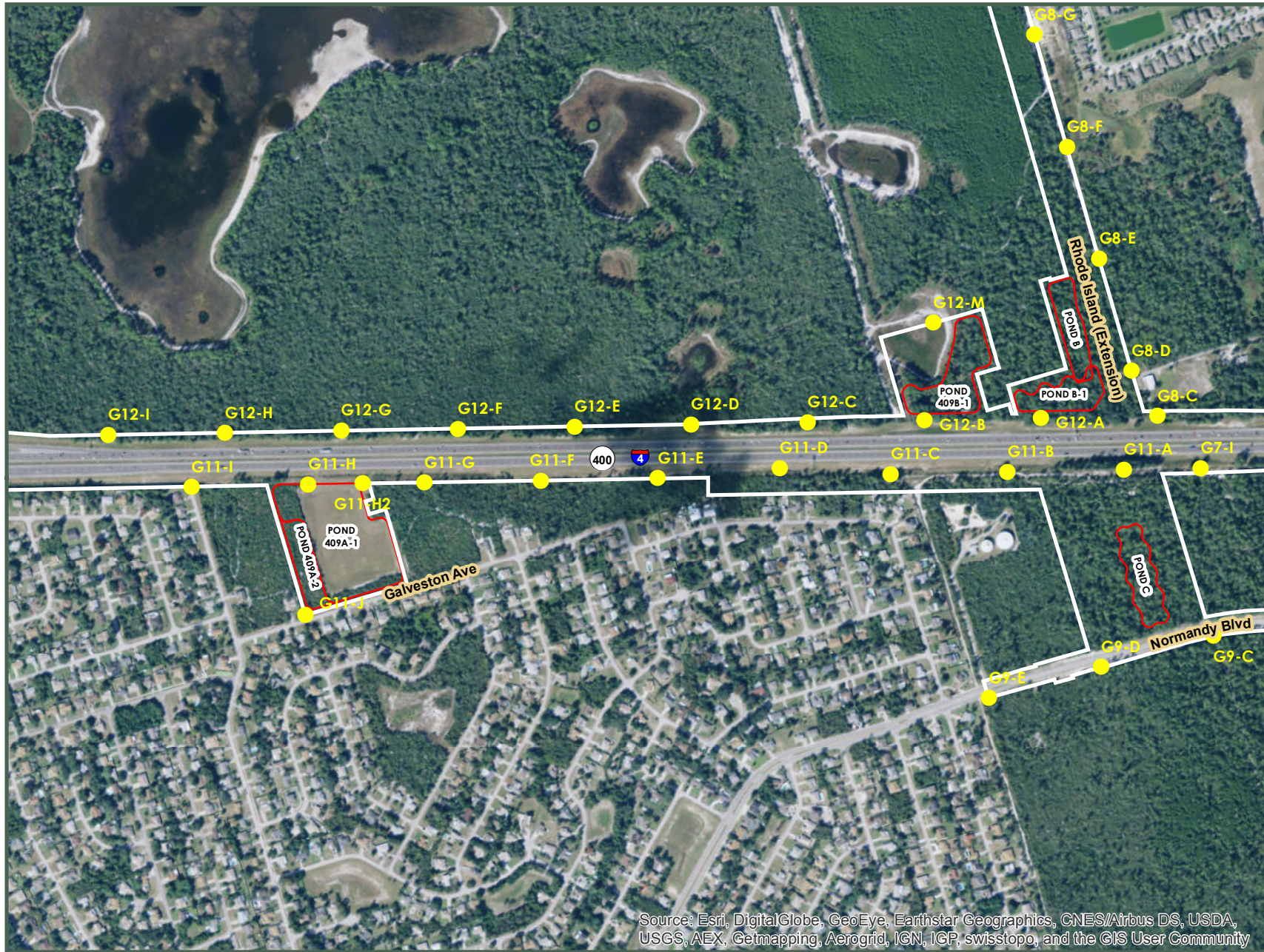
1" = 800'

FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM: Segment 4 - Scrub-Jay Call Station Map  
 SR 400 (I-4) from East of SR 15/600 (US 17/92) to ½ mile East of SR 472 - Volusia County (79110)



Figure 4: Sheet 2 of 7 - Scrub-Jay Call Station Map

1" = 800'



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Pond Sites (11/18/14)
- Additional Ponds (2015)

**Call Stations**

- Scrub-jay Call Stations 2014
- Scrub-jay Call Stations 2015

0 400 800  
Feet

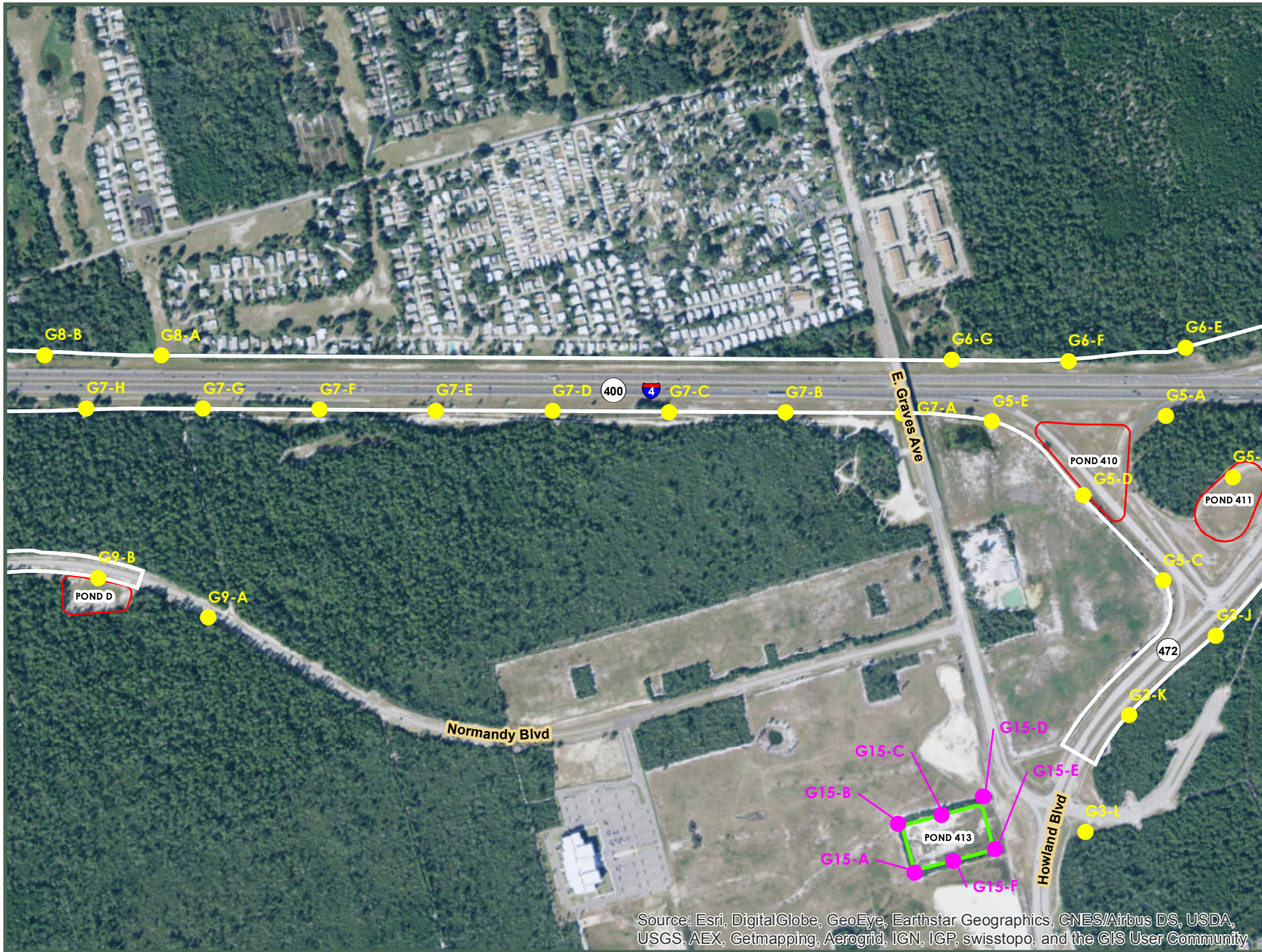
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 4: Sheet 3 of 7 - Scrub-Jay Call Station Map

1" = 800'



### Map Key

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Pond Sites (11/18/14)
- Additional Ponds (2015)

### Call Stations

- Scrub-jay Call Stations 2014
- Scrub-jay Call Stations 2015

0 400 800  
Feet

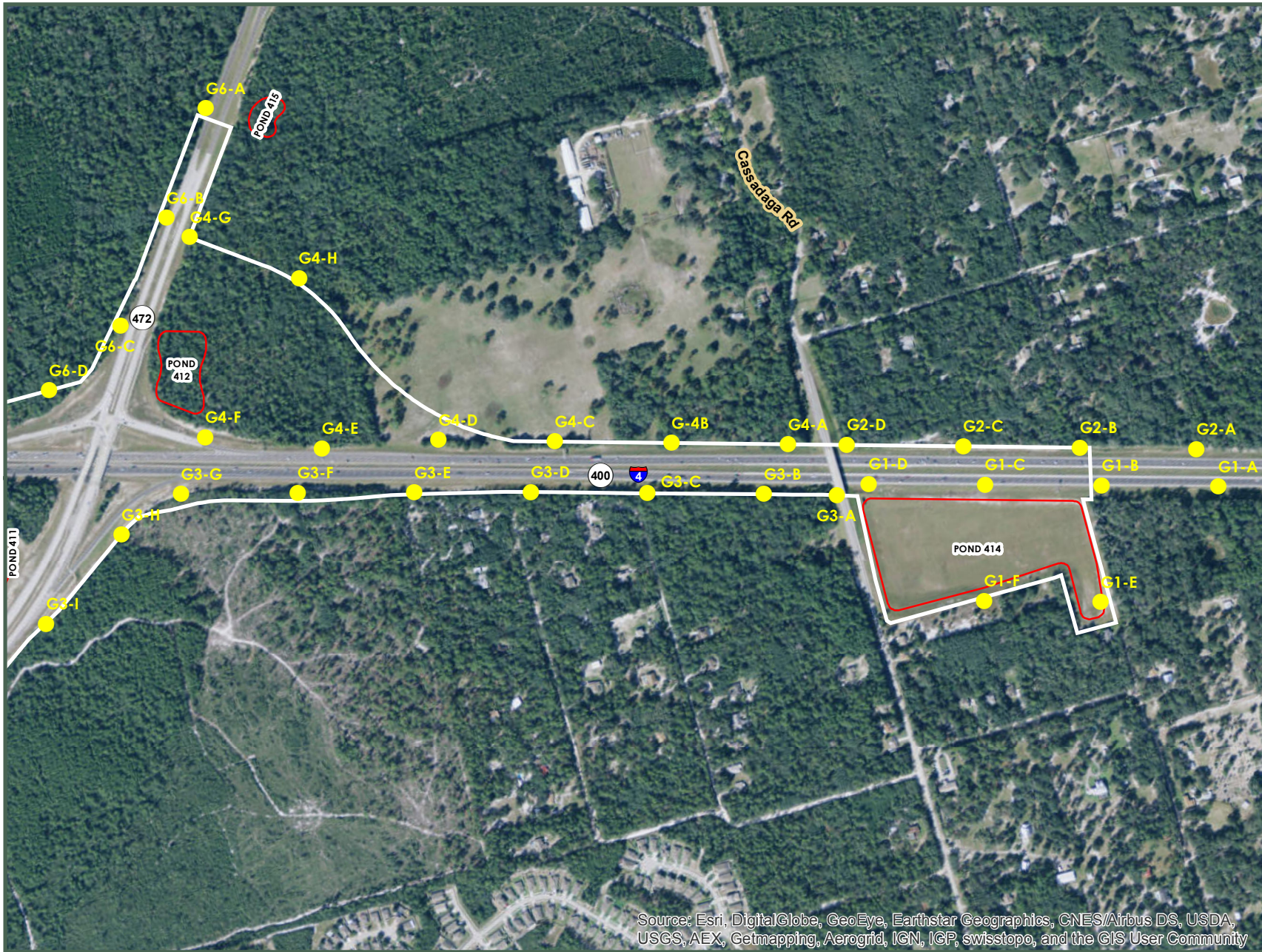
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 4: Sheet 4 of 7 - Scrub-Jay Call Station Map

1" = 800'

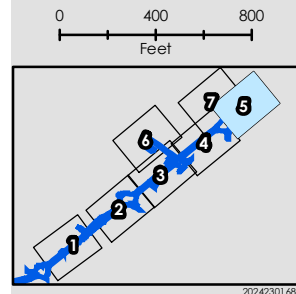


**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Pond Sites (11/18/14)
- Additional Ponds (2015)

**Call Stations**

- Scrub-jay Call Stations 2014
- Scrub-jay Call Stations 2015



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Scrub-Jay Call Station Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mmoore 6/3/2015  
 Technical Review by: mmoore 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Figure 4: Sheet 5 of 7 - Scrub-Jay Call Station Map

1" = 800'



**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Pond Sites (11/18/14)
- Additional Ponds (2015)

**Call Stations**

- Scrub-jay Call Stations 2014
- Scrub-jay Call Stations 2015

0 400 800  
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Scrub-Jay Call Station Map

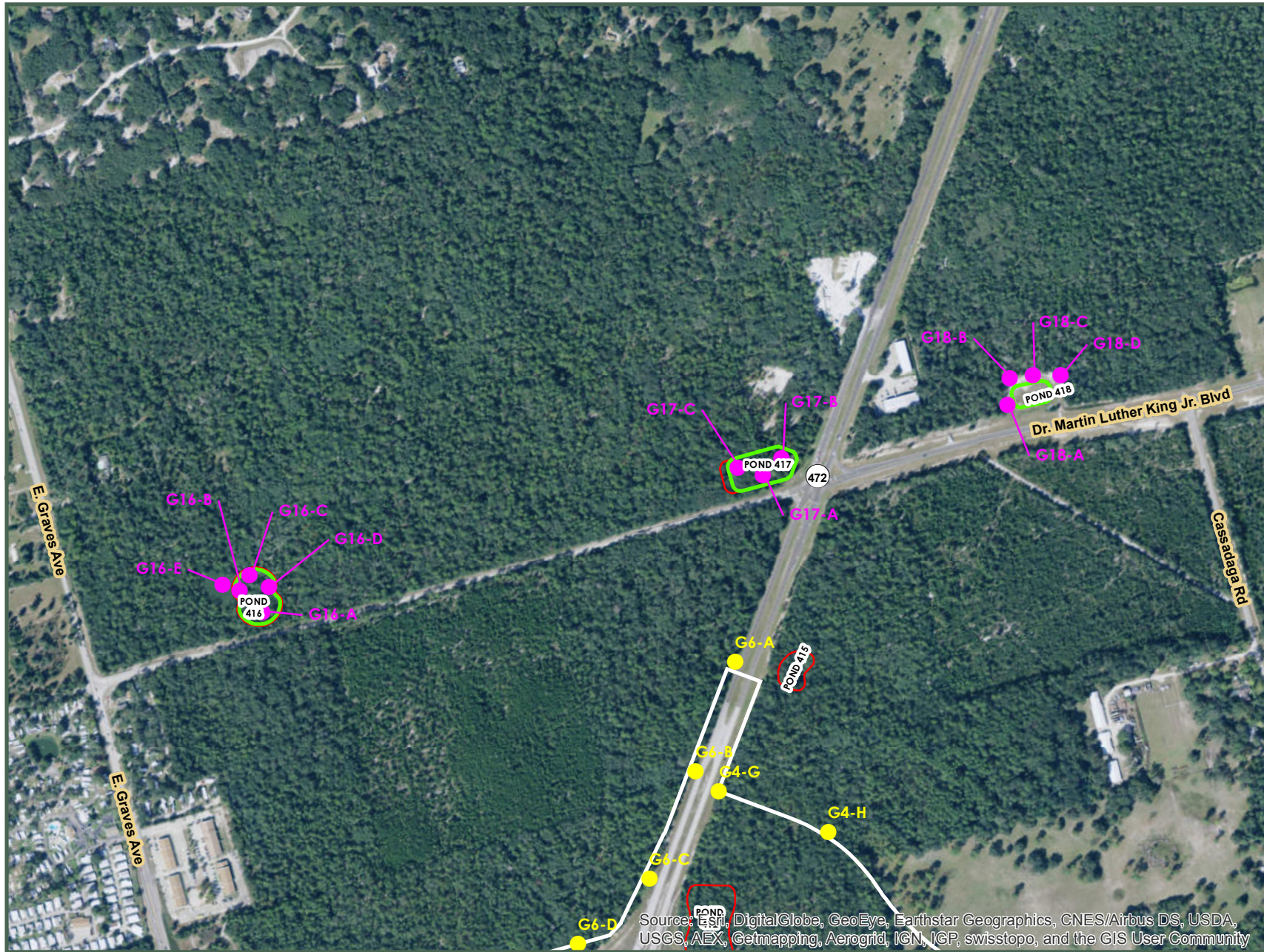
**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mmoore 6/3/2015  
 Technical Review by: mmoore 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Figure 4: Sheet 6 of 7 - Scrub-Jay Call Station Map

1" = 800'

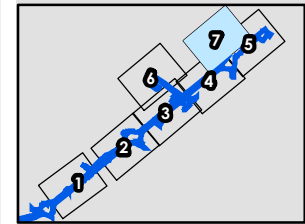
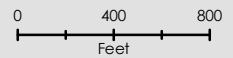


### Map Key

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Proposed Pond Sites (11/18/14)
- Additional Ponds (2015)

### Call Stations

- Scrub-jay Call Stations 2014
- Scrub-jay Call Stations 2015



**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Scrub-Jay Call Station Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: jmoore 6/3/2015  
 Technical Review by: jmoore 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 4: Sheet 7 of 7 - Scrub-Jay Call Station Map

1" = 800'

**FIGURE 5**  
**SCRUB-JAY RIGHT-OF-WAY UTILIZATION AND FLIGHT MAP**





### Map Key

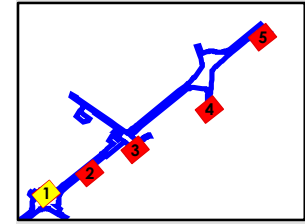
- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Scrub-Jay Call Stations (2014)
- Supplemental Call Stations (2014)
- Proposed Ponds (11/18/14)

#### Utilized R/W (2014)

- Family 1 (0.9 ac)

#### Flight Patterns

- 10/9/2014
- 10/20/2014



**Title:** FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
**Segment 4: Scrub-Jay R/W Utilization and Flight Map**

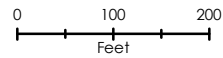
**Client/Project:** Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mleonard 6/3/2015  
 Technical Review by: jmoore 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Figure 5: Sheet 1 of 5 - Scrub-Jay R/W Utilization & Flight Map

1" = 200'



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet





### Map Key

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Scrub-Jay Call Stations (2014)
- Supplemental Call Stations (2014)
- Proposed Ponds (11/18/14)

### Utilized R/W (2014)

- Family 2 (1.3 ac)
- Family 3 (4.0 ac)

### Flight Patterns

- 10/8/2014
- 10/13/2014
- 10/14/2013
- 10/20/2014
- 10/22/2014
- 10/30/2014

**Title:** FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
**Segment 4: Scrub-Jay R/W Utilization and Flight Map**

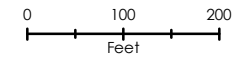
**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mbehrand 6/3/2015  
 Technical Review by: mdrauer 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Figure 5: Sheet 2 of 5 - Scrub-Jay R/W Utilization & Flight Map

1" = 200'



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



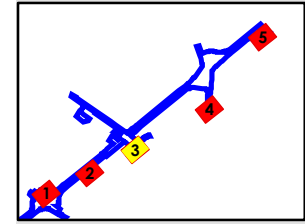


**Map Key**

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Scrub-Jay Call Stations (2014)
- Proposed Ponds (11/18/14)

**Flight Patterns**

- 10/8/2014



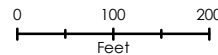
**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Scrub-Jay R/W Utilization and Flight Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mleonard 6/3/2015  
 Technical Review by: mdrauer 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 5: Sheet 3 of 5 - Scrub-Jay R/W Utilization & Flight Map

1" = 200'



### Map Key

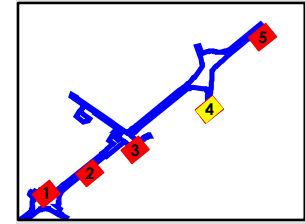
- SR 400 (I-4) Beyond the Ultimate-Segment 4 Right of Way
- Scrub-Jay Call Stations (2014)
- Proposed Ponds (11/18/14)
- Additional Ponds (2015)

**Utilized R/W (2014)**

- Family 4 (2.3 ac)

**Flight Patterns**

- 4/21/2015
- 4/23/2015
- 4/24/2015
- 4/20/2015
- 11/24/2014
- 10/8/2014
- 10/14/2013



**Title:** FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
**Segment 4: Scrub-Jay R/W Utilization and Flight Map**

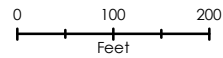
**Client/Project:** Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 5: Sheet 4 of 5 - Scrub-Jay R/W Utilization & Flight Map



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

1" = 200'

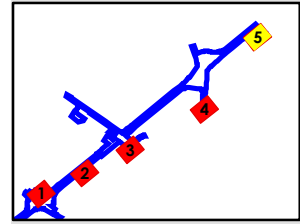


### Map Key

- SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way
- Scrub-Jay Call Stations (2014)
- Supplemental Call Stations (2014)
- Proposed Ponds (11/18/14)

### Flight Patterns

- 10/8/2014
- 10/9/2014



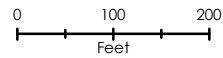
**Title:** FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
**Segment 4: Scrub-Jay R/W Utilization and Flight Map**

**Client/Project:** Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mleonard 6/3/2015  
 Technical Review by: mdrauer 6/3/2015  
 Independent Review by: jmoore 6/3/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 5: Sheet 5 of 5 - Scrub-Jay R/W Utilization & Flight Map

1" = 200'

**FIGURE 6**  
**SCRUB-JAY HABITAT IMPACT MAP**

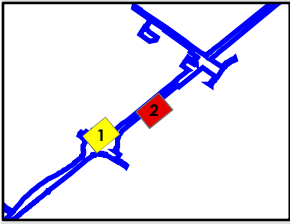


**Map Key**

SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way

**Habitat Impacts**

Family 1 Pond 406B & R/W



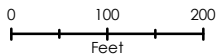
**Title:**  
 FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:  
 Segment 4: Scrub-Jay Habitat Impact Map

**Client/Project:**  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to ½ mile East of SR 472

**Project Location:**  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mlschwarz 7/6/2015  
 Technical Review by: mdrauer 7/6/2015  
 Independent Review by: jmoore 7/6/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



Figure 6: Sheet 1 of 4 - Scrub-Jay Habitat Impact Map

1" = 200'



### Map Key

SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way

### Habitat Impacts

- Family 2 Pond 409A1
- Family 3 Pond 409A1

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

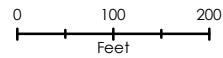
Title:  
**FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM: Segment 4: Scrub-Jay Habitat Impact Map**

Client/Project:  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

Project Location:  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mleonard 1/1/2015  
 Technical Review by: jmoore 7/7/2015  
 Independent Review by: jmoore 7/7/2015

Figure 6: Sheet 2 of 4 - Scrub-Jay Habitat Impact Map



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



1" = 200'



FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM: Segment 4 - Scrub-Jay Habitat Impact Map  
 SR 400 (I-4) from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472 - Volusia County (79110)



**Map Key**

SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way

**Habitat Impacts**

- Family 2 Pond 409A2
- Family 3 Pond 409A2

2024230168

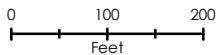
Title:  
**FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:**  
**Segment 4: Scrub-Jay Habitat Impact Map**

Client/Project:  
 Florida Department of Transportation- D5  
 SR 400 (I-4) Beyond the Ultimate PD&E Study  
 Segment 4: SR 400 from East of SR 15/600 (US 17/92) to 1/2 mile East of SR 472

Project Location:  
 79110 Volusia County  
 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: jmoore 7/6/2015  
 Technical Review by: jmoore 7/6/2015  
 Independent Review by: jmoore 7/6/2015

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet

Figure 6: Sheet 3 of 4 - Scrub-Jay Habitat Impact Map

1" = 200'



### Map Key

SR 400 (I-4) Beyond the Ultimate- Segment 4 Right of Way

### Habitat Impacts

- Family 2 R/W Impacts
- Family 3 R/w Impacts

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

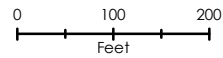
Title:  
**FLORIDA SCRUB-JAY SURVEY TECHNICAL MEMORANDUM:**  
**Segment 4: Scrub-Jay Habitat Impact Map**

Client/Project:  
 Florida Department of Transportation- D5  
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Project Location:  
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 STA 2583+0.00 (Begin) - MP 0.086  
 STA 3118+46.00 (End) - MP 10.227

Prepared by: mmoore 7/6/2015  
 Technical Review by: mdrayer 7/6/2015  
 Independent Review by: jmoore 7/6/2015

Figure 6: Sheet 4 of 4 - Scrub-Jay Habitat Impact Map



Coordinate System: NAD 1983 StatePlane Florida East FIPS 0901 Feet



1" = 200'

**APPENDIX A**  
**SCRUB-JAY HABITAT ASSESSMENT DATA**

Habitat Assessment Data

October 2014 / April 2015 Scrub Jay Survey Results  
 I-4 Beyond the Ultimate Segment 4  
 FPID # 432100-1-22-01

| Call Station Number   | Reviewer                 | Location | FLUCFCS Code  | Habitat Description  | Canopy (include % Scrub Oak)   | Shrub (% Scrub Oak:)  | Herbaceous  |
|---|--------------------------|----------|---|--|--|---|---|
| G4-A, G4-B, G4-C, G4-D, G1-E, G1-D, G1- C,  | CC, KM, MLD, MRD, MH, ML | Volusia  | 2110: Improved Pasture; 2130: WoodlandPasture; 3100: Herbaceous Upland Non-Forested | Upland pasture - cattle grazing - managed land   | scattered slash pine <5%   | scattered wax myrtle <5%; <5%scrub oaks   | Bahiagrass, dog fennel, carpet grass, broom sedge, smut grass, torpedo grass  |
| G5-D, G5-C, G6-G, G13-A, G13-B, G13-C, G11-G, G11-H, G11-H2. G11-J, G11-I, G1-F, G8-G, G8H, G8-I, G18-A, G18-B, G18-C, G18-D  | CC, KM, MLD, MRD, MH, ML | Volusia  | 3200: Shrub and Brushland; 3300: Mixed Non-Forested Uplands; 7400: Disturbed Land   | Disturbed transistional areas  | 10-30% immature pine   | wax myrtle <15%; <5%scrub oaks  | grapevine, smilax sp, pawpaw, gopher apple,   |
| G13-D, G13-E, G13-F, G13-G, G12-L, G14-A, G11-K, G12-K, G12-J, G12-I, G11-H, G11-G, G8-C, G8-D, G8-E, G8-F, G11-A, G11-B, G11-C, G11-D, G11-E, G11-F, G7-A, G7-B, G7-C, G7-D, G7-E, G7-F, G7-G, G7-H, G7-I, G9-C, G9-D, G9-E, G5-A, G5-B, G3-I, G1 -E, G9-A, G9-B, G12-C, G12-E, G12-F                              | CC, KM, MLD, MRD, MH, ML | Volusia  | 4120: Longleaf Pine-Xeric Oak; 4130: Sand Pine; 4210: Xeric Oak;                    | Scrub habitat dominated by sand pine and mixed scrub oak, with and longleaf pine and pine seedlings. | 40-60% sand pine, 15 - 20%, sand live oak - 15 - 20', 5 - 10% long leaf Pine               | saw palmetto 20 - 40%, mixed scrub oak species 5 - 20%, wax myrtle, rusty lyonia staggerbush, beauty berry, wax myrtle, winged sumac, gallberry | Wire grass, penny royal, grave vine, smilax sp., paw paw, prickly pear cactus, shiny blueberry, bracken fern, Aristida sp, runner oak, gallberry, rabbit tobacco, bachelor button, milkwort, hypericum, sunshine mimosa, rosemary, grapevine, smilax sp, pawpaw, gopher apple, prickly pear cactus, gallberry, blueberry. |
| G1-A, G1-B, G1-E, G2-A, G2-B, G2-C, G2-D, G3-B, G3-C, G3-D, G3-E, G3-F, G3-G, G3-H, G3-J, G3-K, G4-E, G4-F, G4-G, G4-H, G5-E, G6-A, G6-B, G6-C, G6-D, G6-E, G6-F, G8-A, G8-B, G12-A, G12-B, G12-D, G12-M, G3-L, G8-F, G8-J, G8-K, G8-L, G10-A, G10-B, G10-C, G16-A, G16-B, G16-C, G16-D, G16-E, G17-A, G17-B, G17-C | CC, KM, MLD, MRD, MH, ML | Volusia  | 4340: Upland Mixed Conifer/Hardwood   | Hardwood - Conifer Mixed habitat lot of large live and laurel oak, some long leaf pine               | laurel oak - 50-65%, longleaf pine 5 - 15%, scattered cabbage palm, scattered dahoon holly | 30% oak, 10% pine, very little saw palmetto 5 - 10%, beautyberry, B. pepper, wax myrtle   | Bahia, broom sedge, grapevine, dog fennel, beauty berry, sweet grass, carpet grass, bracken fern, smilax, blackberry  |

Stantec Biologists: MH = Mike Holdsworth, ML = Matthew Leonard, MLD = Mike Dinardo, MRD = Mike Drauer, KM = Kevin Muldrew, CC = Crystal Clark

**APPENDIX B**  
**SCRUB-JAY STATION DATA**

Scrub-Jay Station Data

October 2014 Scrub Jay Survey Results

I-4 Beyond the Ultimate Segment 4

FPID # 432100-1-22-01

Stantec Biologists: MH = Mike Holdsworth, ML = Matthew Leonard, MLD = Mike Dinardo, MRD = Mike Drauer, KM = Kevin Muldrew, CC = Crystal Clark

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes  |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--|
| G10-A          | 1                   | MH       | 10/8/2014  | 10:21 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G10-A          | 2                   | MH       | 10/9/2014  | 11:01 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed   |
| G10-A          | 3                   | MH       | 10/11/2014 | 10:09 AM   | 0               | 0                  | N/A                 | 80       | 1-2 E                        | 0 - Clear                  | No Scrub Jays Observed   |
| G10-A          | 4                   | MH       | 10/19/2014 | 8:38 AM    | 0               | 0                  | N/A                 | 63       | 2-5 NW                       | 0 - Clear                  | No Scrub Jays Observed: songbird activity, nothing came to tape  |
| G10-A          | 5                   | MH       | 10/22/2014 | 10:15 AM   | 0               | 0                  | N/A                 | 71       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G10-B          | 1                   | MH       | 10/8/2014  | 10:11 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed: pileated woodpecker                      |
| G10-B          | 2                   | MH       | 10/9/2014  | 10:51 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G10-B          | 3                   | MH       | 10/11/2014 | 9:57 AM    | 0               | 0                  | N/A                 | 79       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G10-B          | 4                   | MH       | 10/19/2014 | 8:47 AM    | 0               | 0                  | N/A                 | 63       | 2-5 NW                       | 0 - Clear                  | No Scrub Jays Observed   |
| G10-B          | 5                   | MH       | 10/22/2014 | 10:05 AM   | 0               | 0                  | N/A                 | 70       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G10-C          | 1                   | MH       | 10/8/2014  | 9:59 AM    | 0               | 0                  | N/A                 | 79       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G10-C          | 2                   | MH       | 10/9/2014  | 10:40 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G10-C          | 3                   | MH       | 10/11/2014 | 9:46 AM    | 0               | 0                  | N/A                 | 78       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G10-C          | 4                   | MH       | 10/19/2014 | 8:57 AM    | 0               | 0                  | N/A                 | 65       | 1-4 NW                       | 0 - Clear                  | No Scrub Jays Observed: Flicker, titmouse                        |
| G10-C          | 5                   | MH       | 10/22/2014 | 9:54 AM    | 0               | 0                  | N/A                 | 70       | 7 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G11-A          | 1                   | ML       | 10/8/2014  | 10:32 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G11-A          | 2                   | ML       | 10/9/2014  | 9:14 AM    | 0               | 0                  | N/A                 | 73       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-A          | 3                   | MH       | 10/10/2014 | 9:47 AM    | 0               | 0                  | N/A                 | 79       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-A          | 4                   | MRD      | 10/20/2014 | 9:23 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-A          | 5                   | MH       | 10/28/2014 | 10:23 AM   | 0               | 0                  | N/A                 | 72       | 1 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G11-B          | 1                   | ML       | 10/9/2014  | 9:07 AM    | 0               | 0                  | N/A                 | 72       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-B          | 2                   | MH       | 10/10/2014 | 9:37 AM    | 0               | 0                  | N/A                 | 77       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed: downy woodpecker, mocking bird, blue jay |
| G11-B          | 3                   | MRD      | 10/13/2014 | 10:19 AM   | 0               | 0                  | N/A                 | 81       | 10 SE                        | 0 - Clear                  | No Scrub Jays Observed   |
| G11-B          | 4                   | MRD      | 10/20/2014 | 9:15 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-B          | 5                   | MH       | 10/28/2014 | 10:33 AM   | 0               | 0                  | N/A                 | 72       | 1 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G11-C          | 1                   | ML       | 10/8/2014  | 10:22 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G11-C          | 2                   | ML       | 10/9/2014  | 9:00 AM    | 0               | 0                  | N/A                 | 72       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-C          | 3                   | MH       | 10/10/2014 | 9:25 AM    | 0               | 0                  | N/A                 | 76       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed: blue jay                                 |
| G11-C          | 4                   | MRD      | 10/20/2014 | 9:07 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-C          | 5                   | MH       | 10/28/2014 | 10:44 AM   | 0               | 0                  | N/A                 | 73       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G11-D          | 1                   | MLD/MH   | 10/7/2014  | 10:50AM    | 0               | 0                  | N/A                 | 75       | 2 SE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G11-D          | 2                   | MLD      | 10/8/2014  | 10:26 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G11-D          | 3                   | ML       | 10/9/2014  | 8:52 AM    | 0               | 0                  | N/A                 | 72       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G11-D          | 4                   | MH       | 10/10/2014 | 9:15 AM    | 0               | 0                  | N/A                 | 75       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed: two mocking birds                        |
| G11-D          | 5                   | MRD      | 10/20/2014 | 8:57 AM    | 0               | 0                  | N/A                 | 72       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-E          | 1                   | MLD/MH   | 10/7/2014  | 10:41 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed   |
| G11-E          | 2                   | MLD      | 10/8/2014  | 10:17 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G11-E          | 3                   | ML       | 10/9/2014  | 8:45 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G11-E          | 4                   | MH       | 10/10/2014 | 9:05 AM    | 0               | 0                  | N/A                 | 74       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-E          | 5                   | MRD      | 10/20/2014 | 8:51 AM    | 0               | 0                  | N/A                 | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-F          | 1                   | MLD/MH   | 10/7/2014  | 10:32 AM   | 0               | 0                  | N/A                 | 75       | 0.8 SE                       | 0 - Clear                  | No Scrub Jays Observed   |
| G11-F          | 2                   | MLD      | 10/8/2014  | 10:08 AM   | 0               | 0                  | N/A                 | 78       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G11-F          | 3                   | ML       | 10/9/2014  | 8:38 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G11-F          | 4                   | MH       | 10/10/2014 | 8:55 AM    | 0               | 0                  | N/A                 | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed   |
| G11-F          | 5                   | MRD      | 10/13/2014 | 10:00 AM   | 0               | 0                  | N/A                 | 81       | 8 SE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G11-F          | 6                   | MRD      | 10/20/2014 | 8:44 AM    | 0               | 0                  | N/A                 | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight    | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes   |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|------------------------|----------|------------------------------|----------------------------|---|
| G11-G          | 1                   | MLD/MH   | 10/7/2014  | 10:13 AM   | 0               | 0                  | N/A                    | 75       | 3 SE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G11-G          | 2                   | MLD      | 10/8/2014  | 9:58 AM    | 0               | 0                  | N/A                    | 77       | 0                            | 0 - Clear                  | Birds from G11-H2 stayed and called back but did not follow.  |
| G11-G          | 3                   | ML       | 10/9/2014  | 8:30 AM    | 0               | 0                  | N/A                    | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G11-G          | 4                   | MH       | 10/10/2014 | 8:44 AM    | 0               | 0                  | N/A                    | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G11-G          | 5                   | MRD      | 10/13/2014 | 9:50 AM    | 0               | 0                  | N/A                    | 80       | 8 SE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G11-G          | 6                   | MRD      | 10/20/2014 | 8:33 AM    | 0               | 0                  | N/A                    | 70       | 3 E                          | 0 - Clear                  | 2 Jays sitting near G11-H2, but not coming toward G11-G   |
| G11-H          | 1                   | MLD/MH   | 10/7/2014  | 9:56 AM    | 5               | 0                  | NE to SW, and SE to NW | 72       | 0                            | 0 - Clear                  | Two families observed (2 and 3 birds each) one group defended the landscaped live oak (north group/3 birds), other group (south/2 birds) did not defend (see field map notes)   |
| G11-H          | 2                   | MLD      | 10/8/2014  | 9:27 AM    | 2               | 0                  | N/A                    | 76       | 0                            | 0 - Clear                  | Two adults west of pond - not defending or scolding - darting into brush  |
| G11-H          | 3                   | ML       | 10/9/2014  | 8:12 AM    | 0               | 0                  | N/A                    | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G11-H          | 4                   | MH       | 10/10/2014 | 8:32 AM    | 1               | 0                  | N/A                    | 73       | 1.4                          | 0 - Clear                  | One jay remained perched on sand pine from G11-H2 call (same individual for both stations). Bird flew south after hearing tape at this station. A goldfinch and thrasher were seen here as well.  |
| G11-H          | 5                   | MRD      | 10/13/2014 | 9:40 AM    | 1               | 0                  | S TO N                 | 79       | 5 SE                         | 0 - Clear                  | Sat on fence briefly  |
| G11-H2         | 1                   | MLD/MH   | 10/7/2014  | 10:23 AM   | 2               | 0                  | N/A                    | 75       | 3 SE                         | 0 - Clear                  | Two scrub jays in the distance at the northwest corner of the pond, alert   |
| G11-H2         | 2                   | MLD      | 10/8/2014  | 9:46 AM    | 3               | 0                  | S TO N                 | 77       | 0                            | 0 - Clear                  | Three adults flew from the south, stayed in oaks within the R/W, scolded, flew back to the south.   |
| G11-H2         | 3                   | ML       | 10/9/2014  | 8:25 AM    | 0               | 0                  | N/A                    | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G11-H2         | 4                   | MH       | 10/10/2014 | 8:21 AM    | 1               | 0                  | N/A                    | 72       | 1.4                          | 0 - Clear                  | first call to north, one of south birds alerted, perched on sand pine in south of retention pond area. No north of retention pond group could be called.  |
| G11-H2         | 5                   | MRD      | 10/20/2014 | 8:27 AM    | 3               | 0                  | N TO S                 | 68       | 3 E                          | 0 - Clear                  | Three birds flew from north to south  |
| G11-I          | 1                   | MLD/MH   | 10/7/2014  | 9:45 AM    | 0               | 0                  | N/A                    | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-I          | 2                   | MLD      | 10/8/2014  | 9:16 AM    | 0               | 0                  | N/A                    | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-I          | 3                   | ML       | 10/8/2014  | 10:41 AM   | 0               | 0                  | N/A                    | 83       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-I          | 4                   | ML       | 10/9/2014  | 8:06 AM    | 0               | 0                  | N/A                    | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G11-I          | 5                   | MH       | 10/11/2014 | 7:33 AM    | 0               | 0                  | N/A                    | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-I          | 6                   | MRD      | 10/13/2014 | 9:30 AM    | 0               | 0                  | N/A                    | 79       | 8 SE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G11-I          | 7                   | MRD      | 10/20/2014 | 8:21 AM    | 0               | 0                  | N/A                    | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-J          | 1                   | MLD/MH   | 10/7/2014  | 9:20 AM    | 1               | 0                  | unknown                | 72       | 0                            | 0 - Clear                  | one scrub jay observed on side of Galveston Avenue on way to call station. Bird was north of the call station on Galveston Avenue. No birds came to station G11-J, but played tape at approximate area where individual scrub jay was seen and had 3 birds defending supplemental station (see field notes on map). Area where they were defending was approximately west of corner of Galveston and Geraldine. |
| G11-J          | 2                   | MLD      | 10/8/2014  | 8:59 AM    | 0               | 0                  | N/A                    | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-J          | 3                   | MRD      | 10/9/2014  | 8:00 AM    | 0               | 0                  | N/A                    | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G11-J          | 4                   | MRD      | 10/10/2014 | 8:57 AM    | 0               | 0                  | N/A                    | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G11-J          | 5                   | MRD      | 10/13/2014 | 10:37 AM   | 2               | 0                  | W TO E                 | 82       | 8 SE                         | 0 - Clear                  | called back - didn't show defence   |
| G11-K          | 1                   | MH       | 10/10/2014 | 8:06 AM    | 0               | 0                  | N/A                    | 72       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed: mocking bird, blue jay, thrasher  |
| G11-K          | 2                   | MH       | 10/11/2014 | 7:23 AM    | 0               | 0                  | N/A                    | 69       | 1 SW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G11-K          | 3                   | MH       | 10/12/2014 | 8:23 AM    | 0               | 0                  | N/A                    | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G11-K          | 4                   | MH       | 10/19/2014 | 11:08 AM   | 0               | 0                  | N/A                    | 74       | 1-3 N                        | 0 - Clear                  | No Scrub Jays Observed: mocking bird  |
| G11-K          | 5                   | MRD      | 10/20/2014 | 8:09 AM    | 0               | 0                  | N/A                    | 64       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-A          | 1                   | ML       | 10/8/2014  | 8:05 AM    | 0               | 0                  | N/A                    | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-A          | 2                   | ML       | 10/9/2014  | 11:20 AM   | 0               | 0                  | N/A                    | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-A          | 3                   | ML       | 10/10/2014 | 10:04 AM   | 0               | 0                  | N/A                    | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-A          | 4                   | MLD      | 10/20/2014 | 8:29 AM    | 0               | 0                  | N/A                    | 68       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed: catbirds  |
| G12-A          | 5                   | KM       | 10/22/2014 | 8:21 AM    | 0               | 0                  | N/A                    | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-B          | 1                   | ML       | 10/8/2014  | 8:13 AM    | 0               | 0                  | N/A                    | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-B          | 2                   | ML       | 10/9/2014  | 11:31 AM   | 0               | 0                  | N/A                    | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-B          | 3                   | ML       | 10/10/2014 | 10:08 AM   | 0               | 0                  | N/A                    | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-B          | 4                   | MLD      | 10/20/2014 | 8:39 AM    | 0               | 0                  | N/A                    | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-B          | 5                   | KM       | 10/22/2014 | 8:30 AM    | 0               | 0                  | N/A                    | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes   |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|---|
| G12-C          | 1                   | ML       | 10/8/2014  | 8:22 AM    | 0               | 0                  | N/A                 | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-C          | 2                   | ML       | 10/9/2014  | 11:36 AM   | 0               | 0                  | N/A                 | 83       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-C          | 3                   | ML       | 10/10/2014 | 10:15 AM   | 0               | 0                  | N/A                 | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-C          | 4                   | MLD      | 10/20/2014 | 8:51 AM    | 0               | 0                  | N/A                 | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-C          | 5                   | KM       | 10/22/2014 | 8:39 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-D          | 1                   | ML       | 10/8/2014  | 8:29 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-D          | 2                   | ML       | 10/9/2014  | 11:42 AM   | 0               | 0                  | N/A                 | 83       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-D          | 3                   | ML       | 10/10/2014 | 10:20 AM   | 0               | 0                  | N/A                 | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-D          | 4                   | MLD      | 10/20/2014 | 9:02 AM    | 0               | 0                  | N/A                 | 72       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-D          | 5                   | KM       | 10/22/2014 | 8:50 AM    | 0               | 0                  | N/A                 | 68       | 1-4 NW                       | 0 - Clear                  | No Scrub Jays Observed  |
| G12-E          | 1                   | ML       | 10/8/2014  | 8:36 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-E          | 2                   | MH       | 10/9/2014  | 11:37 AM   | 0               | 0                  | N/A                 | 83       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-E          | 3                   | ML       | 10/10/2014 | 10:26 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-E          | 4                   | MLD      | 10/20/2014 | 9:12 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-E          | 5                   | KM       | 10/22/2014 | 8:59 AM    | 0               | 0                  | N/A                 | 69       | 4 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G12-F          | 1                   | ML       | 10/8/2014  | 8:44 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-F          | 2                   | MH       | 10/9/2014  | 11:48 AM   | 0               | 0                  | N/A                 | 82       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-F          | 3                   | ML       | 10/10/2014 | 10:32 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-F          | 4                   | MLD      | 10/20/2014 | 9:20 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-F          | 5                   | KM       | 10/22/2014 | 9:08 AM    | 1               | 1                  | E TO W              | 69       | 3 NNW                        | 0 - Clear                  | Birds came across I-4 from the area of the retention pond on the opposite side of I-4 (eastbound side) scolding heavily at first. Gathered acorns on westbound side. Birds were flying approximately 30 to 40 feet above I-4                          |
| G12-G          | 1                   | MRD      | 10/9/2014  | 11:30 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-G          | 2                   | ML       | 10/10/2014 | 10:38 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-G          | 3                   | MH       | 10/19/2014 | 11:32 AM   | 0               | 0                  | N/A                 | 76       | 3-8 N                        | 0 - Clear                  | No Scrub Jays Observed - including E side of road. Played several different call varieties.   |
| G12-G          | 4                   | MLD      | 10/20/2014 | 9:30 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-G          | 5                   | KM       | 10/22/2014 | 9:21 AM    | 3               | 0                  | E TO W              | 69       | 2 NW                         | 0 - Clear                  | One adult came to edge of the retention pond on the opposite side of I-4 but did not cross over. Two jays were spotted crossing back and forth approximately 30 to 40 feet over I-4 toward station G12-H. Jays seen at station G12-F did not respond. |
| G12-H          | 1                   | ML       | 10/8/2014  | 8:51 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-H          | 2                   | MRD      | 10/9/2014  | 11:38 AM   | 0               | 0                  | N/A                 | 83       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-H          | 3                   | ML       | 10/10/2014 | 10:43 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-H          | 4                   | MLD      | 10/20/2014 | 9:40 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-H          | 5                   | KM       | 10/22/2014 | 9:30 AM    | 2               | 0                  | E TO W              | 69       | 3 NW                         | 0 - Clear                  | Two jays crossed over I-4 from the south edge of the retention pond and crossed over I-4 (two round trips). Saw them through binoculars approximately 30 to 40 feet above I-4.  |
| G12-I          | 1                   | ML       | 10/8/2014  | 8:58 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-I          | 2                   | MRD      | 10/9/2014  | 11:47 AM   | 0               | 0                  | N/A                 | 82       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-I          | 3                   | ML       | 10/10/2014 | 10:49 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-I          | 4                   | MLD      | 10/20/2014 | 9:55 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-I          | 5                   | KM       | 10/22/2014 | 9:49 AM    | 0               | 0                  | N/A                 | 70       | 7 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G12-J          | 1                   | ML       | 10/8/2014  | 9:06 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-J          | 2                   | MRD      | 10/9/2014  | 11:55 AM   | 0               | 0                  | N/A                 | 82       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-J          | 3                   | ML       | 10/10/2014 | 10:56 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-J          | 4                   | MLD      | 10/20/2014 | 10:10 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G12-J          | 5                   | KM       | 10/22/2014 | 10:08 AM   | 0               | 0                  | N/A                 | 70       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G12-K          | 1                   | ML       | 10/8/2014  | 9:18 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-K          | 2                   | ML       | 10/9/2014  | 11:54 AM   | 0               | 0                  | N/A                 | 82       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed  |
| G12-K          | 3                   | ML       | 10/10/2014 | 11:03 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed  |
| G12-K          | 4                   | MRD      | 10/13/2014 | 8:16 AM    | 0               | 0                  | N/A                 | 71       | 5 NNE                        | 0 - Clear                  | No Scrub Jays Observed  |
| G12-K          | 5                   | MLD      | 10/20/2014 | 10:20 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed  |



Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes   |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|---|
| G12-L          | 1                   | ML       | 10/8/2014  | 9:25 AM    | 0               | 0                  | N/A                 | 76       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-L          | 2                   | ML       | 10/9/2014  | 11:59 AM   | 2               | 0                  | NW TO SE            | 82       | 1.8-4.8                      | 0 - Clear                  | 1st bird perched nearly parallel to the edge of the R/W. perched on pine tree 30-40 yards away from station. 2nd bird came from NW, perched on snag pine tree directly in front of station. Birds arrive during 3 minutes of play.            |
| G12-L          | 3                   | ML       | 10/10/2014 | 11:11 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed  |
| G12-L          | 4                   | MRD      | 10/13/2014 | 8:35 AM    | 0               | 0                  | N/A                 | 77       | 5 NNE                        | 0 - Clear                  | No Scrub Jays Observed  |
| G12-L          | 5                   | MLD      | 10/20/2014 | 10:29 AM   | 2               | 0                  | W TO E              | 76       | 2 E                          | 0 - Clear                  | Two adults appeared at G12-L and scolded then crossed to G14-A (see G14-A)  |
| G12-M          | 1                   | MH       | 10/8/2014  | 8:09 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G12-M          | 2                   | MH       | 10/9/2014  | 8:50 AM    | 0               | 0                  | N/A                 | 72       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G12-M          | 3                   | MH       | 10/11/2014 | 7:57 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed: Coopers hawk nearby   |
| G12-M          | 4                   | MH       | 10/19/2014 | 10:31 AM   | 0               | 0                  | N/A                 | 70       | 1-2 NW                       | 0 - Clear                  | No Scrub Jays Observed  |
| G12-M          | 5                   | MH       | 10/22/2014 | 9:39 AM    | 0               | 0                  | N/A                 | 69       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-A          | 1                   | ML       | 10/10/2014 | 8:56 AM    | 0               | 0                  | N/A                 | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-A          | 2                   | MH       | 10/12/2014 | 7:20 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal  |
| G13-A          | 3                   | MH       | 10/19/2014 | 10:51 AM   | 0               | 0                  | N/A                 | 72       | 1-3 NW                       | 0 - Clear                  | No Scrub Jays Observed: cat bird, blue jay  |
| G13-A          | 4                   | MLD      | 10/20/2014 | 10:45 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-A          | 5                   | MH       | 10/22/2014 | 10:54 AM   | 0               | 0                  | N/A                 | 73       | 4 NW                         | 0 - Clear                  | No Scrub Jays Observed: thrasher, three blue jays, two mocking birds  |
| G13-B          | 1                   | ML       | 10/10/2014 | 9:05 AM    | 0               | 0                  | N/A                 | 74       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-B          | 2                   | MH       | 10/12/2014 | 7:11 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed: crows, cat bird, grackle, coopers hawk  |
| G13-B          | 3                   | MRD      | 10/13/2014 | 12:00 PM   | 0               | 0                  | N/A                 | 86       | 4 SE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-B          | 4                   | MLD      | 10/20/2014 | 10:56 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-B          | 5                   | MH       | 10/22/2014 | 11:04 AM   | 0               | 0                  | N/A                 | 73       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-C          | 1                   | ML       | 10/8/2014  | 9:41 AM    | 0               | 0                  | N/A                 | 77       | 1                            | 0 - Clear                  | No Scrub Jays Observed - vegetation thick at this point, some other birds were observed   |
| G13-C          | 2                   | ML       | 10/10/2014 | 8:18 AM    | 0               | 0                  | N/A                 | 72       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed - Waited for fog to burn off in the morning before 8.  |
| G13-C          | 3                   | MH       | 10/12/2014 | 7:38 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G13-C          | 4                   | MRD      | 10/13/2014 | 9:05 AM    | 0               | 0                  | N/A                 | 77       | 5 NNE                        | 0 - Clear                  | No Scrub Jays Observed  |
| G13-C          | 5                   | MH       | 10/20/2014 | 11:08 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-D          | 1                   | ML       | 10/8/2014  | 9:47 AM    | 0               | 0                  | N/A                 | 77       | 0                            | 0 - Clear                  | No Scrub Jays Observed - vegetation thick at this point, some other birds were observed   |
| G13-D          | 2                   | ML       | 10/10/2014 | 8:28 AM    | 0               | 0                  | N/A                 | 72       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-D          | 3                   | MH       | 10/12/2014 | 7:48 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G13-D          | 4                   | MRD      | 10/13/2014 | 9:18 AM    | 0               | 0                  | N/A                 | 77       | 4 NNE                        | 0 - Clear                  | No Scrub Jays Observed  |
| G13-D          | 5                   | MH       | 10/20/2014 | 10:55 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-F          | 1                   | ML       | 10/8/2014  | 9:54 AM    | 0               | 0                  | N/A                 | 77       | 1                            | 0 - Clear                  | No Scrub Jays Observed - vegetation thick at this point, some other birds were observed   |
| G13-F          | 2                   | ML       | 10/10/2014 | 8:35 AM    | 0               | 0                  | N/A                 | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-F          | 3                   | MH       | 10/12/2014 | 7:58 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G13-F          | 4                   | MH       | 10/20/2014 | 11:18 AM   | 0               | 0                  | N/A                 | 78       | 5 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-F          | 5                   | MH       | 10/22/2014 | 10:32 AM   | 0               | 0                  | N/A                 | 71       | 4 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G13-G          | 1                   | ML       | 10/8/2014  | 10:06 AM   | 0               | 0                  | N/A                 | 78       | 1                            | 0 - Clear                  | No Scrub Jays Observed - vegetation thick at this point, some other birds were observed   |
| G13-G          | 2                   | ML       | 10/10/2014 | 8:43 AM    | 0               | 0                  | N/A                 | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-G          | 3                   | MH       | 10/12/2014 | 8:08 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal, mocking bird  |
| G13-G          | 4                   | MH       | 10/20/2014 | 11:28 AM   | 0               | 0                  | N/A                 | 78       | 5 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G13-G          | 5                   | MH       | 10/22/2014 | 10:41 AM   | 0               | 0                  | N/A                 | 73       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G14-A          | 1                   | ML       | 10/8/2014  | 9:30 AM    | 0               | 0                  | N/A                 | 76       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G14-A          | 2                   | ML       | 10/9/2014  | 12:10 PM   | 2               | 0                  | NW TO SE            | 82       | 1.8-4.8                      | 0 - Clear                  | Birds from station G12-L follow call to station G14-A on opposite side of ramp pavement. Both birds defended the habitat within the infield of the clover-leaf ramp system. 2nd bird continued to hang around long after playing was stopped. |
| G14-A          | 3                   | ML       | 10/10/2014 | 11:20 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed  |
| G14-A          | 4                   | MRD      | 10/13/2014 | 8:47 AM    | 0               | 0                  | N/A                 | 77       | 5 NNE                        | 0 - Clear                  | No Scrub Jays Observed  |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes  |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--|
| G14-A          | 5                   | MLD      | 10/20/2014 | 10:33 AM   | 2               | 0                  | N TO S, S TO N      | 76       | 2 E                          | 0 - Clear                  | Once crossed off-ramp to G14-A from G12-L, 1 of 2 birds from G12-L followed over to G14-A and continued scolding until I left. Did not follow calls when I traversed approximately 100 feet toward I-4 |
| G1-A           | 1                   | CC       | 10/8/2014  | 10:56 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G1-A           | 2                   | CC       | 10/9/2014  | 11:10 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed   |
| G1-A           | 3                   | MRD      | 10/10/2014 | 11:34 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed   |
| G1-A           | 4                   | MH       | 10/12/2014 | 11:17 AM   | 0               | 0                  | N/A                 | 83       | 2-4 E                        | 0 - Clear                  | No Scrub Jays Observed   |
| G1-A           | 5                   | KM       | 10/20/2014 | 10:50 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G1-B           | 1                   | CC       | 10/8/2014  | 10:46 AM   | 0               | 0                  | N/A                 | 83       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G1-B           | 2                   | CC       | 10/9/2014  | 11:00 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed   |
| G1-B           | 3                   | MRD      | 10/10/2014 | 11:21 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed   |
| G1-B           | 4                   | MH       | 10/12/2014 | 11:08 AM   | 0               | 0                  | N/A                 | 83       | 2-4 E                        | 0 - Clear                  | No Scrub Jays Observed   |
| G1-B           | 5                   | KM       | 10/20/2014 | 10:40 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G1-C           | 1                   | CC       | 10/8/2014  | 10:00 AM   | 0               | 0                  | N/A                 | 78       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G1-C           | 2                   | CC       | 10/9/2014  | 10:51 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-C           | 3                   | MRD      | 10/10/2014 | 11:13 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed   |
| G1-C           | 4                   | MH       | 10/19/2014 | 11:21 AM   | 0               | 0                  | N/A                 | 75       | 3-8 N                        | 0 - Clear                  | No Scrub Jays Observed   |
| G1-C           | 5                   | KM       | 10/20/2014 | 10:30 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G1-D           | 1                   | CC       | 10/8/2014  | 9:50 AM    | 0               | 0                  | N/A                 | 77       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G1-D           | 2                   | CC       | 10/9/2014  | 10:09 AM   | 0               | 0                  | N/A                 | 78       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-D           | 3                   | MRD      | 10/10/2014 | 10:50 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G1-D           | 4                   | MH       | 10/12/2014 | 10:41 AM   | 0               | 0                  | N/A                 | 82       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-D           | 5                   | KM       | 10/20/2014 | 10:20 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-E           | 1                   | CC       | 10/8/2014  | 10:29 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G1-E           | 2                   | CC       | 10/9/2014  | 10:40 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-E           | 3                   | MRD      | 10/10/2014 | 11:04 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed   |
| G1-E           | 4                   | MH       | 10/12/2014 | 10:59 AM   | 0               | 0                  | N/A                 | 82       | 2-4 E                        | 0 - Clear                  | No Scrub Jays Observed: cardinal, blue jay   |
| G1-E           | 5                   | KM       | 10/20/2014 | 11:00 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G1-F           | 1                   | CC       | 10/8/2014  | 10:13 AM   | 1               | 0                  | W TO S              | 80       | 0                            | 0 - Clear                  | One adult came from west, stayed in tree stand to south.   |
| G1-F           | 2                   | CC       | 10/9/2014  | 10:22 AM   | 1               | 0                  | NE TO SW            | 79       | 1.7                          | 0 - Clear                  | One adult scrub jay. Hawk nearby   |
| G1-F           | 3                   | MRD      | 10/10/2014 | 10:57 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G1-F           | 4                   | MH       | 10/12/2014 | 10:50 AM   | 0               | 0                  | N/A                 | 82       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-F           | 5                   | MRD      | 10/13/2014 | 11:20 AM   | 0               | 0                  | N/A                 | 83       | 4 N                          | 0 - Clear                  | No Scrub Jays Observed   |
| G1-F           | 6                   | KM       | 10/20/2014 | 11:10 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G2-A           | 1                   | MRD/ML   | 10/7/2014  | 8:10 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-A           | 2                   | MRD      | 10/8/2014  | 7:50 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-A           | 3                   | MRD      | 10/9/2014  | 9:14 AM    | 0               | 0                  | N/A                 | 73       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G2-A           | 4                   | MH       | 10/20/2014 | 8:03 AM    | 0               | 0                  | N/A                 | 63       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-A           | 5                   | KM       | 10/21/2014 | 7:28 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-B           | 1                   | MRD/ML   | 10/7/2014  | 8:21 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-B           | 2                   | MRD      | 10/8/2014  | 7:58 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-B           | 3                   | MRD      | 10/9/2014  | 9:20 AM    | 0               | 0                  | N/A                 | 74       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G2-B           | 4                   | MH       | 10/20/2014 | 8:11 AM    | 0               | 0                  | N/A                 | 64       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-B           | 5                   | KM       | 10/21/2014 | 7:37 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-C           | 1                   | MRD/ML   | 10/7/2014  | 8:32 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-C           | 2                   | MRD      | 10/8/2014  | 8:07 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-C           | 3                   | MRD      | 10/9/2014  | 9:28 AM    | 0               | 0                  | N/A                 | 74       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G2-C           | 4                   | MH       | 10/20/2014 | 8:20 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-C           | 5                   | KM       | 10/21/2014 | 7:47 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-D           | 1                   | MRD/ML   | 10/7/2014  | 8:40 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes  |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--|
| G2-D           | 2                   | MRD      | 10/8/2014  | 8:15 AM    | 0               | 0                  | N/A                 | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G2-D           | 3                   | MRD      | 10/9/2014  | 9:36 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G2-D           | 4                   | MH       | 10/20/2014 | 8:29 AM    | 0               | 0                  | N/A                 | 68       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G2-D           | 5                   | KM       | 10/21/2014 | 7:57 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-B           | 1                   | CC       | 10/8/2014  | 9:33 AM    | 0               | 0                  | N/A                 | 75       | 1                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-B           | 2                   | CC       | 10/9/2014  | 9:56 AM    | 0               | 0                  | N/A                 | 77       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed: mocking bird and red-shoulder hawk           |
| G3-B           | 3                   | MRD      | 10/10/2014 | 10:43 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G3-B           | 4                   | MH       | 10/12/2014 | 10:32 AM   | 0               | 0                  | N/A                 | 81       | 2 SE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G3-B           | 5                   | KM       | 10/20/2014 | 10:10 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-C           | 1                   | CC       | 10/8/2014  | 9:22 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-C           | 2                   | CC       | 10/9/2014  | 9:45 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed: Two king birds                               |
| G3-C           | 3                   | MRD      | 10/10/2014 | 10:35 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G3-C           | 4                   | MH       | 10/12/2014 | 10:23 AM   | 0               | 0                  | N/A                 | 81       | 2 SE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G3-C           | 5                   | KM       | 10/20/2014 | 9:24 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-D           | 1                   | CC       | 10/8/2014  | 9:10 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-D           | 2                   | CC       | 10/9/2014  | 9:35 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-D           | 3                   | MRD      | 10/10/2014 | 10:27 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G3-D           | 4                   | MH       | 10/12/2014 | 10:14 AM   | 0               | 0                  | N/A                 | 80       | 1 SE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G3-D           | 5                   | KM       | 10/20/2014 | 9:15 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-E           | 1                   | CC       | 10/8/2014  | 9:01 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-E           | 2                   | CC       | 10/9/2014  | 9:25 AM    | 0               | 0                  | N/A                 | 74       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-E           | 3                   | MRD      | 10/10/2014 | 10:19 AM   | 0               | 0                  | N/A                 | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G3-E           | 4                   | MH       | 10/12/2014 | 10:05 AM   | 0               | 0                  | N/A                 | 79       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-E           | 5                   | KM       | 10/20/2014 | 9:05 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-F           | 1                   | CC       | 10/8/2014  | 8:50 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed: king bird observed                           |
| G3-F           | 2                   | CC       | 10/9/2014  | 9:16 AM    | 0               | 0                  | N/A                 | 73       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-F           | 3                   | MRD      | 10/10/2014 | 10:11 AM   | 0               | 0                  | N/A                 | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed   |
| G3-F           | 4                   | MH       | 10/12/2014 | 9:56 AM    | 0               | 0                  | N/A                 | 78       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-F           | 5                   | KM       | 10/20/2014 | 8:55 AM    | 0               | 0                  | N/A                 | 72       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-G           | 1                   | CC       | 10/8/2014  | 8:38 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed: Mocking bird call                            |
| G3-G           | 2                   | CC       | 10/9/2014  | 9:04 AM    | 0               | 0                  | N/A                 | 72       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-G           | 3                   | MRD      | 10/10/2014 | 10:03 AM   | 0               | 0                  | N/A                 | 80       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-G           | 4                   | MH       | 10/12/2014 | 9:47 AM    | 0               | 0                  | N/A                 | 77       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-G           | 5                   | KM       | 10/20/2014 | 8:45 AM    | 0               | 0                  | N/A                 | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-H           | 1                   | CC       | 10/8/2014  | 8:26 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-H           | 2                   | CC       | 10/9/2014  | 8:53 AM    | 0               | 0                  | N/A                 | 72       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G3-H           | 3                   | MRD      | 10/10/2014 | 9:55 AM    | 0               | 0                  | N/A                 | 79       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-H           | 4                   | MH       | 10/12/2014 | 9:37 AM    | 0               | 0                  | N/A                 | 76       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinals (pair), thrasher, downy woodpecker |
| G3-H           | 5                   | KM       | 10/20/2014 | 8:32 AM    | 0               | 0                  | N/A                 | 68       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-I           | 1                   | CC       | 10/8/2014  | 8:15 AM    | 0               | 0                  | N/A                 | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-I           | 2                   | CC       | 10/9/2014  | 8:43 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G3-I           | 3                   | MRD      | 10/10/2014 | 9:46 AM    | 0               | 0                  | N/A                 | 79       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-I           | 4                   | MH       | 10/12/2014 | 9:28 AM    | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-I           | 5                   | KM       | 10/20/2014 | 8:22 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-J           | 1                   | CC       | 10/8/2014  | 8:03 AM    | 0               | 0                  | N/A                 | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-J           | 2                   | CC       | 10/9/2014  | 8:33 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G3-J           | 3                   | MRD      | 10/10/2014 | 9:34 AM    | 0               | 0                  | N/A                 | 76       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-J           | 4                   | MH       | 10/12/2014 | 9:18 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal                                     |
| G3-J           | 5                   | KM       | 10/20/2014 | 8:09 AM    | 0               | 0                  | N/A                 | 64       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-K           | 1                   | CC       | 10/8/2014  | 7:53 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes  |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--|
| G3-K           | 2                   | CC       | 10/9/2014  | 8:20 AM    | 1               | 0                  | W TO E              | 70       | 0-1.7                        | 0 - Clear                  | One adult sitting on fence                                       |
| G3-K           | 3                   | MRD      | 10/10/2014 | 9:26 AM    | 0               | 0                  | N/A                 | 76       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-K           | 4                   | MH       | 10/12/2014 | 9:07 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-K           | 5                   | KM       | 10/20/2014 | 7:57 AM    | 0               | 0                  | N/A                 | 63       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G3-L           | 1                   | CC       | 10/8/2014  | 7:40 AM    | 3               | 0                  | unknown             | 66       | 0                            | 0 - Clear                  | Sat in tree behind station and defended. Kingbird also observed. |
| G3-L           | 2                   | CC       | 10/9/2014  | 8:03 AM    | 0               | 0                  | N/A                 | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed: Three cardinals                          |
| G3-L           | 3                   | MRD      | 10/10/2014 | 9:14 AM    | 0               | 0                  | N/A                 | 74       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G3-L           | 4                   | MH       | 10/12/2014 | 8:57 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed: 2 doves and a red-headed woodpecker      |
| G3-L           | 5                   | MRD      | 10/13/2014 | 11:10 AM   | 0               | 0                  | N/A                 | 82       | 6 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-A           | 1                   | MRD/ML   | 10/7/2014  | 8:54 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-A           | 2                   | MRD      | 10/8/2014  | 8:22 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-A           | 3                   | MRD      | 10/9/2014  | 9:42 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-A           | 4                   | MH       | 10/20/2014 | 8:38 AM    | 0               | 0                  | N/A                 | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-A           | 5                   | KM       | 10/21/2014 | 8:07 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-B           | 1                   | MRD/ML   | 10/7/2014  | 9:03 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-B           | 2                   | MRD      | 10/8/2014  | 8:30 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-B           | 3                   | MRD      | 10/9/2014  | 9:50 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-B           | 4                   | MH       | 10/20/2014 | 8:47 AM    | 0               | 0                  | N/A                 | 70       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-B           | 5                   | KM       | 10/21/2014 | 8:17 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-C           | 1                   | MRD/ML   | 10/7/2014  | 9:12 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-C           | 2                   | MRD      | 10/8/2014  | 8:37 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-C           | 3                   | MRD      | 10/9/2014  | 9:58 AM    | 0               | 0                  | N/A                 | 77       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-C           | 4                   | MH       | 10/20/2014 | 8:56 AM    | 0               | 0                  | N/A                 | 72       | 3 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-C           | 5                   | KM       | 10/21/2014 | 8:27 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-D           | 1                   | MRD/ML   | 10/7/2014  | 9:24 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-D           | 2                   | MRD      | 10/8/2014  | 8:45 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-D           | 3                   | MRD      | 10/9/2014  | 10:05 AM   | 0               | 0                  | N/A                 | 78       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-D           | 4                   | MH       | 10/20/2014 | 9:06 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-D           | 5                   | KM       | 10/21/2014 | 8:37 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-E           | 1                   | MRD/ML   | 10/7/2014  | 9:33 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-E           | 2                   | MRD      | 10/8/2014  | 8:54 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-E           | 3                   | MRD      | 10/9/2014  | 10:13 AM   | 0               | 0                  | N/A                 | 78       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-E           | 4                   | MH       | 10/20/2014 | 9:15 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-E           | 5                   | KM       | 10/21/2014 | 8:47 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-F           | 1                   | MRD/ML   | 10/7/2014  | 9:40 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-F           | 2                   | MRD      | 10/8/2014  | 9:04 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-F           | 3                   | MRD      | 10/9/2014  | 10:22 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-F           | 4                   | MH       | 10/20/2014 | 9:25 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G4-F           | 5                   | KM       | 10/21/2014 | 8:57 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-G           | 1                   | MRD/ML   | 10/7/2014  | 9:52 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-G           | 2                   | MH       | 10/8/2014  | 10:49 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G4-G           | 3                   | MH       | 10/9/2014  | 8:10 AM    | 0               | 0                  | N/A                 | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G4-G           | 4                   | MH       | 10/11/2014 | 11:05 AM   | 0               | 0                  | N/A                 | 81       | 1-4 E                        | 0 - Clear                  | No Scrub Jays Observed   |
| G4-G           | 5                   | MH       | 10/19/2014 | 8:09 AM    | 0               | 0                  | N/A                 | 63       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed: Cardinals (pair)                         |
| G4-H           | 1                   | MRD/ML   | 10/7/2014  | 10:20 AM   | 0               | 0                  | N/A                 | 75       | 4 SE                         | 0 - Clear                  | No Scrub Jays Observed   |
| G4-H           | 2                   | MH       | 10/8/2014  | 11:04 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinals (pair)                         |
| G4-H           | 3                   | MH       | 10/9/2014  | 7:54 AM    | 0               | 0                  | N/A                 | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed   |
| G4-H           | 4                   | MH       | 10/11/2014 | 10:49 AM   | 0               | 0                  | N/A                 | 80       | 1-4 E                        | 0 - Clear                  | No Scrub Jays Observed   |
| G4-H           | 5                   | MH       | 10/19/2014 | 7:53 AM    | 0               | 0                  | N/A                 | 63       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed: Blue jay                                 |
| G5-A           | 1                   | MLD      | 10/8/2014  | 11:26 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes   |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|---|
| G5-A           | 2                   | ML       | 10/9/2014  | 10:43 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-A           | 3                   | MH       | 10/10/2014 | 11:37 AM   | 0               | 0                  | N/A                 | 84       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-A           | 4                   | MH       | 10/12/2014 | 8:36 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed: Cardinals (pair)            |
| G5-A           | 5                   | MRD      | 10/20/2014 | 10:57 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-B           | 1                   | CC       | 10/8/2014  | 11:23 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-B           | 2                   | ML       | 10/9/2014  | 10:54 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-B           | 3                   | MH       | 10/10/2014 | 11:48 AM   | 0               | 0                  | N/A                 | 84       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-B           | 4                   | MH       | 10/12/2014 | 8:46 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-B           | 5                   | MRD      | 10/20/2014 | 11:05 AM   | 0               | 0                  | N/A                 | 77       | 4 NE                         | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-C           | 1                   | ML       | 10/8/2014  | 11:12 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-C           | 2                   | ML       | 10/9/2014  | 10:34 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-C           | 3                   | MH       | 10/10/2014 | 11:58 AM   | 0               | 0                  | N/A                 | 84       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-C           | 4                   | MRD      | 10/20/2014 | 10:49 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-C           | 5                   | KM       | 10/21/2014 | 10:39 AM   | 0               | 0                  | N/A                 | 78       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-D           | 1                   | MLD      | 10/8/2014  | 11:16 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-D           | 2                   | ML       | 10/9/2014  | 10:26 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-D           | 3                   | MH       | 10/10/2014 | 11:27 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-D           | 4                   | MRD      | 10/20/2014 | 10:42 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-D           | 5                   | KM       | 10/21/2014 | 10:29 AM   | 0               | 0                  | N/A                 | 76       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-E           | 1                   | MRD      | 10/8/2014  | 11:10 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-E           | 2                   | ML       | 10/9/2014  | 10:21 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed - no habitat/next to wetland |
| G5-E           | 3                   | MH       | 10/10/2014 | 11:18 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-E           | 4                   | MRD      | 10/20/2014 | 10:34 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed                              |
| G5-E           | 5                   | KM       | 10/21/2014 | 10:20 AM   | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-A           | 1                   | MRD/ML   | 10/7/2014  | 10:34 AM   | 0               | 0                  | N/A                 | 75       | 0.8 SE                       | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-A           | 2                   | MRD      | 10/8/2014  | 10:05 AM   | 0               | 0                  | N/A                 | 78       | 1                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-A           | 3                   | MRD      | 10/9/2014  | 10:34 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-A           | 4                   | MH       | 10/20/2014 | 9:45 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-A           | 5                   | KM       | 10/21/2014 | 9:10 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-B           | 1                   | MRD/ML   | 10/7/2014  | 10:46 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-B           | 2                   | MRD      | 10/8/2014  | 10:14 AM   | 0               | 0                  | N/A                 | 80       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-B           | 3                   | MRD      | 10/9/2014  | 10:41 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-B           | 4                   | MH       | 10/20/2014 | 9:55 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-B           | 5                   | KM       | 10/21/2014 | 9:19 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-C           | 1                   | MRD/ML   | 10/7/2014  | 10:53 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-C           | 2                   | MRD      | 10/8/2014  | 10:22 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-C           | 3                   | MRD      | 10/9/2014  | 10:49 AM   | 0               | 0                  | N/A                 | 81       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-C           | 4                   | MH       | 10/20/2014 | 10:04 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-C           | 5                   | KM       | 10/21/2014 | 9:29 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-D           | 1                   | MRD/ML   | 10/7/2014  | 11:02 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-D           | 2                   | MRD      | 10/8/2014  | 10:31 AM   | 0               | 0                  | N/A                 | 80       | 1                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-D           | 3                   | MRD      | 10/9/2014  | 10:56 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-D           | 4                   | MH       | 10/20/2014 | 10:13 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-D           | 5                   | KM       | 10/21/2014 | 9:38 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-E           | 1                   | MRD/ML   | 10/7/2014  | 11:10 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-E           | 2                   | MRD      | 10/8/2014  | 10:40 AM   | 0               | 0                  | N/A                 | 83       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-E           | 3                   | MRD      | 10/9/2014  | 11:03 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-E           | 4                   | MH       | 10/20/2014 | 10:23 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-E           | 5                   | KM       | 10/21/2014 | 9:48 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed                              |
| G6-F           | 1                   | MRD/ML   | 10/7/2014  | 11:22 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed                              |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes                                |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--------------------------------------|
| G6-F           | 2                   | MRD      | 10/8/2014  | 10:48 AM   | 0               | 0                  | N/A                 | 83       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G6-F           | 3                   | MRD      | 10/9/2014  | 11:11 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed               |
| G6-F           | 4                   | MH       | 10/20/2014 | 10:32 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed               |
| G6-F           | 5                   | KM       | 10/21/2014 | 9:57 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G6-G           | 1                   | MRD/ML   | 10/7/2014  | 11:34 AM   | 0               | 0                  | N/A                 | 75       | 1.9 SE                       | 0 - Clear                  | No Scrub Jays Observed               |
| G6-G           | 2                   | MRD      | 10/8/2014  | 10:56 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G6-G           | 3                   | MRD      | 10/9/2014  | 11:17 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed               |
| G6-G           | 4                   | MH       | 10/20/2014 | 10:41 AM   | 0               | 0                  | N/A                 | 77       | 2 NE                         | 0 - Clear                  | No Scrub Jays Observed               |
| G6-G           | 5                   | KM       | 10/21/2014 | 10:07 AM   | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-A           | 1                   | MLD      | 10/8/2014  | 11:10 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-A           | 2                   | ML       | 10/9/2014  | 10:15 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-A           | 3                   | MH       | 10/10/2014 | 11:10 AM   | 0               | 0                  | N/A                 | 82       | 1.6-3.6 NW                   | 0 - Clear                  | No Scrub Jays Observed: crow         |
| G7-A           | 4                   | KM       | 10/21/2014 | 7:10 AM    | 0               | 0                  | N/A                 | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-A           | 5                   | KM       | 10/22/2014 | 7:20 AM    | 0               | 0                  | N/A                 | 63       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-B           | 1                   | ML       | 10/8/2014  | 11:08 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-B           | 2                   | ML       | 10/9/2014  | 10:08 AM   | 0               | 0                  | N/A                 | 78       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-B           | 3                   | MH       | 10/10/2014 | 11:02 AM   | 0               | 0                  | N/A                 | 82       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed               |
| G7-B           | 4                   | MRD      | 10/20/2014 | 10:26 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-B           | 5                   | KM       | 10/22/2014 | 11:20 AM   | 0               | 0                  | N/A                 | 75       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-C           | 1                   | MLD      | 10/8/2014  | 11:01 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-C           | 2                   | ML       | 10/9/2014  | 10:01 AM   | 0               | 0                  | N/A                 | 78       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-C           | 3                   | MH       | 10/10/2014 | 10:53 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed: mocking bird |
| G7-C           | 4                   | MRD      | 10/20/2014 | 10:19 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-C           | 5                   | KM       | 10/22/2014 | 11:09 AM   | 0               | 0                  | N/A                 | 73       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-D           | 1                   | ML       | 10/8/2014  | 11:00 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-D           | 2                   | ML       | 10/9/2014  | 9:53 AM    | 0               | 0                  | N/A                 | 77       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-D           | 3                   | MH       | 10/10/2014 | 10:44 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed: blue jay     |
| G7-D           | 4                   | MRD      | 10/20/2014 | 10:13 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-D           | 5                   | KM       | 10/22/2014 | 10:59 AM   | 0               | 0                  | N/A                 | 73       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-E           | 1                   | ML       | 10/8/2014  | 10:54 AM   | 0               | 0                  | N/A                 | 84       | 1                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-E           | 2                   | ML       | 10/9/2014  | 9:47 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-E           | 3                   | MH       | 10/10/2014 | 10:35 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed               |
| G7-E           | 4                   | MRD      | 10/20/2014 | 10:06 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-E           | 5                   | KM       | 10/22/2014 | 10:48 AM   | 0               | 0                  | N/A                 | 73       | 4 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-F           | 1                   | MLD      | 10/8/2014  | 10:51 AM   | 0               | 0                  | N/A                 | 84       | 1                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird |
| G7-F           | 2                   | ML       | 10/9/2014  | 9:42 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-F           | 3                   | MH       | 10/10/2014 | 10:25 AM   | 0               | 0                  | N/A                 | 81       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed               |
| G7-F           | 4                   | MRD      | 10/20/2014 | 10:00 AM   | 0               | 0                  | N/A                 | 76       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-F           | 5                   | KM       | 10/22/2014 | 10:39 AM   | 0               | 0                  | N/A                 | 73       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-G           | 1                   | ML       | 10/8/2014  | 10:49 AM   | 0               | 0                  | N/A                 | 84       | 0                            | 0 - Clear                  | No Scrub Jays Observed               |
| G7-G           | 2                   | ML       | 10/9/2014  | 9:36 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-G           | 3                   | MH       | 10/10/2014 | 10:16 AM   | 0               | 0                  | N/A                 | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed               |
| G7-G           | 4                   | MRD      | 10/20/2014 | 9:51 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-G           | 5                   | KM       | 10/22/2014 | 10:30 AM   | 0               | 0                  | N/A                 | 71       | 4 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-H           | 1                   | MLD      | 10/8/2014  | 10:43 AM   | 0               | 0                  | N/A                 | 83       | 0                            | 0 - Clear                  | No Scrub Jays Observed: flicker      |
| G7-H           | 2                   | ML       | 10/9/2014  | 9:31 AM    | 0               | 0                  | N/A                 | 74       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-H           | 3                   | MH       | 10/10/2014 | 10:06 AM   | 0               | 0                  | N/A                 | 80       | 2.1-4.6                      | 0 - Clear                  | No Scrub Jays Observed               |
| G7-H           | 4                   | MRD      | 10/20/2014 | 9:39 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed               |
| G7-H           | 5                   | KM       | 10/22/2014 | 10:21 AM   | 0               | 0                  | N/A                 | 71       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed               |
| G7-I           | 1                   | MLD      | 10/8/2014  | 10:35 AM   | 0               | 0                  | N/A                 | 83       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mockingbird  |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes  |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--|
| G7-I           | 2                   | ML       | 10/9/2014  | 9:22 AM    | 0               | 0                  | N/A                 | 74       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G7-I           | 3                   | MH       | 10/10/2014 | 9:55 AM    | 0               | 0                  | N/A                 | 80       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G7-I           | 4                   | MRD      | 10/20/2014 | 9:31 AM    | 0               | 0                  | N/A                 | 74       | 2 E                          | 0 - Clear                  | No Scrub Jays Observed   |
| G7-I           | 5                   | KM       | 10/22/2014 | 10:09 AM   | 0               | 0                  | N/A                 | 71       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G8-A           | 1                   | ML       | 10/8/2014  | 7:35 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-A           | 2                   | CC       | 10/9/2014  | 11:24 AM   | 0               | 0                  | N/A                 | 81       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed   |
| G8-A           | 3                   | ML       | 10/10/2014 | 9:29 AM    | 0               | 0                  | N/A                 | 76       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G8-A           | 4                   | MLD      | 10/20/2014 | 8:03 AM    | 0               | 0                  | N/A                 | 63       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-A           | 5                   | KM       | 10/22/2014 | 7:53 AM    | 0               | 0                  | N/A                 | 65       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-B           | 1                   | ML       | 10/8/2014  | 7:42 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-B           | 2                   | CC       | 10/9/2014  | 11:35 AM   | 0               | 0                  | N/A                 | 83       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed   |
| G8-B           | 3                   | ML       | 10/10/2014 | 9:46 AM    | 0               | 0                  | N/A                 | 79       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G8-B           | 4                   | MLD      | 10/20/2014 | 8:12 AM    | 0               | 0                  | N/A                 | 64       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-B           | 5                   | KM       | 10/22/2014 | 8:02 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-C           | 1                   | ML       | 10/8/2014  | 7:55 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-C           | 2                   | CC       | 10/9/2014  | 11:45 AM   | 0               | 0                  | N/A                 | 83       | 1.8-4.8                      | 0 - Clear                  | No Scrub Jays Observed   |
| G8-C           | 3                   | ML       | 10/10/2014 | 9:56 AM    | 0               | 0                  | N/A                 | 80       | 3.2                          | 0 - Clear                  | No Scrub Jays Observed   |
| G8-C           | 4                   | MLD      | 10/20/2014 | 8:20 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-C           | 5                   | KM       | 10/22/2014 | 8:11 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-D           | 1                   | MH       | 10/8/2014  | 7:42 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal, blue jays  |
| G8-D           | 2                   | MH       | 10/9/2014  | 8:26 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed: cardinals (pair), catbird  |
| G8-D           | 3                   | MH       | 10/11/2014 | 10:26 AM   | 0               | 0                  | N/A                 | 80       | 1-2 E                        | 0 - Clear                  | No Scrub Jays Observed: mocking bird   |
| G8-D           | 4                   | MRD      | 10/13/2014 | 11:40 AM   | 0               | 0                  | N/A                 | 84       | 3 SSE                        | 0 - Clear                  | No Scrub Jays Observed   |
| G8-D           | 5                   | MH       | 10/19/2014 | 8:22 AM    | 0               | 0                  | N/A                 | 63       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed   |
| G8-E           | 1                   | MH       | 10/8/2014  | 8:24 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed: towhee   |
| G8-E           | 2                   | MH       | 10/9/2014  | 9:07 AM    | 0               | 0                  | N/A                 | 73       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed: two red-shoulder hawks nearby  |
| G8-E           | 3                   | MH       | 10/11/2014 | 8:15 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed: Towhee   |
| G8-E           | 4                   | MH       | 10/19/2014 | 10:19 AM   | 0               | 0                  | N/A                 | 69       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed   |
| G8-E           | 5                   | MH       | 10/22/2014 | 8:15 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed: songbird activity, nothing came to tape  |
| G8-F           | 1                   | MH       | 10/8/2014  | 8:35 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed: blue jay   |
| G8-F           | 2                   | MH       | 10/9/2014  | 9:19 AM    | 0               | 0                  | N/A                 | 74       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed   |
| G8-F           | 3                   | MH       | 10/11/2014 | 8:26 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal, pileated woodpecker, mocking bird  |
| G8-F           | 4                   | MH       | 10/19/2014 | 10:10 AM   | 0               | 0                  | N/A                 | 68       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed   |
| G8-F           | 5                   | MH       | 10/22/2014 | 8:25 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird, blue jay   |
| G8-G           | 1                   | MH       | 10/8/2014  | 8:49 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-G           | 2                   | MH       | 10/9/2014  | 10:25 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed   |
| G8-G           | 3                   | MH       | 10/11/2014 | 8:36 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-G           | 4                   | MH       | 10/19/2014 | 10:01 AM   | 0               | 0                  | N/A                 | 68       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed   |
| G8-G           | 5                   | MH       | 10/22/2014 | 8:35 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G8-H           | 1                   | MH       | 10/8/2014  | 8:59 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal and five blue jays  |
| G8-H           | 2                   | MH       | 10/9/2014  | 10:15 AM   | 0               | 0                  | N/A                 | 79       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed: three mocking birds, flicker, blue jay and observed a kestrel and little blue heron nearby |
| G8-H           | 3                   | MH       | 10/11/2014 | 8:46 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird   |
| G8-H           | 4                   | MH       | 10/19/2014 | 9:52 AM    | 0               | 0                  | N/A                 | 67       | 1-4 NW                       | 0 - Clear                  | No Scrub Jays Observed: cardinal   |
| G8-H           | 5                   | MH       | 10/22/2014 | 8:45 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed: songbird activity, nothing came to tape  |
| G8-I           | 1                   | MH       | 10/8/2014  | 9:13 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed: two mocking birds, blue jay, and a feral cat nearby  |
| G8-I           | 2                   | MH       | 10/9/2014  | 10:02 AM   | 0               | 0                  | N/A                 | 78       | 1.7                          | 0 - Clear                  | No Scrub Jays Observed: mocking bird, catbird  |
| G8-I           | 3                   | MH       | 10/11/2014 | 8:56 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird, blue jay   |
| G8-I           | 4                   | MH       | 10/19/2014 | 9:43 AM    | 0               | 0                  | N/A                 | 67       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed: catbird, cardinals   |
| G8-I           | 5                   | MH       | 10/22/2014 | 8:54 AM    | 0               | 0                  | N/A                 | 68       | 1-4 NW                       | 0 - Clear                  | No Scrub Jays Observed: blue jay, cardinal, flicker, mocking bird  |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date       | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes   |
|----------------|---------------------|----------|------------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|---|
| G8-J           | 1                   | MH       | 10/8/2014  | 9:23 AM    | 0               | 0                  | N/A                 | 76       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird  |
| G8-J           | 2                   | MH       | 10/9/2014  | 9:52 AM    | 0               | 0                  | N/A                 | 77       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed: two mocking birds, cardinals (pair)   |
| G8-J           | 3                   | MH       | 10/11/2014 | 9:06 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G8-J           | 4                   | MH       | 10/19/2014 | 9:34 AM    | 0               | 0                  | N/A                 | 66       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed  |
| G8-J           | 5                   | MH       | 10/22/2014 | 9:04 AM    | 0               | 0                  | N/A                 | 69       | 4 NW                         | 0 - Clear                  | No Scrub Jays Observed: two flickers  |
| G8-K           | 1                   | MH       | 10/8/2014  | 9:34 AM    | 0               | 0                  | N/A                 | 77       | 1                            | 0 - Clear                  | No Scrub Jays Observed  |
| G8-K           | 2                   | MH       | 10/9/2014  | 9:42 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed: mocking bird  |
| G8-K           | 3                   | MH       | 10/11/2014 | 9:16 AM    | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed: Coopers hawk nearby   |
| G8-K           | 4                   | MH       | 10/19/2014 | 9:25 AM    | 0               | 0                  | N/A                 | 66       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed: fly catcher, cardinal, catbird, goldfinch   |
| G8-K           | 5                   | MH       | 10/22/2014 | 9:13 AM    | 0               | 0                  | N/A                 | 69       | 3 NNW                        | 0 - Clear                  | No Scrub Jays Observed  |
| G8-L           | 1                   | MH       | 10/8/2014  | 10:34 AM   | 0               | 0                  | N/A                 | 83       | 1                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird  |
| G8-L           | 2                   | MH       | 10/9/2014  | 9:33 AM    | 0               | 0                  | N/A                 | 76       | 1.8                          | 0 - Clear                  | No Scrub Jays Observed  |
| G8-L           | 3                   | MH       | 10/11/2014 | 9:27 AM    | 0               | 0                  | N/A                 | 76       | 0                            | 0 - Clear                  | No Scrub Jays Observed: cardinal  |
| G8-L           | 4                   | MH       | 10/19/2014 | 9:16 AM    | 0               | 0                  | N/A                 | 65       | 1-5 NW                       | 0 - Clear                  | No Scrub Jays Observed: catbird, cardinal   |
| G8-L           | 5                   | MH       | 10/22/2014 | 9:22 AM    | 0               | 0                  | N/A                 | 69       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed: cardinals, blue jay, mocking bird, catbird  |
| G9-A           | 1                   | MLD/MH   | 10/7/2014  | 8:16 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G9-A           | 2                   | MLD      | 10/8/2014  | 7:47 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G9-A           | 3                   | MRD      | 10/9/2014  | 8:57 AM    | 0               | 0                  | N/A                 | 72       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G9-A           | 4                   | MRD      | 10/10/2014 | 8:05 AM    | 0               | 0                  | N/A                 | 72       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-A           | 5                   | MH       | 10/22/2014 | 11:46 AM   | 0               | 0                  | N/A                 | 75       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G9-B           | 1                   | MLD/MH   | 10/7/2014  | 8:26 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed: Two blue jays and one cardinal  |
| G9-B           | 2                   | MLD      | 10/8/2014  | 7:59 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G9-B           | 3                   | MRD      | 10/9/2014  | 8:45 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G9-B           | 4                   | MRD      | 10/10/2014 | 8:14 AM    | 0               | 0                  | N/A                 | 72       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-B           | 5                   | MRD      | 10/13/2014 | 11:00 AM   | 0               | 0                  | N/A                 | 82       | 8 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-C           | 1                   | MLD/MH   | 10/7/2014  | 8:40 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking bird and blue jay   |
| G9-C           | 2                   | MLD      | 10/8/2014  | 8:11 AM    | 0               | 0                  | N/A                 | 67       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking birds   |
| G9-C           | 3                   | MRD      | 10/9/2014  | 8:36 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G9-C           | 4                   | MRD      | 10/10/2014 | 8:25 AM    | 0               | 0                  | N/A                 | 72       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-C           | 5                   | MH       | 10/22/2014 | 11:36 AM   | 0               | 0                  | N/A                 | 75       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G9-D           | 1                   | MLD/MH   | 10/7/2014  | 8:52 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G9-D           | 2                   | MLD      | 10/8/2014  | 8:21 AM    | 1               | 0                  | S TO NW             | 67       | 0                            | 0 - Clear                  | One adult SJ scolding and moving from station to across the street and back. Bird came from the south, scolded from pine, moved across the street and scolded, then moved back to pine and flew to the west (see map).  |
| G9-D           | 3                   | MRD      | 10/9/2014  | 8:27 AM    | 0               | 0                  | N/A                 | 71       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G9-D           | 4                   | MRD      | 10/10/2014 | 8:35 AM    | 0               | 0                  | N/A                 | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-D           | 5                   | MRD      | 10/13/2014 | 10:50 AM   | 0               | 0                  | N/A                 | 82       | 8 E                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-D           | 6                   | MH       | 10/22/2014 | 11:27 AM   | 0               | 0                  | N/A                 | 75       | 3 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G9-E           | 1                   | MLD/MH   | 10/7/2014  | 9:03 AM    | 0               | 0                  | N/A                 | 66       | 0                            | 0 - Clear                  | No Scrub Jays Observed: blue jays   |
| G9-E           | 2                   | MLD      | 10/8/2014  | 8:32 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed: mocking birds, blue jays  |
| G9-E           | 2                   | MRD      | 10/8/2014  | 9:22 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed  |
| G9-E           | 3                   | MRD      | 10/9/2014  | 8:16 AM    | 0               | 0                  | N/A                 | 70       | 0-1.7                        | 0 - Clear                  | No Scrub Jays Observed  |
| G9-E           | 4                   | MRD      | 10/10/2014 | 8:46 AM    | 0               | 0                  | N/A                 | 73       | 1.4                          | 0 - Clear                  | No Scrub Jays Observed  |
| G9-E           | 5                   | MH       | 10/22/2014 | 11:18 AM   | 0               | 0                  | N/A                 | 75       | 2 NW                         | 0 - Clear                  | No Scrub Jays Observed  |
| G15-A          | 1                   | ML       | 4/20/2015  | 8:05 AM    | 2               | 1                  | N TO S, S TO N      | 68       | 0                            | 0 - Clear                  | 2 Adults and 1 possible JV scrub jay observed. Flew in from the N to the left and right of the station. Birds did not defend aggressively and were not interested in the tape as other families in the area. The JV was observed for the shortest period of time to the left of the station. The adults stayed for the about 2-3 min and the left. Birds continued to scold but did not reappear. |
| G15-A          | 2                   | ML       | 4/21/2015  | 7:50 AM    | 1               | 0                  | UNKNOWN             | 66       | 1.5                          | 0 - Clear                  | One adult appeared quickly and then left with minimal vocalization.   |
| G15-A          | 3                   | ML       | 4/22/2015  | 9:33 AM    | 0               | 0                  | N/A                 | 70       | 2.6                          | 0 - Clear                  | No Scrub Jays Observed  |



Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date      | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes  |
|----------------|---------------------|----------|-----------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|--|
| G15-A          | 4                   | ML       | 4/23/2015 | 10:13 AM   | 0               | 0                  | N/A                 | 74       | 1.9                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-A          | 5                   | ML       | 4/24/2015 | 8:00 AM    | 2               | 0                  | E TO W              | 69       | 4 to 5                       | 0 - Clear                  | Two adults observed. Vocalizations minimal. Did not stay at station  |
| G15-B          | 1                   | ML       | 4/20/2015 | 8:14 AM    | 1               | 0                  | E TO W, S TO N      | 68       | 0                            | 0 - Clear                  | One adult appeared - followed from station A. minimal vocalization. Quickly left   |
| G15-B          | 2                   | ML       | 4/21/2015 | 7:58 AM    | 0               | 0                  | N/A                 | 66       | 1.5                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-B          | 3                   | ML       | 4/22/2015 | 9:41 AM    | 0               | 0                  | N/A                 | 70       | 2.6                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-B          | 4                   | ML       | 4/23/2015 | 10:23 AM   | 2               | 0                  | S TO NE             | 74       | 1.9                          | 0 - Clear                  | Two adults made a quick appearance and left.   |
| G15-B          | 5                   | ML       | 4/24/2015 | 8:48 AM    | 1               | 0                  | S TO NE             | 70       | 4 to 5                       | 0 - Clear                  | One adult. Minimal scolding, however landed on sand on front of oaks and did not leave as quickly as observed on previous days |
| G15-C          | 1                   | ML       | 4/20/2015 | 8:23 AM    | 0               | 1                  | N TO S              | 68       | 0                            | 0 - Clear                  | One JV appear from the west and quickly departure to the north. Only scolded 2-3 times before leaving                          |
| G15-C          | 2                   | ML       | 4/21/2015 | 8:06 AM    | 2               | 0                  | TO E, N TO S, S TO  | 66       | 1.5                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-C          | 3                   | ML       | 4/22/2015 | 9:49 AM    | 1               | 0                  | N/A                 | 72       | 2.6                          | 0 - Clear                  | One adult observed flew from the north. Did not scold and left quickly   |
| G15-C          | 4                   | ML       | 4/23/2015 | 10:36 AM   | 0               | 0                  | N/A                 | 74       | 1.9                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-C          | 5                   | ML       | 4/24/2015 | 8:39 AM    | 0               | 0                  | N/A                 | 70       | 4 to 5                       | 0 - Clear                  | No Scrub Jays Observed   |
| G15-D          | 1                   | ML       | 4/20/2015 | 8:34 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G15-D          | 2                   | ML       | 4/21/2015 | 8:14 AM    | 1               | 0                  | N TO S, S TO N      | 66       | 1.5                          | 0 - Clear                  | One adult observed flew in from the west. Minimal vocalizations. Departed quickly.   |
| G15-D          | 3                   | ML       | 4/22/2015 | 9:58 AM    | 0               | 0                  | N/A                 | 72       | 2.6                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-D          | 4                   | ML       | 4/23/2015 | 10:47 AM   | 0               | 0                  | N/A                 | 75       | 1.9                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-D          | 5                   | ML       | 4/24/2015 | 8:31 AM    | 0               | 0                  | N/A                 | 70       | 4 to 5                       | 0 - Clear                  | No Scrub Jays Observed   |
| G15-E          | 1                   | ML       | 4/20/2015 | 8:41 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G15-E          | 2                   | ML       | 4/21/2015 | 8:21 AM    | 0               | 0                  | N/A                 | 66       | 1.5                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-E          | 3                   | ML       | 4/22/2015 | 10:09 AM   | 0               | 0                  | N/A                 | 73       | 2.6                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-E          | 4                   | ML       | 4/23/2015 | 9:58 AM    | 0               | 0                  | N/A                 | 74       | 1.9                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-E          | 5                   | ML       | 4/24/2015 | 8:20 AM    | 0               | 0                  | N/A                 | 71       | 4 to 5                       | 0 - Clear                  | No Scrub Jays Observed   |
| G15-F          | 1                   | ML       | 4/20/2015 | 8:53 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G15-F          | 2                   | ML       | 4/21/2015 | 8:29 AM    | 0               | 0                  | N/A                 | 66       | 1.5                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-F          | 3                   | ML       | 4/22/2015 | 10:18 AM   | 0               | 0                  | N/A                 | 72       | 2.6                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-F          | 4                   | ML       | 4/23/2015 | 10:06 AM   | 0               | 0                  | N/A                 | 73       | 1.9                          | 0 - Clear                  | No Scrub Jays Observed   |
| G15-F          | 5                   | ML       | 4/24/2015 | 8:12 AM    | 2               | 0                  | S TO N              | 70       | 4 to 5                       | 0 - Clear                  | Two adults approached from the north. Scolded and moved on. Observed flying toward station A                                   |
| G16-A          | 1                   | ML       | 4/20/2015 | 9:32 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-A          | 2                   | ML       | 4/21/2015 | 8:40 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-A          | 3                   | ML       | 4/22/2015 | 9:21 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-A          | 4                   | ML       | 4/23/2015 | 8:10 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-A          | 5                   | ML       | 4/24/2015 | 9:00 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-B          | 1                   | ML       | 4/20/2015 | 9:45 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-B          | 2                   | ML       | 4/21/2015 | 8:51 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-B          | 3                   | ML       | 4/22/2015 | 9:00 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-B          | 4                   | ML       | 4/23/2015 | 8:20 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-B          | 5                   | ML       | 4/24/2015 | 9:11 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-C          | 1                   | ML       | 4/20/2015 | 9:58 AM    | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-C          | 2                   | ML       | 4/21/2015 | 9:10 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-C          | 3                   | ML       | 4/22/2015 | 9:08 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-C          | 4                   | ML       | 4/23/2015 | 8:37 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-C          | 5                   | ML       | 4/24/2015 | 9:26 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-D          | 1                   | ML       | 4/20/2015 | 10:08 AM   | 0               | 0                  | N/A                 | 69       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-D          | 2                   | ML       | 4/21/2015 | 9:18 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-D          | 3                   | ML       | 4/22/2015 | 9:16 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-D          | 4                   | ML       | 4/23/2015 | 8:44 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-D          | 5                   | ML       | 4/24/2015 | 9:33 AM    | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |
| G16-E          | 1                   | ML       | 4/20/2015 | 10:21 AM   | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed   |

Scrub-Jay Station Data

| Call Station # | Survey Call Event # | Reviewer | Date      | Start Time | Adults Observed | Juveniles Observed | Direction of Flight | Temp (F) | Wind Speed & Direction (mph) | Precipitation & Visibility | Notes                  |
|----------------|---------------------|----------|-----------|------------|-----------------|--------------------|---------------------|----------|------------------------------|----------------------------|------------------------|
| G16-E          | 2                   | ML       | 4/21/2015 | 9:02 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G16-E          | 3                   | ML       | 4/22/2015 | 8:52 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G16-E          | 4                   | ML       | 4/23/2015 | 8:28 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G16-E          | 5                   | ML       | 4/24/2015 | 9:17 AM    | 0               | 0                  | N/A                 | 72       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-A          | 1                   | ML       | 4/20/2015 | 10:34 AM   | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-A          | 2                   | ML       | 4/21/2015 | 9:29 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-A          | 3                   | ML       | 4/22/2015 | 8:43 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-A          | 4                   | ML       | 4/23/2015 | 8:53 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-A          | 5                   | ML       | 4/24/2015 | 9:45 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-B          | 1                   | ML       | 4/20/2015 | 10:43 AM   | 0               | 0                  | N/A                 | 73       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-B          | 2                   | ML       | 4/21/2015 | 9:37 AM    | 0               | 0                  | N/A                 | 71       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-B          | 3                   | ML       | 4/22/2015 | 8:27 AM    | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-B          | 4                   | ML       | 4/23/2015 | 9:01 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-B          | 5                   | ML       | 4/24/2015 | 9:52 AM    | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-C          | 1                   | ML       | 4/20/2015 | 10:50 AM   | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-C          | 2                   | ML       | 4/21/2015 | 9:44 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-C          | 3                   | ML       | 4/22/2015 | 8:36AM     | 0               | 0                  | N/A                 | 68       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-C          | 4                   | ML       | 4/23/2015 | 9:10 AM    | 0               | 0                  | N/A                 | 70       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G17-C          | 5                   | ML       | 4/24/2015 | 10:00 AM   | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G18-A          | 1                   | ML       | 4/20/2015 | 10:58 AM   | 0               | 0                  | N/A                 | 74       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G18-A          | 2                   | ML       | 4/21/2015 | 9:58 AM    | 0               | 0                  | N/A                 | 72       | 1.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-A          | 3                   | ML       | 4/22/2015 | 8:17 AM    | 0               | 0                  | N/A                 | 68       | 1.2                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-A          | 4                   | ML       | 4/23/2015 | 9:20 AM    | 0               | 0                  | N/A                 | 70       | 2.4                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-A          | 5                   | ML       | 4/24/2015 | 10:08 AM   | 0               | 0                  | N/A                 | 75       | 3.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-B          | 1                   | ML       | 4/20/2015 | 11:06 AM   | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G18-B          | 2                   | ML       | 4/21/2015 | 10:07 AM   | 0               | 0                  | N/A                 | 74       | 1.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-B          | 3                   | ML       | 4/22/2015 | 8:08AM     | 0               | 0                  | N/A                 | 66       | 1.2                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-B          | 4                   | ML       | 4/23/2015 | 9:27 AM    | 0               | 0                  | N/A                 | 70       | 2.4                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-B          | 5                   | ML       | 4/24/2015 | 10:16 AM   | 0               | 0                  | N/A                 | 76       | 3.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-C          | 1                   | ML       | 4/20/2015 | 11:12 AM   | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G18-C          | 2                   | ML       | 4/21/2015 | 10:15 AM   | 0               | 0                  | N/A                 | 74       | 1.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-C          | 3                   | ML       | 4/22/2015 | 8:01 AM    | 0               | 0                  | N/A                 | 66       | 1.2                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-C          | 4                   | ML       | 4/23/2015 | 9:35 AM    | 0               | 0                  | N/A                 | 70       | 2.7                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-C          | 5                   | ML       | 4/24/2015 | 10:23 AM   | 0               | 0                  | N/A                 | 75       | 3.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-D          | 1                   | ML       | 4/20/2015 | 11:18 AM   | 0               | 0                  | N/A                 | 75       | 0                            | 0 - Clear                  | No Scrub Jays Observed |
| G18-D          | 2                   | ML       | 4/21/2015 | 10:22 AM   | 0               | 0                  | N/A                 | 73       | 1.6                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-D          | 3                   | ML       | 4/22/2015 | 7:50 AM    | 0               | 0                  | N/A                 | 66       | 1.2                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-D          | 4                   | ML       | 4/23/2015 | 9:42 AM    | 0               | 0                  | N/A                 | 70       | 2.4                          | 0 - Clear                  | No Scrub Jays Observed |
| G18-D          | 5                   | ML       | 4/24/2015 | 10:30 AM   | 0               | 0                  | N/A                 | 74       | 3.6                          | 0 - Clear                  | No Scrub Jays Observed |

Stantec Biologists: MH = Mike Holdsworth, ML = Matthew Leonard, MLD = Mike Dinardo, MRD = Mike Drauer, KM = Kevin Muldrew, CC = Crystal Clark