

Florida Department of Agriculture and Consumer Services  
**Office of Agricultural Water Policy**



**Status of Implementation of  
Agricultural Nonpoint Source  
Best Management Practices**

July 1, 2020

Report to the Governor, the President of the Senate, and the Speaker of the House  
Pursuant to Section 403.0675(2), F.S.

Publication No: FDACS-P-01924 07/20

# Executive Summary

Pursuant to state law, the Florida Department of Agriculture and Consumer Services (FDACS) Office of Agricultural Water Policy (OAWP) works with Florida's agricultural producers to implement best management practices (BMPs) for nutrient reduction, irrigation management, and protection of water resources. This report presents information on the status of implementation of the BMP program that is required annually pursuant to Section 403.0675(2), F.S. BMP implementation data is presented both statewide and for each area covered by a basin management action plan (BMAP) developed by the Florida Department of Environmental Protection. Important points from this report include:

- Approximately 56 percent of the overall agricultural acreage identified by the Florida Statewide Agricultural Irrigation Demand dataset is enrolled in the BMP program statewide. This includes acreage both inside and outside basin management action plan areas.
- Eighty percent of the overall irrigated agricultural acres statewide are enrolled in the BMP program.
- Almost 3,600 implementation verification (IV) site visits were performed statewide out of approximately 12,776 enrolled in the BMP program through a Notice of Intent to Implement BMPs.
- Approximately 72 percent of the agricultural operations enrolled in the BMP program completed self-reported surveys regarding the implementation of those nutrient, irrigation and water resource BMPs that are consistent across each of the adopted BMP manuals.
- Self-reported surveys completed by producers were phased out in August 2019 to allow more time for IV site visits and will no longer make up part of the data being collected in 2020, nor will information on the surveys be included in future reports.
- Responses by those agricultural operations that participated in either the survey or IV site visit, or both, indicated consistent compliance with established BMPs.
- The IV site visits, self-reported survey responses, and additional data evaluated for the development of this report are being utilized by OAWP to improve data collection during BMP IV site visits, improve outreach to producers to increase BMP implementation, improve the prioritization of cost-share funding, and develop methodologies and tools to improve data accuracy and efficiency in gathering data for reporting purposes.
- OAWP continues working to improve data collection and analysis methods to ensure replicable procedures, accurate data, and meaningful reporting to meet legislative requirements. Amendments to Section 403.067, F.S., effective July 1, 2020, now require specific time-frames for IV site visits to verify proper implementation of BMPs as well as reporting requirements for records retained by OAWP regarding fertilizer application on acreages enrolled in the BMP program. This data will begin to be collected and reported beginning July 1. The July 1, 2021 report will include six months of data collection during 2020.

# Introduction and FDACS OAWP BMP Program Overview

Agricultural water quality and water conservation best management practices (BMPs) are an integral part of water resource protection required under the regulatory BMP program implemented by the Florida Department of Agriculture and Consumer Services (FDACS) Office of Agricultural Water Policy (OAWP).

Under the Florida Watershed Restoration Act (FWRA), the Florida Department of Environmental Protection (FDEP) is authorized to adopt BMAPs, which are road maps for the restoration of waterbodies to meet total maximum daily loads (TMDLs).<sup>1</sup> As of May 2020, 31 BMAPs have been adopted, and two new BMAPs are pending due to legal challenges. The BMAPs are required to identify management strategies to achieve TMDLs.<sup>2</sup> BMAPs identify the implementation of agricultural BMPs as the management strategy to address agricultural nonpoint sources. BMPs are just one strategy that needs to be implemented in conjunction with other management strategies to achieve the TMDLs. Agricultural landowners located within BMAPs are required to either properly implement BMPs identified as applicable to their property and operation or conduct water quality monitoring prescribed by FDEP.<sup>3</sup>

For the purposes of the BMP program, a BMP is defined by law as a means, a practice or combination of practices determined by the coordinating agencies, based on research, field-testing, and expert review, to be the most effective and practicable on-location means, including economic and technological considerations, for improving water quality in agricultural and urban discharges. BMPs for agricultural discharges must reflect a balance between water quality improvements and agricultural productivity.<sup>4</sup> BMPs are based on scientific and technical research and are adopted on a statewide basis through their incorporation into BMP manuals adopted by FDACS. Applicable BMPs are then implemented by producers and agricultural landowners. Site-specific factors are considered when determining the applicability of BMPs including commodity type, topography, geology, location of production, soil type, parcel size, and type and sensitivity of the ecological resources in the surrounding areas. Producers that are properly<sup>5</sup> implementing BMPs receive a presumption of compliance with state water quality standards for the pollutants addressed by the BMPs. Additionally, producers who enroll in the BMP program become eligible for technical assistance and cost-share funding administered by FDACS.

The FWRA authorizes FDACS to develop and adopt, by rule, BMPs necessary to achieve the level of pollution reduction established by FDEP for agricultural pollutant sources adopted in TMDL allocations.<sup>6</sup> FDACS has adopted ten BMP manuals that cover nearly all major agricultural commodities in Florida.<sup>7</sup> It is the intent of OAWP to update existing BMP manuals and consider

1. Section 403.067, F.S.; BMAP information is available at <https://floridadep.gov/dear/water-quality-restoration/content/basin-management-action-plans-bmaps>.

2. Section 403.067(7), F.S.

3. Section 403.067, F.S.

4. Section 373.4595(2)(a), F.S.

5. Section 403.067(7)(c), F.S.

6. Section 403.067(7)(c), F.S.

7. One manual addresses wildlife (imperiled state species). The BMP manuals are available at <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices>.

development of new manuals as research becomes available. Newly proposed BMPs are initially verified by FDEP<sup>8</sup> based on underlying research for inclusion in the applicable manual before being adopted by reference in Title 5M, F.A.C.

### **BMP Enrollment**

To enroll in the BMP program, producers must meet with an OAWP representative to determine the BMPs that are applicable to their operation and then submit a Notice of Intent to Implement the BMPs (NOI) to OAWP, along with the BMP checklist from the applicable BMP manual. Because many agricultural operations are diverse and are engaged in the production of multiple commodities, a landowner may sign multiple NOIs for a single parcel.

The process of enrolling producers in the BMP program is staff-intensive and typically requires two or more site visits, an evaluation of production activities and resource concerns, documentation of parcel information, mapping, and data entry. The time needed to complete a single enrollment depends on the intensity of the agricultural operation, the requirements of the applicable BMAP, the size of the operation, the geology of the site, the water resources on or near the site, the producer's technical and financial resources, and the assistance or training needed by the producer to implement the BMPs. To achieve the most benefits to water resources, OAWP has historically focused BMP program enrollment efforts on higher intensity agricultural operations, such as nurseries and dairies, other irrigated acreage, and on larger parcels that are greater than 50 acres. In recent years, smaller, bona fide agricultural operations became an additional area of focus. OAWP continues to use a phased approach to meet enrollment requirements in BMAPs and Chapter 62-307, F.A.C., and achieve the most benefits to water resources from nutrient reduction.

OAWP makes multiple efforts to contact agricultural landowners to enroll them in the BMP program. Enrollment efforts include multiple letters and a site visit. If efforts are unsuccessful or if the landowner opts to conduct water quality monitoring, OAWP refers the landowner to FDEP to either implement a monitoring under the requirements of Chapter 62-307, F.A.C., or be subject to other enforcement action as necessary if a landowner chooses not to implement BMPs or conduct water quality monitoring. The requirements for monitoring can be onerous and expensive, including installation of a monitoring well, performing water quality sampling multiple times each year, and measuring discharge flow and water quality concentrations at surface water sites.

### **BMP Implementation Verification**

FDACS is required to verify that producers are implementing the BMPs identified in their NOIs.<sup>9</sup> Until August 2019, the two methods for verifying implementation of BMPs included IV site visits and producer self-surveys. OAWP conducted site visits on enrolled parcels and worked with the producers to evaluate nutrient management, irrigation management, and water resource protection BMPs. Site visits have historically been prioritized based on criteria including the date the NOI was signed, date of the last site visit, whether a status report has been completed or not, whether the operation has received cost-share funding, or whether other BMP related concerns exist for the NOI.

8. Section 403.067(7)(c), F.S.

9. Section 403.067(7)(c)2., F.S.

Since August 2019, OAWP has focused on IV site visits that evaluate proper BMP implementation using the completed checklists in the BMP manuals which a landowner is enrolled. Procedures used to verify the proper implementation of agricultural BMPs are outlined in Rules 5M-1.008 and 5M-1.009, F.A.C. Site visits provide an opportunity to address areas of concern on an operation and for a FDACS representative to discuss with producers topics related to water quality, water conservation, BMAPs and BMP requirements, changes in BMPs, and other opportunities to improve water quality. Site visits additionally allow for the identification of cost-share opportunities for BMPs, and other practices and projects. Producers not implementing BMPs according to the process outlined in Chapter 5M-1, F.A.C., are referred to FDEP for enforcement action after attempts at remedial action are exhausted.

### **BMP Implementation Reports**

FDACS is required to submit annual reports on the status of BMP implementation and verification of BMP implementation to the Florida Legislature and the Governor.<sup>10</sup> Because of the diversity of agricultural production and water resources across the state, OAWP is working to ensure that the reporting is based on an accurate and consistent statewide dataset. This includes efforts to standardize a set of core practices across all manuals to make evaluation and analyses of BMPs more relevant.

### **Cost-Share**

The utilization of cost-share funding in prioritized areas has greatly enhanced the implementation of BMPs, other practices, and projects (including large-scale innovative technologies). During 2019, 139 projects were completed statewide, including 110 projects within BMAP areas. **Table 1** lists the total amount of cost-share reimbursements for projects completed in 2019 in each BMAP area. The total cost-share reimbursement in BMAP areas for 2019 was \$10,694,330.96. If all BMAP costs are summed up in **Table 1**, the amount spent will be higher than the total cost-share reimbursement because some BMAP boundaries overlap. **Table 2** lists the total amount of cost-share reimbursements for projects completed in 2019 for each BMP category. In addition, OAWP provided cooperative cost-share funding that is administered through the water management districts that is not included in the funding totals in **Tables 1 and 2**.

10. Section 403.0675, F.S.

**Table 1. Cost-share for Projects Completed in 2019 by BMAP**

<b>BMAP Name</b>	<b>Total Costs of Projects Completed in 2019</b>
Alafia River Basin	\$16,875.00
Caloosahatchee Estuary Basin	\$85,683.08
Central Indian River Lagoon	\$1,163,806.71
Chassahowitzka-Homosassa Springs	\$67,971.77
Hillsborough River Basin	\$17,657.85
Jackson Blue Spring	\$614.947.76
Lake Okeechobee Basin	\$5,028,500.76
Lower St. Johns River Basin Main Stem	\$476,672.67
Middle and Lower Suwannee River Basin	\$945,616.80
Orange Creek	\$41,367.23
Rainbow River and Springs	\$256,767.37
Santa Fe River Basin	\$654,242.34
Silver River and Springs	\$109,371.31
St. Lucie River and Estuary Basin	\$626,305.37
Upper Ocklawaha River Basin	\$90,756.21
Upper Wakulla River and Wakulla Spring	\$147,863.26
Wacissa River and Wacissa Springs	\$44,135.99
Weeki Wachee Spring and River	\$134,616.98
Wekiva River, Rock Springs Run, and Little Wekiva Canal	\$121,172.50
Wekiwa Spring and Rock Springs	\$50,000.00
Outside any specific BMAP area	\$6,112,913.25

## Research Highlights

Research to develop, revise, and improve BMPs is required in Sections 403.067, 373.813, and 570.081, F.S. Initial research efforts and studies have focused on determining optimal fertilizer rates for various crops. In recent years, research has expanded to include quantifying and demonstrating benefits from precision agriculture technologies that either improve the nutrient use efficiencies of crops or reduce fertilizer and irrigation application rates.

Numerous research projects conducted in support of the BMP program have demonstrated a reduction in nitrogen fertilization use on crops when using drip irrigation, soil moisture sensors, variable rate irrigation, and other technologies (i.e. controlled-release fertilizers). Research further demonstrates that fertilizer application rates can also be reduced through precise application of nutrients at the root zone and at the right timing based on plant growth. More information on research funded by OAWP is available at <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Best-Management-Practices/BMP-Research>.

**Table 2. Cost-share for Projects Completed Statewide in 2019 by BMP Category (includes projects outside of BMAP areas)**

<b>BMP Category</b>	<b>Total Costs of Projects Completed in 2019</b>
Irrigation Management	\$6,908,208.44
Nutrient Management	\$5,937,669.12
Water Resource Protection	\$3,961,366.65

## Methodology

This report was developed utilizing data collected from January 1 to December 31, 2019. The timeframe of data represented in this report was adjusted from previous reports to better align with the FDEP Statewide Annual Report on Total Maximum Daily Loads, Basin Management Action Plans, Minimum Flows or Minimum Water Levels, and Recovery or Prevention Strategies Report (STAR Report). Some of the data generated for this report was provided to FDEP for inclusion in the STAR Report. Aligning the reporting time frames reduces inconsistencies and questions about these reports and is more efficient for both agencies.

The 2020 report is based on several data sources, including responses to self-survey questions regarding the status of implementing BMPs (dataset through August 2019)<sup>11</sup>, Geographic Information System (GIS) mapping data, and additional information collected by OAWP during IV site visits to producers enrolled in the BMP program.

11. Self-reported surveys completed by producers were phased out in August 2019 to refocus efforts IV site visits and will no longer make up part of that data being collected in 2020 for inclusion in future reports.

## Land Use Mapping and Enrollment Tracking

The identified agricultural areas utilized this report are based on the Florida Statewide Agricultural Irrigation Demand (FSAID) datasets.<sup>12</sup> The ongoing mapping and ground-truthing efforts that FDACS undertakes to refine the FSAID datasets provide the best available data to identify irrigated and non-irrigated agricultural lands in Florida and understand agricultural land uses trends.<sup>13</sup> Land use data accuracy improvements from ground-truthing efforts are important because they can affect the amount of overall agricultural acreage identified in the state. In addition to improved data accuracy and available information, statewide agricultural acreage and enrolled agricultural acreage will vary year to year due to the dynamic nature of the agricultural industry. Notable trends reported in 2019 include increases in irrigated agricultural lands in north Florida and a decrease in overall agricultural acres statewide. These trends are projected to continue over the next two decades.<sup>14</sup>

## Characterization of Unenrolled Agricultural Acreages

To capture some of the land use changes that have occurred since the last FSAID update, OAWP performed additional land use characterizations for this report. For this effort, any part of an agricultural land use from the FSAID Agricultural Lands Geo-database (ALG) that falls outside of the boundaries of parcels enrolled in the BMP program is considered “unenrolled agricultural lands”. Further characterization of these unenrolled agricultural lands is accomplished by overlaying DOR Property Appraiser Parcels data on the unenrolled agricultural lands and evaluating the DOR land use codes, owner name, parcel frequency, and the ALG acres within each parcel.

Lands that may be classified as agriculture but are unlikely to have enrollable agricultural activities include parcels that:

- Have DOR use codes associated with industrial or institutional use (codes 7000-9800) such as schools, mines, military lands, churches cemeteries, rights of way and other similar land uses;
- Are owned by utilities,
- Appear to contain less than one acre of agricultural activity, or
- Are part of a state or water management district restoration or water storage project.

Additionally, sovereign lands under tribal ownership with agricultural activities are not subject to the requirements of Section 403.067, F.S., or other state requirements. As such, these agricultural activities are not included in the total agricultural acres evaluated for this report.

12. Information on FSAID is available at <https://www.fdacs.gov/Agriculture-Industry/Water/Agricultural-Water-Supply-Planning>. This annual report is based on FSAID6.

13. FSAID agricultural land use datasets are updated annually through a combination of methods including water use permit review, DOR land use comparison, and ground-truthing. Ground-truthing of the irrigated agricultural lands is undertaken each year in specific counties rotating through the state on a five-year cycle. FDACS provides updated datasets to FDEP and the water management districts each year. Work is ongoing with these coordinating agencies to incorporate the FSAID agricultural data into the statewide land use dataset. The water management districts currently use the FSAID agricultural acres for water supply planning, though some perform their own volume calculations. FDEP BMAPs (including reports and BMAP updates) have different agricultural land use acres and calculations because the reports were adopted up to 11 years ago. Further, some of the more recently adopted BMAPs and models continue to use older datasets, so the agricultural acres identified in the BMAPs do not match the current agricultural acres that FDACS uses for analyses and BMP enrollment efforts.

14. <https://www.fdacs.gov/content/download/84471/file/FSAID-VI-Water-Use-Estimates-Final-Report.pdf>.



It is possible that lands owned by the state (Board of Trustees of the Internal Improvement Trust Fund) or the water management districts may be leased, in whole or in part, for agricultural activities. However, such leasing is infrequent. Any leasing entity engaged in agriculture is required to enroll in the BMP program. Coordination between FDACS, FDEP, and the water management districts will continue to ensure the land use is correctly characterized and that any public lands leased for agricultural activities are required to enroll in the BMP program.

When datasets are compared or combined, differences between them can result in spatial boundaries that do not align precisely, creating “slivers.” Slivers are not enrollable because they are an artifact of the geospatial analysis and do not represent lands with active agricultural practices. For example, a sliver can represent the area between the boundary of a parcel and the beginning of a road, canal, easement, etc. In this analysis, most slivers were captured in the group containing less than one acre of agricultural land. The analyses were performed only within the individual BMAP areas, and not statewide.

Because the land uses and acreage identified through the analyses are not likely to contain enrollable agricultural activity, **Table 4** was modified to reflect the changes in the number of total agricultural acres, percentage of the BMAP area that is agricultural, and the percent enrolled within the BMAPs.

### **BMP Enrollment Data**

BMP enrollment data are collected in the field by OAWP based on the adopted NOI forms and BMP checklists. Each parcel ID is included in an enrollment and is recorded on the NOI form. NOI and BMP checklist data are entered into the Best Management Practices Tracking System database (BMPTS2). On a quarterly basis, the BMPTS2 enrolled parcel data are mapped using the DOR annual statewide GIS parcel data. The mapped enrolled parcel data are used to identify overall BMP enrollment within adopted BMAP areas, which are also compared to the latest FSAID agricultural land use data.<sup>15</sup>

The number of NOIs and the number of acres enrolled in the BMP program fluctuate when parcels are sold, when leases are lost, or when production areas decrease or production ceases, among other reasons. When crop types on a specific parcel change, additional NOIs may be required for any new commodities being produced on the parcel that require the use of a different BMP manual. New commodities may result in a reduction or increase in the acreage enrolled in the BMP program.

### **Self-Reporting Survey (Used through August 2019)**

An annual status report survey was provided to all producers enrolled in the BMP program to complete and submit online or was completed with assistance from OAWP. Responses for individual NOIs were integrated with spatial data in GIS to obtain acreage information for the annual report. Use of the status report survey was suspended in August 2019, and will not be reflected in future reports, as the effort has been replaced by IV site visits.

15. Acres are rounded for reporting purposes. GIS boundary data for BMAP areas are provided by FDEP.

## IV Site Visits

IV site visits are conducted on agricultural acreages with NOIs to determine the status of BMP implementation, including a review of nutrient and irrigation management records, verification that BMPs are being properly implemented, and verification that cost-share practices are being properly utilized, maintained, and/or implemented.

## Everglades Program and Permitted Operations

Producers located in the Everglades Agricultural Area or C-139 Basin within the South Florida Water Management District (SFWMD) implement BMPs according to the SFWMD permitting process adopted under Chapter 40E-63, F.A.C. Producers regulated under Chapter 40E-63, F.A.C., are considered to be in compliance with the BMP program if the producers are in compliance with the SFWMD permits. OAWP does not conduct IV site visits on these 125 NOIs because SFWMD conducts site visits and ensures compliance with the Chapter 40E-63 permits.

## Limitations of Data

The statewide agricultural acreage summary includes data from NOIs both inside and outside of BMAP areas. Further, many producers have more than one NOI because they are producing multiple agricultural commodities and are implementing BMPs from more than one BMP manual. To prevent duplication in counts of acres enrolled under more than one manual, those acres are reclassified as “multiple commodity.” Those acres are not included in any of the individual commodity totals.

**Table 4** provides the number of NOIs and the agricultural acreage are listed for each BMAP. However, because there is overlap of several BMAP boundaries, some NOIs and acres are counted in more than one BMAP. Therefore, adding together the NOI counts or acreages on **Table 4** for the BMAPs will result in higher NOI counts and agricultural acres enrolled in the BMP program compared to the total provided.<sup>16</sup>

16. Information is not included for BMAPs where agricultural acreage does not exist, such as Bayou Chico.

# Results and Discussion

For calendar year 2019, 56 percent of the agricultural acres identified in FSAID are enrolled in the BMP program. Of the number of enrolled agricultural properties based on NOIs, about 72 percent completed surveys on their status of implementing BMPs, which comprises almost 66 percent of the enrolled agricultural acres and about 37 percent of the total agricultural acres statewide (**Table 3**). Almost 3,600 IV site visits were performed statewide out of 12,776 NOIs representing a quarter of all agricultural acres enrolled in the BMP program.

**Table 3. Status of Statewide BMP Implementation for Producers Enrolled in the BMP Program**

Statewide Metrics	Value
Agricultural acres	7,104,219
Number of enrollments (NOIs)	12,776
Agricultural acres enrolled in the BMP program	3,983,488
Agricultural acres represented in IV site visits	978,247
Number of NOIs represented in IV site visits	3,577
Irrigated agricultural acres	1,877,858
Irrigated agricultural acres enrolled in the BMP program	1,501,671

**Table 4** provides a summary of the status of enrollment statewide and within each BMAP area. **Table 5** provides a summary of the status of IV visits and self-reporting surveys. A one-page summary is also provided for each adopted and pending BMAP area in Florida in the **Appendix**. Rates of enrollment and reporting vary by geographic area due to several factors including whether a BMAP is adopted, the date that a BMAP was adopted, size of individual parcels within a BMAP or geographic area, types of commodities being produced, and the amount of fallow or grazed lands. Enrollment in the BMP program has been steadily increasing in recent years, especially within areas with an adopted TMDL or BMAP.

## Unenrolled Agricultural Acreage

In areas where FDEP adopted a BMAP, landowners are required to either enroll in the BMP program and implement BMPs or conduct water quality monitoring prescribed by FDEP.<sup>17</sup> FDACS continues to increase enrollment to meet the BMAP goal of enrolling 100 percent of the enrollable agricultural acres in the BMP program.<sup>18</sup> To achieve that goal, land use analyses are conducted to ensure that areas containing agricultural land uses are prioritized, while lands classified as agriculture where the ability to implement agricultural BMPs under the BMP program is limited, such as smaller rural homesteads.

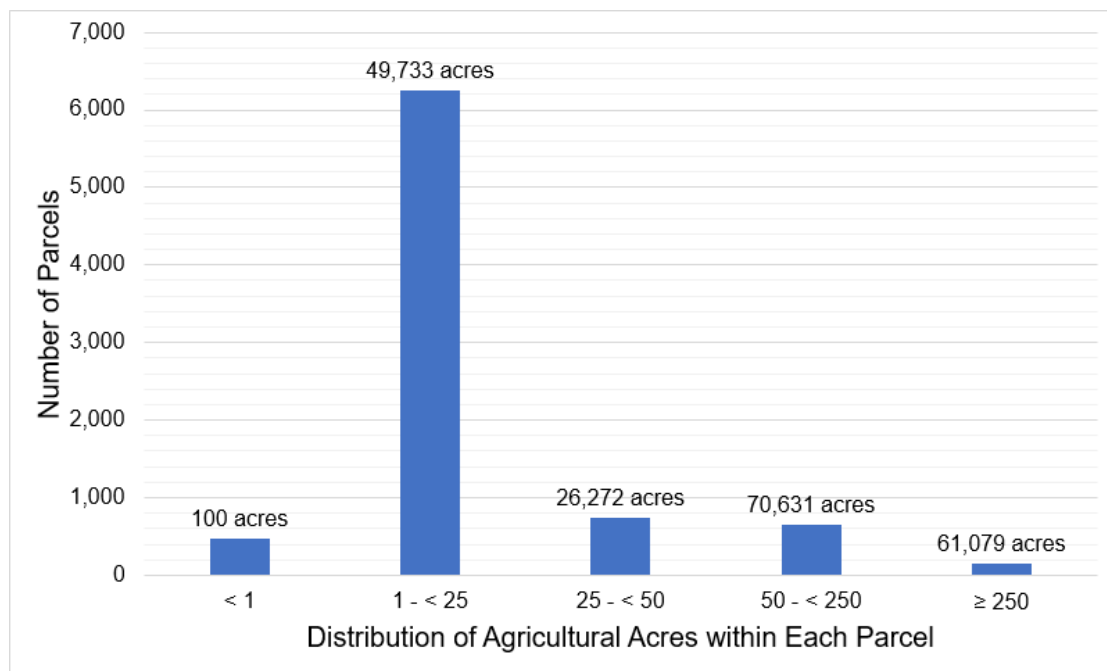
17. Section 403.067(7), F.S.

18. Agricultural land use designation is not always indicative of current agricultural activity and consequently presents challenges to estimating load allocations accurately as well as enrolling every agricultural acre in an appropriate BMP manual.

The comparison of the unenrolled agricultural lands within each BMAP area to the industrial and institutional DOR land use codes identified several acres where agriculture was not occurring. Those identified acres were removed from the reporting metrics because. In nearly half of the BMAPs, the industrial and institutional land uses comprised over 10 percent of the unenrolled acreage. The BMAPs with the largest percent changes are located predominantly in central Florida.<sup>19</sup> This change is consistent with the rapid urban growth and land use changes occurring in that part of the state. The change was 20 percent or more in the following BMAP areas: St. Lucie (27 percent); Wekiwa Spring and Rock Springs (27 percent); Chassahowitzka-Homosassa Springs (25 percent); Lake Okeechobee (22 percent); Wekiva River, Rock Springs Run, and Little Wekiva Canal (22 percent); and North Indian River Lagoon (20 percent).

Examination of the acreage distribution assists in allocating resources and provides insight into one of the challenges OAWP has in meeting the 100 percent enrollment – the large number of small non-commercial, agricultural parcels. **Figure 1** provides the distribution of unenrolled agricultural acres by the number of parcels. Based on the example in **Figure 1**, the 1,532 parcels with at least 25 acres of agricultural land (157,833 acres) will be the next priority for BMP enrollment efforts before focusing on the 6,723 smaller parcels (49,833 acres). Smaller acreage parcels are still prioritized if they are more intensive operations.

**Figure 1. Distribution of agricultural acreage on parcels with potential agricultural activity<sup>20</sup>**



19. Banana River Lagoon and Everglades West Coast are not considered here due to their small size.

20. The horizontal axis groups parcels based on the acres of agriculture they contain. The vertical axis shows the number of parcels within each group. The label above each bar is the total acres in each group.

**Table 4. Status of BMP Enrollment Statewide and Within Adopted and Pending BMAP Areas <sup>21</sup>**

<b>Basin Management Action Plan Area</b>	<b>Year Adopted</b>	<b>Agricultural Acres as of December 2019</b>	<b>Percentage of the BMAP area that is Agriculture Ag Acres Enrolled</b>	<b>Number of NOIs</b>	<b>Total Ag Acres Enrolled</b>	<b>Percentage of Total Ag Acres Enrolled</b>
Statewide (includes BMAP areas and non-BMAP areas) <sup>1</sup>	N/A	7,104,219	20	12,776	3,983,488	56
Alafia River Basin	2014	9,192	19	104	5,086	55
Banana River Lagoon <sup>2</sup>	2013	71	0.2	0	0	0
Caloosahatchee Estuary Basin	2012	33,938	12	49	20,917	62
Central Indian River Lagoon	2013	162,365	34	220	88,236	54
Chassahowitzka-Homosassa Springs	2019	31,971	10	108	13,342	42
DeLeon Spring	2019	10,385	16	39	2,568	25
Everglades West Coast Basin	2012	6,877	12	17	5,393	78
Gemini Springs	2019	680	2	8	230	34
Hillsborough River Basin	2009	12,877	25	58	7,003	54
Jackson Blue Spring and Merritts Mill Pond	2016	40,865	44	224	28,062	69
Kings Bay and Crystal River Springs	2019	11,799	7	28	2,892	25
Lake Harney, Lake Monroe, Middle St. Johns River, Smith Canal	2012	17,346	7	28	5,682	33
Lake Jesup Basin	2010	4,642	5	50	3,151	68
Lake Okeechobee Basin	2014	1,586,350	41	2,259	1,378,535	87
Long Branch	2008	428	12	2	195	46

**Table 4. Status of BMP Enrollment Statewide and Within Adopted and Pending BMAP Areas <sup>21</sup> (cont.)**

<b>Basin Management Action Plan Area</b>	<b>Year Adopted</b>	<b>Agricultural Acres as of December 2019</b>	<b>Percentage of the BMAP area that is Agriculture Ag Acres Enrolled</b>	<b>Number of NOIs</b>	<b>Total Ag Acres Enrolled</b>	<b>Percentage of Total Ag Acres Enrolled</b>
Lower St. Johns River Basin Mainstem	2008	126,528	7	272	57,223	45
Lower St. Johns River Basin Tributaries I	2009	59	0	1	50	85
Lower St. Johns River Basin Tributaries II	2010	853	2	4	429	50
Manatee River Basin	2014	1,073	7	5	946	88
Middle and Lower Suwannee River Basin	Pending	378,889	28	1,264	200,860	53
North Indian River Lagoon	2013	5,663	3	18	284	5
Orange Creek	2008	51,410	13	199	21,417	42
Rainbow River and Springs	2015	174,177	40	436	83,814	48
Santa Fe River Basin	2012	228,168	21	747	103,321	45
Silver River and Springs	2015	116,608	18	334	30,475	26
St. Lucie River and Estuary Basin	2013	243,192	47	355	193,365	80
Upper Ocklawaha River Basin	2007	82,513	15	355	17,150	21
Upper Wakulla River and Wakulla Springs	2015	59,321	7	100	17,503	30
Volusia Blue Springs	Pending	2,171	3	6	77	4
Wacissa River and Wacissa Springs	2019	53,031	16	71	17,853	34
Weeki Wachee Spring & River	2019	44,251	21	89	22,764	51
Wekiva River, Rock Springs Run and Little Wekiva Canal	2015	40,314	10	311	8,758	22
Wekiwa Spring and Rock Springs <sup>3</sup>	Pending	14,062	7	193	4,402	31

21. The examination of unenrolled lands shows that 60 percent of the unenrolled lands statewide fall into two generally lower intensity categories of Open Lands and Grazing Lands. Individual BMAPs vary between 37 and 87 percent of their unenrolled lands falling into these categories with two of the smaller BMAPS having only open or grazing lands remaining. This further demonstrates OAWP's focus on enrollment of activities where BMP implementation has the greatest potential benefit to water resources. Looking at the priority BMAPs identified in SB712, the unenrolled acres in the Lake Okeechobee BMAP are 66 percent open or grazing lands, in Caloosahatchee its 83 percent, in St. Lucie - 59 percent, in Central Indian River Lagoon - 50 percent, and in Silver River and Springs - 69 percent.

**Table 5. Status of IV Visits and Self Reporting Surveys Within Adopted and Pending BMAP Areas**

<b>Basin Management Action Plan Area</b>	<b>Number of NOIs</b>	<b>NOIs with both IV and Survey</b>	<b>NOIs with IV only</b>	<b>NOIs with Survey only</b>
Statewide (includes BMAP areas and non-BMAP areas)	12,776	3,185	392	6,024
Alafia River Basin	104	19	2	65
Banana River Lagoon	0	0	0	0
Caloosahatchee Estuary Basin	49	3	3	23
Central Indian River Lagoon	220	40	4	139
Chassahowitzka-Homosassa Springs	108	20	0	72
DeLeon Spring	39	8	1	17
Everglades West Coast Basin	17	2	0	7
Gemini Springs	8	0	0	6
Hillsborough River Basin	58	7	0	36
Jackson Blue Spring and Merritts Mill Pond	224	36	0	163
Kings Bay and Crystal River Springs	28	2	2	20
Lake Harney, Lake Monroe, Middle St. Johns River, Smith Canal	28	1	0	16
Lake Jesup Basin	50	4	1	30
Lake Okeechobee Basin	2,345	576	74	1,235
Long Branch	2	0	0	1
Lower St. Johns River Basin Mainstem	272	40	10	106
Lower St. Johns River Basin Tributaries I	1	0	0	0
Lower St. Johns River Basin Tributaries II	4	1	0	1
Manatee River Basin	5	0	0	4
Middle and Lower Suwannee River Basin	1,264	532	87	387
North Indian River Lagoon	18	2	0	8
Orange Creek	199	54	8	45
Rainbow River and Springs	436	235	35	65
Santa Fe River Basin	747	267	21	217
Silver River and Springs	334	106	27	59
St. Lucie River and Estuary Basin	355	45	22	213
Upper Ocklawaha River Basin	355	58	7	115
Upper Wakulla River and Wakulla Springs	100	45	6	34
Volusia Blue Springs	6	0	0	4
Wacissa River and Wacissa Springs	71	29	4	23
Weeki Wachee Spring & River	89	6	1	64
Wekiva River, Rock Springs Run and Little Wekiva Canal	311	31	2	89
Wekiwa Spring and Rock Springs	193	19	1	54

Note: There are 125 NOIs statewide (86 of which are within the Lake Okeechobee BMAP) that are regulated by the SFWMD under Chapter 40E-63, F.A.C. Surveys and IVs for these NOIs are not included in the counts in this table because SFWMD verifies implementation of BMPs as part of the Chapter 40E-63 Permits.

## Next Steps

As requirements for the BMP program continue to evolve, OAWP continues to update and refine enrollment, reporting, and educational tools to reflect programmatic needs and legislative direction. SB 712, adopted during the 2020 Legislative Session, directed significant changes to the BMP program. The changes build on changes initiated during the 2016 Legislative Session. In response, OAWP has made substantial improvements to the BMP program, as well as measures to improve data quality for reporting that include:

- Enhancing coordination with producers, agencies, stakeholders, and legislative staff and members to communicate legislative requirements and increase enrollment in the BMP program. OAWP is sending correspondence to all producers currently enrolled in the BMP program to inform them of the ongoing changes to the program. OAWP is sending correspondence to agricultural land owners within BMAPs that are not currently enrolled in the BMP program to increase enrollment rates and verify land uses, rural homesteads and urban agricultural areas, where additional focus may be required to achieve resource protection. This effort is utilizing a phased approach and targeting priority land uses, while ensuring that all entities identified as agriculture are being notified. Additionally, OAWP continues to coordinate with industry groups and outreach partners to educate and inform agricultural producers about the BMP program.
- Improving tools and methods to verify agricultural land use types, which will result in more accurate data on agricultural production acreage throughout the state.
- Improving BMP implementation verification by eliminating the self-reporting surveys and increasing the number of IV site visits. Beginning July 1, 2020, OAWP will perform IV visits on each NOI in BMAPs every two years, retain fertilizer application records for phosphorus and nitrogen applied over a NOI, and provide the aggregated data to FDEP for each BMAP. The FY 2020-2021 budget includes eight additional positions to facilitate this more intensive resource effort.<sup>22</sup>
- Updating digital tools to complete enrollments and IV site visit requirements. These efforts include the development of technical assistance tools for producers enrolled in the BMP program to facilitate record keeping requirements for compliance and retention purposes. These tools, such as the development of a Nutrient Application Summary Form, will increase data standardization, improve efficiency, and assist producers in meeting the requirements of SB 712.
- Providing training and standard operating procedures for OAWP representatives for enrollment, IV site visits, and record retention. Improved technology and training are also being provided to OAWP representatives to make the IV process more effective and efficient.

22. While OAWP intends to fully implement the requirements of law, COVID-19 has created challenges that may impact the ability of OAWP to be at full staffing capacity at July 1, 2020. Additionally, the reluctance of certain producers to allow OAWP to undertake the necessary site visits during the pandemic has resulted in a flexible approach to achieve as much as possible electronically, while scheduling in person activities for later in 2020.



- Modifying data management systems and processes. In 2019, a process was created for OAWP representatives to edit the FSAID land use data while in the field using their tablet or phone. In early 2020, OAWP representatives were trained to use this process, and recurring training sessions for current and new OAWP representatives are planned. This process will allow the next annual report to include a more accurate snapshot of active agricultural at the end of the calendar year. Steps are also being made to improve mapping of BMP enrollment without having to rely on DOR data. Parcel IDs and parcel geometry change every year and introduce issues when trying to map NOIs. OAWP is in the process of mapping NOIs using FSAID data instead of parcel boundaries to reduce the amount of error when mapping enrolled agricultural acres.
- Optimizing staff resources and contractual services to meet newly established statutory requirements and BMAP goals for BMP enrollment and implementation and IV site visits. This includes prioritizing BMAPs for IV site visits listed as priority areas in SB 712.
- Refining the process of prioritizing BMPs, practices, and projects for cost-share funding. These efforts will target cost-share funding within BMAP areas to achieve the greatest benefits to the water resources through nutrient reduction. OAWP is also and improving the process for tracking the use of cost-share funding.
- Developing and finalizing a rule to address temporarily inactive agricultural operations that will eventually return to active production to ensure that the necessary applicable BMPs continue to be implemented during the period of temporary inactivity.

Additional improvements that will enhance the ability of OAWP to support the water and environmental goals of the state include:

- Continuing to re-examine each BMP manual to achieve consistency in formatting, assess the veracity of each manual, and to examine and incorporate, where appropriate, current research to improve the manual;
- Developing contract management processes that will result in more efficient and effective utilization of cost-share funds in prioritized areas to achieve water resource protection and restoration priorities;
- Undertaking targeted research projects, in coordination with other agency, educational institutions and stakeholder partners, that will further inform future updates of the BMP manuals and the expenditure of cost-share funds;
- Conducting additional characterizations of the agricultural land uses for each BMAP area to help focus enrollment and cost-share funding to provide the greatest benefits to the water resources through nutrient reduction.

The BMAP updates adopted in January 2020, for the Northern Everglades watersheds (Lake Okeechobee, St. Lucie and Caloosahatchee BMAPS) require FDACS to provide a list of unenrolled landowners to FDEP within one year of adopting the BMAP updates. Enrollment efforts in these BMAPs are being accelerated to meet the requirement.

The requirements of SB 712 and the directives of the Northern Everglades BMAPs will impact the metrics reported in the next annual report.

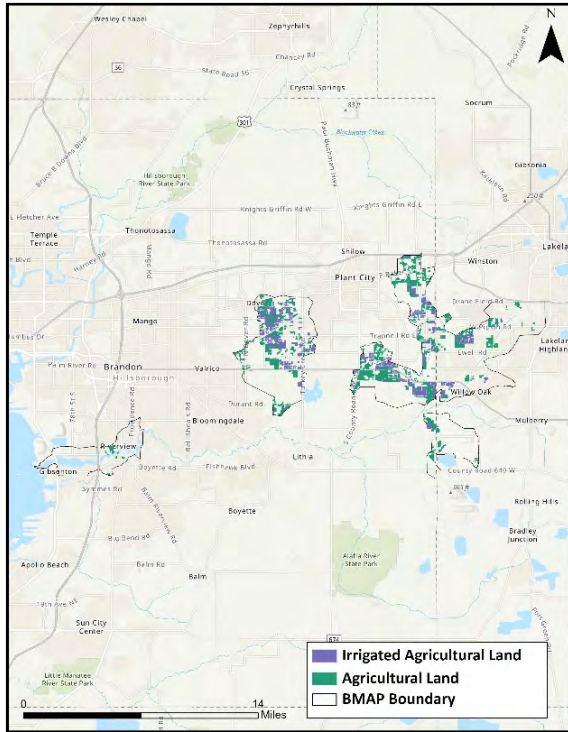
# Status of Implementation of Agricultural Best Management Practices (BMPs) Statewide

<b>Enrollment and Response Summary</b>	<b>2019</b>	<b>Change from 2018</b>
Total agricultural acres statewide	7,104,219	
Total agricultural acres enrolled	3,983,488	
Percentage of agricultural acres enrolled	56%	2%
Total irrigated acres	1,887,858	
Total irrigated acres enrolled	1,501,671	
Percentage of irrigated acres enrolled	80%	4%

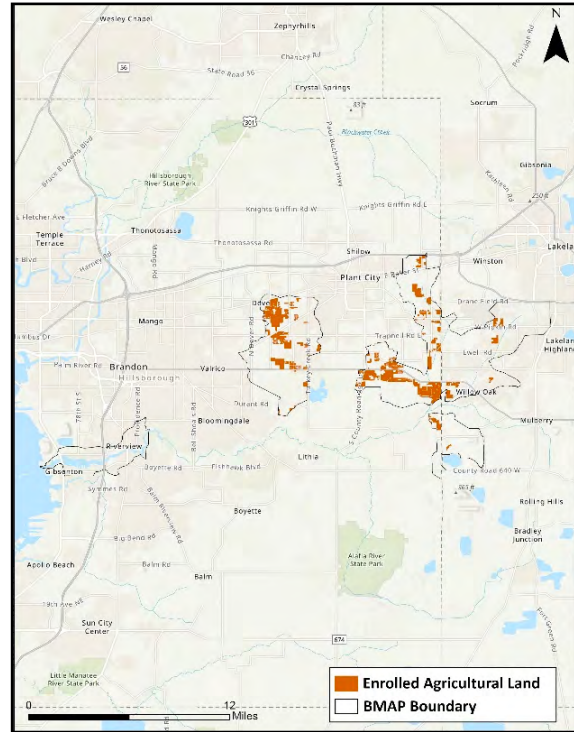
## Agricultural Acres Enrolled

<b>BMP Manuals</b>	<b>Acres</b>
Citrus	492,937
Conservation Plan Rule	189,104
Cow/Calf	1,422,515
Dairy	56,877
Equine	14,897
Fruit & Nut	17,423
Lake Okeechobee Protection Plan (LOPP)	29,610
Multiple Commodities	626,091
Nursery	33,047
Poultry	1,143
Row/Field Crops	1,065,884
Sod	33,344
Wildlife	616
<b>TOTAL</b>	<b>3,983,488</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Alafia River Basin

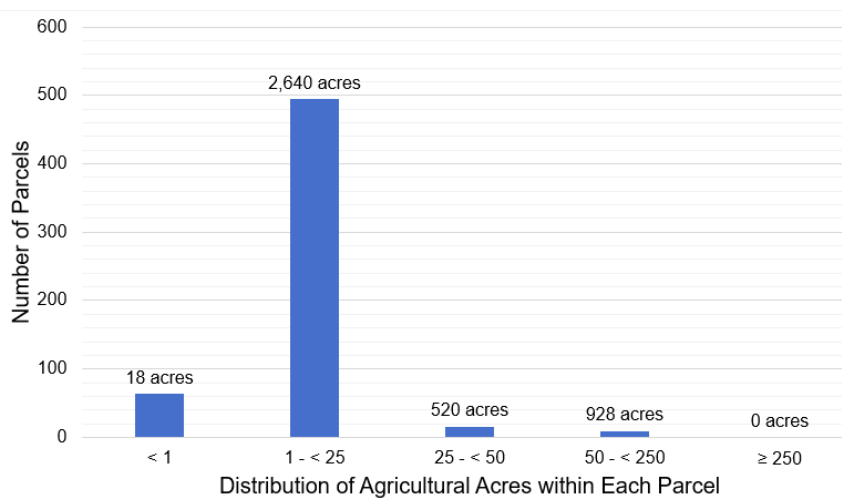


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

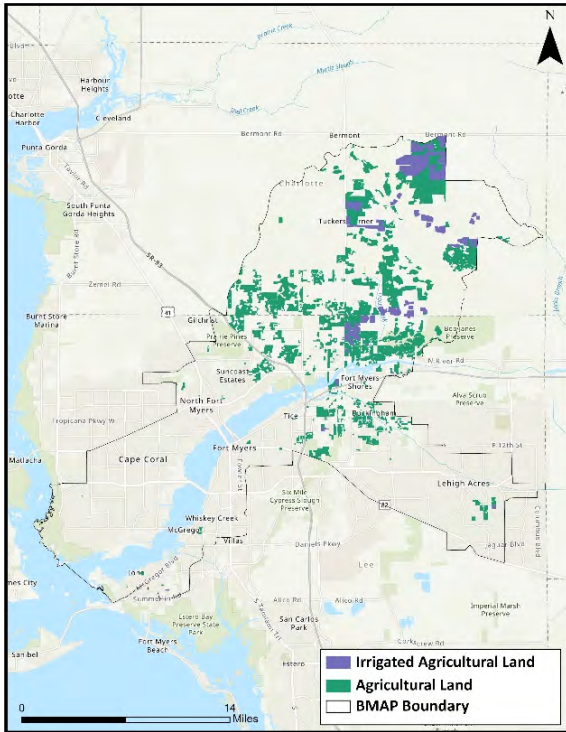
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	9,192	
Total agricultural acres enrolled	5,086	
Percentage of agricultural acres enrolled	55%	3%
Total irrigated acres	3,636	
Total irrigated acres enrolled	2,763	
Percentage of irrigated acres enrolled	76%	4%



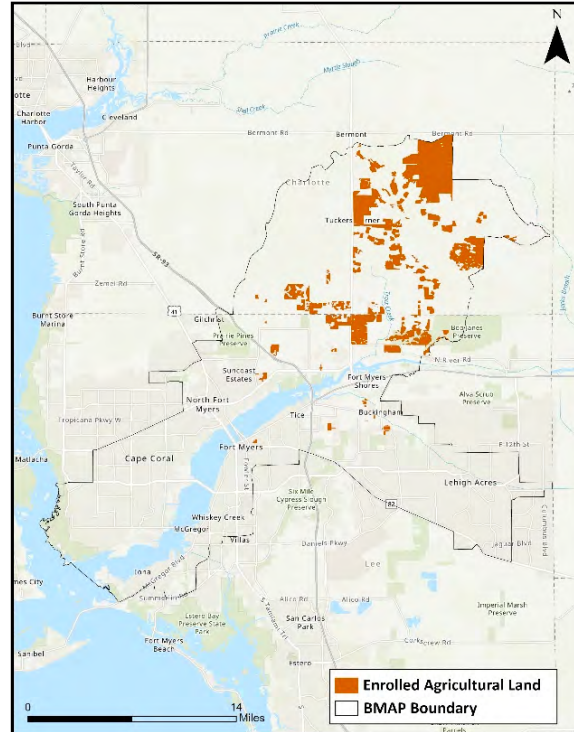
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	1,185
Equine	29
Fruit & Nut	257
Multiple Commodities	278
Nursery	247
Row/Field Crops	3,090
Sod	0
<b>TOTAL</b>	<b>5,086</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Caloosahatchee Estuary Basin <sup>23</sup>

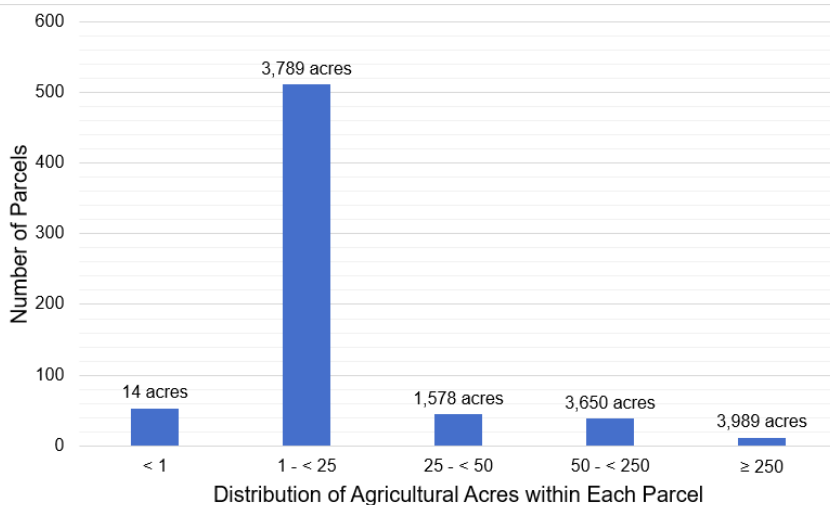


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

<b>Enrollment and Response Summary</b>	<b>2019</b>	<b>Change from 2018</b>
Total agricultural acres in the BMAP	33,938	
Total agricultural acres enrolled	20,917	
Percentage of agricultural acres enrolled	62	5%
Total irrigated acres	6,607	
Total irrigated acres enrolled	5,866	
Percentage of irrigated acres enrolled	89	15%

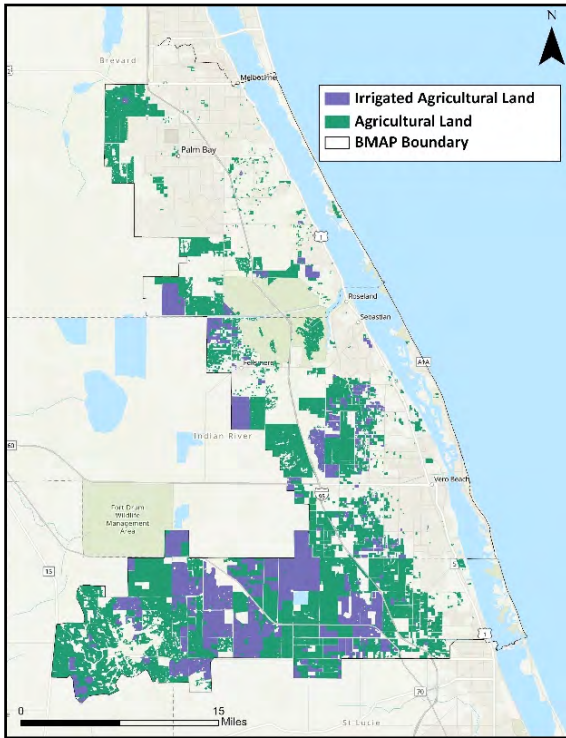


## Agricultural Acres Enrolled

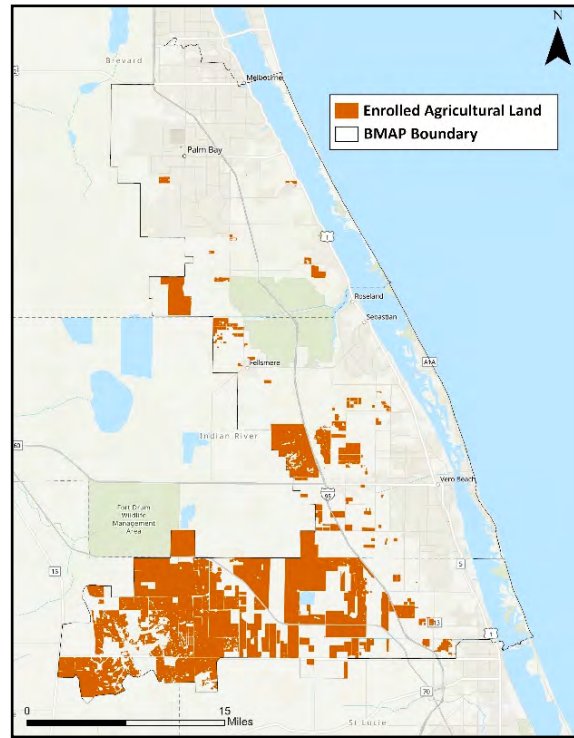
<b>BMP Manuals</b>	<b>Acres</b>
Citrus	0
Cow/Calf	7,421
Equine	0
Fruit and Nut	31
Multiple Commodities	12,952
Nursery	212
Row/Field Crops	35
Sod	266
<b>TOTAL</b>	<b>20,917</b>

23. Characteristics and metrics for this BMAP will be significantly different in the next report as the BMAP area was expanded in the 2020 BMAP update.

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Central Indian River Lagoon Basin

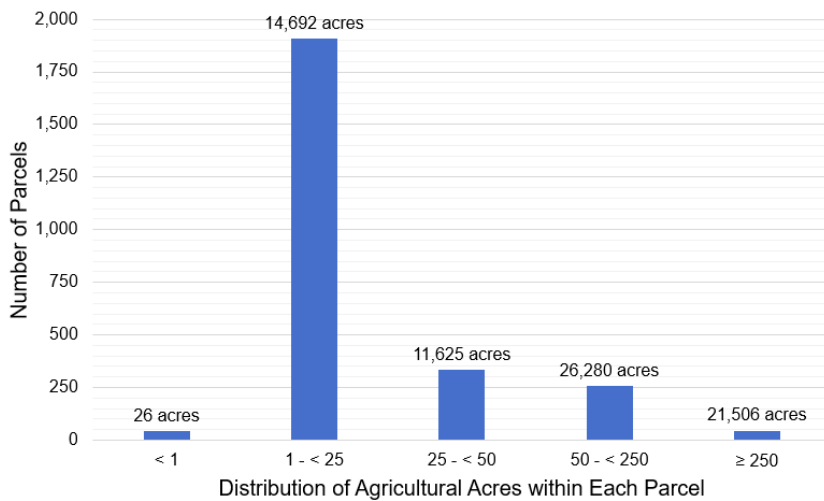


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

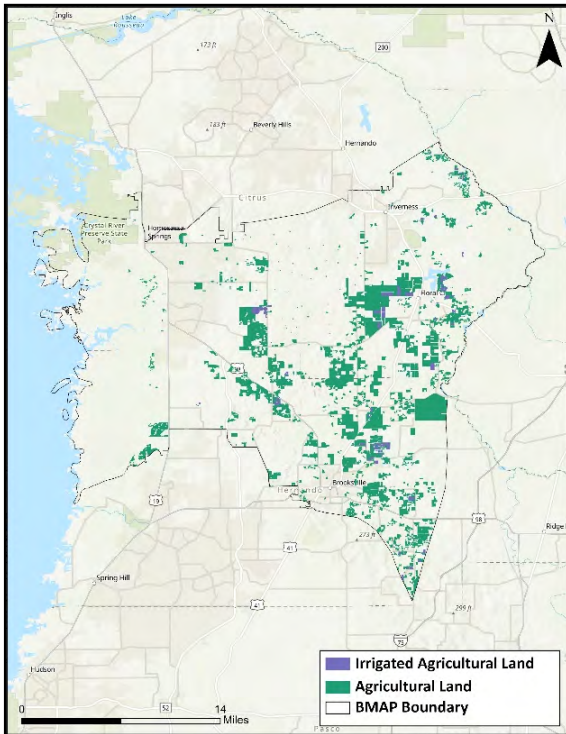
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	162,036	
Total agricultural acres enrolled	88,236	
Percentage of agricultural acres enrolled	54%	4%
Total irrigated acres	51,777	
Total irrigated acres enrolled	38,344	
Percentage of irrigated acres enrolled	74%	4%



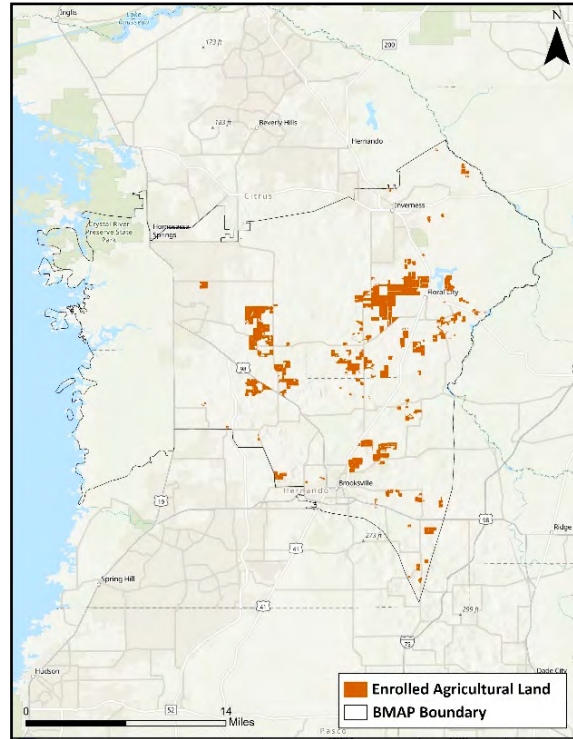
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	37,542
Cow/Calf	29,991
Dairy	5,720
Equine	22
Multiple Commodities	3,758
Nursery	205
Row/Field Crops	10,998
Sod	0
<b>TOTAL</b>	<b>88,236</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in Chassahowitzka-Homosassa Springs

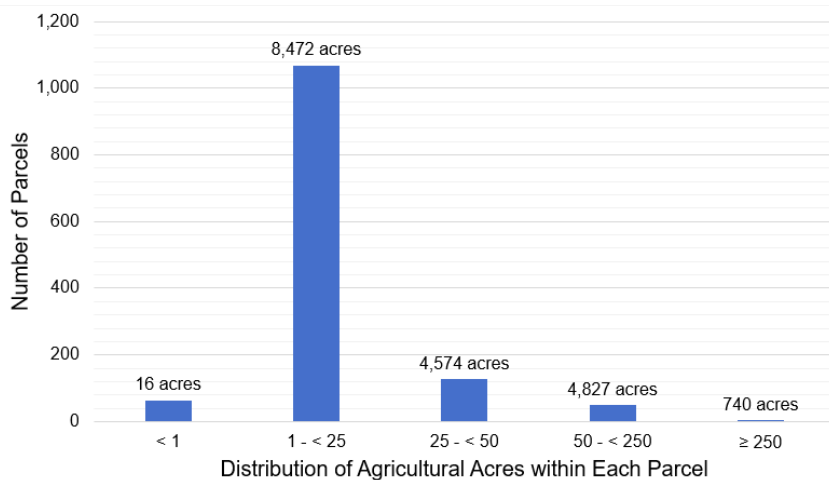


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

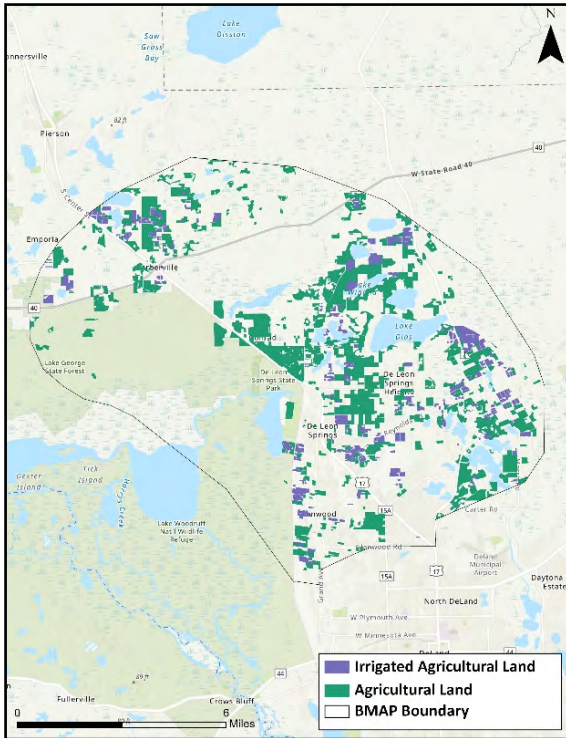
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	31,971	
Total agricultural acres enrolled	13,342	
Percentage of agricultural acres enrolled	42%	8%
Total irrigated acres	2,060	
Total irrigated acres enrolled	1,449	
Percentage of irrigated acres enrolled	70%	0%



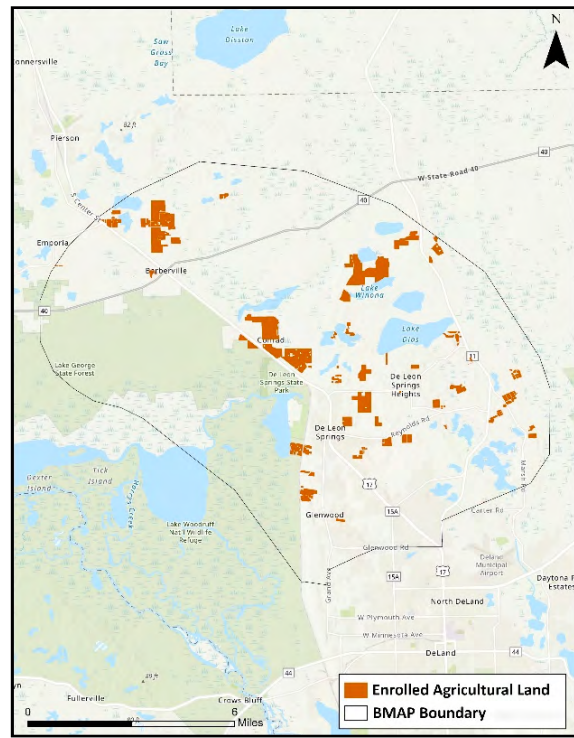
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	92
Cow/Calf	9,042
Dairy	256
Equine	20
Fruit & Nut	534
Multiple Commodities	2,059
Nursery	825
Row/Field Crops	514
<b>TOTAL</b>	<b>13,342</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in DeLeon Spring

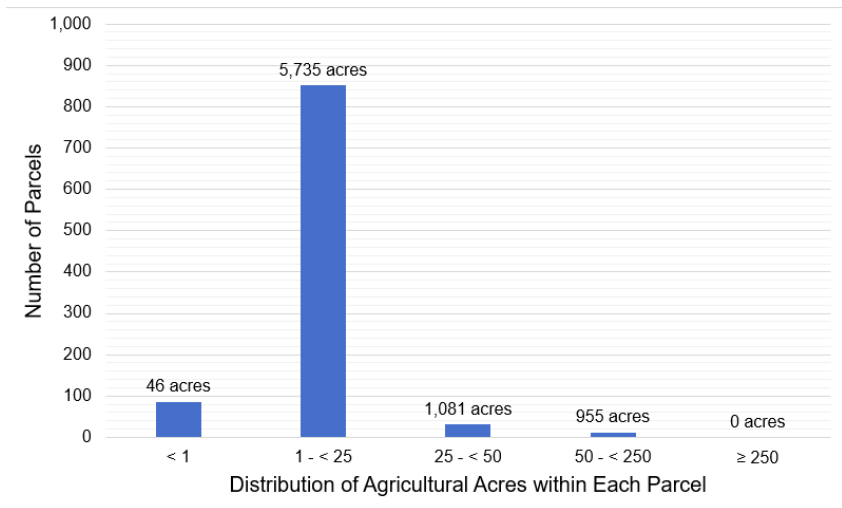


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

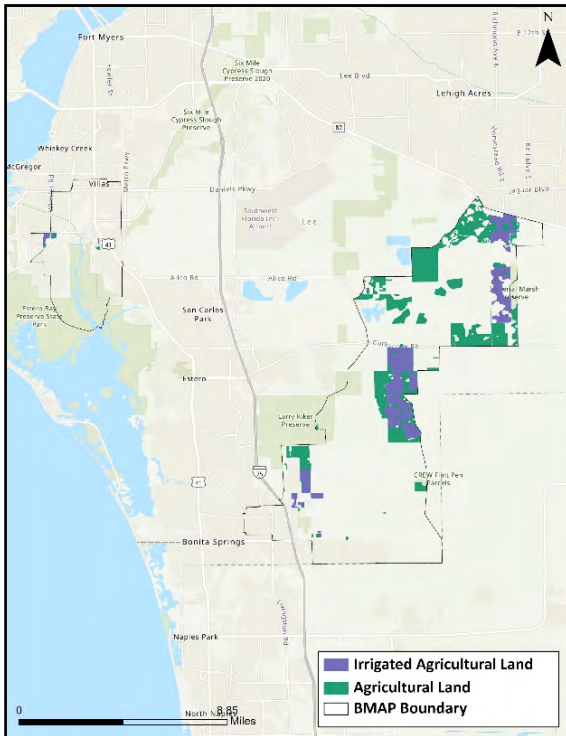
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	10,385	
Total agricultural acres enrolled	2,568	
Percentage of agricultural acres enrolled	25%	3%
Total irrigated acres	2,194	
Total irrigated acres enrolled	860	
Percentage of irrigated acres enrolled	39%	-1%



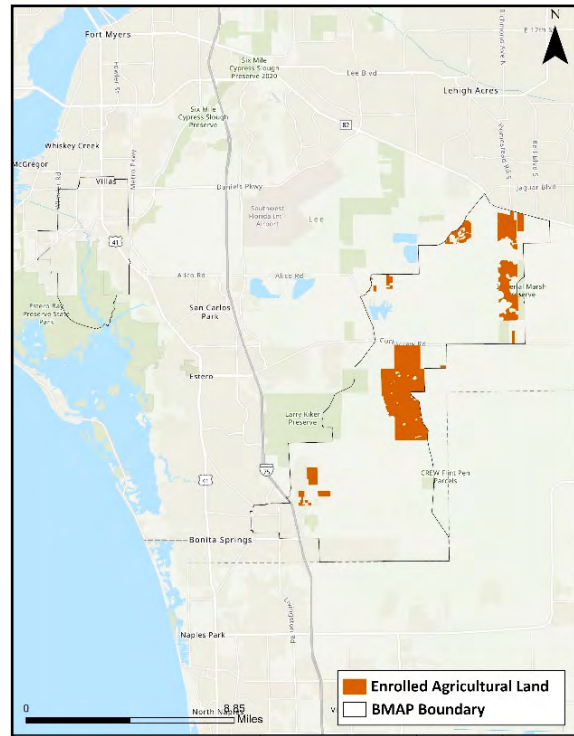
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	130
Cow/Calf	1,088
Equine	167
Fruit & Nut	27
Multiple Commodities	0
Nursery	1,137
Row/Field Crops	19
Sod	0
<b>TOTAL</b>	<b>2,568</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in Everglades West Coast

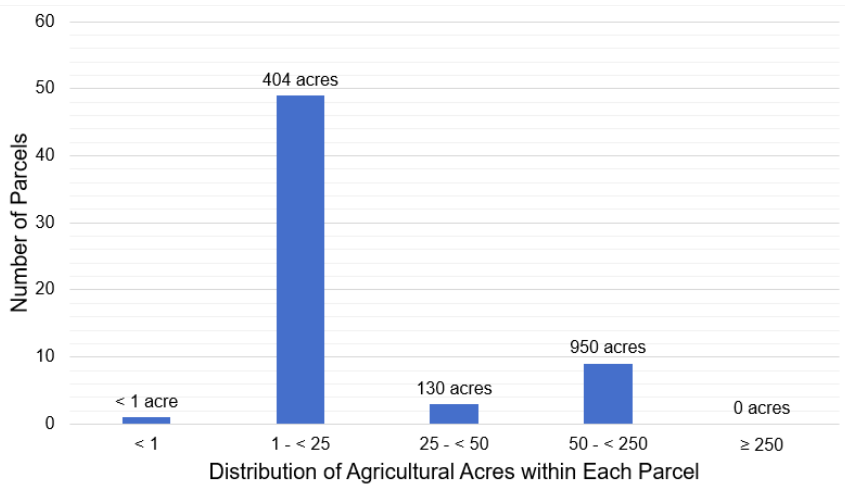


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	6,877	
Total agricultural acres enrolled	5,393	
Percentage of agricultural acres enrolled	78%	29%
Total irrigated acres	3,571	
Total irrigated acres enrolled	3,385	
Percentage of irrigated acres enrolled	95%	27%

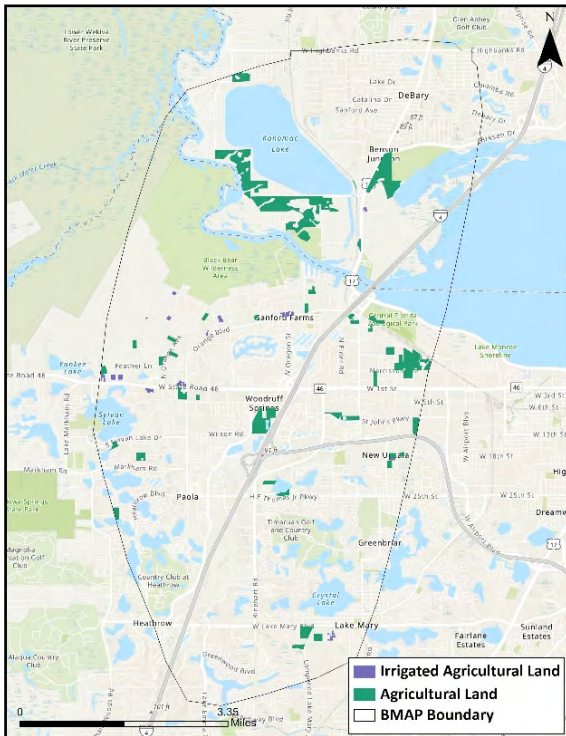


## Agricultural Acres Enrolled

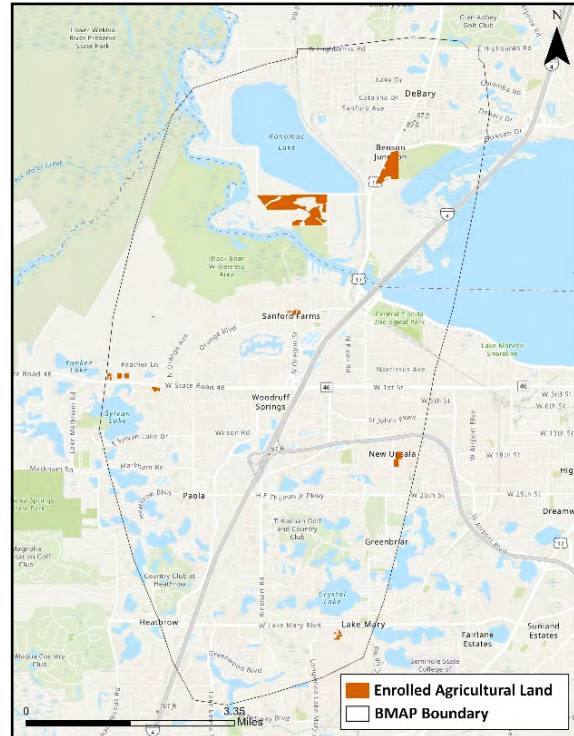
BMP Manuals	Acres
Citrus	815
Cow/Calf	69
Equine	0
Fruit & Nut	0
Multiple Commodities	97
Nursery	55
Row/Field Crops	4,357
Sod	0
<b>TOTAL</b>	<b>5,393</b>



# Status of Implementation of Agricultural Best Management Practices (BMPs) in Gemini Springs

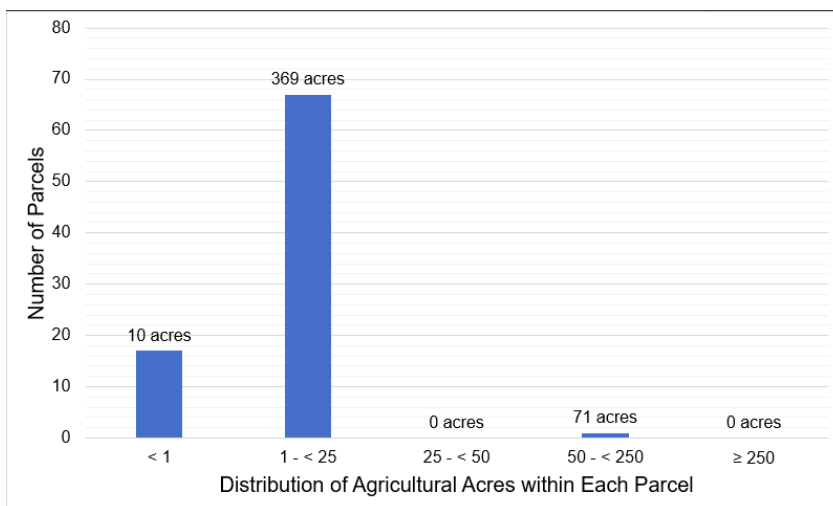


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

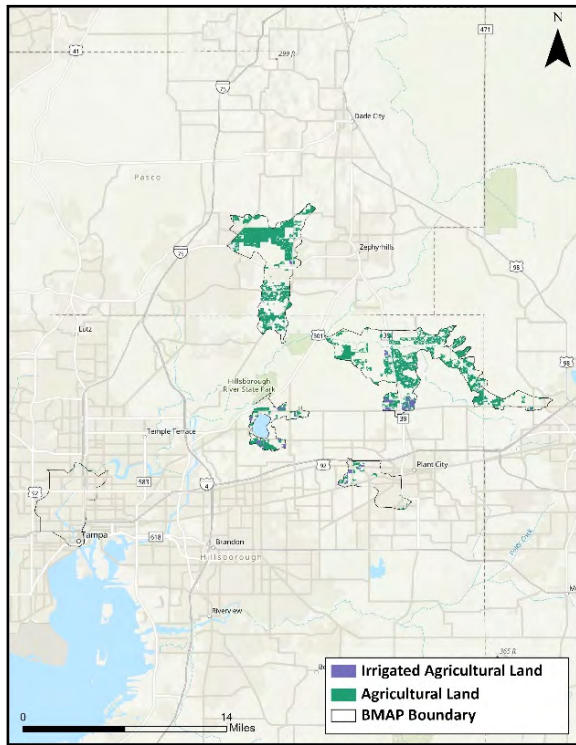
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	680	
Total agricultural acres enrolled	230	
Percentage of agricultural acres enrolled	34%	14%
Total irrigated acres	40	
Total irrigated acres enrolled	25	
Percentage of irrigated acres enrolled	63%	5%



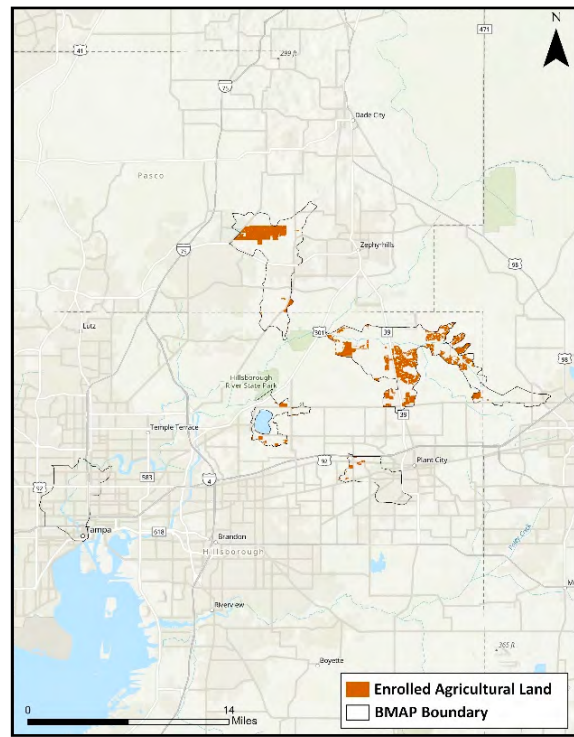
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	5
Cow/Calf	196
Equine	0
Fruit & Nut	0
Multiple Commodities	0
Nursery	29
Row/Field Crops	0
Sod	0
<b>TOTAL</b>	<b>230</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Hillsborough River Basin

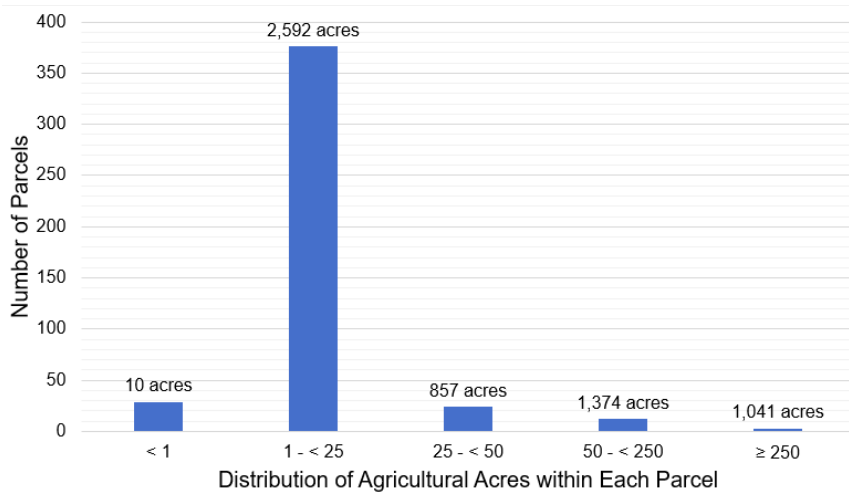


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

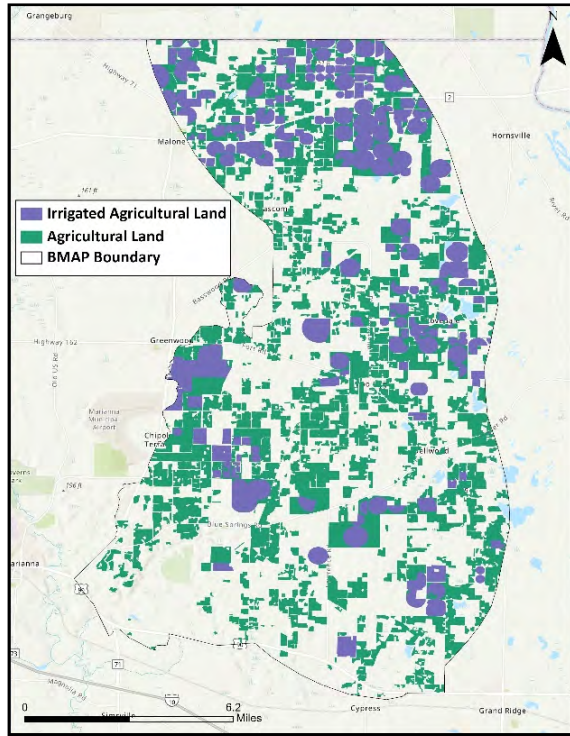
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	12,877	
Total agricultural acres enrolled	7,003	
Percentage of agricultural acres enrolled	54%	2%
Total irrigated acres	796	
Total irrigated acres enrolled	578	
Percentage of irrigated acres enrolled	73%	6%



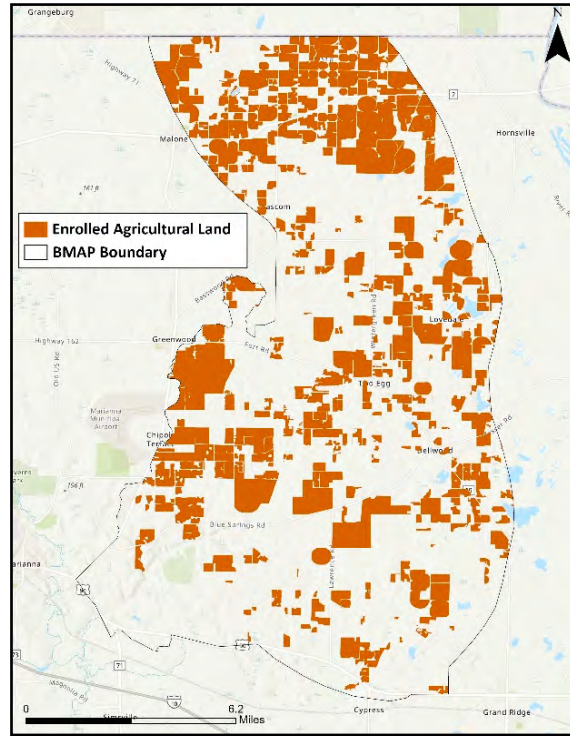
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	1
Cow/Calf	5,994
Equine	7
Fruit & Nut	7
Multiple Commodities	233
Nursery	20
Row/Field Crops	741
Sod	0
<b>TOTAL</b>	<b>7,003</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Jackson Blue Spring and Merritts Mill Pond

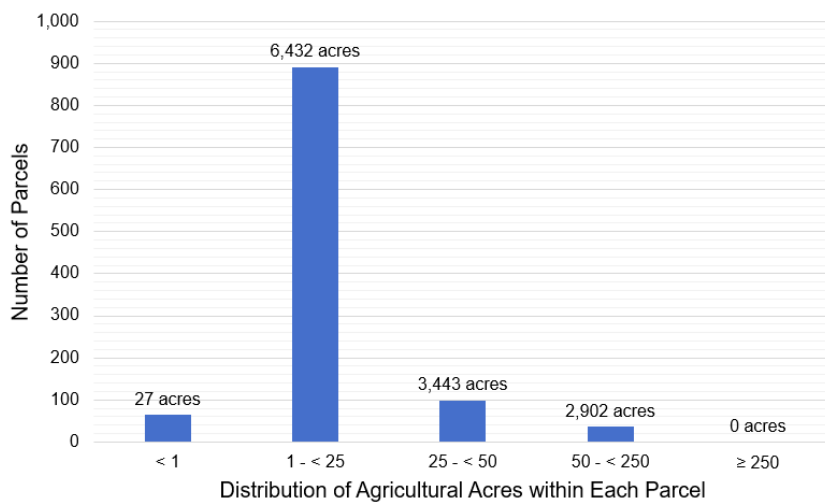


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

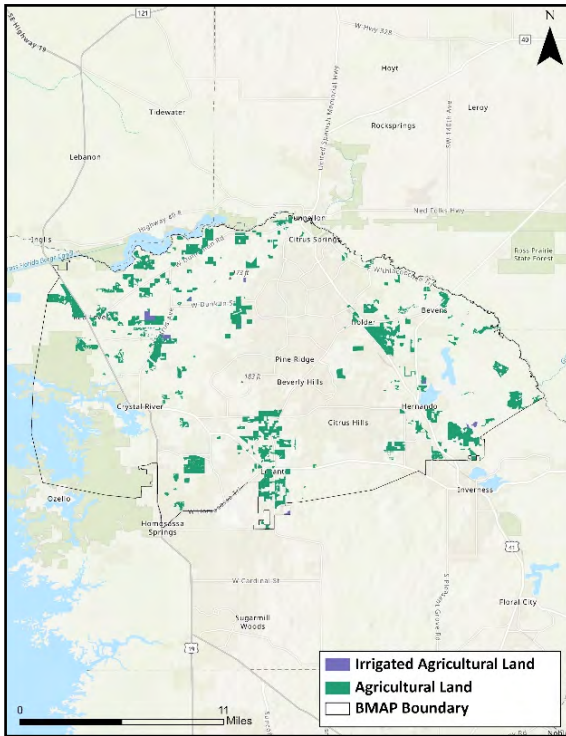
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	40,865	
Total agricultural acres enrolled	28,062	
Percentage of agricultural acres enrolled	69%	8%
Total irrigated acres	13,769	
Total irrigated acres enrolled	13,082	
Percentage of irrigated acres enrolled	95%	10%



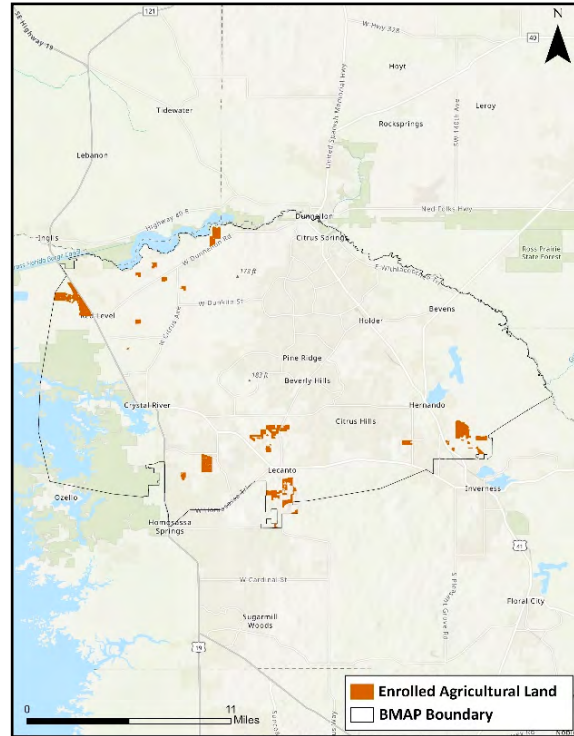
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	2,306
Equine	0
Fruit & Nut	0
Multiple Commodities	3,048
Nursery	0
Row/Field Crops	22,708
Sod	0
<b>TOTAL</b>	<b>28,062</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Kings Bay and Crystal RiverSprings Basin

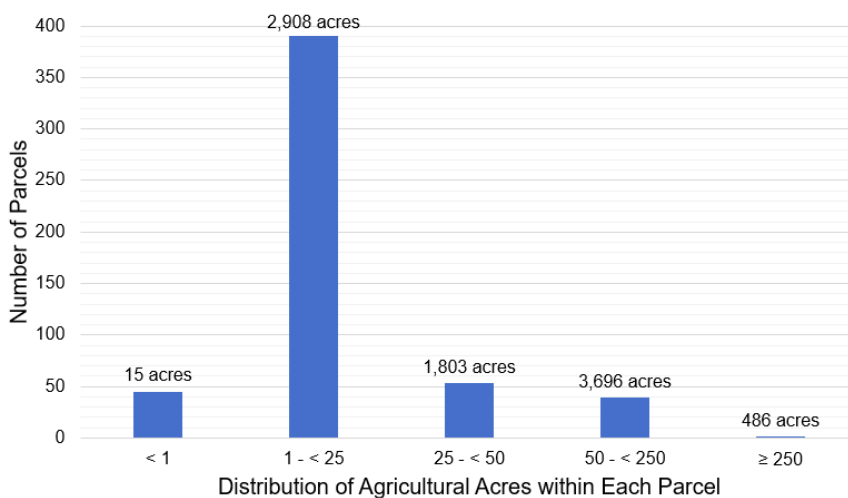


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

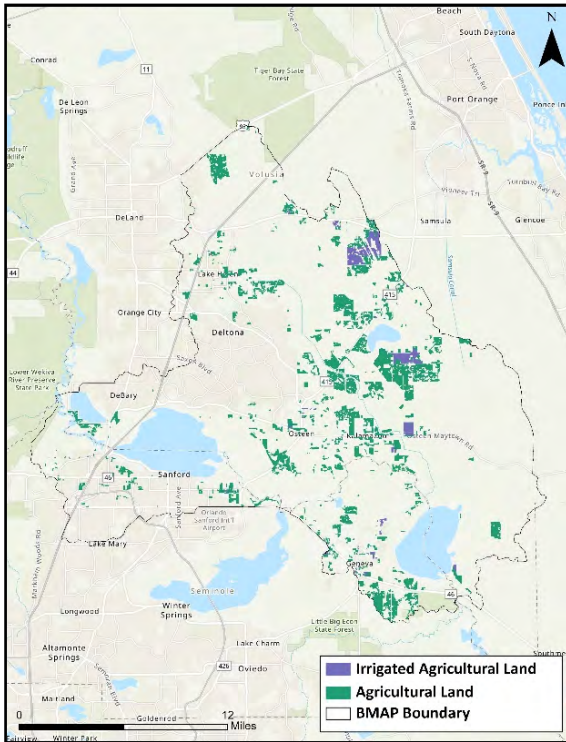
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	11,799	
Total agricultural acres enrolled	2,892	
Percentage of agricultural acres enrolled	25%	4%
Total irrigated acres	331	
Total irrigated acres enrolled	28	
Percentage of irrigated acres enrolled	8%	-1%



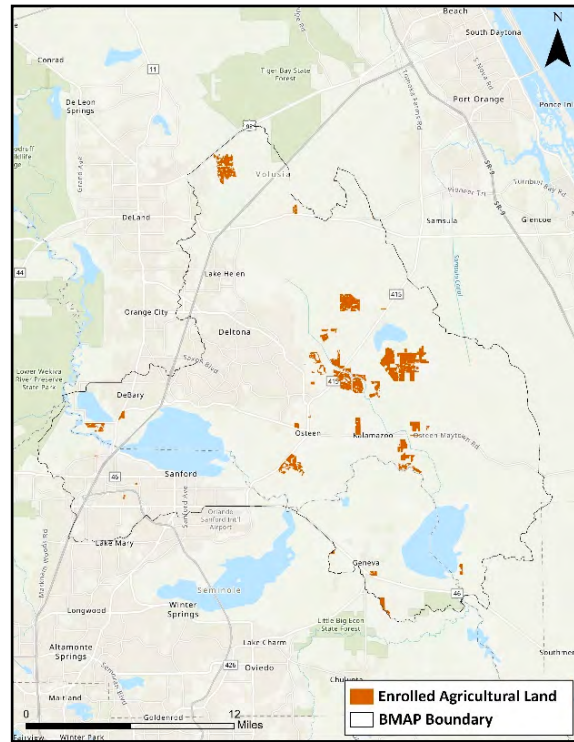
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	1,984
Equine	0
Fruit & Nut	0
Multiple Commodities	289
Nursery	0
Row/Field Crops	619
Sod	0
<b>TOTAL</b>	<b>2,892</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in Lake Harney, Lake Monroe, Middle St. Johns River, and Smith Canal

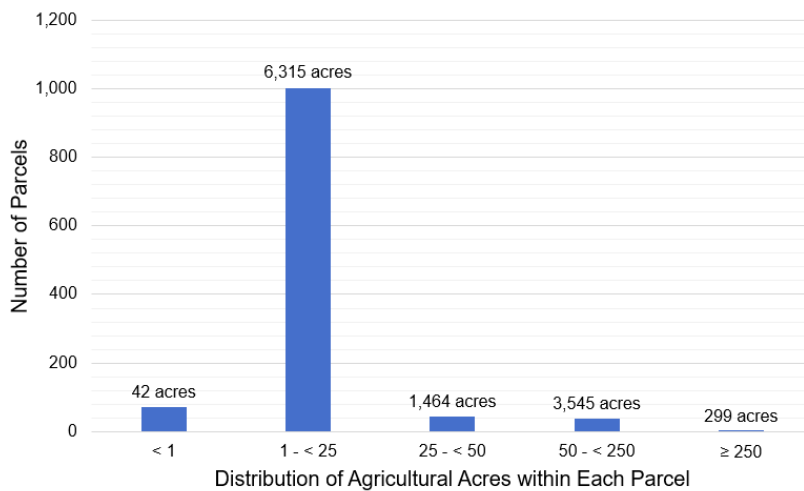


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

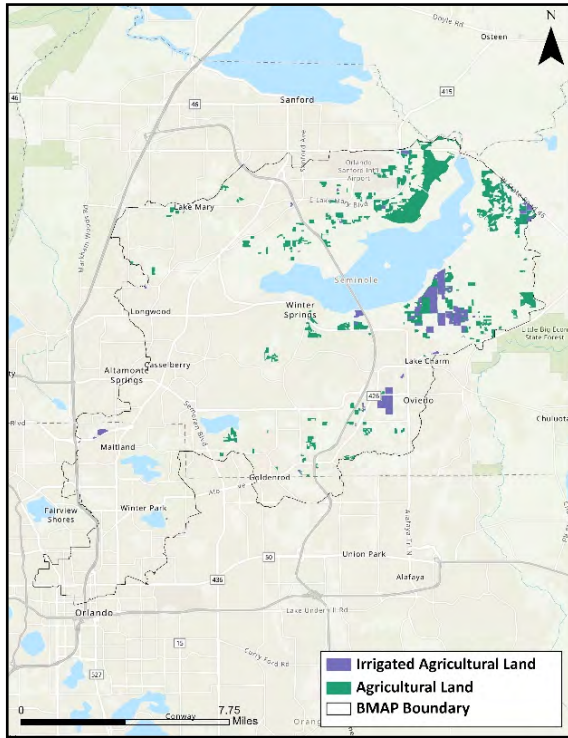
<b>Enrollment and Response Summary</b>	<b>2019</b>	<b>Change from 2018</b>
Total agricultural acres in the BMAP	17,346	
Total agricultural acres enrolled	5,682	
Percentage of agricultural acres enrolled	33%	3%
Total irrigated acres	2,029	
Total irrigated acres enrolled	779	
Percentage of irrigated acres enrolled	38%	-2%



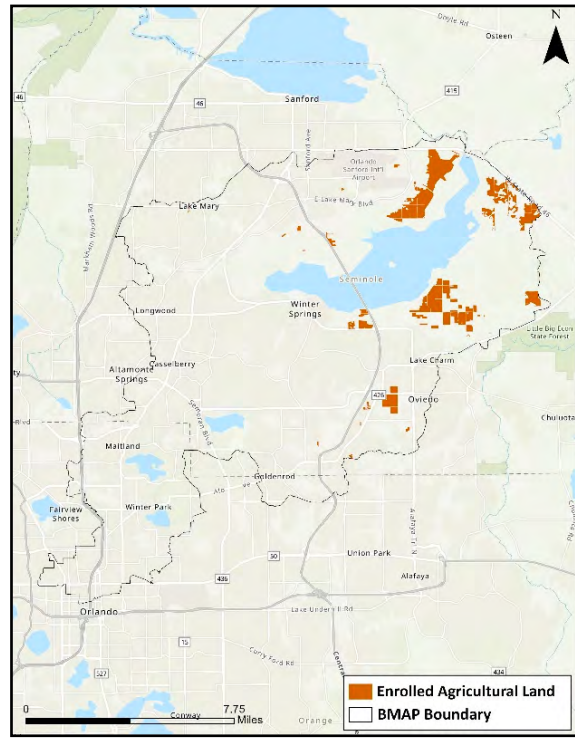
## Agricultural Acres Enrolled

<b>BMP Manuals</b>	<b>Acres</b>
Citrus	184
Cow/Calf	5,096
Equine	7
Fruit & Nut	0
Multiple Commodities	0
Nursery	240
Row/Field Crops	155
Sod	0
<b>TOTAL</b>	<b>5,682</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Lake Jesup Basin

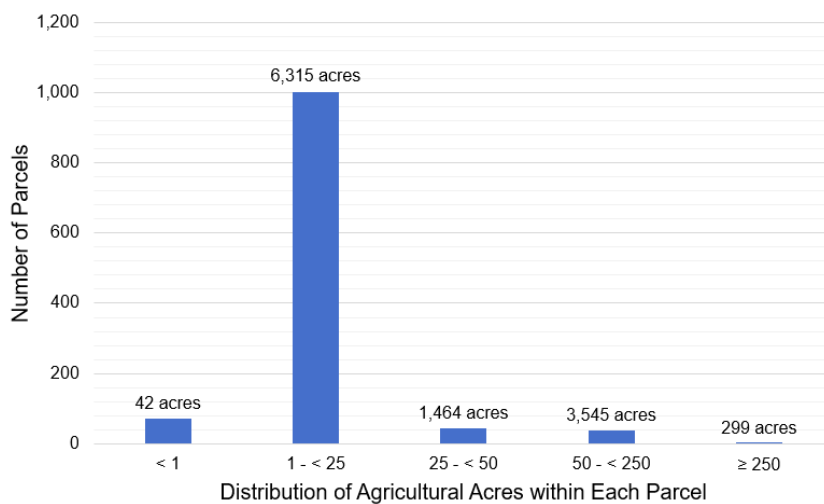


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

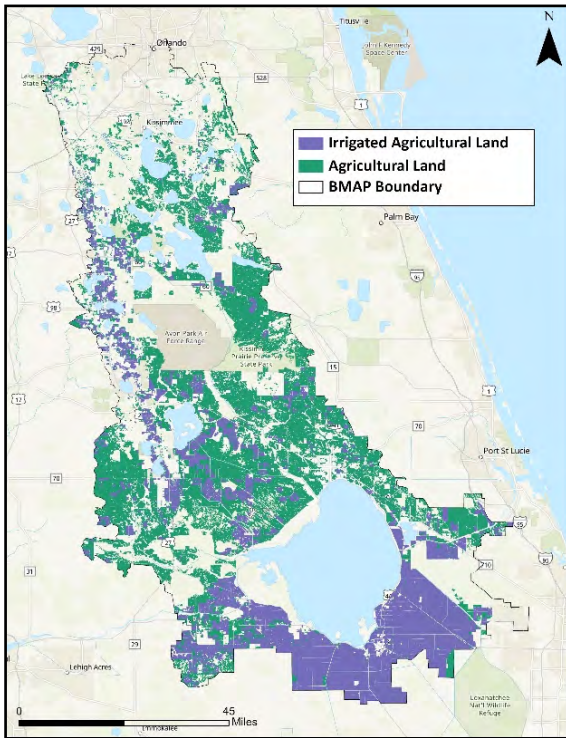
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	4,642	
Total agricultural acres enrolled	3,151	
Percentage of agricultural acres enrolled	68%	14%
Total irrigated acres	1,247	
Total irrigated acres enrolled	955	
Percentage of irrigated acres enrolled	77%	2%



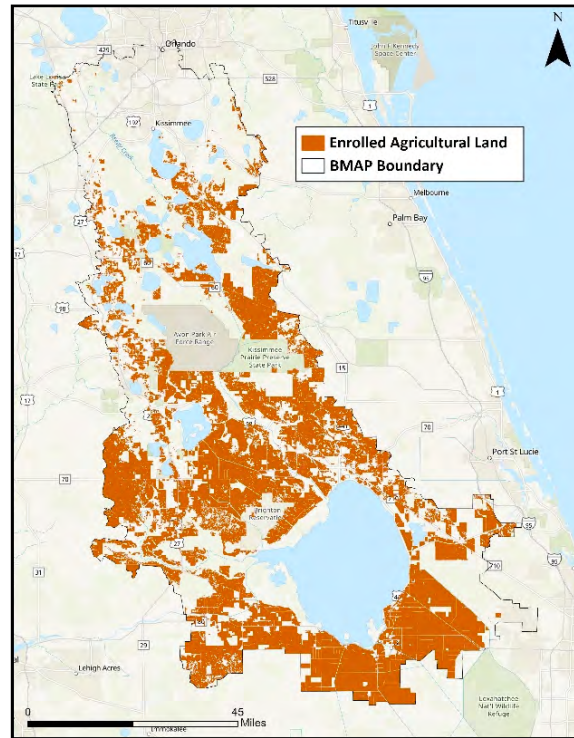
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	233
Cow/Calf	1,818
Equine	12
Multiple Commodities	163
Nursery	698
Row/Field Crops	18
Sod	209
Sod	0
<b>TOTAL</b>	<b>3,151</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Lake Okeechobee Basin



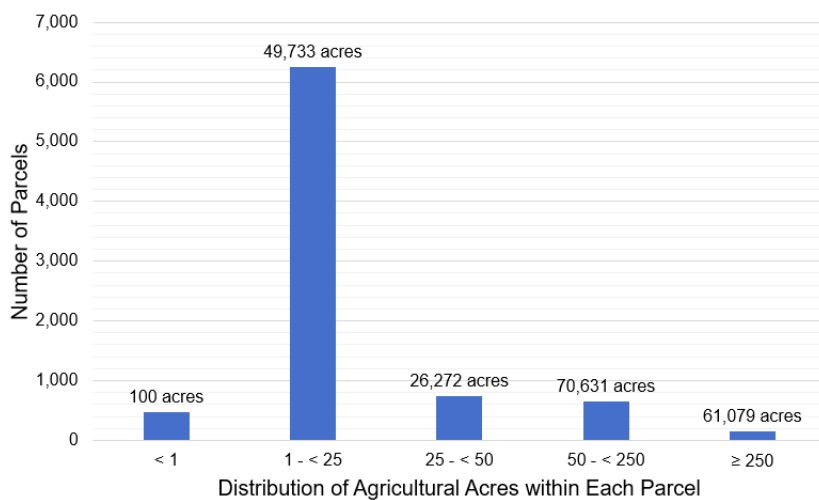
**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

## Enrollment and Response Summary

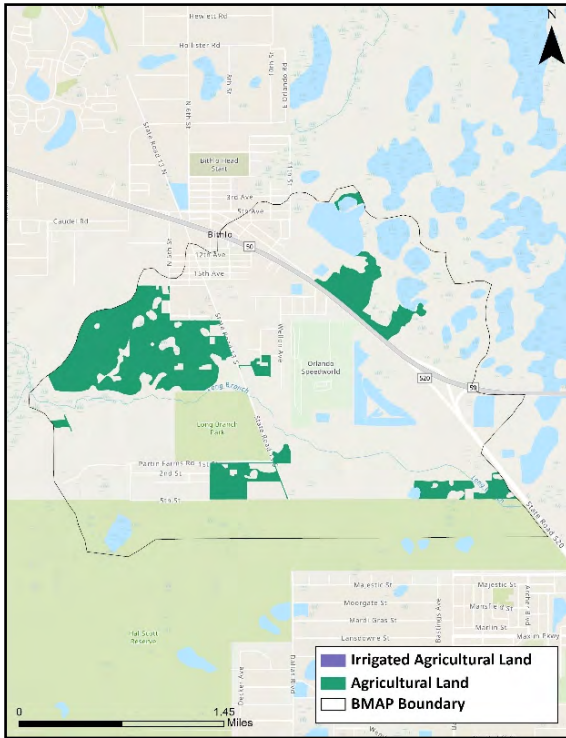
	2019	Change from 2018
Total agricultural acres in the BMAP	1,586,350	
Total agricultural acres enrolled	1,378,535	
Percentage of agricultural acres enrolled	87%	11%
Total irrigated acres	669,128	
Total irrigated acres enrolled	606,528	
Percentage of irrigated acres enrolled	91%	4%



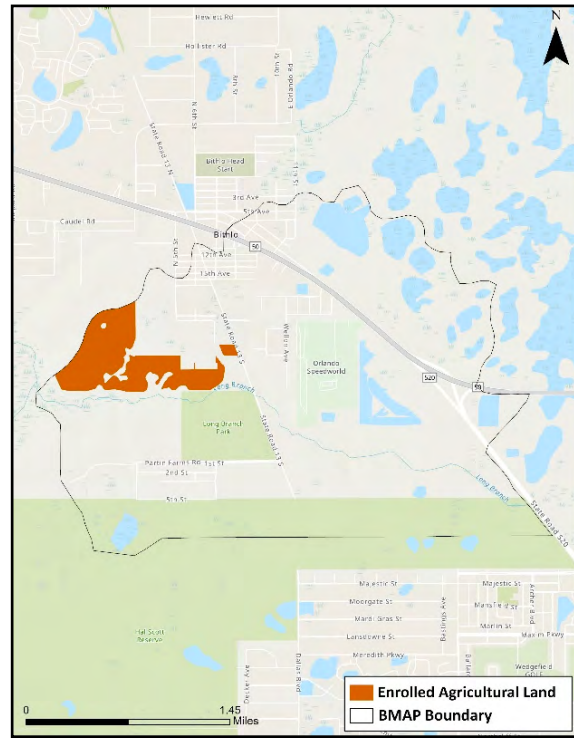
## Agricultural Acres Enrolled

BMP Manual	Acres
Citrus	127,644
Conservation Plan	147,877
Cow/Calf	529,017
Dairy	19,997
Equine	457
Fruit & Nut	733
LOPP	28,897
Multiple Commodities	94,561
Nursery	3,016
Poultry	79
Row/Field Crops	410,310
Sod	15,947
<b>TOTAL</b>	<b>1,378,535</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in Long Branch

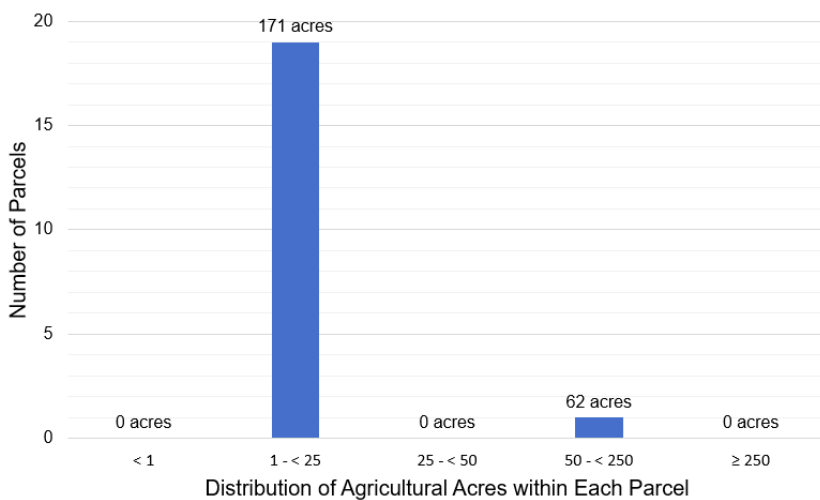


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	428	
Total agricultural acres enrolled	195	
Percentage of agricultural acres enrolled	46%	4%
Total irrigated acres	0	
Total irrigated acres enrolled	0	
Percentage of irrigated acres enrolled	0%	0%

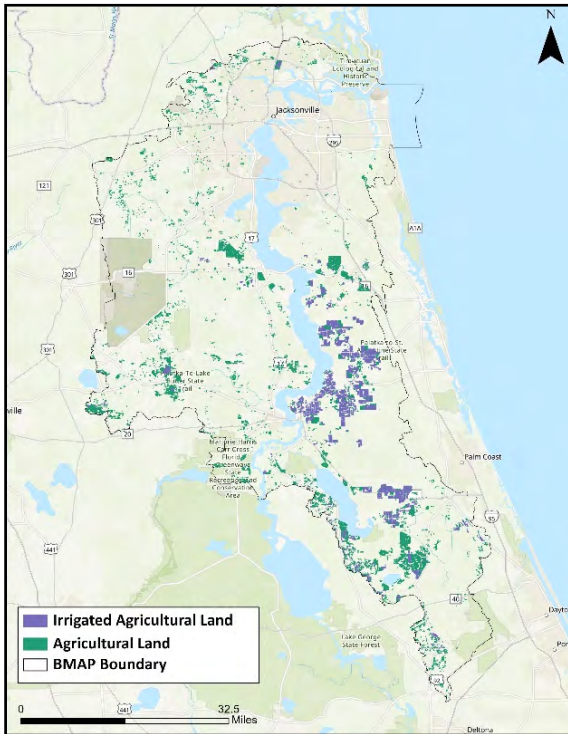


## Agricultural Acres Enrolled

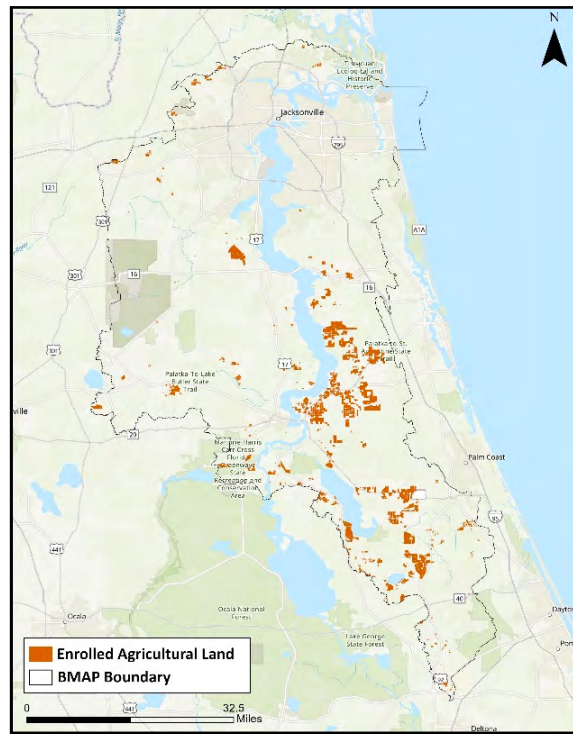
BMP Manuals	Acres
Citrus	0
Cow/Calf	195
Equine	0
Fruit & Nut	0
Multiple Commodities	0
Nursery	0
Row/Field Crops	0
Sod	0
<b>TOTAL</b>	<b>195</b>



# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Lower St. Johns River Basin Main Stem

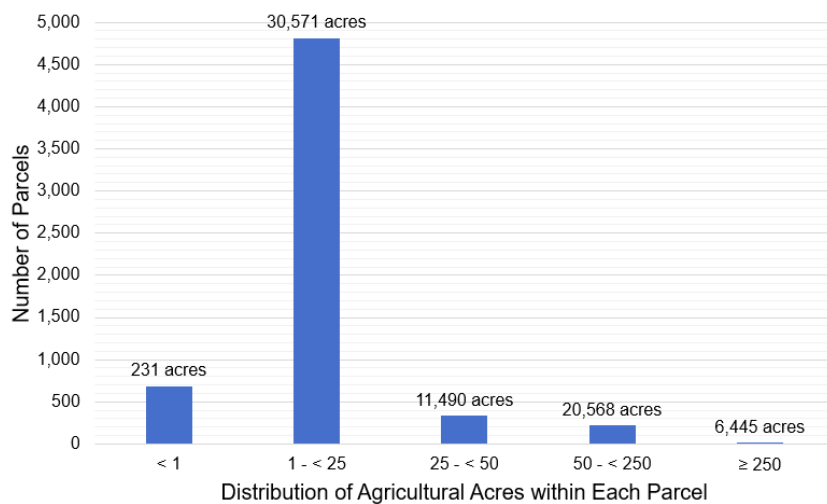


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

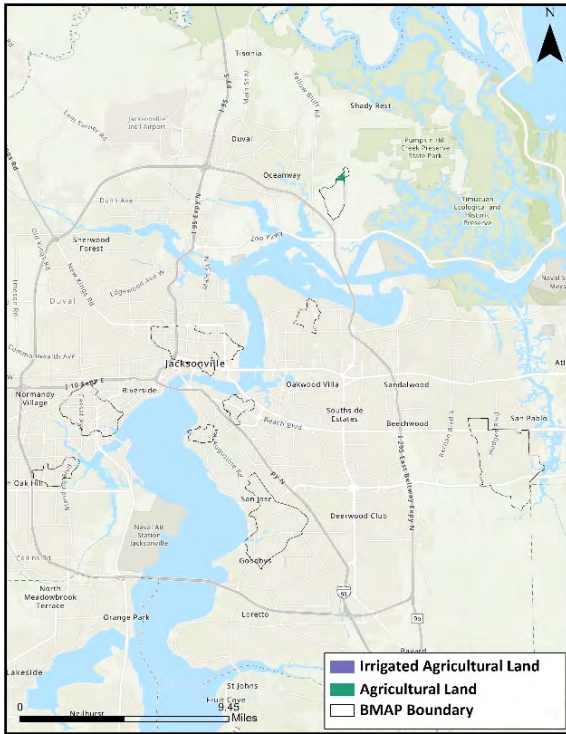
<b>Enrollment and Response Summary</b>	<b>2019</b>	<b>Change from 2018</b>
Total agricultural acres in the BMAP	126,528	
Total agricultural acres enrolled	57,223	
Percentage of agricultural acres enrolled	45%	3%
Total irrigated acres	45,065	
Total irrigated acres enrolled	31,393	
Percentage of irrigated acres enrolled	70%	3%



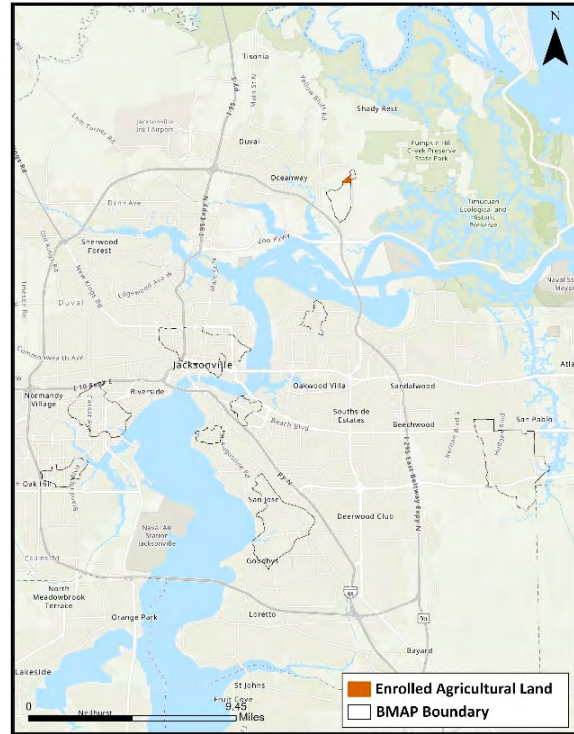
## Agricultural Acres Enrolled

<b>BMP Manuals</b>	<b>Acres</b>
Citrus	94
Cow/Calf	20,818
Equine	129
Fruit & Nut	268
Multiple Commodities	3,882
Nursery	2,712
Row/Field Crops	26,914
Sod	2,406
<b>TOTAL</b>	<b>57,223</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Lower St. Johns River Basin Tributaries I

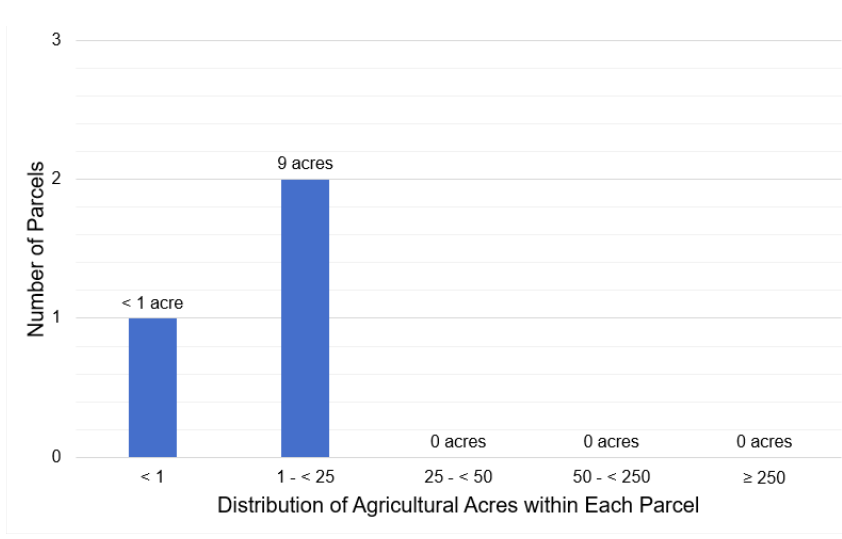


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

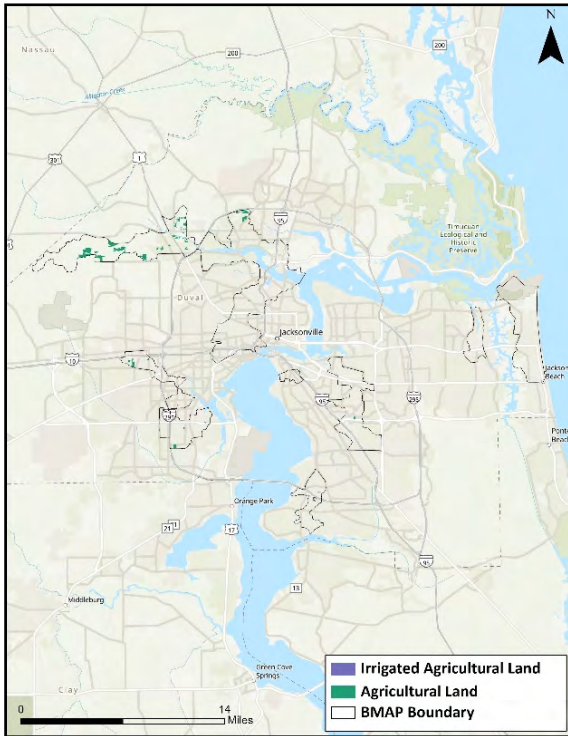
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	59	
Total agricultural acres enrolled	50	
Percentage of agricultural acres enrolled	85%	7%
Total irrigated acres	0	
Total irrigated acres enrolled	0	
Percentage of irrigated acres enrolled	0%	0%



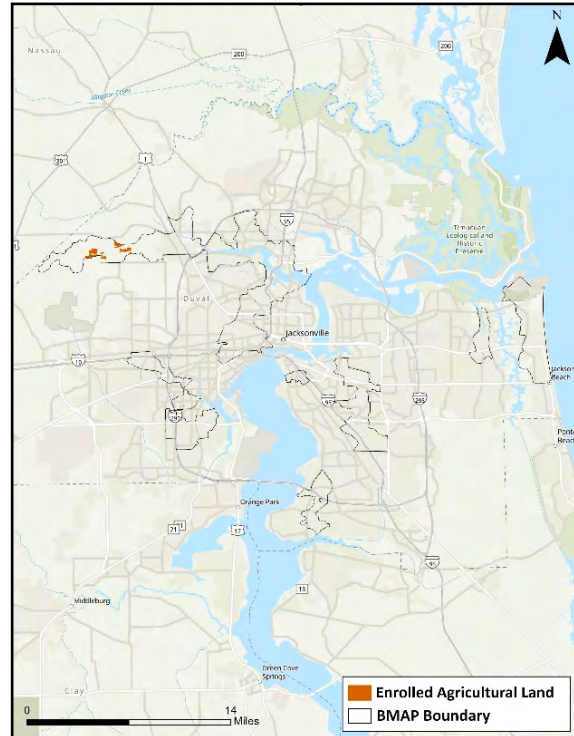
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	50
Equine	0
Fruit & Nut	0
Multiple Commodities	0
Nursery	0
Row/Field Crops	0
Sod	0
<b>TOTAL</b>	<b>50</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Lower St. Johns River Basin Tributaries II

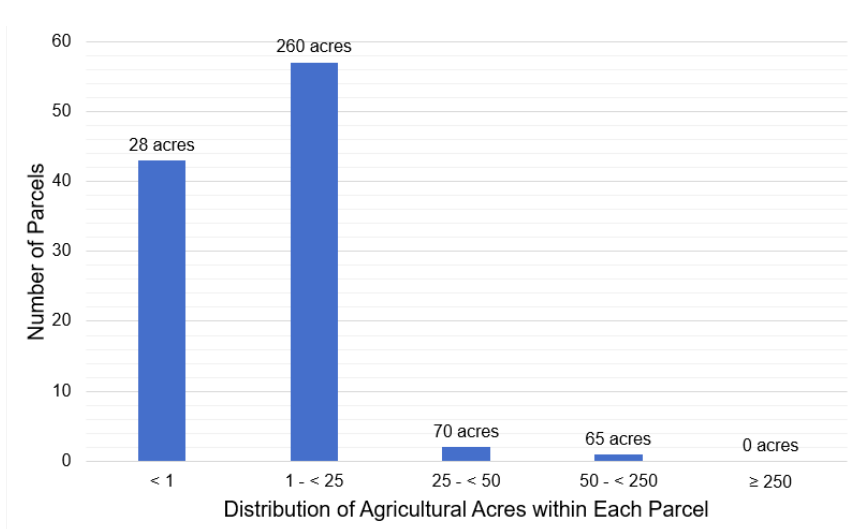


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

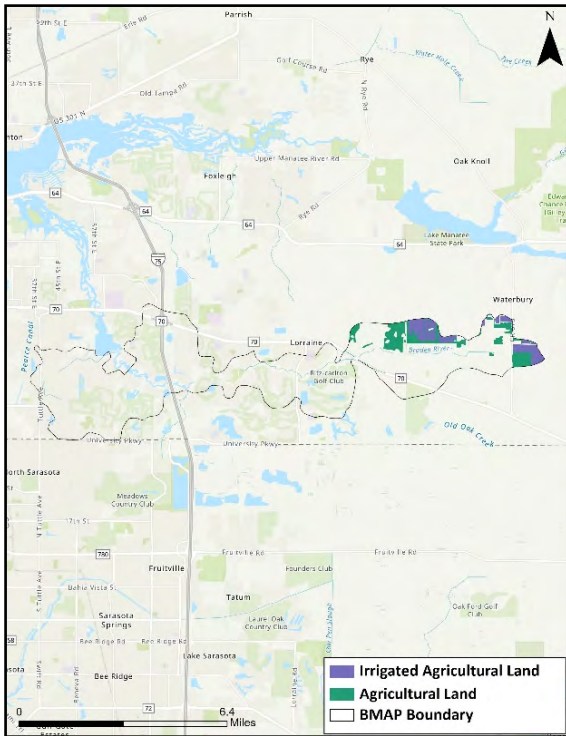
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	853	
Total agricultural acres enrolled	429	
Percentage of agricultural acres enrolled	50%	7%
Total irrigated acres	0	
Total irrigated acres enrolled	0	
Percentage of irrigated acres enrolled	0%	0%



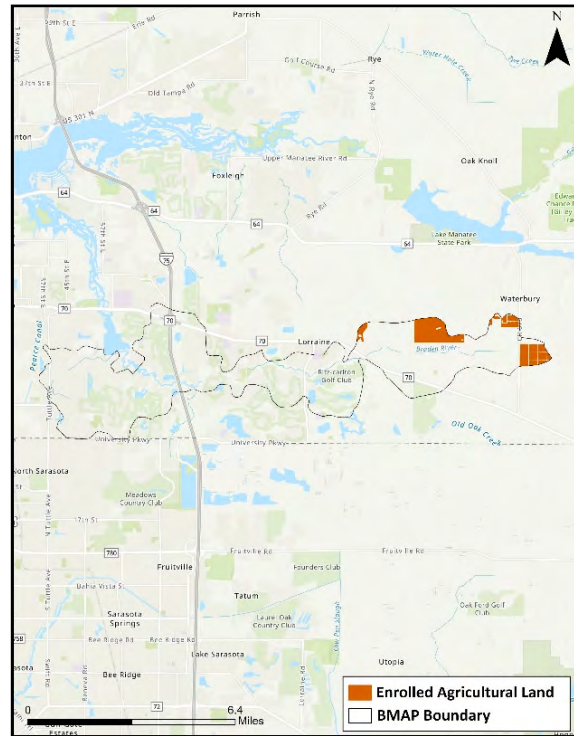
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	130
Equine	0
Fruit & Nut	0
Multiple Commodities	273
Nursery	0
Row/Field Crops	26
Sod	0
<b>TOTAL</b>	<b>429</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Manatee River Basin

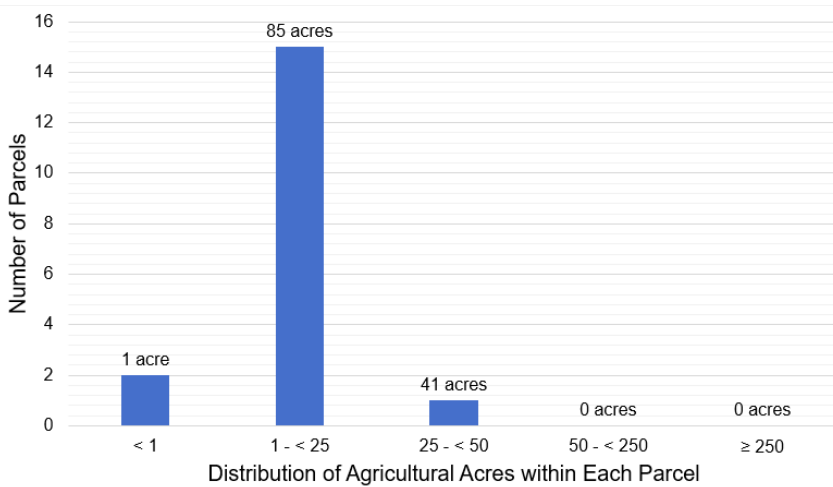


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

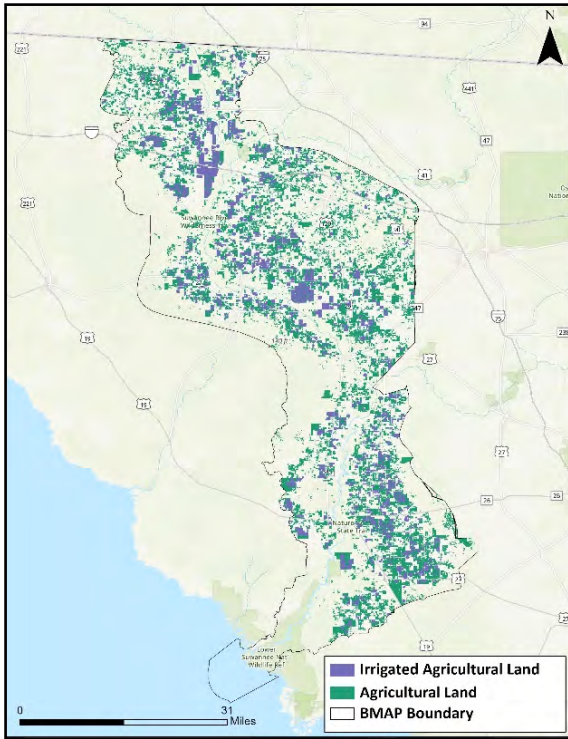
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	1,073	
Total agricultural acres enrolled	946	
Percentage of agricultural acres enrolled	88%	0%
Total irrigated acres	569	
Total irrigated acres enrolled	533	
Percentage of irrigated acres enrolled	94%	0%



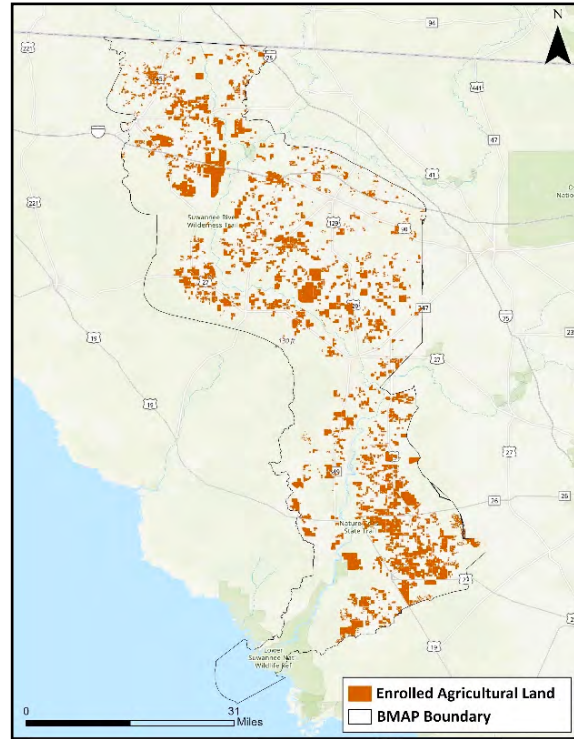
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	300
Equine	0
Fruit & Nut	0
Multiple Commodities	475
Nursery	0
Row/Field Crops	115
Sod	56
<b>TOTAL</b>	<b>946</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Middle and Lower Suwannee River Basin

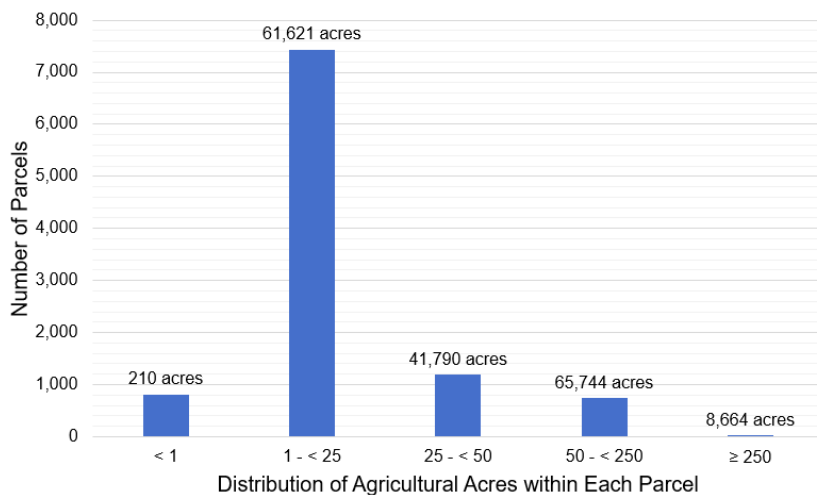


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

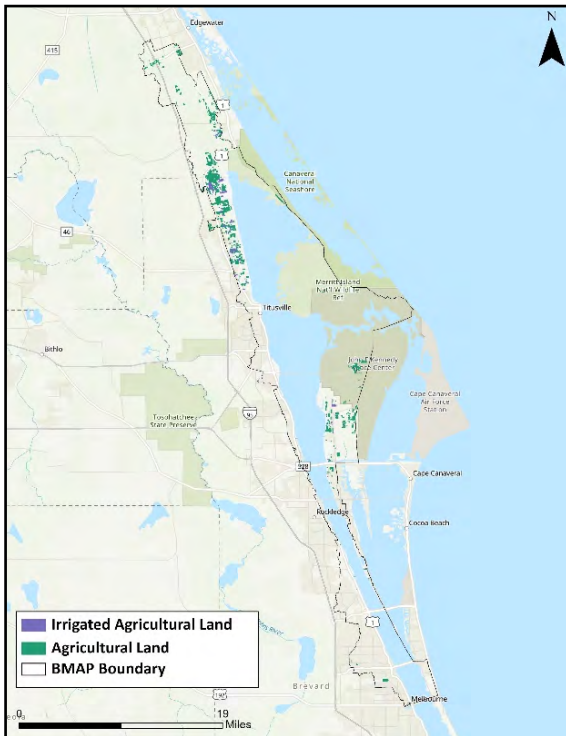
<b>Enrollment and Response Summary</b>	<b>2019</b>	<b>Change from 2018</b>
Total agricultural acres in the BMAP	380,765	
Total agricultural acres enrolled	200,860	
Percentage of agricultural acres enrolled	53%	3%
Total irrigated acres	100,959	
Total irrigated acres enrolled	84,036	
Percentage of irrigated acres enrolled	83%	5%



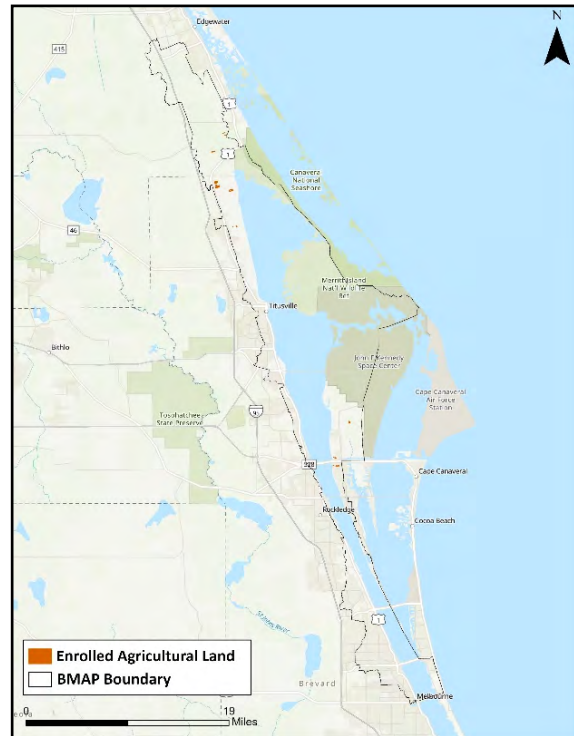
## Agricultural Acres Enrolled

<b>BMP Manuals</b>	<b>Acres</b>
Citrus	0
Cow/Calf	28,769
Dairy	21,426
Equine	36
Fruit & Nut	568
Multiple Commodities	55,827
Nursery	141
Poultry	299
Row/Field Crops	93,576
Sod	218
<b>TOTAL</b>	<b>200,860</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the North Indian River Lagoon

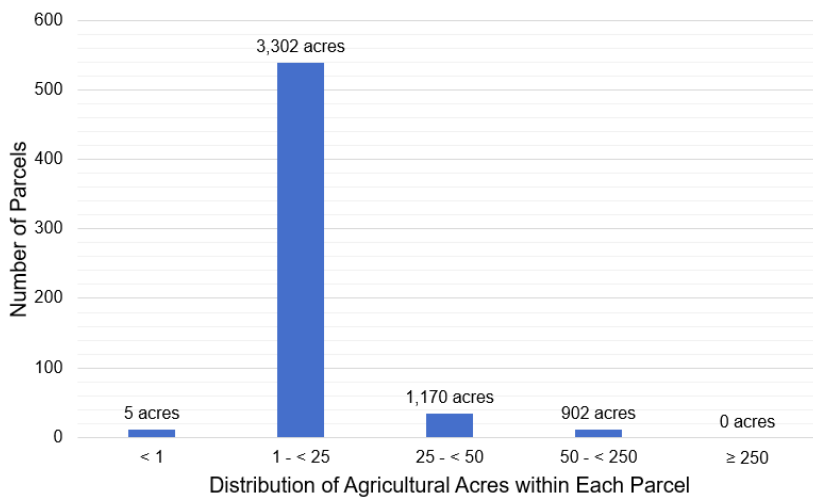


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

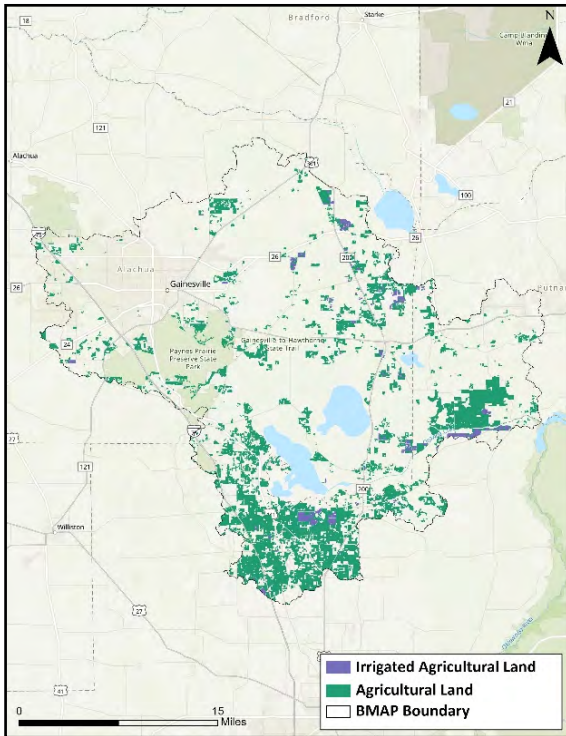
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	5,663	
Total agricultural acres enrolled	284	
Percentage of agricultural acres enrolled	5%	1%
Total irrigated acres	977	
Total irrigated acres enrolled	174	
Percentage of irrigated acres enrolled	18%	2%



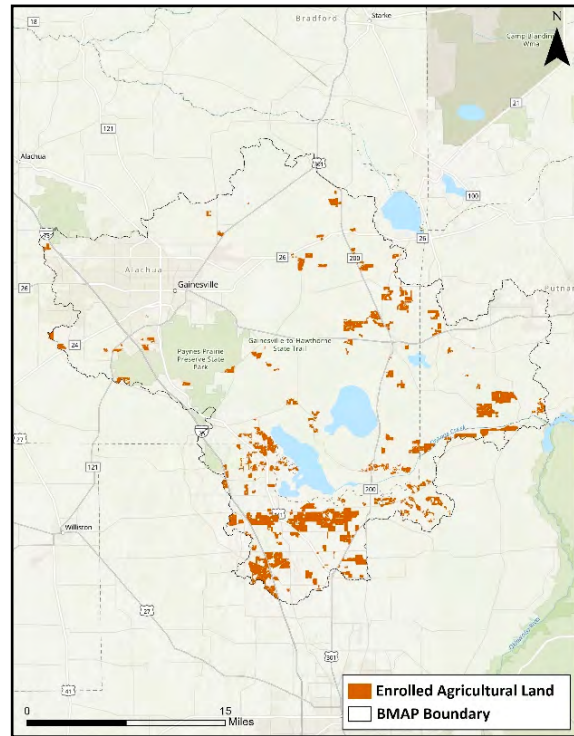
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	283
Cow/Calf	0
Equine	0
Fruit & Nut	0
Multiple Commodities	0
Nursery	1
Row/Field Crops	0
Sod	0
<b>TOTAL</b>	<b>284</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Orange Creek

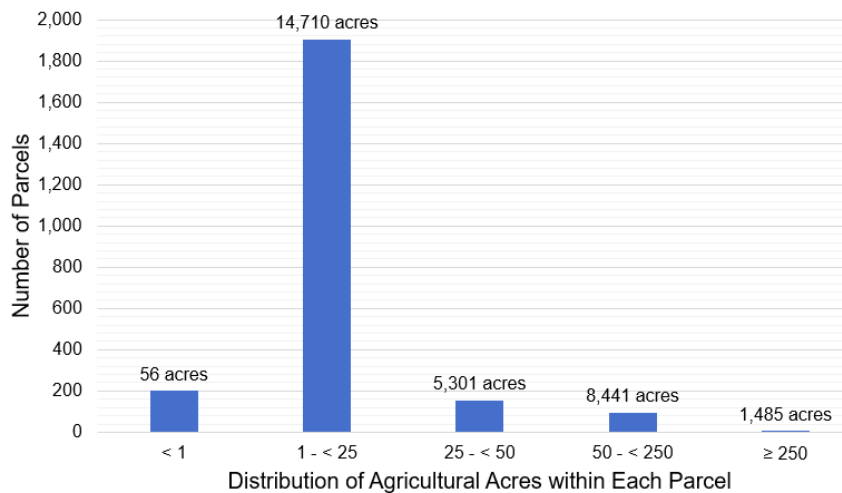


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

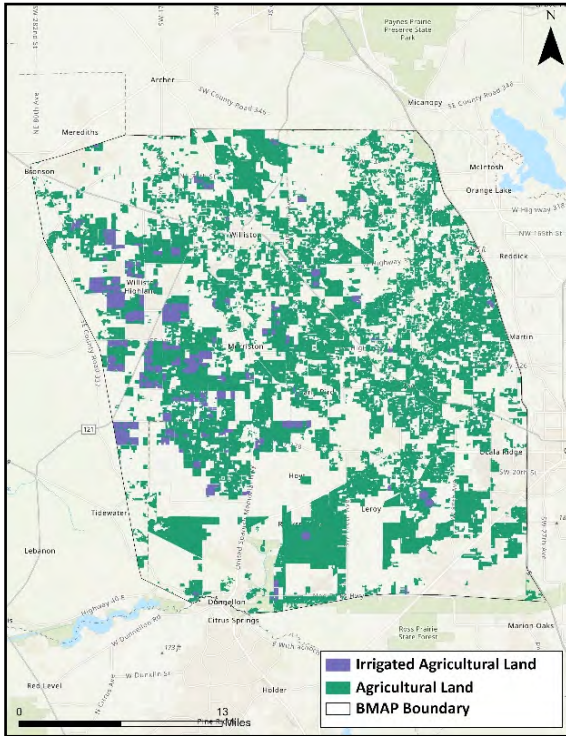
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	51,410	
Total agricultural acres enrolled	21,417	
Percentage of agricultural acres enrolled	42%	11%
Total irrigated acres	3,699	
Total irrigated acres enrolled	2,748	
Percentage of irrigated acres enrolled	74%	17%



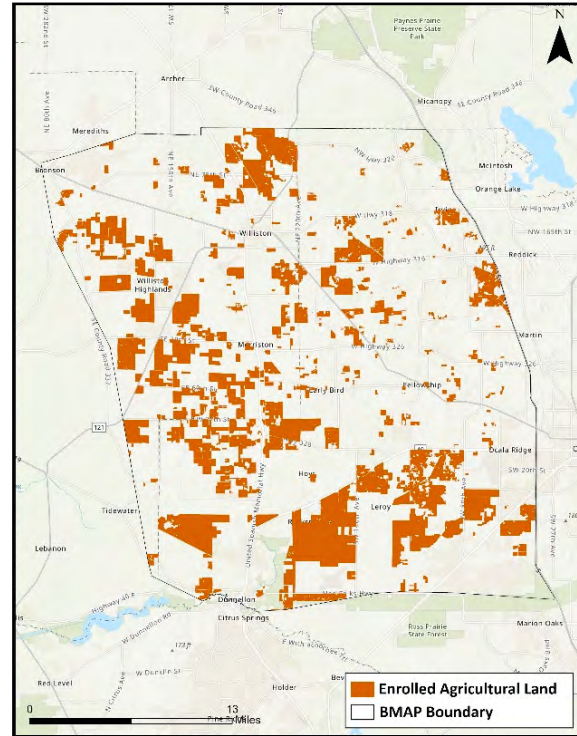
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	9,832
Dairy	77
Equine	2,679
Fruit & Nut	1,493
Multiple Commodities	3,272
Nursery	43
Row/Field Crops	4,021
Sod	0
<b>TOTAL</b>	<b>21,417</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Rainbow River and Springs

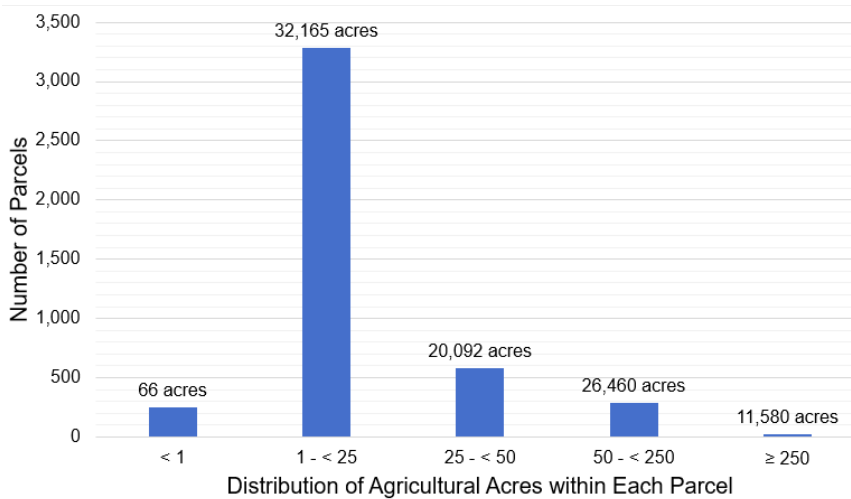


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	174,177	
Total agricultural acres enrolled	83,814	
Percentage of agricultural acres enrolled	48%	8%
Total irrigated acres	12,989	
Total irrigated acres enrolled	10,721	
Percentage of irrigated acres enrolled	83%	7%

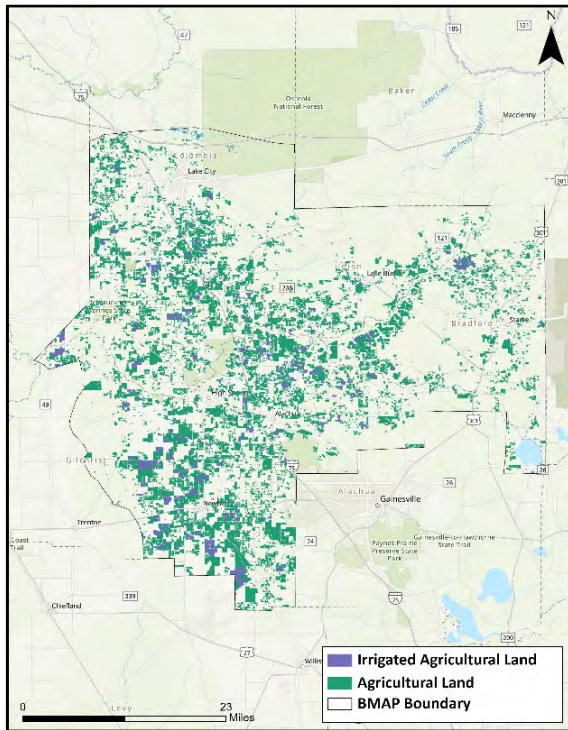


## Agricultural Acres Enrolled

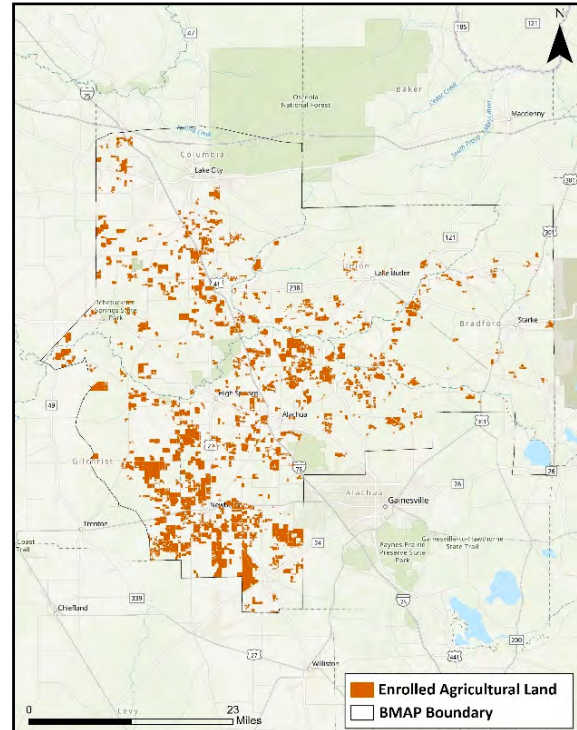
BMP Manuals	Acres
Citrus	0
Cow/Calf	35,895
Equine	9,218
Fruit & Nut	177
Multiple Commodities	29,984
Nursery	756
Row/Field Crops	7,653
Sod	131
<b>TOTAL</b>	<b>83,814</b>



# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Santa Fe River Basin

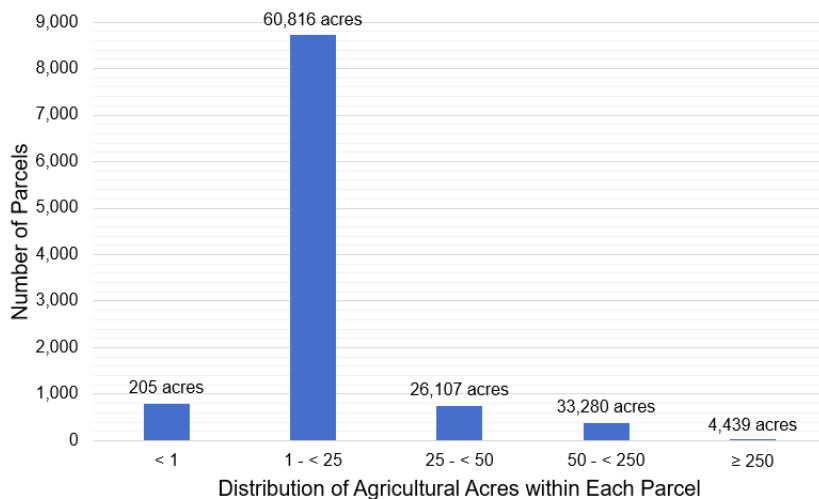


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

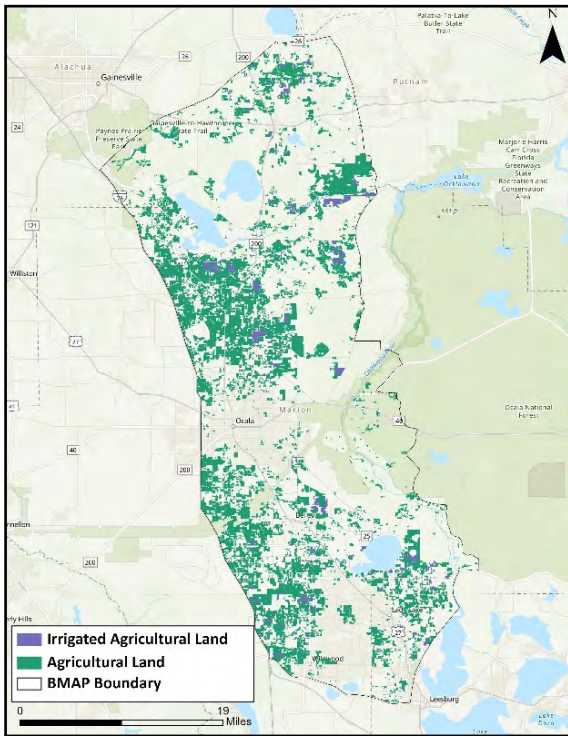
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	228,168	
Total agricultural acres enrolled	103,321	
Percentage of agricultural acres enrolled	45%	2%
Total irrigated acres	20,389	
Total irrigated acres enrolled	16,957	
Percentage of irrigated acres enrolled	83%	2%



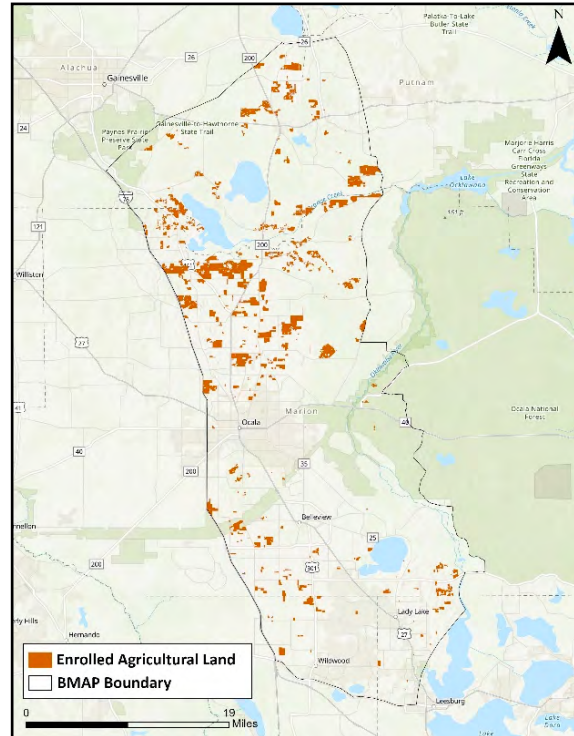
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/CalF	40,647
Dairy	3,807
Equine	33
Fruit & Nut	547
Multiple Commodities	25,707
Nursery	762
Poultry	86
Row/Field Crops	31,518
Sod	214
<b>TOTAL</b>	<b>103,321</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Silver River and Springs

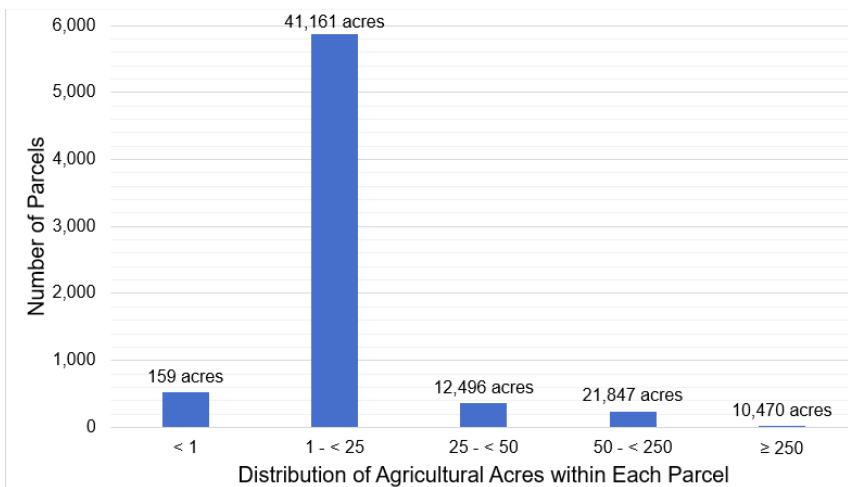


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

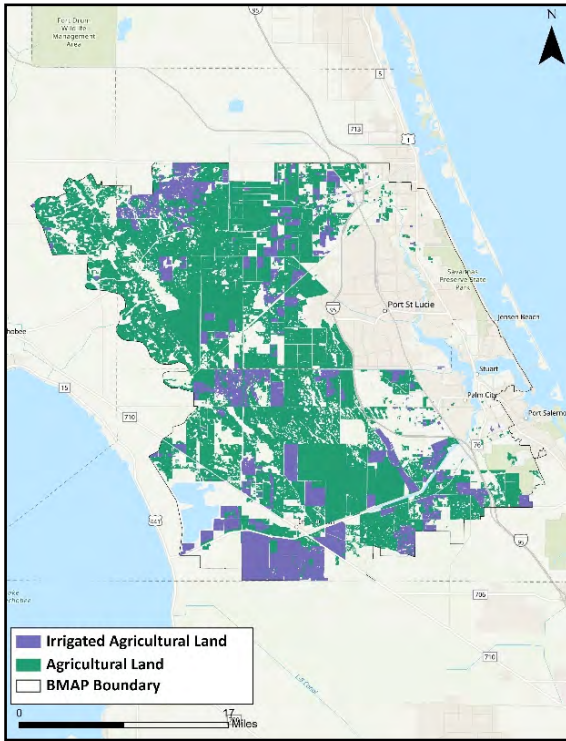
<b>Enrollment and Response Summary</b>	<b>2019</b>	<b>Change from 2018</b>
Total agricultural acres in the BMAP	116,608	
Total agricultural acres enrolled	30,475	
Percentage of agricultural acres enrolled	26%	7%
Total irrigated acres	8,628	
Total irrigated acres enrolled	4,544	
Percentage of irrigated acres enrolled	53%	8%



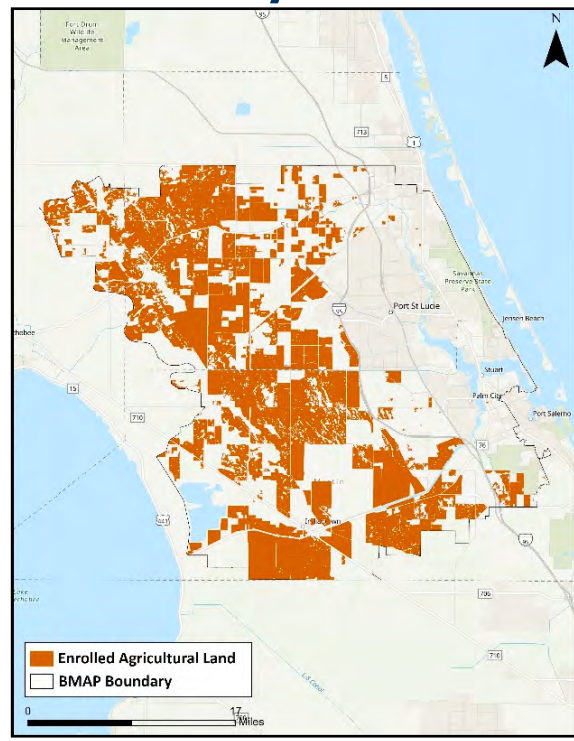
## Agricultural Acres Enrolled

<b>BMP Manuals</b>	<b>Acres</b>
Citrus	818
Cow/Calf	13,221
Dairy	77
Equine	3,465
Fruit & Nut	1,045
Multiple Commodities	4,762
Nursery	354
Row/Field Crops	6,694
Sod	39
<b>TOTAL</b>	<b>30,475</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the St. Lucie River and Estuary Basin <sup>24</sup>



**Agricultural Lands in BMAP Area**

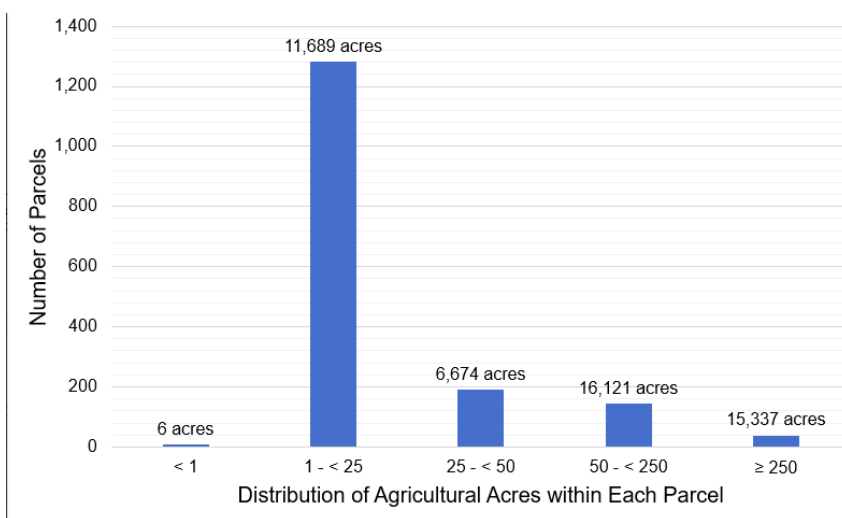


**Enrolled Agricultural Lands in BMAP Area**

Enrollment and Response Summary		
	2019	Change from 2018
Total agricultural acres in the BMAP	243,192	
Total agricultural acres enrolled	193,365	
Percentage of agricultural acres enrolled	80%	18%
Total irrigated acres	61,053	
Total irrigated acres enrolled	53,146	
Percentage of irrigated acres enrolled	87%	8%

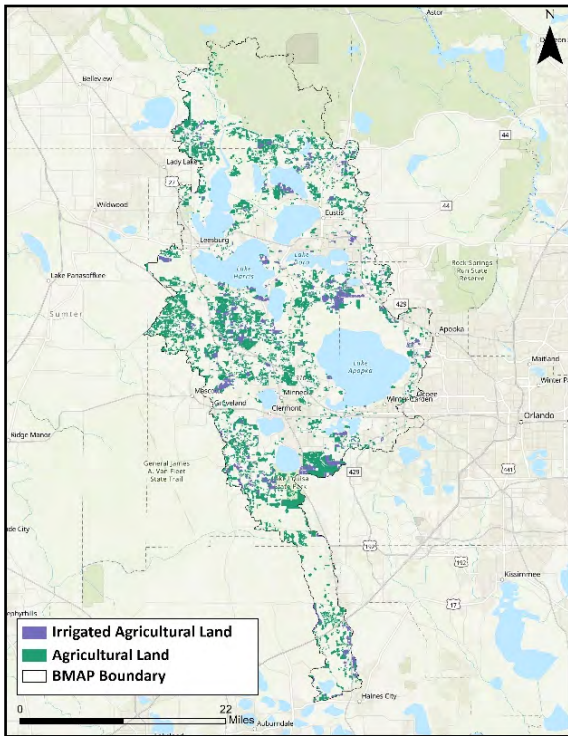
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	21,308
Cow/Calf	112,372
Dairy	529
Equine	120
Fruit & Nut	44
LOPP	162
Multiple Commodities	22,489
Nursery	282
Poultry	42
Row/Field Crops	33,504
Sod	2,513
<b>TOTAL</b>	<b>193,365</b>

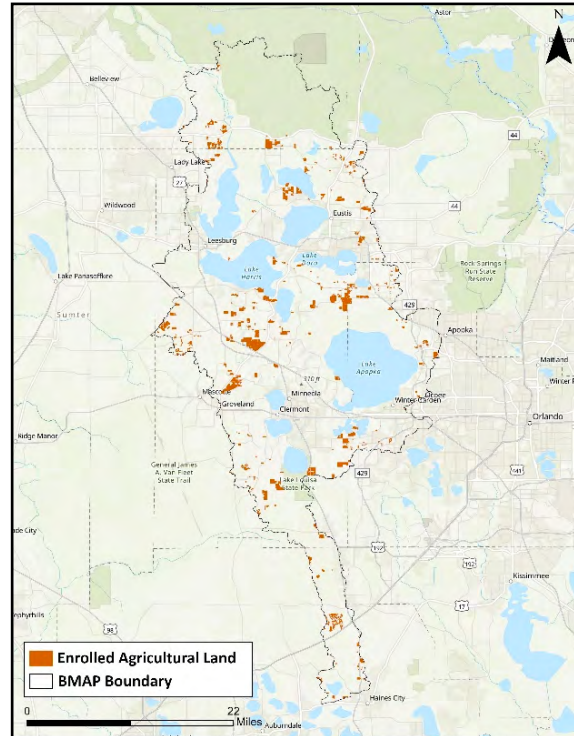


24. Characteristics and metrics for this BMAP will be significantly different in the next report as the BMAP area was expanded in the 2020 FDEP update.

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Upper Ocklawaha River Basin

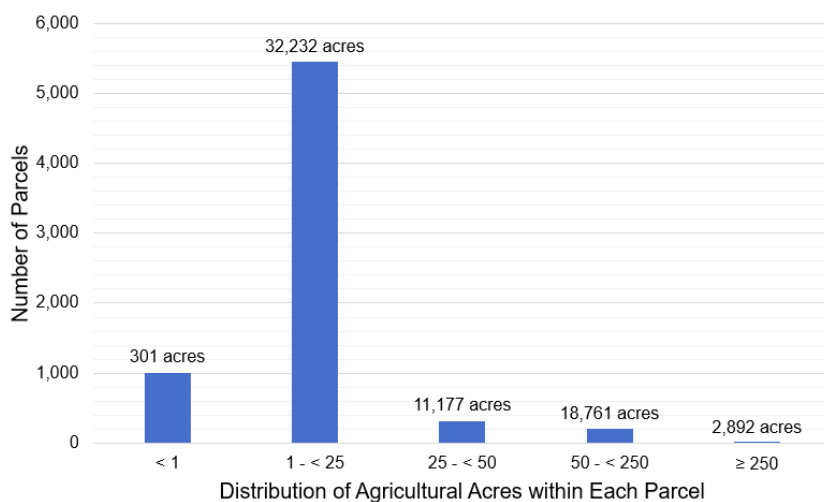


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

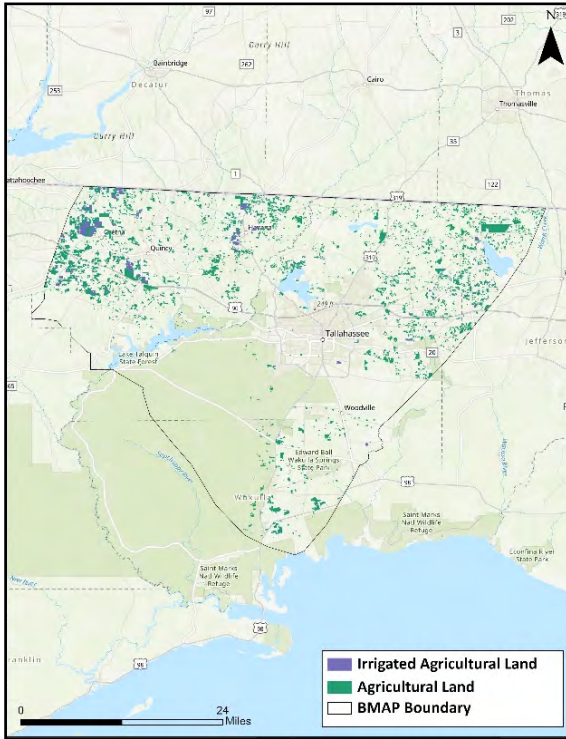
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	82,513	
Total agricultural acres enrolled	17,150	
Percentage of agricultural acres enrolled	21%	3%
Total irrigated acres	16,307	
Total irrigated acres enrolled	8,824	
Percentage of irrigated acres enrolled	54%	1%



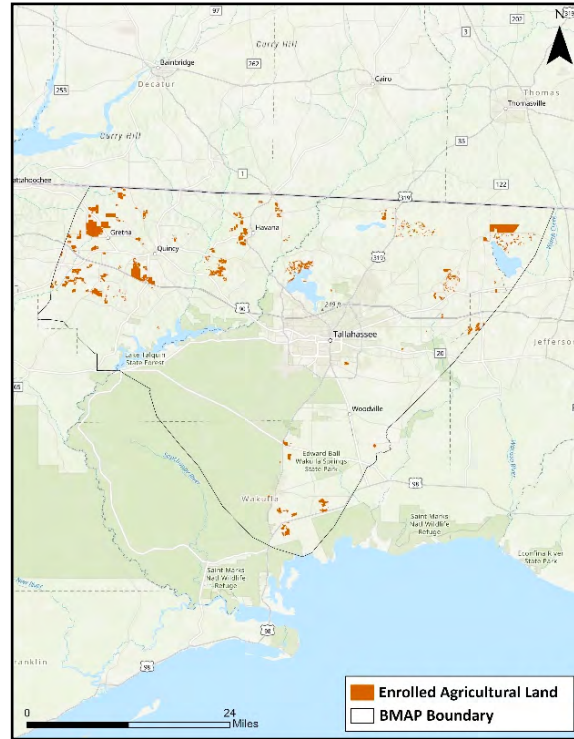
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	7,182
Cow/Calf	4,287
Equine	19
Fruit & Nut	725
Multiple Commodities	1,301
Nursery	2,239
Row/Field Crops	895
Sod	502
<b>TOTAL</b>	<b>17,150</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Upper Wakulla River and Wakulla Springs

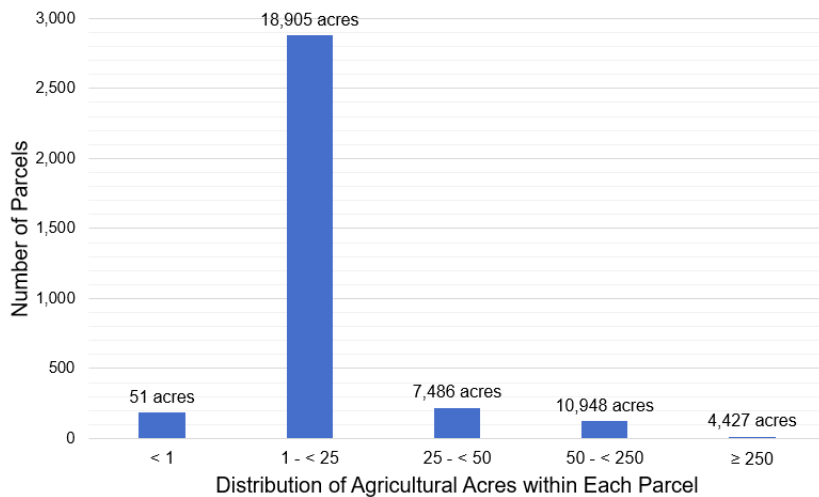


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

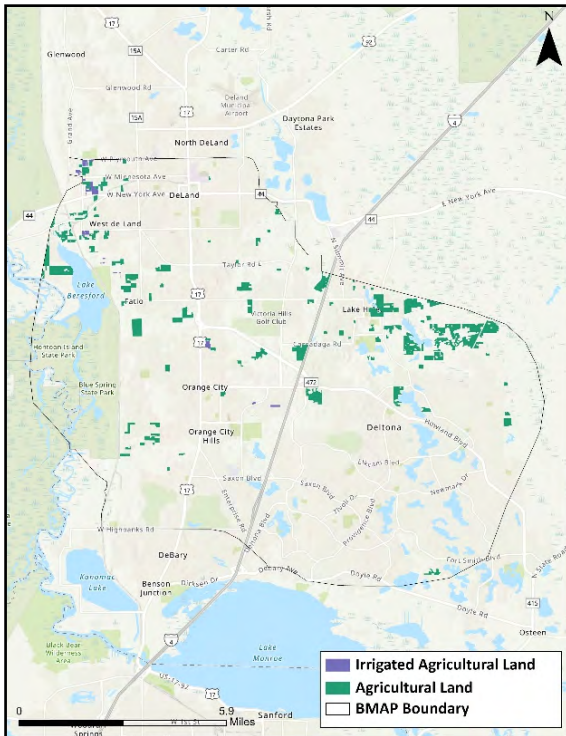
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	59,321	
Total agricultural acres enrolled	17,503	
Percentage of agricultural acres enrolled	30%	3%
Total irrigated acres	5,052	
Total irrigated acres enrolled	3,512	
Percentage of irrigated acres enrolled	70%	5%



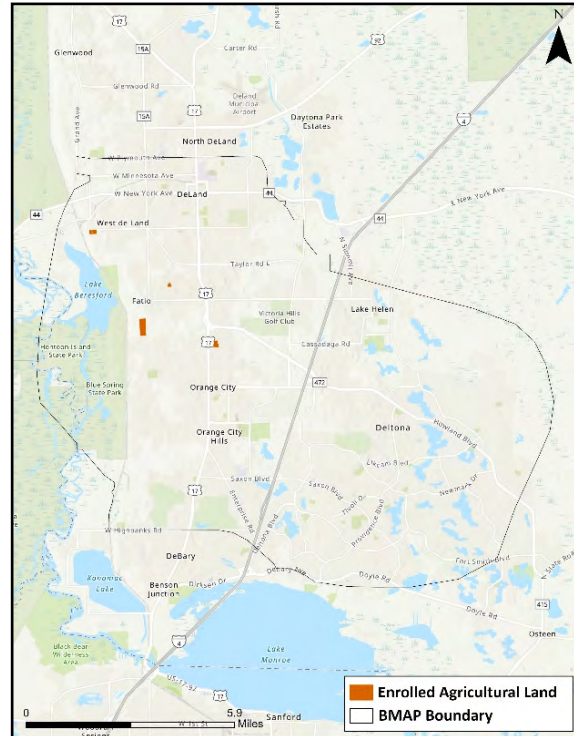
## Agricultural Acres Enrolled

BMP Manual	Acres
Citrus	85
Cow/Calf	3,681
Equine	5
Fruit & Nut	1,233
Multiple Commodities	1,627
Nursery	2,246
Poultry	312
Row/Field Crops	7,861
Sod	453
<b>TOTAL</b>	<b>17,503</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Volusia Blue Springs

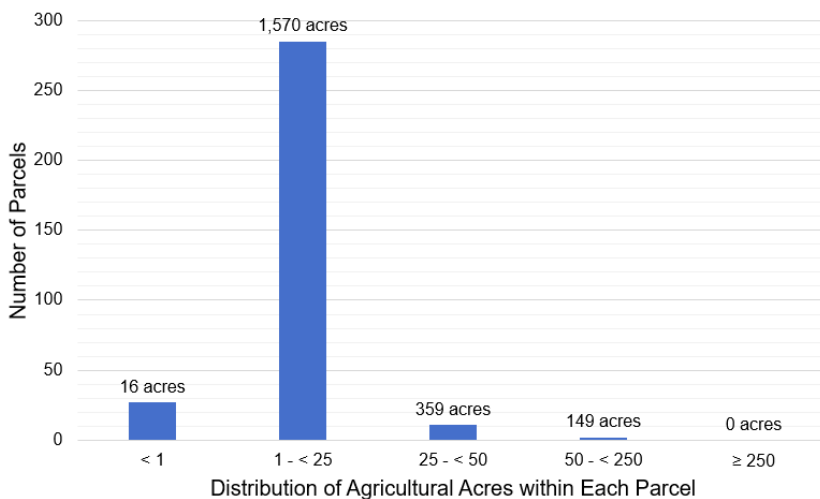


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

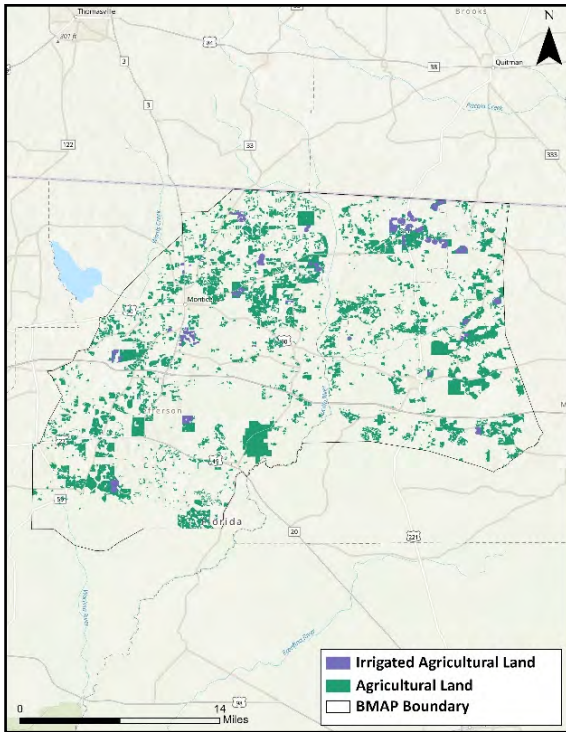
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	2,171	
Total agricultural acres enrolled	77	
Percentage of agricultural acres enrolled	4%	1%
Total irrigated acres	110	
Total irrigated acres enrolled	25	
Percentage of irrigated acres enrolled	23%	1%



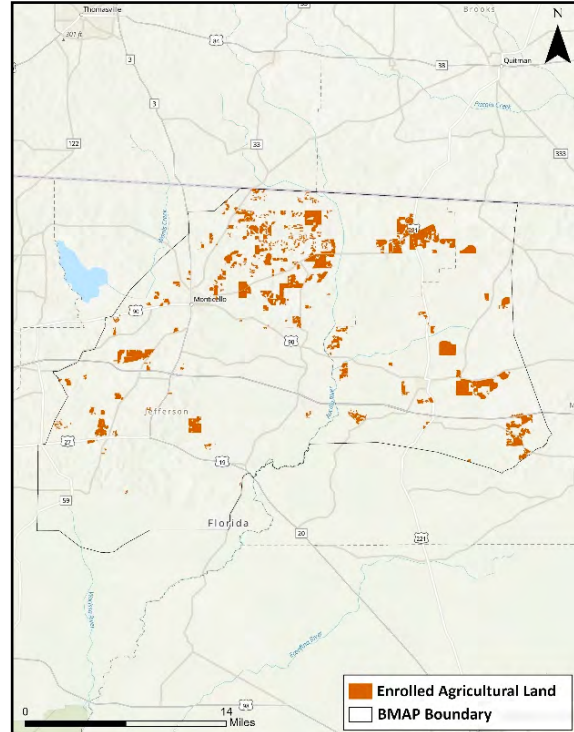
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	0
Cow/Calf	47
Equine	0
Fruit & Nut	0
Multiple Commodities	11
Nursery	19
Row/Field Crops	0
Sod	0
<b>TOTAL</b>	<b>77</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Wacissa River and Wacissa Springs

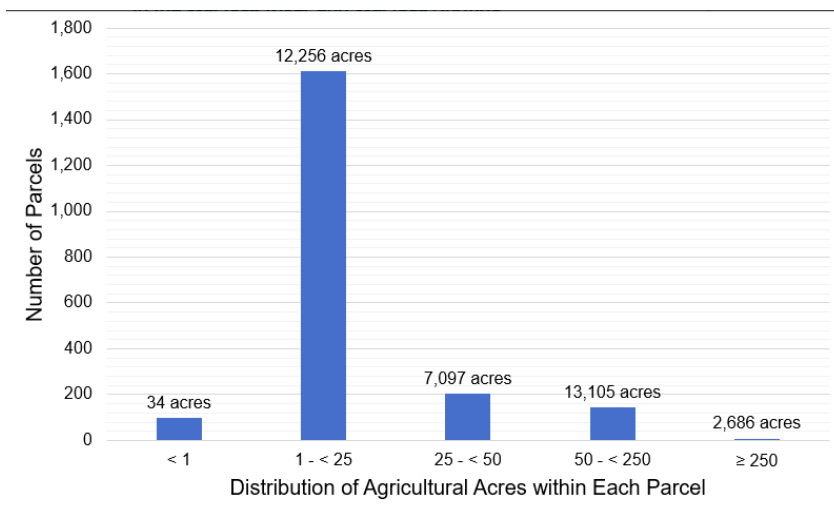


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

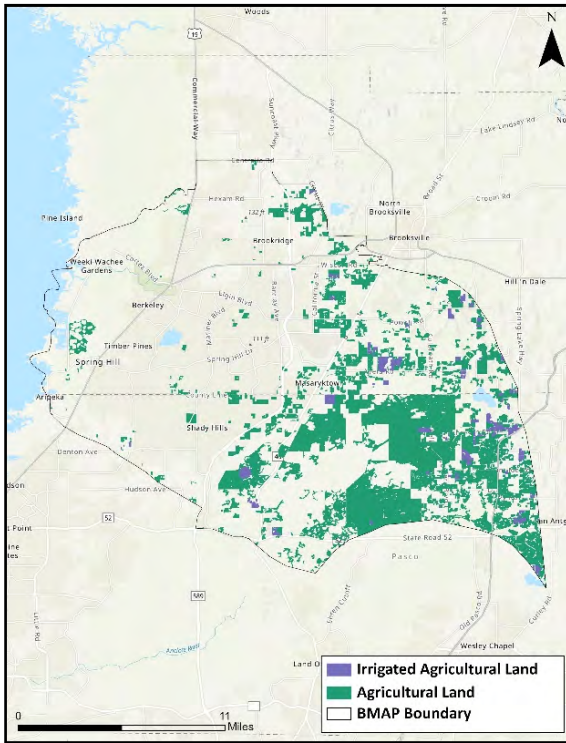
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	53,031	
Total agricultural acres enrolled	17,853	
Percentage of agricultural acres enrolled	34%	5%
Total irrigated acres	4,071	
Total irrigated acres enrolled	2,328	
Percentage of irrigated acres enrolled	57%	9%



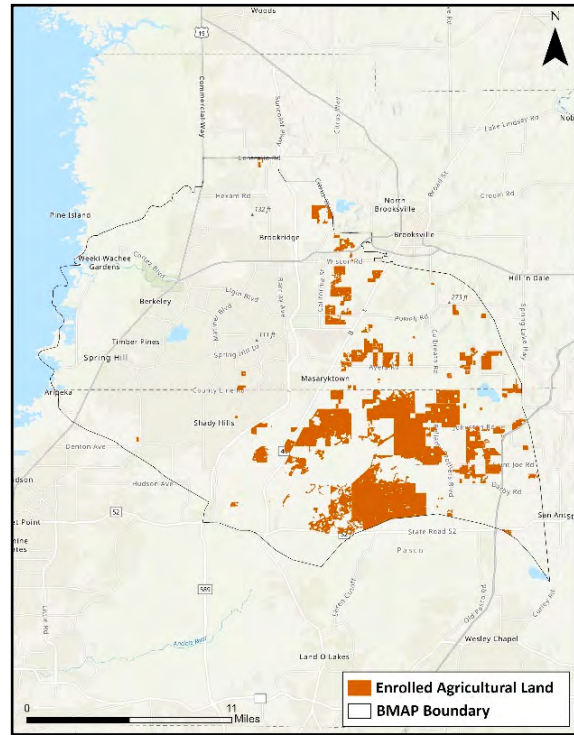
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	16
Cow/Calf	4,767
Dairy	1,273
Multiple Commodities	654
Nursery	43
Row/Field Crops	11,100
<b>TOTAL</b>	<b>17,853</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Weeki Wachee Spring and River

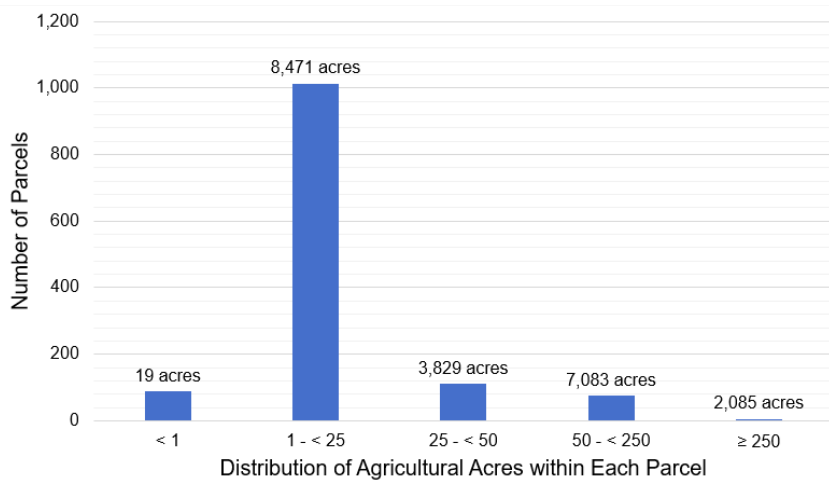


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	44,251	
Total agricultural acres enrolled	22,764	
Percentage of agricultural acres enrolled	51%	4%
Total irrigated acres	2,821	
Total irrigated acres enrolled	1,355	
Percentage of irrigated acres enrolled	48%	5%

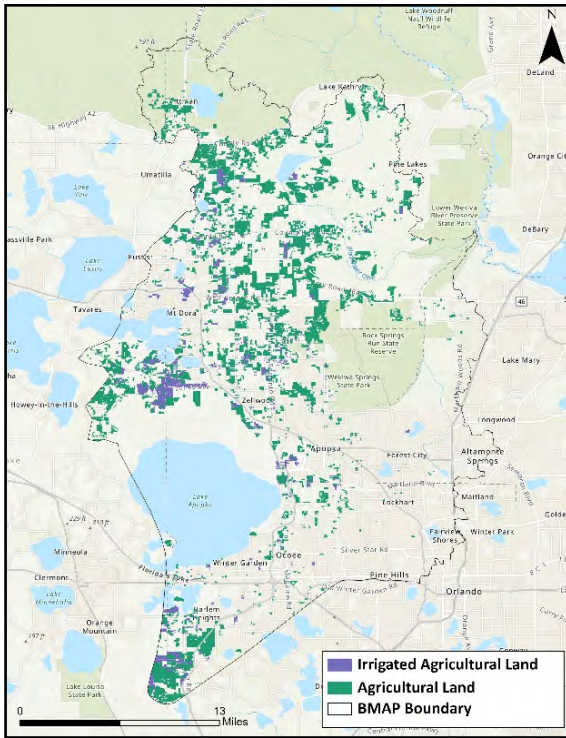


## Agricultural Acres Enrolled

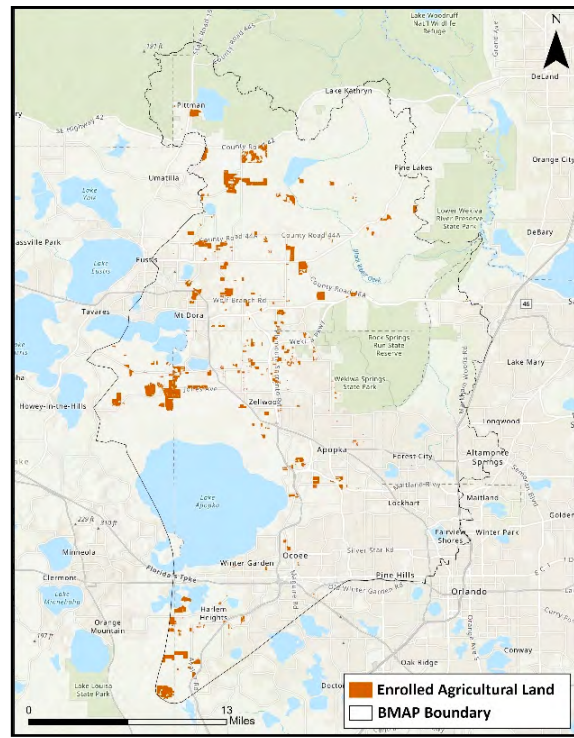
BMP Manuals	Acres
Citrus	268
Cow/Calf	16,692
Equine	61
Fruit & Nut	909
Multiple Commodities	3,466
Nursery	161
Row/Field Crops	921
Wildlife	286
Sod	0
<b>TOTAL</b>	<b>22,764</b>



# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Wekiva River, Rock Springs Run, and Little Wekiva Canal

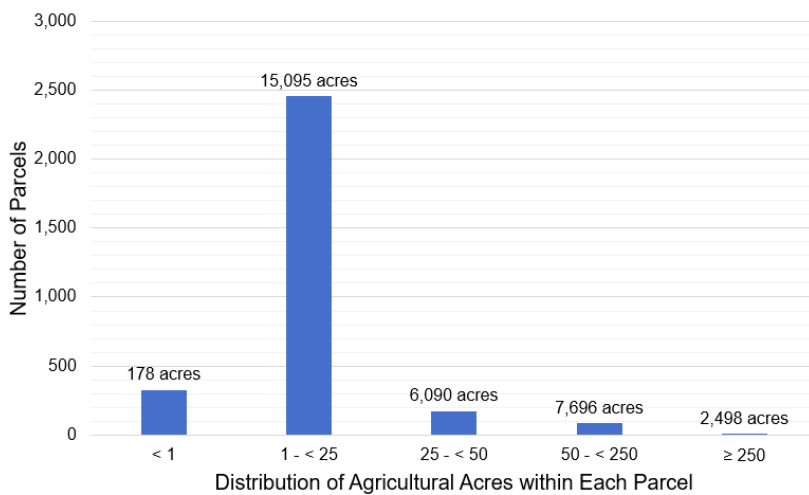


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

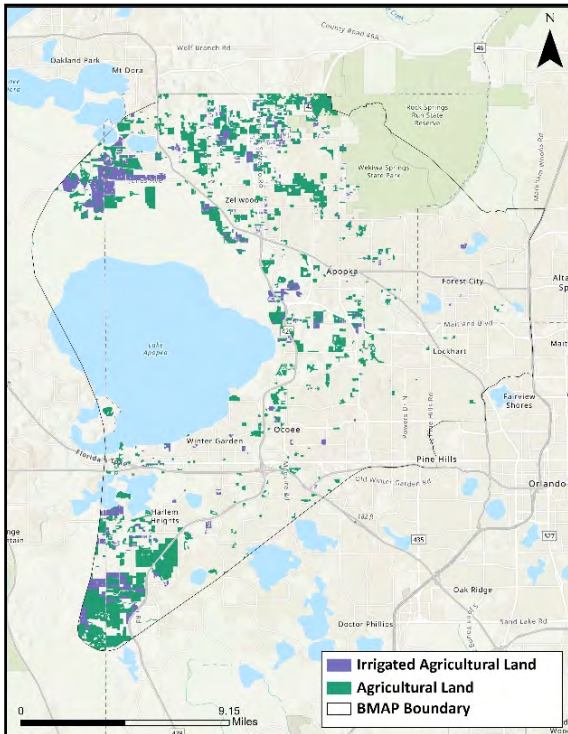
Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	40,314	
Total agricultural acres enrolled	8,758	
Percentage of agricultural acres enrolled	22%	4%
Total irrigated acres	6,901	
Total irrigated acres enrolled	4,250	
Percentage of irrigated acres enrolled	62%	1%



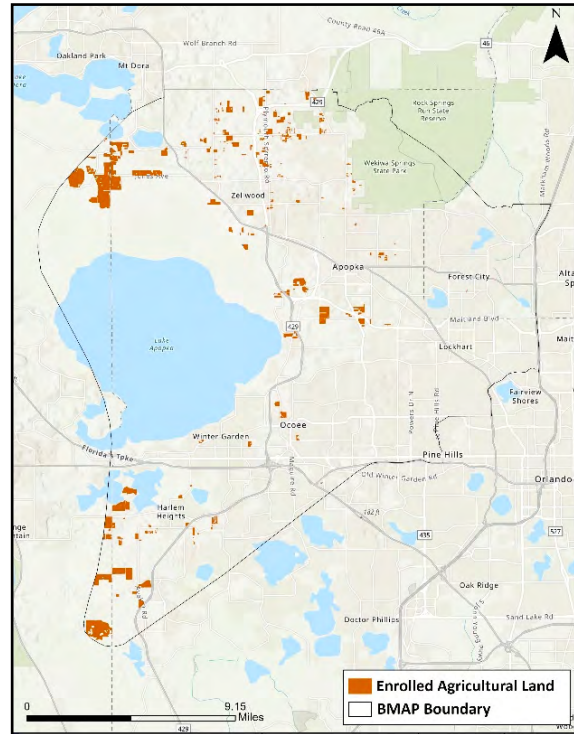
## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	2,203
Cow/Calf	1,461
Equine	440
Fruit & Nut	419
Multiple Commodities	63
Nursery	2,461
Row/Field Crops	864
Sod	847
<b>TOTAL</b>	<b>8,758</b>

# Status of Implementation of Agricultural Best Management Practices (BMPs) in the Wekiwa Spring and Rock Spring Basin

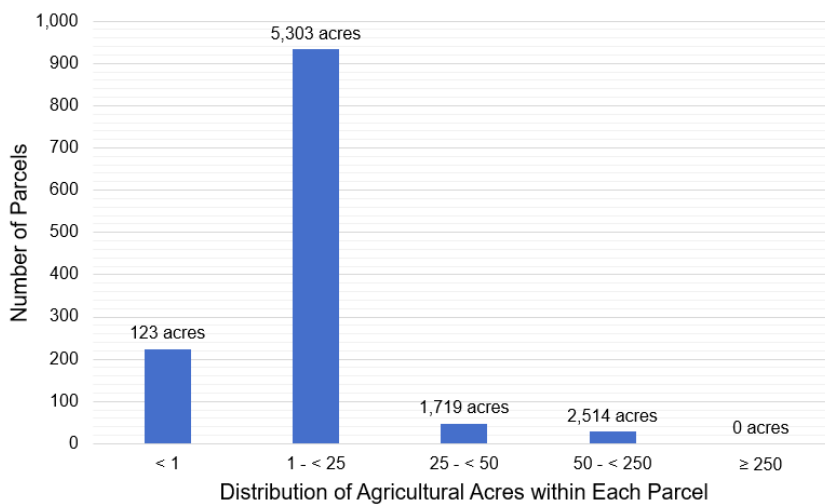


**Agricultural Lands in BMAP Area**



**Enrolled Agricultural Lands in BMAP Area**

Enrollment and Response Summary	2019	Change from 2018
Total agricultural acres in the BMAP	14,062	
Total agricultural acres enrolled	4,402	
Percentage of agricultural acres enrolled	31%	7%
Total irrigated acres	4,585	
Total irrigated acres enrolled	2,770	
Percentage of irrigated acres enrolled	60%	1%



## Agricultural Acres Enrolled

BMP Manuals	Acres
Citrus	1,540
Cow/Calf	85
Equine	20
Fruit & Nut	203
Multiple Commodities	17
Nursery	1,457
Row/Field Crops	777
Sod	303
<b>TOTAL</b>	<b>4,402</b>