

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

Facilitating Agricultural Resource Management Systems (FARMS)

Florida Stormwater Association Conference
June 19-21, 2019



Southwest Florida
Water Management District



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FARMS Program

FARMS

FARMS is an agricultural Best Management Practice (BMP) cost-share program.

- Created in 2003 as a cooperative program with FDACS
- Coordination within the District and with FDACS, NRCS, and SWCDs
- Reduces groundwater use
- Improves water quality
- Improves natural systems
- Budget \$6 Million per year



FARMS Program

Five Program Goals

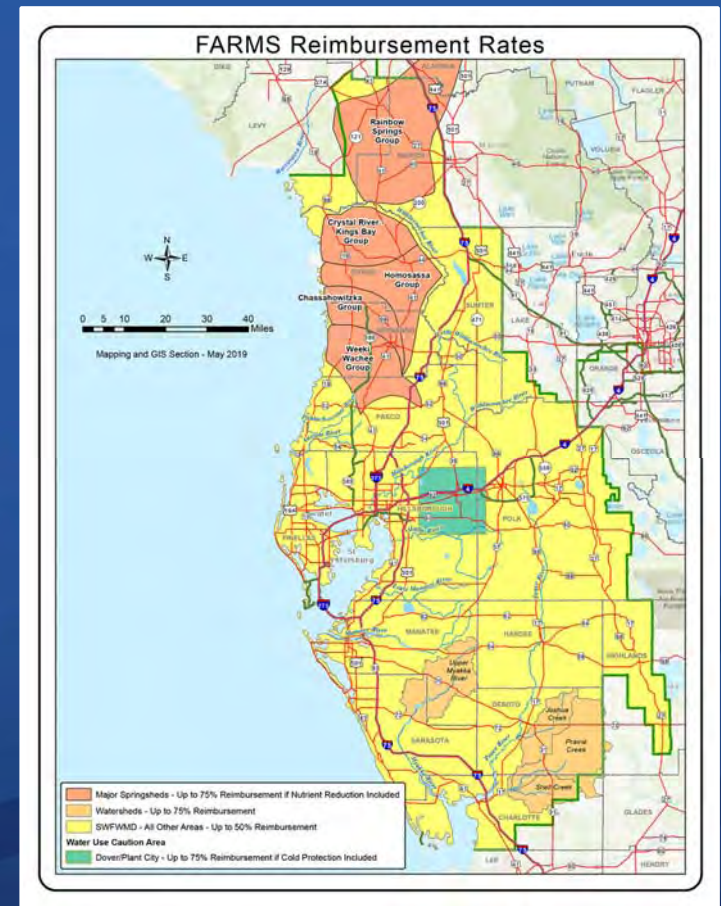
- ✓ Goal 1 - Shell Prairie and Joshua Creek, Reduce groundwater use and improve water quality
- ✓ Goal 2 - Upper Myakka River Watershed and Flatford Swamp, Improve natural systems and hydroperiod, respectively
- ✓ Goal 3 - Southern Water Use Caution Area (WUCA), reduce groundwater use by 40 MGD by 2025
- ✓ Goal 4 - Dover/Plant City WUCA, reduce cold protection groundwater quantities in the DPCWUCA by 20% by 2020
- ✓ Goal 5 - Northern District/Springs Coast, Reduce groundwater use and nutrient loading impacts



FARMS Program

Reimbursement Rates

50% to 75% reimbursement rate dependent on project location and type.



FARMS Program

Typical Cost Share BMPs

Tailwater Recovery / Surface Water Pump Stations

- Motors
- Pumps
- Filters
- Shed
- Mainline



FARMS Program

Typical Cost Share BMPs

Precision Irrigation Systems

- Auto pump start/stop
- Irrigation zone automation
- Weather stations
- Soil moisture & salinity probes



FARMS Program

Typical Cost Share BMPs

Frost/Freeze Protection BMPs

- Alternative water supply
- Chemical protectants
- Row covers (DPCWUCA)
- Wind machines



FARMS Program

Typical Cost Share BMPs

Nutrient Reduction BMPs

- Fertigation systems
- Manure storage structures (composting)
- Vegetative filter strips



FARMS Accomplishments

- 199 Board-approved projects as of September 2018
- 28.2 MGD projected groundwater offset
- Total invested: ~\$70.6 M since 2003
 - District costs \$40.2 M
 - Producer costs \$30.4 M
 - District 56%/Producer 44%
 - \$2.50/1,000 gallons saved
- \$6 M budgeted each year for FARMS projects.



Other Programs Overseen by FARMS

Mini-FARMS Program

- Partnership with FDACS
- Scaled-down version of FARMS
- Notice of Intent (NOI) filed with FDACS to implement BMPs
- \$8,000 cap, 75% reimbursement
- Total Funding last 5 years (\$374,633)
- 158 projects over 4,570 acres serviced

FAWN Program

- Partnership with IFAS
- Collect and distribute real-time data
- 44 weather stations statewide (13 in the District)



Other Programs Overseen by FARMS

UF-IFAS Research

Agricultural Commodities

- Blueberries
- Citrus
- Equine Waste Stream
- Nursery Trees and Plants
- Peaches
- Peppers
- Potatoes
- Strawberries
- Tomatoes



Other Programs Overseen by FARMS

Well Plugging Program

- 79 Wells Back-Plugged in the SWUCA/59 in the Shell Prairie, and Joshua Creek Watersheds
- 42% Average Reduced Conductivity
- 41% Average Reduced Total Dissolved Solids
- 57% Average Reduced Chloride
- 79% Average Retained Well Yield



FARMS Program

Keys To Making Public/Private Partnerships Successful With Agriculture Partners

- Producer designed projects
- Producer provides at least 25% of funding
- Does not cut water use permit quantities
 - The estimated groundwater saved is set aside on the permit as standby quantity
- Producer profits by reducing production cost
- District's profit is groundwater savings and nutrient loading reductions



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Questions and Discussion

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