



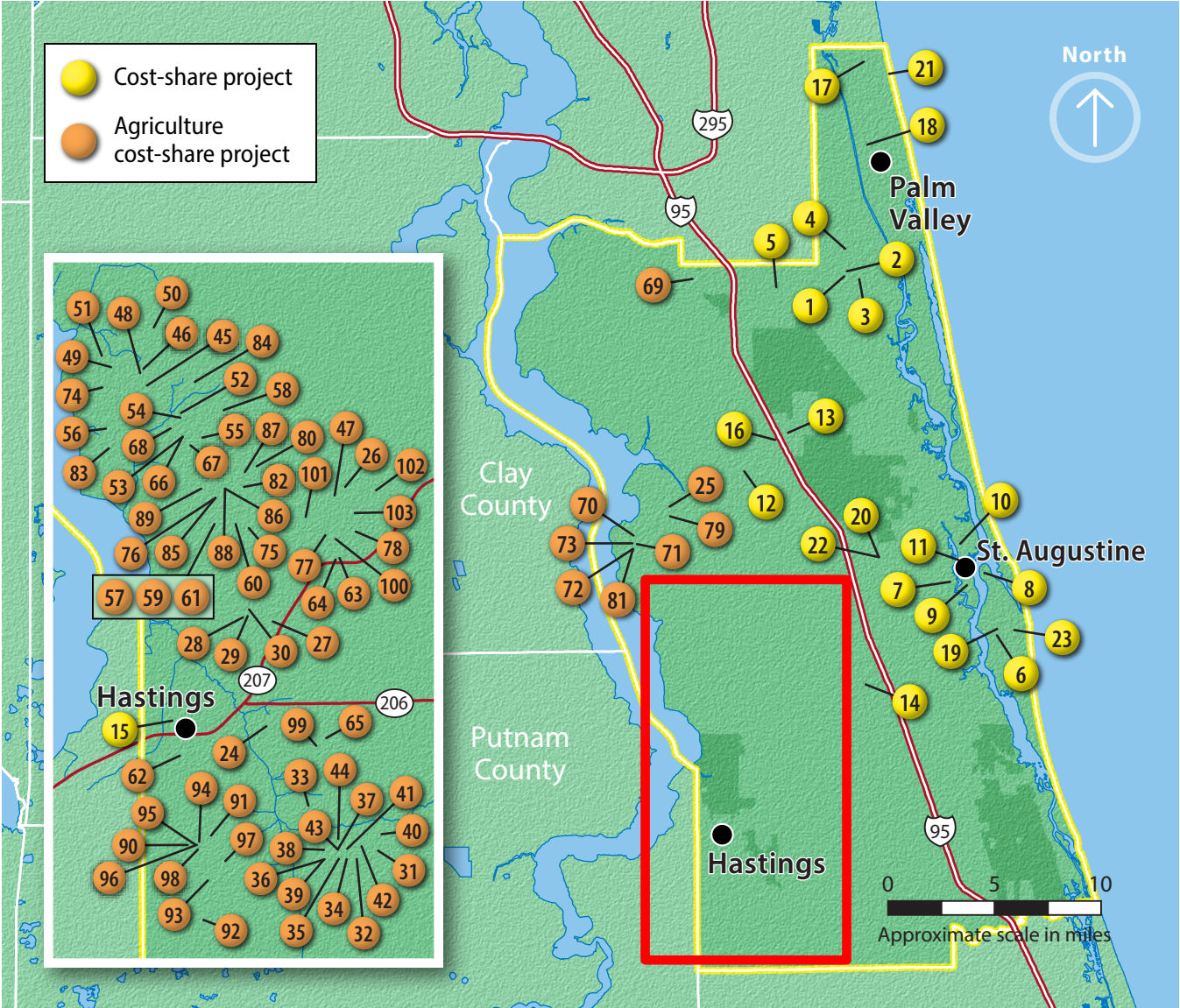
St. Johns River Water Management District

Cost-share and District-led projects in St. Johns County

The St. Johns River Water Management District (District) implements a wide variety of projects aimed at protecting water supplies, improving water quality, restoring natural systems, and providing flood protection. A summary of the cost-share projects benefiting St. Johns County are described on the following pages. The summary includes a description of benefits for each project, including nutrient load reduction (total phosphorus [TP],

total nitrogen [TN] pounds per year [lbs/yr]), alternative water supplied (million gallons per day [mgd]), water conserved (mgd), alternative water storage capacity created (million gallons [MG]), or acres protected from flooding.

Also listed at the end of this document are District-led projects and other efforts benefiting the communities in St. Johns County.



Cost-Share Program:

Through the Cost-Share Program, the District and Florida Department of Environmental Protection (DEP) together have awarded approximately \$13 million for projects in communities throughout St. Johns County beginning in fiscal year 2015, leveraging approximately \$64 million when combined with local matching funds. St. Johns County cost-share projects have provided an estimated benefit of 11 mgd of alternative water supply, 11 MG of storage capacity, 1.1 mgd of water conserved, 136,000 lbs/yr TN reduction, 45,000 lbs/yr TP reduction, and 1,446 acres of flood protection.

- 1. JEA Nocatee Coastal Oaks Phase 4** — The project included construction of a reclaimed water pipe in the Nocatee Coastal Oaks Phase 4 area. The estimated alternative water supply benefit is 2 mgd. Project Status: Complete.
- 2. JEA Nocatee Parkway Reclaimed Water (RCW) Transmission** — The project involved the construction of a 16-inch reclaimed water transmission line to provide reclaimed water to multiple communities in the Nocatee development and reduce direct discharge to the St. Johns River. The estimated alternative water supply benefit is 1.65 mgd. The estimated nutrient reduction is 20,593 lbs/yr of TN and 7,534 lbs/yr of TP. Project Status: Complete.
- 3. JEA Nocatee Riverwood Reclaimed Water Transmission** — The project involved providing reclaimed water to existing and future customers (eventual build-out of nearly 10,000 single-family homes and 4,500 multifamily units). The estimated alternative water supply benefit is 1.85 mgd. The estimated nutrient reduction is 10,609 lbs/yr of TN and 3,881 lbs/yr of TP. Project Status: Complete.
- 4. JEA North Nocatee Reclaimed Water Storage Tank** — The project involved the construction of a reclaimed water storage tank at the North Nocatee facility. The estimated water supply benefit is 2 MG reclaimed water storage capacity created. The estimated nutrient load reduction water quality benefit is 22,465 lbs/yr of TN and 8,219 lbs/yr of TP. Project Status: Complete.
- 5. JEA Twin Creeks Reclaimed Water (RCW) Storage and Delivery** — The project included the construction of two 1.5 MG storage tanks, five pumps, and connector pipes from the existing reclaimed water system to the tanks. The estimated water supply benefit is 3 MG reclaimed water storage capacity created. The estimated water quality nutrient load reduction to the St. Johns River is 20,397 lbs/yr of TN and 6,592 lbs/yr of TP. Project Status: Complete.
- 6. St. Augustine Beach Mizell Road Stormwater Pump Station and Outfall** — The project included raising control weir height, increasing pumping capacity through the enlargement of the pump station and pond/canal bank improvements, and installing a backup power supply for the pumps. The project will provide flood protection during extreme tides and storm surge events, which will improve resiliency and reduce impacts associated with sea-level rise. The estimated flood protection benefit is 342 acres. The nutrient load reduction water quality benefit is approximately 1,136 lbs/yr of TN and 314 lbs/yr of TP. Project Status: Complete.
- 7. St. Augustine Box Culvert Over Oyster Creek** — The project involved the replacement of a box culvert over Oyster Creek along South Dixie Highway to reduce tailwater flooding and support a larger city-led resiliency project. The estimated flood protection benefit is 700 acres. Project Status: Complete.
- 8. St. Augustine Davis Shores Tidal Backflow Preventers** — The project involved the retrofit of 17 existing stormwater outfalls with backflow prevention valves in the North Davis Shores and South Davis Shores areas. The estimated flood protection benefit is 380 acres. Project Status: Complete.

- 9. St. Augustine Lincolnville Drainage Improvements** — The project involved the installation of stormwater conveyance and treatment along three streets within the Lincolnville neighborhood. The project will result in a nutrient load reduction water quality benefit of 440 lbs/yr of TN and 70 lbs/yr of TP to the San Sebastian River. Project Status: Complete.
- 10. St. Augustine Macaris Outfall Flood Protection Project** — The project involved retrofitting two existing stormwater outfalls with tidal backflow prevention valves. The estimated flood protection benefit is 22 acres. Project Status: Complete.
- 11. St. Augustine Water Conservation** — The project involved performing a revenue sufficiency study and analysis to support an educational and outreach program, adoption of block rates, procurement and installation of automatic meter reading equipment, collection and analysis of consumptive use data and the production of a final report. The estimated water conservation benefit is 0.58 mgd. Project Status: Complete.
- 12. St. Johns County Advanced Metering Infrastructure (AMI) Expansion** — The project included expanding the county's AMI system in the northwest part of the St. Johns County Utility Department service area. The estimated water conservation benefit is 0.144 mgd. Project Status: Complete.
- 13. St. Johns County Bannon Lakes 2.0 MG RCW Tank and Pump Station** — The project involved the construction a 2 MG reclaimed water storage tank and the installation of a 2,500 gallons per minute (gpm) booster pump, control valve, electrical building, and associated works. The estimated alternative water supply benefit is 2 MG reclaimed water storage capacity created. The estimated water quality nutrient reduction benefit is 3,559 lbs/yr of TN and 1,186 lbs/yr of TP. Project Status: Complete.
- 14. St. Johns County Customer Portal** — The project included purchasing an interactive application that allows customers to make informed decisions about water usage. The estimated water conservation benefit is 0.368 mgd. Project Status: Complete.
- 15. St. Johns County Hastings Water Main Replacements (formerly Hastings)** — The project was originally undertaken with the Town of Hastings, which was annexed by the county after the project began. The project included replacing 6,215 linear feet (LF) of asbestos-cement pipe with 6-inch PVC water mains. The estimated water conservation benefit is 0.015 mgd. Project Status: Complete.
- 16. St. Johns County International Golf Parkway Reuse Main** — The project included constructing a reclaimed water transmission main along International Golf Parkway from the proposed County Road (CR) 2009 to just east of I-95. The estimated alternative water supply benefit is 1.6 mgd. Project Status: Complete.
- 17. St. Johns County Marsh Landing RCW Main** — The project involved the construction of approximately 7,200 LF of reclaimed water main from the Marsh Landing wastewater treatment facility (WWTF) to the Oak Bridge Golf Course. This will allow reclaimed water from the Marsh Landing WWTF to be sent to Oak Bridge Golf Course, thereby reducing excess reclaimed water discharge to the Intracoastal Waterway. The project provides an estimated alternative water supply benefit of 0.063 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River basin management action plan (BMAP) area is 8,834 lbs/yr of TN and 1,815 lbs/yr of TP. Project Status: Complete.
- 18. St. Johns County Players Club RCW Facility** — The project involved the construction of a new 2.4 mgd advanced water reclamation facility at the Players Club site in Ponte Vedra Beach. The new facility consolidates three aging wastewater

treatment facilities. The estimated alternative water supply benefit is 2.4 mgd. The estimated nutrient load reduction water quality benefit is 29,418 lbs/yr of TN and 9,698 lbs/yr of TP. Project Status: Complete.

19. **St. Johns County Reclaimed Storage Tank at Anastasia Island** — The project included the construction of a 1 MG ground storage tank and high service pumps to complement existing reuse facilities serving Marsh Creek golf course and to provide pressurized service to the new Ocean Cay residential community. The estimated alternative water supply benefit is 1 MG reclaimed water storage capacity created. Project Status: Complete.
20. **St. Johns County Reclaimed Storage Tank at State Road (SR) 16 WWTF** — The project involved the construction of a 1 MG ground storage tank for reclaimed water at the SR 16 wastewater treatment facility site. The project also included the construction of the interconnect piping, upgrades to existing reuse pumps with variable frequency drives, and improving instrumentation and controls. The estimated alternative water supply benefit is 1 MG reclaimed water storage capacity created. Project Status: Complete.
21. **St. Johns County San Diego Road Drainage Improvements** — The project included the construction of drainage inlets and a storm sewer system along San Diego Road and Ponte Vedra Boulevard. The estimated flood protection benefit is 1.5 acres. Project Status: Complete.
22. **St. Johns County State Road (SR) 16 and CR 2209 Reclaimed Water Transmission** — The project includes the upsizing of an existing reclaimed water line from SR 16 wastewater treatment facility to World Golf Village and construction of a 2 MG storage tank. The estimated alternative water supply benefit is 0.93 mgd. The estimated nutrient

load reduction water quality benefit to Cowan Creek is 18,569 lbs/yr TN and 5,479 lbs/yr TP. Project Status: In Progress.

23. **St. Johns St. Augustine Beach RCW Main** — The project involved the construction of an RCW main from just east of the Anastasia Island WWTP to a 73-home subdivision, city hall, and a park. The estimated alternative water supply benefit is 0.04 mgd. Project Status: Complete.

Agricultural Cost-Share Program

The Agricultural Cost-Share Program provides funding to agricultural operations to conserve water and reduce offsite nutrient loading. Beginning in fiscal year 2014, the District and DEP have provided over \$11.2 million in funding for agricultural projects in St. Johns County. St. Johns County agricultural cost-share projects have provided an estimated benefit of 2 mgd of water conservation, 156,000 lbs/yr TN reduction, and 32,000 lbs/yr TP reduction.

24. **Barnes Farms Land Leveling** — The project involved precision land leveling on approximately 40 acres of row crops in preparation for irrigation conversion benefitting Deep Creek and the lower St. Johns River. The estimated water conservation benefit is 0.002 mgd and the estimated nutrient load reduction water quality benefit is 24 lbs/yr of TN and 9 lbs/yr of TP. Project Status: Complete.
25. **Ben Wells Precision Land Leveling Equipment** — This project involves purchasing precision land leveling equipment on approximately 550 acres of row crop benefitting the Lower St. Johns. The estimated water conservation benefit is 0.05 mgd. The estimated nutrient load reduction water quality benefit is 1,254 lbs/yr of TN and 277 lbs/yr of TP. Project Status: Complete.
26. **Blandford Turf Irrigation Conversion** — This project involved converting from seepage irrigation to micro-irrigation on approximately

40 acres of container nursery. The estimated water conservation benefit is 0.017 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 340 lbs/yr of TN and 100 lbs/yr of TP. Project Status: Complete.

27. **Blandford Turf Irrigation Drain Tile** — This project involved converting approximately 100 acres of seepage irrigation to sub-irrigation drain tile. The estimated water conservation benefit is 0.016 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 246 lbs/yr of TN and 160 lbs/yr of TP. Project Status: Complete.
28. **Blue Sky Farms Cover Crop Equipment** — This project involves purchasing precision agricultural equipment for cover crop establishment on approximately 500 acres of row crops benefitting the Lower St. Johns River Basin. The estimated nutrient load reduction water quality benefit is 748 lbs/yr of TN and 97 lbs/yr of TP. Project Status: Complete.
29. **Blue Sky Farms, Inc. GPS Guidance and Real-time Kinematic (RTK) Station** — This project involved the purchase and implementation of GPS Guidance and an RTK station for precision land leveling. The estimated water conservation benefit is 0.029 mgd. The estimated nutrient load reduction water quality benefit to the Lower St. Johns River is 360 lbs/yr of TN and 140 lbs/yr of TP. Project Status: Complete.
30. **Blue Sky Farms, Inc. Irrigation Drain Tile** — This project involved the installation of sub-irrigation drain tile on approximately 92 acres of row crops. The estimated water conservation benefit is 0.017 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 226 lbs/yr of TN and 147 lbs/yr of TP. Project Status: Complete.
31. **C.P. and Wesley Smith Farm Irrigation Drain Tile Field 1** — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 87 acres of row crop. The estimated water conservation benefit is 0.070 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 2,216 lbs/yr of TN and 564 lbs/yr of TP. Project Status: Complete.
32. **C.P. and Wesley Smith Farm Irrigation Drain Tile Field 2** — This project involved conversion of approximately 35 acres of seepage irrigation to sub-irrigation drain tile. The estimated water conservation benefit is 0.010 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 248 lbs/yr of TN and 56 lbs/yr of TP. Project Status: Complete.
33. **C.P. and Wesley Smith Farm Irrigation Drain Tile Field 3** — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 62 acres of row crops. The estimated water conservation benefit is 0.010 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 440 lbs/yr of TN and 99 lbs/yr of TP. Project Status: Complete.
34. **C.P. and Wesley Smith Farm Irrigation Drain Tile Field 4** — This project involved conversion of 23 acres of crop land from seepage irrigation to sub-irrigation drain tile. The estimated water conservation benefit is 0.004 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 57 lbs/yr of TN and 37 lbs/yr of TP. Project Status: Complete.
35. **C.P. and Wesley Smith Farm Irrigation Drain Tile Field 5** — This project involved conversion of 33 acres of crop land from seepage irrigation to sub-irrigation drain tile. The estimated water conservation benefit is 0.006 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 81 lbs/yr of TN and 53 lbs/yr of TP. Project Status: Complete.

- 36. C.P. and Wesley Smith Farm Irrigation Drain Tile Field 6** — This project involved the installation of sub-irrigation drain tile on approximately 77 acres of row crops. The estimated water conservation benefit is 0.014 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 189 lbs/yr of TN and 123 lbs/yr of TP. Project Status: Complete.
- 37. C.P. and Wesley Smith Farm Irrigation Drain Tile Field 7** — This project involved installation of sub-irrigation drain tile on another 77 acres of row crops. The estimated water conservation benefit is 0.014 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 182 lbs/yr of TN and 118 lbs/yr of TP. Project Status: Complete.
- 38. C.P. and Wesley Smith Farm Irrigation Drain Tile Field 8** — This project involved converting from seepage to sub-irrigation drain tile on approximately 76 acres of row crops. The estimated water conservation benefit is 0.014 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 187 lbs/yr of TN and 121 lbs/yr of TP. Project Status: Complete.
- 39. C.P. and Wesley Smith Farm Irrigation Drain Tile Field 9** — This project involved installation of sub-irrigation tile drain on approximately 84 acres of row crops. The estimated water conservation benefit is 0.016 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 206 lbs/yr of TN and 134 lbs/yr of TP. Project Status: Complete.
- 40. C.P. and Wesley Smith Farm Irrigation Drain Tile Field 10** — This project involved converting approximately 79 acres of row crop from seepage to sub-irrigation drain tile. The estimated water conservation benefit is 0.021 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 194 lbs/yr of TN and 126 lbs/yr of TP. Project Status: Complete.
- 41. C.P. and Wesley Smith Farm Irrigation Drain Tile Field 11** — This project involved converting from seepage irrigation to sub-irrigation drain tile on approximately 94 acres of row crops. The estimated water conservation benefit is 0.024 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 231 lbs/yr of TN and 150 lbs/yr of TP. Project Status: Complete.
- 42. C.P. and Wesley Smith Farm Precision Fertilizer Application Equipment** — This project involved the purchase and implementation of Y drop precision fertilizer application equipment and conversion from seepage to irrigation on approximately 24 acres of row crops. The estimated water conservation benefit is 0.004 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 757 lbs/yr of TN and 304 lbs/yr of TP. Project Status: Complete.
- 43. C.P. and Wesley Smith Farm Precision Fertilizer Application Equipment 2** — This project involved the purchase and implementation of precision fertilizer application equipment on approximately 2,000 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 2,880 lbs/yr TN and 1,120 lbs/yr TP. Project Status: Complete.
- 44. C.P. and Wesley Smith Soil Grid Mapping** — This project involved the purchase of soil grid mapping equipment on approximately 800 acres of row crops. The estimated nutrient load reduction water quality benefit to the Lower St. Johns River is 4264 lbs/yr of TN and 640 lbs/yr of TP. Project Status: Complete.
- 45. Daniel Corey Land Leveling and Culvert Installation** — This project involved land leveling and culvert installation on 48 acres of row crops. The estimated water conservation benefit is 0.002 mgd and the estimated nutrient

load reduction water quality benefit to the lower St. Johns River is 35 lbs/yr of TN and 13 lbs/yr of TP. Project Status: Complete.

- 46. DeLee Produce GPS Equipment and Weather Stations** — This project involved the purchase and implementation of GPS equipment and weather stations on approximately 500 acres of row crops. The estimated water conservation benefit is 0.035 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 432 lbs/yr of TN and 168 lbs/yr of TP. Project Status: Complete.
- 47. DeLee Produce Land Plane** — This project involved the purchase of a land plane for more efficient management of irrigation water on approximately 500 acres of potatoes and broccoli benefitting the lower St. Johns River. The estimated water conservation benefit is 0.029 mgd. The estimated nutrient load reduction water quality benefit is 360 lbs/yr of TN and 140 lbs/yr of TP. Project Status: Complete.
- 48. DeLee Produce Precision Fertilizer Application Equipment** — This project involved the purchase and implementation of precision fertilizer application equipment on approximately 700 acres of row crops. The estimated nutrient load reduction water quality benefit to the Lower St. Johns River is 13,522 lbs/yr TN and 2,746 lbs/yr TP. Project Status: Complete.
- 49. DeLee Produce Precision Fertilizer Application Equipment 2** — This project involves the purchase of precision fertilizer application equipment on approximately 948 acres of row crop. The estimated nutrient load reduction water quality benefit to the Lower St. Johns River is 17,098 lbs/yr TN and 1,192 lbs/yr TP. Project Status: Complete.
- 50. DeLee Produce Precision Land Leveling Equipment** — This project involves the purchase of precision land leveling equipment benefitting the Lower St. Johns River basin. The estimated conservation is 0.086 mgd. The estimated nutrient load reduction water quality benefit is 1,141 lbs/yr of TN and 194 lbs/yr of TP. Project Status: Complete.
- 51. DeLee Produce Soil Moisture Sensors and Weather Station** — This project involves purchasing three soil moisture sensors and a weather station for approximately 229 acres of row crops. The estimated conservation is 0.02 mgd. The estimated nutrient load water quality benefit is 103 lbs/yr TN and 13 lbs/yr TP. Project Status: Complete.
- 52. First Farms Enhanced Seepage** — This project involved performing an irrigation conversion from seepage irrigation to enhanced seepage on approximately 50 acres of row crops. The estimated water conservation benefit is 0.020 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 353 lbs/yr of TN and 96 lbs/yr of TP. Project Status: Complete.
- 53. First Farms Irrigation Drain Tile Field 1** — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 92 acres of row crops. The estimated water conservation benefit is 0.017 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 224 lbs/yr of TN and 146 lbs/yr of TP. Project Status: Complete.
- 54. First Farms Irrigation Drain Tile Field 2** — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 67 acres of row crops. The estimated water conservation benefit is 0.035 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 295 lbs/yr of TN and 236 lbs/yr of TP. Project Status: Complete.
- 55. First Farms Irrigation Drain Tile Field 3** — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 100 acres of row crops. The estimated water conservation benefit is 0.019 mgd. The estimated nutrient load

reduction water quality benefit to the lower St. Johns River is 246 lbs/yr of TN and 160 lbs/yr of TP. Project Status: Complete.

- 56. First Farms Irrigation Drain Tile Field 5** — This project involves converting from seepage to irrigation drain tile on approximately 50 acres of Asian vegetables. The estimated water conservation is 0.022 mgd. The estimated nutrient load reduction water quality benefit to the Lower St. Johns River is 170 lbs/yr of TN and 57 lbs/yr of TP. Project Status: In Progress
- 57. Jeff Parker Farms Irrigation Drain Tile Field 1** — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 60 acres of row crops. The estimated water conservation benefit is 0.042 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 202 lbs/yr of TN and 53 lbs/yr of TP. Project Status: Complete.
- 58. Jeff Parker Farms Irrigation Drain Tile Field 2** — This project involved performing an irrigation conversion from seepage to sub-irrigation drain tile on approximately 39 acres of row crops. The estimated water conservation benefit is 0.010 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 284 lbs/yr of TN and 64 lbs/yr of TP. Project Status: Complete.
- 59. Jeff Parker Farms Irrigation Drain Tile Field 3** — This project involved converting from seepage irrigation to irrigation drain tile on approximately 30 acres of row crops. The estimated water conservation benefit is 0.008 mgd. The project also provides an estimated nutrient load reduction water quality benefit to the lower St. Johns River of 74 lbs/yr TN and 48 lbs/yr TP. Project Status: Complete.
- 60. Jeff Parker Farms Precision Fertilizer Applicator** — This project involved purchasing and implementing the use of a precision fertilizer applicator for use on approximately 700 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 17,321 lbs/yr TN. Project Status: Complete.
- 61. Jeff Parker Farms Precision Fertilizer Equipment** — This project involved the purchase and implementation of precision agriculture equipment on 800 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 200 lbs/yr of TN and 128 lbs/yr of TP. Project Status: Complete.
- 62. John Mitchell Farm Fertilizer Banding Equipment** — This project involved purchasing a bander for use on approximately 650 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 1,432 lbs/yr of TN and 572 lbs/yr of TP. Project Status: Complete.
- 63. John Sykes Farm Drip Irrigation and Fertigation** — This project involved the installation of plasticulture and surface drip irrigation with fertigation for use on approximately 62 acres of row crops. The estimated water conservation benefit is 0.023 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 441 lbs/yr of TN and 120 lbs/yr of TP. Project Status: Complete.
- 64. John Sykes Farm Recirculating Vegetable Washer** — This project involved purchasing and implementing an in-field recirculating vegetable washer for use on approximately 404 acres. The estimated water conservation benefit is 0.061 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 497 lbs/yr of TN and 323 lbs/yr of TP. Project Status: Complete.
- 65. Jon Revels Irrigation Drain Tile** — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 111 acres of row crops. The estimated water conservation benefit is 0.085 mgd. The estimated nutrient load

reduction water quality benefit to the lower St. Johns River is 512 lbs/yr of TN and 133 lbs/yr of TP. Project Status: Complete.

66. Lee's Shiloh Farm Irrigation Drain Tile Field 1

— This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 119 acres of row crops. The estimated water conservation benefit is 0.062 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 324 lbs/yr of TN and 292 lbs/yr of TP. Project Status: Complete.

67. Lee's Shiloh Farm Irrigation Drain Tile Field 2

— This project involved performing an irrigation conversion from seepage to irrigation drain tile on approximately 87 acres of row crops. The estimated water conservation benefit is 0.016 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 214 lbs/yr of TN and 139 lbs/yr of TP. Project Status: Complete.

68. Lee's Shiloh Farms Inc. Irrigation Drain Tile Field 3

— This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 89 acres of row crops. The estimated water conservation benefit is 0.020 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 632 lbs/yr of TN and 142 lbs/yr of TP. Project Status: Complete.

69. Loops Nursey and Greenhouses Irrigation Retrofit

— This project involved the retrofit of a greenhouse watering system to capture and recirculate all irrigation water benefitting the lower St. Johns River. The estimated water conservation benefit is 0.001 mgd and the estimated annual water quality nutrient loading reduction benefit is 592 lbs/yr of TN and 81 lbs/yr of TP. Project Status: Complete.

70. Picolata Farms Enhanced Seepage

— This project involved performing an irrigation conversion from seepage to enhanced seep on approximately 40 acres of row crops.

The estimated water conservation benefit is 0.016 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 283 lbs/yr of TN and 77 lbs/yr of TP. Project Status: Complete.

71. Picolata Farms Irrigation Drain Tile Field 1

— This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 85 acres of row crops. The estimated water conservation benefit is 0.052 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 2,520 lbs/yr of TN and 655 lbs/yr of TP. Project Status: Complete.

72. Picolata Farms Irrigation Drain Tile Field 2

— This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 28 acres of row crops. The estimated water conservation benefit is 0.190 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 69 lbs/yr of TN and 45 lbs/yr of TP. Project Status: Complete.

73. Picolata Farms Precision Fertilizer

Application Equipment — This project involved the purchase and implementation of precision fertilizer application equipment on approximately 740 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 1,065 lbs/yr of TN and 414 lbs/yr of TP. Project Status: Complete.

74. Picolata Produce Farms Weather Stations and SMS

— This project involved purchasing and implementing portable weather stations and soil moisture sensors for use on approximately 740 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 12,819 lbs/yr TN and 2,607 lbs/yr TP. Project Status: Complete.

75. Prim Parker Farms Irrigation Drain Tile

Field 1 — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 20 acres

of row crops. The estimated water conservation benefit is 0.013 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 78 lbs/yr of TN and 20 lbs/yr of TP. Project Status: Complete.

76. Prim Parker Farms Irrigation Drain Tile

Field 2 — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 44 acres of row crops. The estimated water conservation benefit is 0.01 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 108 lbs/yr of TN and 70 lbs/yr of TP. Project Status: Complete.

77. Prim Parker Farms Irrigation Drain Tile

Field 3 — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 55 acres of row crops. The estimated water conservation benefit is 0.010 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 391 lbs/yr of TN and 88 lbs/yr of TP. Project Status: Complete.

78. Prim Parker Farms Irrigation Drain Tile

Field 4 — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 71 acres of row crops. The estimated water conservation benefit is 0.013 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 175 lbs/yr of TN and 114 lbs/yr of TP. Project Status: Complete.

79. Richard Wells Jr. Farms, LLC Precision

Fertilizer — This project involves the purchase of precision fertilizer application equipment for approximately 400 acres of row crops benefitting the Lower St. Johns River Basin. The estimated nutrient load reduction water quality benefit is 11,360 lbs/yr of TN and 1,739 lbs/yr of TP. Project Status: Complete.

80. Riverdale Potato Farm Folding Drag Scraper

— This project involved the purchase of land leveling equipment and GPS for more efficient management of irrigation water on approximately 950 acres of potatoes and green beans. The estimated water conservation benefit is 0.056 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 684 lbs/yr of TN and 266 lbs/yr of TP. Project Status: Complete.

81. Riverdale Potato Farm Irrigation Drain Tile

Field 1 — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 67 acres of row crops. The estimated water conservation benefit is 0.010 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 476 lbs/yr of TN and 107 lbs/yr of TP. Project Status: Complete.

82. Riverdale Potato Farm Irrigation Drain Tile

Field 2 — This project involved installation of sub-irrigation drain tile on approximately 58 acres of row crops. The estimated water conservation benefit is 0.011 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 143 lbs/yr of TN and 93 lbs/yr of TP. Project Status: Complete.

83. Riverdale Potato Farm Precision Fertilizer

Equipment — This project involved the purchase and implementation of precision fertilizer application equipment with auto boom leveling on approximately 950 acres of potatoes and green beans. The estimated nutrient load reduction water quality benefit is 10,867 lbs/yr of TN and 2,173 lbs/yr of TP. Project Status: Complete.

84. Royal Agriculture Inc. Precision Land Leveling

— This project involves the purchase and implementation of precision land leveling equipment on approximately 250 acres of row crop benefitting the Lower St. Johns Basin. The estimated water conservation benefit

is 0.042 mgd. The estimated nutrient load reduction benefit is 2,463 lbs/yr of TN and 460 lbs/yr of TP. Project Status: Complete.

85. Scott Parker Farms Irrigation Drain Tile

Field 1 — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 40 acres of row crops. The estimated water conservation benefit is 0.028 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 130 lbs/yr of TN and 34 lbs/yr of TP. Project Status: Complete.

86. Scott Parker Farms Irrigation Drain Tile

Field 2 — This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 40 acres of row crops. The estimated water conservation benefit is 0.030 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 397 lbs/yr of TN and 103 lbs/yr of TP. Project Status: Complete.

87. Scott Parker Farms Irrigation Drain Tile

Field 3 — This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 40 acres of row crop. The estimated water conservation benefit is 0.010 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 284 lbs/yr of TN and 65 lbs/yr of TP. Project Status: Complete.

88. Scott Parker Farms Irrigation Drain Tile

Field 4 — This project involved converting approximately 35 acres of seepage to sub-irrigation drain tile. The estimated water conservation benefit is 0.007 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 86 lbs/year TN and 56 lbs/year TP. Project Status: Complete.

89. Scott Parker Soil Moisture Sensors —

This project involves the purchase of two soil moisture probes and a weather station for approximately 80 acres of peppers and

potatoes. The estimated water conservation benefit is 0.004 mgd. The estimated nutrient load reduction benefit to the Lower St. Johns is 44 lbs/yr TN and 9 lbs/yr TP. Project Status: Complete.

90. Smith and Johns, Inc., Irrigation Drain Tile —

This project involved converting from seepage to irrigation drain tile on approximately 42 acres of row crops. The estimated water conservation benefit is 0.011 mgd. The project also provides an estimated nutrient load reduction water quality benefit to the lower St. Johns River of 103 lbs/yr TN and 67 lbs/yr TP. Project Status: Complete.

91. Tater Farms Drone Soil Mapping — This

project involves using Unmanned Aerial Systems to monitor nutrient levels and plan fertilizer applications in sod benefitting the Lower St. Johns Basin. The estimated nutrient load reduction water quality benefit is 3,200 lbs/yr of TN and 352 lbs/yr of TP. Project Status: Complete.

92. Tater Farms Irrigation Drain Tile Field 1 —

This project involved performing an irrigation conversion from seepage irrigation to sub-irrigation drain tile on approximately 150 acres of sod. The estimated water conservation benefit is 0.022 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 5,460 lbs/yr of TN and 601 lbs/yr of TP. Project Status: Complete.

93. Tater Farms Irrigation Drain Tile Field 2 —

This project involved performing an irrigation conversion from seepage irrigation to irrigation drain tile on approximately 125 acres of sod and converting to linear overhead irrigation on approximately 80 acres of sod. The estimated water conservation benefit is 0.044 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 682 lbs/yr of TN and 302 lbs/yr of TP. Project Status: Complete.

- 94. Tater Farms Irrigation Linear Overhead and Irrigation Drain Tile Field 3** — This project included conversion of approximately 35 acres of farmland from seepage irrigation to linear overhead irrigation (with fertigation) and conversion of approximately 109 acres of farmland from seepage irrigation to irrigation drain tile. The estimated water conservation benefit is 0.029 mgd and the estimated nutrient load reduction water quality benefit to the lower St. Johns River is 778 lbs/year TN and 100 lbs/year TP. Project Status: Complete.
- 95. Tater Farms Precision Agriculture Equipment: Phase 3** — This project involved purchasing and implementing soil grid sampling and mapping, fertilizer injection rigs, soil moisture sensors and precision fertilizer application equipment. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 1,609 lbs/yr TN and 4,099 lbs/yr TP. Project Status: Complete.
- 96. Tater Farms Precision Fertilizer and Land Leveling Equipment** — This project involved the purchase and implementation of precision fertilizer and land leveling equipment with GPS and RTK on approximately 2,500 acres of citrus and sod. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 10,000 lbs/yr of TN and 1,650 lbs/yr of TP. Project Status: Complete.
- 97. Tater Farms Soil Moisture Sensors** — This project involves purchasing soil moisture sensors for 2300 acres of sod. The estimated conservation is 0.38 mgd. The estimated nutrient load reduction water quality benefit to the Lower St. Johns is 2,306 lbs/yr TN and 1,076 lbs/yr TP. Project Status: Complete.
- 98. Tater Farms Soil Moisture Sensors and Precision Fertilizer Application Equipment** — This project involved purchase of a precision fertilizer spreader and soil moisture sensors for approximately 2,700 acres of citrus. The estimated water conservation benefit is 0.015 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 5,400 lbs/yr of TN and 2,380 lbs/yr of TP. Project Status: Complete.
- 99. William Revels Farm Fertilizer Banding Equipment** — This project involved the purchase and implementation of a fertilizer tender and GPS unit on an existing bander for use on approximately 900 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 1,984 lbs/yr of TN and 792 lbs/yr of TP. Project Status: Complete.
- 100. Yu An Farms Fertilizer Banding Equipment** — This project involved the purchase and implementation of a bander for use on approximately 1,000 acres of row crops. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 2,204 lbs/yr of TN and 880 lbs/yr of TP. Project Status: Complete.
- 101. Yu An Farms Irrigation Drain Tile Field 1** — This project involved converting approximately 91 acres of row crops from seepage to sub-irrigation drain tile. The estimated water conservation benefit is 0.024 mgd. The estimated nutrient load reduction water quality benefit to the lower St. Johns River is 224 lbs/yr of TN and 146 lbs/yr of TP. Project Status: Complete.
- 102. Yu An Farms Irrigation Drain Tile Field 2** — The project involved installing irrigation drain tile on approximately 80 acres of row crops. The estimated water conservation benefit is 0.021 mgd. The project also provides an estimated nutrient load reduction water quality benefit to the lower St. Johns River of 197 lbs/yr TN and 128 lbs/yr TP. Project Status: Complete.
- 103. Yu An Farms Irrigation Drain Tile Field 3** — This project involves converting from seepage to irrigation drain tile on approximately 80 acres of row crop. The estimated conservation benefit to the Lower St. Johns

River is 0.06 mgd. The estimated nutrient load reduction water quality benefit is 338 lbs/yr of TN and 85 lbs/yr of TP.
Project Status: Complete.

District-led projects and other efforts

The District constructs large, regional projects that often benefit multiple counties and benefit more than one of the District's core missions. Some of the efforts in St. Johns County include:

Expansion of reclaimed water — The District partnered with the county to expand the use of reclaimed water by 1 million gallons per day, which reduces nutrients flowing into the St. Johns River and protects drinking water supplies by offsetting the use of higher quality drinking water for irrigation. The water main installed during the project transports reclaimed water to new customers and future residents and commercial customers along International Golf Parkway. A similar project was conducted at St. Augustine Beach, where a 1 million gallon reclaimed water storage tank and high service pumps were built to complement reclaimed water infrastructure to several residential communities.

Stormwater treatment areas — The District purchased land and built regional stormwater treatment areas to reduce the amount of phosphorus, nitrogen and suspended solids flowing to the St. Johns River from agricultural activity and roadway runoff. The treatment areas, located in the Hastings area, filter runoff and offsets loss of wetlands from a road widening project along State Road 207.

North Florida Regional Water Supply Partnership — The District is working in partnership with the Suwannee Florida Water Management District, DEP, local utilities and other stakeholders in north

Florida to develop joint water resource protection strategies, sharing data and technology, and effective communication with stakeholders across district boundaries. For more information, visit www.northfloridawater.com.

Minimum flows and levels (MFLs) program — The District establishes MFLs for priority water bodies within its boundaries. MFLs define the limits at which further water withdrawals would be significantly harmful to the water resources or ecology of an area. MFLs is an effective tool to assist in making sound water management decisions and preventing significant adverse impacts due to water withdrawals.

Hydrologic and water quality data collection — The District operates a network of data collection sites for hydrologic conditions and water quality in many lakes, wetland restoration areas, streams, springs, and wells.

District conservation areas

The District buys land in the course of its work to protect and preserve water resources. These lands also protect plant and wildlife habitat and provide areas for public recreation and environmental education. Virtually all District property is open to the public for activities that are compatible with conservation, though some may be closed during ongoing construction or restoration projects. In St. Johns County, District properties include Deep Creek Conservation Area, Gourd Island Conservation Area, Moses Creek Conservation Area, Stokes Landing Conservation Area and Twelve Mile Swamp Conservation Area. For a current listing of District conservation areas, visit www.sjrwmd.com/lands.

Project status as of February 2025

