

RESOLUTION 2009-11

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF LAKE WALES, FLORIDA, SUPPORTING THE 2009 POLK COUNTY COMPREHENSIVE WATER SUPPLY PLAN, APPROVING THE PROJECT LISTING OF SAID PLAN, AND APPROVING THE SUBMISSION OF THE COMPLETE PROJECT LISTING TO THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT FOR INCLUSION AS PART OF THE REGIONAL WATER SUPPLY PLAN.

WHEREAS, the Southwest Florida Water Management District maintains a Regional Water Supply Plan which identifies public water supply needs of Polk County, Florida; and

WHEREAS, the Southwest Florida Water Management District provides cooperative funding and grant funding for projects in the approved Water Supply Plan based upon a priority ranking system; and

WHEREAS, the Polk County Board of County Commissioners, through Reiss Engineering and in cooperation with Polk County municipalities, has completed the 2009 Polk County Comprehensive Water Supply Plan identifying future water supply projects; and

WHEREAS, the public water supplies in Polk County have need for a safe, adequate, dependable, and economical sources of supply to meet the current and future needs of their customers; and

WHEREAS, the City of Lake Wales' public water supply has need for a safe, dependable and adequate water source to meet customer needs; and

WHEREAS, the City of Lake Wales takes exception to the water supply and demand projections but fully supports the concepts of the 2009 Polk County Comprehensive Water Supply Plan and believes the project list included in the Plan to be appropriate, approvable and in the best interests of its citizens,

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF LAKE WALES, POLK COUNTY, FLORIDA

SECTION 1. The foregoing findings are incorporated herein by reference and made a part here of.

SECTION 2. The City of Lake Wales approves the 2009 Polk County Comprehensive Water Supply Plan project list and recommends the submission of the complete list to the Southwest Florida Water Management District for inclusion in its Regional Water Supply Plan with the following stipulations:

- a) The city's water service area is defined in the *City of Lake Wales/Polk County Water and Wastewater Service Territorial Agreement, Contract No. 96-2* as amended on July 29, 2008 by the *City of Lake Wales/Polk County Florida Settlement of (1.) Past Due Water Bills; (2.) Agreement as to Service Area and Assets Ownership and (3.) Future Water Service Interlocal Utility Agreement.*

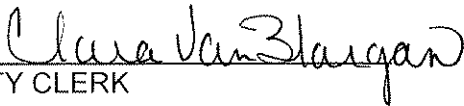
- b) All existing water supply facilities, whatever the present use, within the city's water service area vest with the city and will be incorporated into the city's future resources rather than the into the future resources of the county.
- c) The city can develop not only alternative water supply projects as stated in the county's master plan but also alternative water supply projects as listed in the city's master plan or other projects that are developed cooperatively in the future.

SECTION 3. This resolution shall take effect immediately upon its passage.

PASSED AND CERTIFIED AS TO PASSAGE this 9th day of September, 2009.



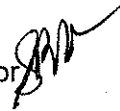
MAYOR/COMMISSIONER

ATTEST: 
CITY CLERK

MEMORANDUM

August 27, 2009

TO: Honorable Mayor and City Commission

FROM: Sarah B. Kirkland, Utilities Project Supervisor 

RE: The Polk County Comprehensive Water Supply Plan

Please see attached both the short and long list projects as recommended by the Polk County Comprehensive Water Supply Plan for your review. The City of Lake Wales did not have any suggested projects on the short list. On the long list, the County listed 4 projects that the City may cooperatively participate in at such time as the need arises. These projects, items numbered 38, 46, 82, and 92, have been identified by a check mark.

Polk County Supplemental Water Supply Plan

10/26/2008

| Short List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permit-ability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|------------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| ik | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 1 | G-1 | Land Use Transitions (Well Name / Municipality proposed to supply) - This project category consists of identifying and planning for the transitioning of existing Agricultural, Mining, or ICI wells; which have been decommissioned or will be decommissioned due to cessation in use from the current water supply use. Transfer to municipal supply will only be considered in cases where the land use will transition from an agricultural, Industrial, mining, or other use to a typical municipal use, for example a change in use from agriculture to residential or commercial development. Land use transitions will include analysis of the SWFWMD DWRM II modeling program. | PCSWSP Costs based on 10 miles of piping, drillingw elts, ground water pumping system, conventional groundwater treatment, and transfer pumping system. Unit costs include both capital and O&M costs. | 25.00 | \$63.3 | \$0.47 | 10.0 | 300 | 7 | 175 | 8 | 80 | 9 | 230 | 10 | 100 | 885 |
| | G-9 | Land Use Transitions (West Ft. Meade Wells) - This project would consist of the transitioning of an ICI well located just west of Ft. Meade. The well is currently permitted for 9.1 MGD and their 10 year average flow is approximately 6 MGD. Land use transitions may include analysis of the SWFWMD DWRM II modeling program. | PCSWSP Cost includes 15 miles of piping, Groundwater pumping system, conventional groundwater treatment facility, transfer pumping system. Unit costs include capital and O&M costs. | 6.00 | \$29.6 | \$0.96 | 2.4 | 72 | 7 | 175 | 8 | 80 | 8 | 210 | 10 | 100 | 637 |
| | G-7 | SE Polk County Well field - This project would consist of drilling several Lower/Upper Floridan wells in the SE area of Polk County. This concept would consist of withdrawing groundwater from the LFA/UFA and treating the raw water to meet primary and secondary treatment standards for distribution as a potable source to meet regional demands in the SE area of Polk County. | PCSWSP Cost analysis includes 25 miles of transmission piping and membrane treatment. Unit costs include both capital and O&M costs. | 15.00 | \$90.4 | \$1.52 | 6.0 | 180 | 7 | 175 | 5 | 50 | 7 | 187 | 4 | 40 | 632 |
| | R-25 | Lakeland/PCU-TECO Hwy 60 Industrial Reuse - This is a joint project to supplement the TECO energy facility with an additional 7.6 MGD of reclaimed water for expansion of the power facility. The project will include Polk County, Lakeland, and TECO. In return, Lakeland will increase their current water use permit quantity, extend their permit to 20 years, and offset per capita demands. | Boyle Engineering Conceptual Design Report: Lakeland & Polk County Reuse Initiative | 6.0 | \$40.0 | \$1.52 | 2.4 | 72 | 9 | 225 | 2 | 20 | 7 | 187 | 7 | 70 | 574 |
| | G-24 | Lakeland: C.W. Combee W.T.P., Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 1.20 | \$1.20 | \$0.36 | 0.5 | 14 | 8 | 200 | 2 | 20 | 9 | 235 | 9 | 90 | 559 |
| | G-5 | NE Polk County Lower Floridan Aquifer - This project would consist of drilling a groundwater well into the Lower Floridan aquifer in the NE area of Polk County. This concept would consist of withdrawing groundwater from the LFA and treating the raw water to meet primary and secondary treatment standards for distribution as a potable source to meet regional demands in the NE area of Polk County. | PCSWSP Cost analysis includes membrane treatment. Unit costs include capital and O&M costs. | 4.00 | \$29.2 | \$1.79 | 1.6 | 48 | 7 | 175 | 7 | 70 | 7 | 175 | 7 | 70 | 538 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

Short List

| Short List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permit -ability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
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| nk | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 6 | G-25 | <u>Lakeland: T.B.Williams W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 3.03 | \$2.56 | \$0.16 | 1.2 | 36 | 6 | 150 | 2 | 20 | 10 | 243 | 9 | 90 | 540 |
| 5 | G-33 | <u>Winter Haven Water Department: Fairfax W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.74 | \$1.18 | \$0.31 | 0.3 | 9 | 6 | 150 | 5 | 50 | 9 | 237 | 9 | 90 | 536 |
| 1 | G-12 | <u>Bartow: 7 MGD W.T.P., #10 Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.63 | \$1.00 | \$0.30 | 0.3 | 8 | 6 | 150 | 5 | 50 | 10 | 238 | 9 | 90 | 535 |
| 1 | G-10 | <u>Auburndale: Atlantic W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.62 | \$1.00 | \$0.31 | 0.2 | 7 | 6 | 150 | 5 | 50 | 9 | 237 | 9 | 90 | 535 |
| | S-15 | <u>Peace River/ Land Use Transition -</u> This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace River. Combined flows from Peace River at Ft. Meade and Bowlegs Creek conclude there is approximately 7.4 mgd of additional flow, with a minimum reservoir size of 29,000 acre-ft and a minimum diversion capacity of 100 mgd. Combined with the West Ft. Meade Wells land use transitions this could potentially provide a substantial amount of water for the Polk County region. The West Ft. Meade Wells are estimated to supply an additional 6 mgd of ground water. | PCSWSP Costs based on 20 miles of piping from South of Ft. Meade to Bartow, transfer pumping, combined surface and ground water treatment, and storage. Unit costs are capital and O&M costs. | 13.4 | \$305.8 | \$5.02 | 5.4 | 161 | 8 | 200 | 9 | 90 | 2 | 41 | 4 | 40 | 532 |

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O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

| Short List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permit-ability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
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| rk | Code | Description | | MGD | (\$mil) | (\$/Kgal) | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 2 | O-2 | Joint Toho/STOPR Project: This project would consist of purchasing bulk water supply from Tohopekaliga Water Authority (TWA). In concept this project would include partnering with Tohopekaliga Water Authority in the development of either a regional surface water and ground water supply facility from both the Kissimmee River and Cypress Lakes wellfield. Partnering with Tohopekaliga Water Authority could reduce costs on a regional project. Quantity determined through Tohopekaliga Water Authority evaluations. | PCSWSP Cost based on initial information provided by Polk County Utilities and Tohopekaliga Water Authority. | 5.00 | \$60.0 | \$2.20 | 2.0 | 60 | 7 | 175 | 9 | 93 | 6 | 158 | 4 | 40 | 526 |
| 3 | R-43 | Winter Haven Reuse Option #3 - Calpine Energy - Winter Haven plans to design and construct of 42,240 linear feet of 8-10" transmission main and pumping station from Winter Haven Plant #3 to connect to Calpine Power Plant. Flow of 1.5mgd / offset of 1.5mgd. | The City of Winter Haven Costs are based on The City of Winter Haven's 10-year Water Supply Plan | 1.5 | \$4.50 | \$0.72 | 0.6 | 18 | 9 | 225 | 2 | 20 | 9 | 220 | 4 | 40 | 523 |
| 4 | R-5 | Public Access Reuse - The concept of this category would be to serve the public with reclaimed water to offset irrigation demands. | PCSWSP Costs include basic additional treatment to wastewater facility and piping to residential area. Unit costs include both capital and O&M costs. | 15 | \$369.7 | \$4.4 | 6.0 | 180 | 8 | 200 | 2 | 20 | 3 | 69 | 4 | 40 | 509 |
| 5 | O-1 | Tampa Bay Water Supply - This project would consist of purchasing bulk water supply from Tampa Bay Water. In concept this project would include partnering with Tampa Bay Water in the development of either a 25 MGD Desal II facility or development of a second Alafia River reservoir to increase water supply from the Alafia River. Partnering with Tampa Bay Water could reduce costs on a regional project. Quantity determined through Tampa Bay Water's Alafia River evaluations. | PCSWSP Cost analysis based on 35 miles of piping from Lakeland to Tampa Bay Water Alafia Reservoir location, estimated assisted cost by Polk County for construction of facilities, surface water pumping, conventional surface water treatment, and transfer pumping. | 10 | \$293.1 | \$6.49 | 4.0 | 120 | 9 | 225 | 10 | 100 | 0 | 0 | 3 | 30 | 475 |

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Polk County Supplemental Water Supply Plan

10/26/2005

Long List

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
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| 7 | G-5 | NE Polk County Lower Floridan Aquifer - This project would consist of drilling a groundwater well into the Lower Floridan aquifer in the NE area of Polk County. This concept would consist of withdrawing groundwater from the LFA and treating the raw water to meet primary and secondary treatment standards for distribution as a potable source to meet regional demands in the NE area of Polk County. | PCSWSP Cost analysis includes membrane treatment. Unit costs include capital and O&M costs. | 4.00 | \$29.2 | \$1.79 | 1.6 | 48 | 7 | 175 | 7 | 70 | 7 | 175 | 7 | 70 | 538 |

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Polk County Supplemental Water Supply Plan

10/26/2006

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| 8 | G-33 | Winter Haven Water Department: Fairfax W.T.P., Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.74 | \$1.18 | \$0.31 | 0.3 | 9 | 6 | 150 | 5 | 50 | 9 | 237 | 9 | 90 | 536 |
| 9 | G-12 | Bartow: 7 MGD W.T.P., #10 Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.63 | \$1.00 | \$0.30 | 0.3 | 8 | 6 | 150 | 5 | 50 | 10 | 238 | 9 | 90 | 535 |
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Polk County Supplemental Water Supply Plan

10/26/2008

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| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 12 | O-2 | Joint Toho/STOPR Project : This project would consist of purchasing bulk water supply from Tohopekaliga Water Authority (TWA). In concept this project would include partnering with Tohopekaliga Water Authority in the development of either a regional surface water and ground water supply facility from both the Kissimmee River and Cypress Lakes wellfield. Partnering with Tohopekaliga Water Authority could reduce costs on a regional project. Quantity determined through Tohopekaliga Water Authority evaluations. | PCSWSP Cost based on Initial Information provided by Polk County Utilities and Tohopekaliga Water Authority. | 5.00 | \$60.0 | \$2.20 | 2.0 | 60 | 7 | 175 | 9 | 93 | 6 | 158 | 4 | 40 | 526 |
| 13 | R-43 | Winter Haven Reuse Option #3 - Calpine Energy - Winter Haven plans to design and construct of 42,240 linear feet of 8-10" transmission main and pumping station from Winter Haven Plant #3 to connect to Calpine Power Plant. Flow of 1.5mgd / offset of 1.5mgd. | The City of Winter Haven Costs are based on The City of Winter Haven's 10-year Water Supply Plan | 1.5 | \$4.50 | \$0.72 | 0.6 | 18 | 9 | 225 | 2 | 20 | 9 | 220 | 4 | 40 | 523 |
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| 15 | O-1 | Tampa Bay Water Supply - This project would consist of purchasing bulk water supply from Tampa Bay Water. In concept this project would include partnering with Tampa Bay Water in the development of either a 25 MGD Desal II facility or development of a second Alafia River reservoir to increase water supply from the Alafia River. Partnering with Tampa Bay Water could reduce costs on a regional project. Quantity determined through Tampa Bay Water's Alafia River evaluations. | PCSWSP Cost analysis based on 35 miles of piping from Lakeland to Tampa Bay Water Alafia Reservoir location, estimated assisted cost by Polk County for construction of facilities, surface water pumping, conventional surface water treatment, and transfer pumping. | 10 | \$293.1 | \$6.49 | 4.0 | 120 | 9 | 225 | 10 | 100 | 0 | 0 | 3 | 30 | 475 |
| 6 | G-16 | Fort Meade: Fort Meade W.T.P. Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.16 | \$0.87 | \$1.04 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 207 | 9 | 90 | 469 |
| | G-20 | Haines City: W.T.P. No1 Ground Water Blending- This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.31 | \$0.99 | \$0.61 | 0.1 | 4 | 6 | 150 | 2 | 20 | 9 | 225 | 7 | 70 | 468 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
G-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



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| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost index (\$) | | Implementation Time | | Total Score |
|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|----|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | | |
| 18 | G-61 | <u>Southwest/Polk Co. Utility: Imperial Lakes W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.22 | \$1.17 | \$0.85 | 0.1 | 3 | 6 | 150 | 2 | 20 | 9 | 215 | 8 | 80 | 467 |
| 19 | G-11 | <u>Auburndale/Winona Park W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.29 | \$0.99 | \$0.65 | 0.1 | 3 | 6 | 150 | 2 | 20 | 9 | 223 | 7 | 70 | 466 |
| 0 | G-4 | <u>Lower Floridan Ground Water Blending -</u> This category of projects would consist of blending Lower and Upper Floridan well water. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes membrane treatment. Unit costs include both capital and O&M costs. | 13.13 | \$49.74 | \$1.96 | 5.2 | 157 | 4 | 100 | 3 | 30 | 7 | 168 | 1 | 10 | 466 |
| 1 | G-34 | <u>Winter Haven Water Department: Inwood W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.15 | \$0.87 | \$1.11 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 204 | 9 | 90 | 466 |
| ! | G-37 | <u>Winter Haven Water Department: Winterset Gardens W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.21 | \$0.98 | \$0.89 | 0.1 | 3 | 6 | 150 | 2 | 20 | 9 | 213 | 8 | 80 | 465 |
| | S-16 | <u>Expansion of SWFWMD Upper Peace R. Water Storage -</u> This project would consist of increasing the berm (or mound) heights of the reservoir creating a larger volume of water which could be stored in the existing reservoir, specifically to create a situation where Polk County and its municipalities could use the excess water for supply. | PCSWSP Quantity will be more specific after SWFWMD completes the Lake Hancock and Upper Peace R. Water Storage evaluations. Cost estimation based on reservoir expansion. | 2.0 | \$20.0 | \$0.57 | 0.8 | 24 | 5 | 125 | 3 | 30 | 9 | 226 | 6 | 60 | 465 |

Code refers to C-Conservation, R-Redeemed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



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|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | 25% | 25% | 10% | 25% | 10% | 25% | 10% | 25% | 10% | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 24 | R-9 | Auburndale Westside Regional WWTF Option #2 - Tenoroc Preserve - This project would consist of continuing to supply the Tenoroc Preserve with reclaimed water to potentially gain incentives for water supply. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Westside Regional WWTF in 2030. Quantity estimated to be 0.74 MGD of total reuse water. Capital costs based on increased pipe size to Tenoroc Preserve. | 0.74 | \$2.65 | \$0.70 | 0.3 | 9 | 7 | 175 | 2 | 20 | 9 | 221 | 4 | 40 | 465 |
| 25 | G-22 | Lake Alfred: Lake Alfred Water Plant - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.18 | \$0.87 | \$0.93 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 211 | 8 | 80 | 463 |
| 26 | G-44 | Northwest: Palmore Water Plant, Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.18 | \$0.87 | \$0.93 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 211 | 8 | 80 | 463 |
| 27 | G-49 | Northeast: Berry W.T.P., Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.37 | \$0.99 | \$0.51 | 0.1 | 4 | 6 | 150 | 2 | 20 | 9 | 229 | 6 | 60 | 463 |
| 28 | R-42 | Winter Haven Reuse Option #2-WWTP Interconnects - Winter Haven plans to interconnect Plant 2 & Plant 3 (plant 3 upgrade completion scheduled for end of 2009) must be completed to serve the remaining 2,461 residential units. The interconnection project cost is estimated at \$12,836,100. Design and construction of 20,400 linear feet of 8-16" transmission main to connect to various residential subdivisions. 2,461 residential units with a 75% hook-up rate = 1,846 units (600gpd per active customer). It is expected that there be a flow of 1.108mgd, with an offset of 0.554mgd. | The City of Winter Haven Costs are based on The City of Winter Haven's 10-year Water Supply Plan | 0.554 | \$12.84 | \$2.61 | 0.2 | 7 | 9 | 225 | 2 | 20 | 6 | 141 | 7 | 70 | 463 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



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|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 29 | G-40 | <u>Winter Haven Water Department: Garden Grove W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.14 | \$0.87 | \$1.19 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 200 | 9 | 90 | 462 |
| 30 | G-51 | <u>Northeast: Regal Inn W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.07 | \$0.87 | \$2.37 | 0.0 | 1 | 8 | 200 | 2 | 20 | 6 | 151 | 9 | 90 | 462 |
| 31 | G-13 | <u>Davenport: Davenport W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.17 | \$0.80 | \$0.98 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 209 | 8 | 80 | 461 |
| 1 | G-35 | <u>Winter Haven Water Department: Winterset W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.17 | \$0.87 | \$0.98 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 209 | 8 | 80 | 461 |
| 3 | R-8 | <u>Auburndale Westside Regional WWTF Option #1 - USF Reclaimed -</u> This project would consist of supplying the University of South Florida Lakeland Campus with reclaimed water in an attempt to eliminate existing/future irrigation groundwater withdrawal. In return Auburndale could gain additional permitted capacity or other incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. A portion of the total quantity of reclaimed supplied may need to be given back to the upper Floridan aquifer. In turn the quantity of reclaimed water supplied for offsets would not be a one-to-one ratio of reclaimed to ground water. | PCSWSP Quantity based on total reclaimed water available from the Westside Regional WWTF in 2030. Quantity estimated to be 0.74 MGD of total reuse water. Capital costs based on piping from Auburndale to USF | 0.74 | \$11.08 | \$2.71 | 0.3 | 9 | 9 | 225 | 2 | 20 | 5 | 137 | 7 | 70 | 461 |

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O-Other Alternative Supply, G-Ground Water
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|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 34 | R-55 | Avon Park Correctional WWTP 2011-2030 Reuse Expansion - The expansion of the distribution and transmission of reuse water throughout Avon Park Correctional Facility. | RWSP Capital Costs estimated using SWFWMD RWSP estimation of \$3.62/Gallon for 2008, SWFWMD RWSP cost per gallon inflated at 4% per year to 2008 from 2005. Total Costs per Kgal calculated using amortized capital cost over 30 years at a 5% interest rate. | 0.7 | \$2.50 | \$0.83 | 0.3 | 8 | 7 | 175 | 2 | 20 | 9 | 216 | 4 | 40 | 459 |
| 35 | G-47 | Northwest: Lake Gibson W.T.P.. Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.13 | \$0.87 | \$1.28 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 197 | 9 | 90 | 458 |
| 36 | R-55 | Polk Co Correctional WWTP 2011-2025 Reuse Expansion - The expansion of the distribution and transmission of reuse water throughout Polk Co. Correctional Facility. | RWSP Capital Costs estimated using SWFWMD RWSP estimation of \$3.62/Gallon for 2008, SWFWMD RWSP cost per gallon inflated at 4% per year to 2008 from 2005. Total Costs per Kgal calculated using amortized capital cost over 30 years at a 5% interest rate. | 0.21 | \$0.70 | \$0.83 | 0.1 | 3 | 8 | 200 | 2 | 20 | 9 | 216 | 2 | 20 | 458 |
| 37 | G-50 | Northeast: Van Fleet W.T.P.. Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.49 | \$1.17 | \$0.46 | 0.2 | 6 | 6 | 150 | 5 | 50 | 9 | 231 | 2 | 20 | 457 |
| 38 | G-27 | Lake Wales: High School W.T.P.. Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.32 | \$0.99 | \$0.59 | 0.1 | 4 | 5 | 125 | 2 | 20 | 9 | 225 | 8 | 80 | 454 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



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Long List

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 39 | G-39 | <u>Winter Haven Water Department; Ridge VO Tech W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.12 | \$0.87 | \$1.38 | 0.0 | 1 | 6 | 150 | 2 | 20 | 8 | 193 | 9 | 90 | 454 |
| 39 | G-46 | <u>Northwest; Timberidge Subdivision W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.12 | \$0.87 | \$1.38 | 0.0 | 1 | 6 | 150 | 2 | 20 | 8 | 193 | 9 | 90 | 454 |
| 41 | G-54 | <u>Northeast; Oak Hill W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.18 | \$0.87 | \$0.93 | 0.1 | 2 | 6 | 150 | 2 | 20 | 8 | 211 | 7 | 70 | 453 |
| 42 | G-3 | <u>Small Scale Irrigation Systems/ Shallow Wells -</u> This category of projects would consist of developing rebate programs in which Polk County allows residential and small commercial customers to install an alternate supply for irrigation such as shallow wells. Rebates will be available for a shallow well, deep well, or surface water withdrawal systems such as man made lake, pond, or canal. Shallow wells can decrease public water supply by 30%. The rebates would have values for up to 50% of the cost of the installation with a maximum value of \$400. Annual participation of 75 accounts per year for 20 years. Initial costs for research and development of \$110,000. | PCSWSP Cost estimation based on the number of accounts, water saved per year, rebate amount offered. Costs only include both programs capital costs. | 0.20 | \$1.4 | \$1.20 | 0.1 | 2 | 6 | 150 | 5 | 50 | 8 | 200 | 5 | 50 | 452 |
| 43 | R-10 | <u>Auburndale Westside Regional WWTF Option #3- Public Access Reuse System -</u> This project would consist of Auburndale using the net increase in reuse water to supply new developments with public access reuse. This will offset Auburndale's residential irrigation demands and could qualify Auburndale to receive other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Westside Regional WWTF in 2030. Quantity estimated to be 0.74 MGD of total reuse water. Capital costs based on estimated filtration, and disinfection. | 0.74 | \$1.88 | \$0.52 | 0.3 | 9 | 7 | 175 | 2 | 20 | 9 | 228 | 2 | 20 | 452 |

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O-Other Alternative Supply, G-Ground Water
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|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 44 | G-21 | <u>Haines City: W.T.P. #2 Ground Water Blending</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.35 | \$0.99 | \$0.54 | 0.1 | 4 | 6 | 150 | 2 | 20 | 9 | 228 | 5 | 50 | 452 |
| 45 | G-32 | <u>Winter Haven Water Department: 3rd Street Water Plant Ground Water Blending</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.34 | \$0.99 | \$0.55 | 0.1 | 4 | 6 | 150 | 2 | 20 | 9 | 227 | 5 | 50 | 451 |
| 46 | G-26 | <u>Lake Wales: Grove Ave. W.T.P. Ground Water Blending</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.29 | \$0.88 | \$0.58 | 0.1 | 3 | 6 | 150 | 2 | 20 | 9 | 226 | 5 | 50 | 449 |
| 47 | R-41 | <u>Winter Haven Reuse Option #1- Public Access Reuse System</u> Winter Haven plans to have reuse connections in 2009. These connections would serve 2,019 residential units with a 75% hook-up rate = 1,514 units (600gpd per active customer). It is expected that there be a flow of 0.908mgd, with an offset of 0.454mgd. | The City of Winter Haven Costs are based on The City of Winter Haven's 10-year Water Supply Plan | 0.454 | \$2.20 | \$1.71 | 0.2 | 5 | 7 | 175 | 2 | 20 | 7 | 179 | 7 | 70 | 449 |
| 48 | G-41 | <u>Winter Haven Water Department: Garden Grove W.T.P. Ground Water Blending</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.11 | \$0.87 | \$1.51 | 0.0 | 1 | 6 | 150 | 2 | 20 | 7 | 187 | 9 | 90 | 448 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

Long List

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 49 | G-58 | Southwest/Polk Co. Utility: Turner Road W.T.P. Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.17 | \$0.87 | \$0.98 | 0.1 | 2 | 7 | 175 | 2 | 20 | 8 | 209 | 4 | 40 | 445 |
| 50 | G-55 | Northeast: Loma Linda W.T.P. Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.09 | \$0.87 | \$1.84 | 0.0 | 1 | 8 | 200 | 2 | 20 | 7 | 173 | 5 | 50 | 444 |
| 51 | R-26 | Lakeland: Glendale & Northside WWTF Option #1- TECO - This project would consist of sending all reclaimed water that is currently routed to McIntosh Power Plant as well as future reclaimed water to the TECO power facility. Sending reclaimed water to TECO could qualify Lakeland for other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs will be based on reservoir size needed for storage to allow TECO to be supplied with a constant flow of reclaimed supply. Piping would be supplied by TECO. | 13.2 | | | 5.3 | 158 | 9 | 225 | 2 | 20 | 0 | 0 | 4 | 40 | 443 |
| 51 | R-27 | Lakeland: Glendale & Northside WWTF Option #2- Public Access Reuse System - This project would consist of sending all future reclaimed water supplies to public access reuse. The reclaimed water can potentially be used for new developments public access reuse to offset irrigation demands and could qualify Lakeland for other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Lakeland WWTF in 2030. Quantity estimated to be 17.81 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 13.2 | | | 5.3 | 158 | 9 | 225 | 2 | 20 | 0 | 0 | 4 | 40 | 443 |
| 53 | G-8 | Well field Sharing - This project would consist of sharing Upper Floridan wells throughout Polk County to optimize permit versus actual use and minimize impacts. The concept of this project would consist of either drilling new wells or increased pumping of existing UFA wells to better match demands to permitted capacity. In some cases, some municipalities would lower their permitted capacity to allow others to increase permitted capacity to meet their demands. | PCSWSP Cost include well drilling and transfer pumping system. Unit costs include both capital and O&M costs. | 6.00 | \$9.72 | \$0.33 | 2.4 | 72 | 3 | 75 | 2 | 20 | 9 | 236 | 4 | 40 | 443 |

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|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 54 | G-48 | Northwest: Indianwoods Sub W.T.P., Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.10 | \$0.67 | \$1.66 | 0.0 | 1 | 6 | 150 | 2 | 20 | 7 | 181 | 9 | 90 | 442 |
| 55 | G-42 | Central: Gordonville W.T.P., Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.10 | \$0.67 | \$1.66 | 0.0 | 1 | 6 | 150 | 2 | 20 | 7 | 181 | 9 | 90 | 442 |
| 56 | R-6 | Agricultural Reuse in Exchange for WUP Incentives - The concept of this category would be to use reclaimed water for agricultural purposes. Reclaimed water can be sent to agricultural facilities in exchange for their potable water supplies or for some other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs include piping and valving to water users and potentially expansion of wastewater facility to treat effluent to current reclaimed standards. Unit costs include both capital and O&M costs. | 20 | | | 8.0 | 240 | 5 | 125 | 2 | 20 | 0 | 0 | 5 | 50 | 435 |
| 57 | G-45 | Northwest: Homestead Subdivision W.T.P., Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.09 | \$0.67 | \$1.84 | 0.0 | 1 | 6 | 150 | 2 | 20 | 7 | 173 | 9 | 90 | 434 |
| 58 | G-29 | Mulberry: Mulberry Plant #1 Ground Water Blending- This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.09 | \$0.67 | \$1.84 | 0.0 | 1 | 6 | 150 | 2 | 20 | 7 | 173 | 9 | 90 | 434 |

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|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|----|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | | |
| 59 | G-60 | <u>Southwest Polk Co. Utility: Gus Stewart W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.22 | \$0.67 | \$0.76 | 0.1 | 3 | 6 | 150 | 2 | 20 | 9 | 218 | 4 | 40 | 431 |
| 60 | G-2 | <u>Regional Water Grid System -</u> This project would consist of the construction of a regional grid system (water transmission main grid) with local interconnects that would allow for the transport of water supply throughout the county. The grid system would be similar to a power system in which separate municipalities can sell water to the grid system when in surplus and/or buy it when in demand. Currently there is a 6 mgd surplus of permitted but not pumped water throughout Polk County. This water can be shifted from city to city to accommodate deficits using surplus. Future supplies of water outside of the county can easily be added to the county once a regional grid system is constructed. | PCSWSP The cost includes 90 miles of transmission main piping, valves and booster pump stations. Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 6.00 | \$226.3 | \$7.21 | 2.4 | 72 | 9 | 225 | 10 | 100 | 0 | 0 | 3 | 30 | 427 |
| 61 | G-52 | <u>Northeast: Edgehill W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.12 | \$0.87 | \$1.38 | 0.0 | 1 | 6 | 150 | 2 | 20 | 8 | 193 | 6 | 60 | 424 |
| 62 | G-57 | <u>East: Sunair Country Club W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 8 | 200 | 2 | 20 | 4 | 112 | 9 | 90 | 423 |
| 63 | R-4 | <u>Regional Reclaimed Water Interconnects -</u> The concept of this category would be to design and construct interconnected reclaimed systems to allow for more effective systems in higher development areas. New developments or current dry lines that currently do not have enough supply to meet peak reuse demands. | PCSWSP Costs estimated from piping and pumping. Unit costs include both capital and O&M costs. | 20 | | | 8.0 | 240 | 4 | 100 | 4 | 40 | 0 | 0 | 4 | 40 | 420 |

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|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 63 | R-1 | <u>Supplement Large Water Users with reclaimed Water in Exchange for WUP Incentives -</u> The concept of this category is to identify and supply large water users currently utilizing potable water to satisfy a non-potable water demand with reclaimed water in exchange for all or a portion of their water use permit quantities or to obtain other incentives. Benefits of this include supplying a consistent amount of water and avoiding the inconsistent demand of irrigation users. Included in the effort should be setting a standard policy and procedure for issuing incentives to utilities using reclaimed water in an environmentally beneficial way. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs include piping and valving to water users and potential expansion of wastewater facility(s) to treat effluent to current reclaimed standards. Unit costs include both capital and O&M costs. | 20 | | | 8.0 | 240 | 4 | 100 | 3 | 30 | 0 | 0 | 5 | 50 | 420 |
| 65 | R-3 | <u>RIBS (Rapid Infiltration Basins) -</u> The concept of this category would be to utilize stormwater capture ponds, mining ponds, or reclaimed water throughout Polk County for RIBS. Implementation of RIBS could provide the user with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs based on conventional rapid infiltration basins. Unit costs include both capital and O&M costs. | 20 | | | 8.0 | 240 | 1 | 25 | 5 | 50 | 0 | 0 | 10 | 100 | 415 |
| 66 | G-19 | <u>Frostproof W.T.P. #3 Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.07 | \$0.87 | \$2.37 | 0.0 | 1 | 6 | 150 | 2 | 20 | 6 | 151 | 9 | 90 | 412 |
| 67 | R-2 | <u>Aquifer Recharge and Recovery (ARR) -</u> The concept of this category would consist of using wastewater effluent, that is not being reused, for aquifer recharge and recovery. Implementation of ARR could provide the user with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs based on conventional aquifer recharge recovery systems. Unit costs include both capital and O&M costs. | 25 | | | 10.0 | 300 | 1 | 25 | 1 | 10 | 0 | 0 | 7 | 70 | 405 |
| 68 | S-2 | <u>Surface/Stormwater Ponds -</u> This project would consist of utilizing lake systems or stormwater ponds as a small amount of supplemental use or constant supply. The surface water source is proposed to be used as a supplemental source for reclaimed water throughout the NE Polk County Region. | PCSWSP Quantity per hydraulic modeling done by PCSWSP. Cost estimates based on chlorine disinfection system, high service pumping, and reservoir. Unit costs are capital and O&M costs. | 0.8 | \$13.1 | \$3.93 | 0.3 | 10 | 7 | 175 | 3 | 30 | 3 | 85 | 10 | 100 | 401 |
| 69 | G-15 | <u>Dundee Lake Ruth W.T.P. #1 Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.06 | \$0.87 | \$2.71 | 0.0 | 1 | 6 | 150 | 2 | 20 | 5 | 137 | 9 | 90 | 398 |

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|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 70 | G-23 | <u>Lake Hamilton: Lake Hamilton W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.08 | \$0.87 | \$2.76 | 0.0 | 1 | 8 | 150 | 2 | 20 | 5 | 135 | 9 | 90 | 396 |
| 71 | G-43 | <u>Central: Tanamora W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.08 | \$0.87 | \$2.07 | 0.0 | 1 | 6 | 150 | 2 | 20 | 7 | 164 | 6 | 60 | 395 |
| 72 | G-53 | <u>Northeast: Polo Davenport W.T.P., Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 8 | 200 | 2 | 20 | 4 | 112 | 6 | 60 | 393 |
| 72 | G-59 | <u>Southwest/Polk Co. Utility: Valley View W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 8 | 200 | 2 | 20 | 4 | 112 | 6 | 60 | 393 |
| 72 | G-62 | <u>Southeast/Polk Co. Utility: Polk County Jail W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 8 | 200 | 2 | 20 | 4 | 112 | 6 | 60 | 393 |

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|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 75 | G-36 | <u>Winter Haven Water Department: Eloise Wood W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.07 | \$0.87 | \$2.37 | 0.0 | 1 | 6 | 150 | 2 | 20 | 6 | 151 | 7 | 70 | 392 |
| 76 | R-16 | <u>Bartow: City of Bartow WWTF Option #1-Progress Energy Hines -</u> This project would consist of continuing to send all reclaimed water supply to Progress Energy Hines Complex for cooling water. Polk County Utilities plans to close the Central Regional WWTF and divert all flows to the City of Bartow WWTF. The City of Bartow plans to send all additional reclaimed water flows to the Hines Complex. In turn, the city can potentially acquire water supply incentives such as increased water use permit, extension of permit, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Bartow WWTF in 2030. Quantity estimated to be 6.84 MGD of total reuse water. Capital costs based on increased pipe size to the Progress Energy Hines. | 5.9 | | | 2.4 | 71 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 386 |
| 76 | R-17 | <u>Bartow: City of Bartow WWTF Option #2 - Public Access Reuse System -</u> This project would consist of sending all future reclaimed water supply to public access reuse. Polk County Utilities plans to close the Central Regional WWTF and divert all flows to the City of Bartow WWTF. The City of Bartow can use future reclaimed flows for residential irrigation to offset potable water demand and could qualify Bartow for other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Alford WWTF in 2030. Quantity estimated to be 6.84 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 5.9 | | | 2.4 | 71 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 386 |
| 76 | R-44 | <u>NERUSA-PCU: Northeast Regional WWTF Option #1 - Public Access Reuse System -</u> This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NERUSA-PCU Northeast Regional WWTF in 2030. Quantity estimated to be 7.87 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 5.9 | - | - | 2.4 | 71 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 386 |
| 76 | R-45 | <u>NERUSA-PCU: Northeast Regional WWTF Option #2 Cemex -</u> This project would consist of PCU sending future reclaimed water flows to a Cemex. Sending the reclaimed water to Cemex could provide the city with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NERUSA-PCU Northeast Regional WWTF in 2030. Quantity estimated to be 7.87 MGD of total reuse water. Capital costs based on transmission piping to the Cemex. | 5.9 | - | - | 2.4 | 71 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 386 |
| 80 | R-22 | <u>Frostproof: Frostproof WWTF Option #1 - Cargill Industrial Reclaimed -</u> This project would consist of Frostproof sending all future reclaimed flows to Cargill Industries. Frostproof could potentially receive incentives such as an increase in water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Frostproof WWTF in 2030. Quantity estimated to be 5.37 MGD of total reuse water. Capital costs based on increased pipe size to Cargill Industries. | 5.37 | | | 2.1 | 64 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 379 |

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| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | 25% | 30% | 25% | 10% | 25% | 10% | 25% | 10% | 25% | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 81 | G-14 | <u>Dundee: Lake Ruth W.T.P. #1 Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 6 | 150 | 2 | 20 | 4 | 112 | 9 | 90 | 373 |
| 82 | G-28 | <u>Lake Wales: Market Street W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 6 | 150 | 2 | 20 | 4 | 112 | 9 | 90 | 373 |
| 82 | G-31 | <u>Polk City: Bougainvillea Plant Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 6 | 150 | 2 | 20 | 4 | 112 | 9 | 90 | 373 |
| 82 | G-36 | <u>Winter Haven Water Department: Cypresswood W.T.P. Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 6 | 150 | 2 | 20 | 4 | 112 | 9 | 90 | 373 |
| 86 | G-18 | <u>Frostproof: Frostproof W.T.P. #2 Ground Water Blending -</u> This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.05 | \$0.87 | \$3.31 | 0.0 | 1 | 6 | 150 | 2 | 20 | 4 | 112 | 9 | 90 | 373 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost index (\$) | | Implementation Time | | Total Score |
|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | 25% | 25% | 10% | 25% | 10% | 25% | 10% | 25% | 10% | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 86 | R-14 | Bartow, Ft. Meade, Mulberry: Reclaimed to Hines Complex - This project would consist of supplying Progress Energy with reclaimed water from Mulberry, Fort Meade, and Bartow instead of potable water in exchange for WUP Incentives. An estimated 25 miles of piping will be used to transfer reclaimed water from Bartow to the Hines Energy Complex. Bartow could also receive reclaimed water from other facilities and then use its pumps and pipes to send to Progress Energy. By sending their reclaimed to Hines, the cities could qualify for incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Bartow, Ft. Meade, and Mulberry WWTFs in 2030. Quantity estimated to be 8.34 MGD of total reuse water. Capital costs based on increased pipe size to the Hines Complex. | 7.0 | | | 2.8 | 84 | 9 | 225 | 2 | 20 | 0 | 0 | 4 | 40 | 369 |
| 86 | R-15 | Bartow, Ft. Meade, Mulberry: Reclaimed to Polk Power Partners - This project would consist of supplying Polk Power Partners LLC with reclaimed water from Mulberry, Fort Meade, and Bartow instead of potable water in exchange for WUP Incentives. An estimated 7 miles of piping will be used to transfer reclaimed water from Bartow to the Polk Power Partners LLC. Bartow could also receive reclaimed water from other facilities and then use its pumps and pipes to send to Progress Energy. By sending their reclaimed to Polk Power Partners LLC, the cities could qualify for incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Bartow Ft. Meade, and Mulberry WWTFs in 2030. Quantity estimated to be 8.34 MGD of total reuse water. Capital costs based on increased pipe size to the Polk Power Partners LLC. | 7.0 | | | 2.8 | 84 | 9 | 225 | 2 | 20 | 0 | 0 | 4 | 40 | 369 |
| 88 | R-52 | SWRUSA-PCU: Southwest Regional WWTF Option #1 - Public Access Reuse System - This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the SWRUSA-PCU WWTF in 2030. Quantity estimated to be 2.16 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 2.16 | | | 0.9 | 26 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 341 |
| 89 | R-24 | Haines City: Haines City WWTF Option #2 - Public Access Reuse System - This project would consist of sending all future increases in reclaimed water to public access reuse. This will offset Haines City's residential irrigation demands and could qualify Haines City for other incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Haines City WWTF in 2030. Quantity estimated to be 2.12 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 2.12 | | | 0.8 | 25 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 340 |
| 90 | R-23 | Haines City: Haines City WWTF Option #1 - Greenefele Resort Utility - This project would consist of using reclaimed water to supply the Greenefele Resort Utility to meet their irrigation needs. In return Haines City could acquire a portion of the Greenefele Resort Utilities water use permit or qualify for other incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Haines City WWTF in 2030. Quantity estimated to be 2.1 MGD of total reuse water. Capital costs based on increased pipe size to the Large Water User. | 2.1 | | | 0.8 | 26 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 340 |
| 91 | G-17 | Frostproof: Frostproof W.T.P. #1 Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.04 | \$0.87 | \$4.13 | 0.0 | 0 | 6 | 150 | 2 | 20 | 3 | 78 | 9 | 90 | 338 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2006

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | Grade | 25% | Grade | 10% | Grade | 25% | Grade | 10% | Grade | |
| 92 | R-31 | <u>Lake Wales: Lake Wales WWTF Option #1 - Mountain Lakes Estates & Golf Club</u> - This project could consist of sending all future reclaimed water to Mountain Lakes Estates and Golf Club to meet irrigation needs. Supplying Mountain Lakes Estates and Golf Club with irrigation water may allow Lake Wales to extend their water use permit length, offset per capita demands or increase their water use permit quantity. | PCSWSP Quantity based on total reclaimed water available from the Lake Wales WWTF in 2030. Quantity estimated to be 1.91 MGD of total reuse water. Capital costs based on transmission piping to the Mountain Lakes Estates and Golf Club. | 1.91 | | | 0.8 | 23 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 338 |
| 93 | R-39 | <u>Winter Haven: City of Winter Haven WWTF #2 Option #1- Public Access Reuse System</u> - This project would consist of Winter Haven sending future reclaimed water flows to public reuse. The reclaimed water for public access reuse could offset irrigation demands and could qualify Winter Haven for incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Winter Haven WWTF #2 in 2030. Quantity estimated to be 1.67 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 1.67 | | | 0.7 | 20 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 335 |
| 93 | R-40 | <u>Winter Haven: City of Winter Haven WWTF #2 Option #2-Progress Energy</u> - This project would consist of Winter Haven sending future reclaimed water flows to Progress Energy. Current and future interconnections would allow reclaimed flows to be sent via other cities. Sending the reclaimed water to Progress Energy could provide the city with incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Winter Haven WWTF #2 in 2030. Quantity estimated to be 1.67 MGD of total reuse water. Capital costs based on transmission piping to Progress Energy. | 1.67 | | | 0.7 | 20 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 335 |
| 95 | S-14 | <u>Peace River at Ft. Meade</u> - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace River. Initial modeling results have concluded there is approximately 6.2 mgd of additional flow, with a minimum reservoir size of 22,000 acre-ft and a minimum diversion capacity of 74 mgd. | PCSWSP Costs based on 15 miles of piping from Ft. Meade to Bartow, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 6.2 | \$205.1 | \$7.37 | 2.5 | 74 | 6 | 150 | 6 | 60 | 0 | 0 | 5 | 50 | 334 |
| 96 | R-34 | <u>Mulberry: Landstar CDD WWTF Option #1 - Public Access Reuse System</u> - This project would consist of Mulberry sending all future reclaimed water to public access reuse. The reclaimed water could offset irrigation demands and could qualify Mulberry for incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Mulberry Landstar CDD WWTF in 2030. Quantity estimated to be 1.4 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 1.4 | | | 0.6 | 17 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 332 |
| 96 | R-35 | <u>Mulberry: Landstar CDD WWTF Option #2 - Progress Energy Hines</u> - This project would consist of Mulberry sending all reuse flows to the Progress Energy Hines Complex for power generation. The Progress Energy Hines Complex requires more water for future cooling for power generation. Mulberry could receive incentives that include increased water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Mulberry Landstar CDD WWTF in 2030. Quantity estimated to be 1.4 MGD of total reuse water. Capital costs based on transmission piping to Progress Energy Hines. | 1.4 | | | 0.6 | 17 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 332 |

Code refers to C-Conservation, R-Reclaimed, S-Surface Water,
O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

Long List

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 96 | R-36 | Mulberry: Landstar CDD WWTF Option #3 - TECO - This project would consist of sending all future reclaimed flows to the future Lakeland reclaimed storage facility (wetlands). All water from the storage facility could be sent to TECO for power generation. The TECO facility requires more water for future cooling needs. Mulberry could receive incentives that include increased water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Mulberry Landstar CDD WWTF in 2030. Quantity estimated to be 1.4 MGD of total reuse water. Capital costs based on transmission piping to Lakeland. | 1.4 | | | 0.6 | 17 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 332 |
| 99 | G-55 | East: Timber Lake Plant, Ground Water Blending - This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs includes both capital and annual O&M costs. | 0.03 | \$0.87 | \$5.51 | 0.0 | 0 | 8 | 200 | 2 | 20 | 1 | 20 | 9 | 90 | 331 |
| 100 | R-11 | Auburndale Allred WWTF Option #1 - Calpine Power Onsite RO - This project would consist of Calpine Power Facility using a 1.5 mgd on-site RO water treatment system to re-utilize 1.0 mgd of reclaimed water (blow down) currently disposed of via spray field. This quantity of water would offset the previous source from the Upper Floridan Aquifer which could then be pumped for potable use and could qualify Auburndale to receive other incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs based on membrane treatment for Calpine Power Facility. | 1.18 | | | 0.5 | 14 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 329 |
| 100 | R-12 | Auburndale Allred WWTF Option #2 - Calpine Power reclaimed - This project would consist of continuing to send all reclaimed water to Calpine Osprey Energy Center for cooling purposes. The future reclaimed flow could continue to be sent to Calpine Osprey Energy Center, in return for an increased water use permit, extended permit, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Allred WWTF in 2030. Quantity estimated to be 1.18 MGD of total reuse water. Capital costs based on increased piping from Auburndale to Calpine Osprey Energy Center. | 1.18 | | | 0.5 | 14 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 329 |
| 100 | R-13 | Auburndale Allred WWTF Option #3 - Public Access Reuse System - This project would consist of distributing the future reclaimed flow increase to new developments in Auburndale for public access reuse to offset irrigation demands and could qualify Auburndale to receive other incentives. Incentives such as: Increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Allred WWTF in 2030. Quantity estimated to be 1.18 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 1.18 | | | 0.5 | 14 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 329 |
| 103 | R-32 | Mulberry: City of Mulberry WWTF Option #1 - TECO - This project would consist of sending all future reclaimed flows to the future Lakeland reclaimed storage facility (wetlands). All water from the storage facility could be sent to TECO for power generation. The TECO facility requires more water for future cooling needs. Mulberry could receive incentives that include increased water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Mulberry WWTF in 2030. Quantity estimated to be 0.88 MGD of total reuse water. Capital costs based on transmission piping to the Lakeland wetlands. | 0.88 | | | 0.4 | 11 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 326 |

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O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

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| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 103 | R-33 | Mulberry: City of Mulberry WWTF Option #2 - Progress Energy Hines - This project would consist of Mulberry sending all future reclaimed flows to Bartow and Bartow sends all reclaimed flows to the Progress Energy Hines Complex for power generation. The Progress Energy Hines Complex requires more water for future cooling for power generation. Mulberry could receive incentives that include increased water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Mulberry WWTF in 2030. Quantity estimated to be 0.88 MGD of total reuse water. Capital costs based on transmission piping to Bartow. | 0.88 | | | 0.4 | 11 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 326 |
| 105 | R-18 | Dundee: Dundee Regional WWTF Option #1 - Public Access Reuse System This project would consist of sending all future reclaimed water supply to public access reuse. The City of Dundee could use future reclaimed flows for residential irrigation to offset potable water demands and could qualify Dundee for other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Alford WWTF in 2030. Quantity estimated to be 0.82 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.82 | | | 0.3 | 10 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 325 |
| 105 | R-19 | Dundee: Dundee Regional WWTF Option #2 - Dundee Ridge Middle School This project would consist of sending all future reclaimed water supply to Dundee Ridge Middle School with irrigation water or a number of different agricultural users around the plant's location. This would offset groundwater demands and allow Dundee to increase its permit quantity, extend their permit length, offset irrigation demands or receive other incentives. | PCSWSP Quantity based on total reclaimed water available from the Alford WWTF in 2030. Quantity estimated to be 0.82 MGD of total reuse water. Capital costs based on transmission piping to Dundee Ridge Middle School. | 0.82 | | | 0.3 | 10 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 325 |
| 107 | R-49 | NWRUSA-PCU: Northwest Regional WWTF Option #2 - Public Access Reuse System This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NWRUSA-PCU WWTF in 2030. Quantity estimated to be 0.72 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.72 | | | 0.3 | 9 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 324 |
| 108 | R-46 | NERUSA-PCU: Polo Park WWTF - Public Access Reuse System This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NERUSA-PCU Polo Park WWTF in 2030. Quantity estimated to be 0.71 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.71 | | | 0.3 | 9 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 324 |
| 109 | R-37 | Winter Haven: City of Winter Haven WWTF #3 Option #1- Public Access Reuse System This project would consist of Winter Haven sending future reclaimed flows to public access reuse. The reclaimed water could offset irrigation demands and qualify Winter Haven for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Winter Haven WWTF #3 in 2030. Quantity estimated to be 0.67 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.67 | | | 0.3 | 8 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 323 |
| 109 | R-38 | Winter Haven: City of Winter Haven WWTF #3 Option #2- Progress Energy This project would consist of Winter Haven sending future reclaimed water flows to Progress Energy. Sending the reclaimed water to Progress Energy could provide the city with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Winter Haven WWTF #3 in 2030. Quantity estimated to be 0.67 MGD of total reuse water. Capital costs based on transmission piping to Progress Energy. | 0.67 | | | 0.3 | 8 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 323 |

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O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

| Long List | | | Source/Calculations | Potential Quantity | Capital Cost | Unit Costs | Yield (MGD) | | Permittability | | Additional Benefit | | Cost Index (\$) | | Implementation Time | | Total Score |
|-----------|------|---|--|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | Score | 25% | Score | 10% | Score | 25% | Score | 10% | Score | |
| 111 | R-21 | Fort Meade: Fort Meade WWTF Option #2 - Cargill - This project would consist of sending all future reclaimed water supply to Cargill Industries. Fort Meade has approximately 15 more years left on a 25 year agreement to provide industrial reuse to Cargill. Currently, Fort Meade produces 1 MGD of reuse. Of the 1 MGD, only 0.4 MGD is provided to Cargill. The excess and future flow of reuse water can potentially be supplied to Cargill Industries in exchange for incentives. Incentives may include: increased water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Fort Meade WWTF in 2030. Quantity estimated to be 0.62 MGD of total reuse water. Capital costs based on increased pipe size to Cargill Industries. | 0.62 | | | 0.2 | 7 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 322 |
| 112 | R-48 | NWRUSA-PCU: Northwest Regional WWTF Option #1 - Big Cypress Golf and County Club - This project would consist of PCU sending future reclaimed water flows to Big Cypress Golf and County Club. Sending the reclaimed water to a golf course could provide the city with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NWRUSA-PCU Northwest Regional WWTF in 2030. Quantity estimated to be 0.52 MGD of total reuse water. Capital costs based on transmission piping to the Big Cypress Golf and County Club. | 0.52 | | | 0.2 | 6 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 321 |
| 112 | R-53 | SWRUSA-PCU: Northwest Regional WWTF Option #2 - Lakeland TECO project - This project would consist of sending all future reclaimed flows to the future Lakeland reclaimed storage facility (wellands). All water from the storage facility could be sent to TECO for power generation. The TECO facility requires more water for future cooling needs. Mulberry could receive incentives that include increased water use permit quantity, extension of permit length, per capita demand offsets or other incentives. | PCSWSP Quantity based on total reclaimed water available from the SWRUSA-PCU Northwest Regional WWTF in 2030. Quantity estimated to be 0.52MGD of total reuse water. Capital costs based on transmission piping to Lakeland. | 0.52 | | | 0.2 | 6 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 321 |
| 114 | S-13 | Peace River at Bartow - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace River. Initial modeling results have concluded there is approximately 5.1 mgd of additional flow, with a minimum reservoir size of 20,000 acre-ft and a minimum diversion capacity of 84 mgd. | PCSWSP Costs based transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 5.1 | \$167.9 | \$7.45 | 2.0 | 61 | 6 | 150 | 7 | 70 | 0 | 0 | 4 | 40 | 321 |
| 115 | R-28 | Lake Alfred: Lake Alfred WWTF Option #1 - Public Access Reuse System This project would consist of sending all future reclaimed water supplies to public access reuse. Using the reclaimed water to serve public access reuse to its citizens could offset potable water demands and could qualify Lake Alfred for other incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Lake Alfred WWTF in 2030. Quantity estimated to be 0.47 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.47 | | | 0.2 | 6 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 321 |
| 115 | R-29 | Lake Alfred: Lake Alfred WWTF Option #2- Supplement Ag. Crops - This project would consist of continuing to send flows to the city owned citrus grove for agricultural reuse or other large water user. Using it's reclaimed supply for agricultural reuse could qualify Lake Alfred to receive incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Lake Alfred WWTF in 2030. Quantity estimated to be 0.47 MGD of total reuse water. Capital costs based on transmission piping to the citrus grove. | 0.47 | | | 0.2 | 6 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 321 |

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O-Other Alternative Supply, G-Ground Water
Highlighted Projects = Categories



Polk County Supplemental Water Supply Plan

10/26/2008

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|-----------|------|--|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 115 | R-30 | Lake Alfred: Lake Alfred WWTP Option #3 - Lake Alfred to Bartow WWTF to Progress Energy Hines Complex. This project would consist of Lake Alfred sending future reclaimed water flows to Progress Energy. Current and future interconnections would allow reclaimed flows to be sent via other cities. Sending the reclaimed water to Progress Energy could provide the city with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the Lake Alfred in 2030. Quantity estimated to be 0.47 MGD of total reuse water. Capital costs based on transmission piping to Bartow. | 0.47 | | | 0.2 | 6 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 321 |
| 118 | R-47 | NERUSA-PCU: Oak Hills - Public Access Reuse System - This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NERUSA-PCU Polo Park WWTF in 2030. Quantity estimated to be 0.46 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.46 | | | 0.2 | 6 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 321 |
| 119 | R-57 | Direct Potable Reuse - The concept of this category would consist of direct potable reuse from reclaimed water. | PCSWSP Costs based on microfiltration/ultrafiltration, membrane reverse osmosis, disinfection. Unit costs include both capital and O&M costs. | 20 | | | 8.0 | 240 | 0 | 0 | 8 | 80 | 0 | 0 | 0 | 0 | 320 |
| 120 | R-54 | SERUSA-PCU: Sun Ray WWTF -Public Access Reuse System - This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the SERUSA-PCU Sun Ray WWTF in 2030. Quantity estimated to be 0.38 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.38 | | | 0.2 | 5 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 320 |
| 121 | S-5 | Peace River/Arcadia - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace River. Initial modeling results have concluded there is approximately 30.7 mgd of additional flow, unless there are additional quantities permitted in the future by the PRMRWSA or other future upstream users not known at this time. A minimum reservoir size of 64,000 acre-ft and a minimum diversion capacity of 517 mgd would be required. Assuming Polk County will not receive all of the flow available at this location, a yield of 15 mgd will be used. This option will require approximately 50 miles of piping from Arcadia to the grid. | PCSWSP Costs based on 50 miles of piping from Bartow to Arcadia, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 15.0 | \$388.7 | \$5.56 | 5.0 | 180 | 2 | 50 | 5 | 50 | 1 | 18 | 2 | 20 | 318 |
| 122 | R-20 | Fort Meade: Fort Meade WWTF Option #1 - Public Access Reuse System - This project would consist of sending a portion of the future reclaimed water supply to public access reuse. Fort Meade has approximately 15 more years left on a 25 year agreement to provide industrial reuse to Cargill. Currently, Fort Meade produces 1 MGD of reuse. Of the 1 MGD, only 0.4 MGD is provided to Cargill. The excess and future flow of reclaimed water can potentially be used for public access reuse, offsetting irrigation demands. | PCSWSP Quantity based on total reclaimed water available from the Alired WWTF in 2030. Quantity estimated to be 0.22 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.22 | | | 0.1 | 3 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 318 |

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|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 123 | R-50 | NWRUSA-PCU: Mount Olive WWTF - Public Access Reuse System - This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the NWRUSA-PCU WWTF in 2030. Quantity estimated to be 0.13 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.13 | | | 0.1 | 2 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 317 |
| 124 | R-51 | ERUSA-PCU: Waverly WWTF - Public Access Reuse System - This project would consist of sending reclaimed water flow to be used for public access. Using the reclaimed water to offset irrigation demands could qualify PCU for incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Quantity based on total reclaimed water available from the ERUSA-PCU WWTF in 2030. Quantity estimated to be 0.03 MGD of total reuse water. Capital costs based on transmission piping to new developments. | 0.03 | - | - | 0.0 | 0 | 9 | 225 | 2 | 20 | 0 | 0 | 7 | 70 | 315 |
| 125 | S-1 | Surface water runoff Industry (Rainwater Harvesting/Water Cropping) - This project would consist of using large industrial rooftops or land tracts for rainwater harvesting in conjunction with cisterns for irrigation water or other uses. | PCSWSP Cost and demand estimates will be considered in the future. | - | - | - | 0.0 | 0 | 8 | 200 | 5 | 50 | 0 | 0 | 6 | 60 | 310 |
| 126 | S-6 | Peace River - County Line - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace River. The addition of Bowlegs creek to the Peace River-Ft Meade evaluation will add an additional 1.2 mgd of source capacity, 7,000 acre-ft of minimum storage capacity, and 26 mgd of minimum diversion capacity. The sum of Bowlegs creek and Ft. Meade will yield and minimum diversion capacity of 100 mgd; minimum storage capacity of 29,000 acre-ft; and a source capacity of 7.4 mgd. | PCSWSP Costs based on 20 miles of piping from Ft. Meade to Bartow, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 7.4 | \$275.3 | \$8.31 | 3.0 | 89 | 6 | 150 | 5 | 50 | 0 | 0 | 2 | 20 | 309 |
| 127 | R-7 | Augment Reuse with Lower Floridan Aquifer - The concept of this category would involve using Lower Floridan water to augment reuse supplies. The lower quality water will be used to supplement reclaimed water systems to offset potable water demands. Implementation of augmenting reuse with LFA water could provide the user with incentives. Incentives such as: increased water use permitted quantity, extended permit length, per capita demand offsets, or other incentives. | PCSWSP Costs based on piping, pumping, treatment, and well drilling. Unit costs include both capital and O&M costs. | 25 | | | 10.0 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 300 |
| 128 | S-12 | Payne Creek near Bowling Green - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Payne Creek. Initial modeling results have concluded there is approximately 4.6 mgd of additional flow, with a minimum reservoir size of 13,000 acre-ft and a minimum diversion capacity of 116 mgd. | PCSWSP Costs based on 25 miles of piping from Payne Creek to Bartow, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 4.6 | \$152.5 | \$7.19 | 1.8 | 55 | 6 | 150 | 4 | 40 | 0 | 0 | 5 | 50 | 295 |
| 129 | S-11 | Saddle Creek at P-11 - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Saddle Creek. Initial modeling results have concluded there is approximately 1.75 mgd of additional flow, with a minimum reservoir size of 12,000 acre-ft and a minimum diversion capacity of 35.6 mgd. | PCSWSP Costs based on 5 miles of piping from Saddle Creek to Polk County Utilities, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 1.8 | \$110.5 | \$14.16 | 0.7 | 21 | 7 | 175 | 2 | 20 | 0 | 0 | 5 | 50 | 266 |

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|-----------|------|--|--|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | 30% | | 25% | | 10% | | 25% | | 10% | | |
| | | | | | | | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 130 | G-30 | Polk City: Commonwealth Plant Ground Water Blending- This project would consist of blending Lower and Upper Floridan well water. This concept would consist of drilling a new LFA well for new water supply. The new LFA raw water supply in concept would be blended either with the existing UFA raw water supply or blended with the existing finished water from the WTPs. Water quality and quantity will be evaluated to keep any additional treatment at a minimum at any facility. | PCSWSP Cost analysis includes drilling a lower Floridan well(s). Capital Costs only include the initial planning, permitting and design fees, as well as the infrastructure construction costs, including land costs, legal fees and contingencies. Unit costs include both capital and annual O&M costs. | 0.01 | \$0.87 | \$16.50 | 0.0 | 0 | 6 | 150 | 2 | 20 | 0 | 0 | 9 | 90 | 260 |
| 131 | S-10 | Bowlegs Creek near Ft. Meade - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Bowlegs Creek. Initial modeling results have concluded there is approximately 1.2 mgd of additional flow, with a minimum reservoir size of 7,000 acre-ft and a minimum diversion capacity of 26 mgd. | PCSWSP Costs based on 15 miles of piping from Bartow to Ft. Meade, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 1.2 | \$88.5 | \$15.91 | 0.5 | 14 | 7 | 175 | 2 | 20 | 0 | 0 | 5 | 50 | 259 |
| 132 | S-3 | Use of Land-Fill runoff - This project would consist of piping runoff from the upper layers of Landfills to other locations. The runoff could potentially be used as a supplementary source of reclaimed water or for power generation facilities. | SWFWMD Cost and demand estimates will be considered in the future. | - | - | - | 0.0 | 0 | 4 | 100 | 5 | 50 | 0 | 0 | 8 | 80 | 230 |
| 133 | S-8 | South Prong - Alafia River Potable - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the South Prong Alafia River. Initial modeling results have concluded there is approximately 5.8 mgd of additional flow, with a minimum reservoir size of 15,000 acre-ft and a minimum diversion capacity of 58 mgd. This option requires 15 miles of additional piping from Bartow to the South Prong of the Alafia River. The initial project site will be located at the gauging site within Hillsborough County, from which flow data was used to calculate the available quantities of water. | PCSWSP Costs based on 15 miles of piping from Bartow to the South Prong Alafia River gauge site, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 5.8 | \$155.4 | \$5.90 | 2.3 | 70 | 4 | 100 | 3 | 30 | 0 | 4 | 2 | 20 | 224 |
| 134 | S-4 | Kissimmee River/Lake Hatchineha Watershed - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with a relative amount of flow from the Kissimmee River Basin. This option will require approximately 27 miles of piping from Kissimmee River facility to the grid. A more detailed evaluation of the potential additional water supply from the entire Kissimmee River Basin is currently being done to find future quantities of water for supply. Currently an optionable amount of 5 mgd will be assumed. If the quantity later increases or decreases it will be adjusted appropriately. | PCSWSP Costs based on 27 miles of piping from the head waters of the Kissimmee River to Lake Wales, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 5.0 | \$122.5 | \$5.25 | 2.0 | 60 | 3 | 75 | 3 | 30 | 1 | 31 | 2 | 20 | 216 |
| 135 | S-7 | North Prong - Alafia River Potable - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Alafia River. Initial modeling results have concluded there is approximately 5.2 mgd of additional flow, with a minimum reservoir size of 14,000 acre-ft and a minimum diversion capacity of 81 mgd. The initial project site will be located at the gauging site within Hillsborough County, from which flow data was used to calculate the available quantities of water. | PCSWSP Costs based on 16 miles of piping from North Prong Alafia River Gauge site to Lakeland, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs. | 5.2 | \$139.4 | \$5.94 | 2.1 | 62 | 4 | 100 | 3 | 30 | 0 | 2 | 2 | 20 | 215 |

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|-----------|------|---|---|--------------------|--------------|------------|-------------|-------|----------------|-------|--------------------|-------|-----------------|-------|---------------------|-------|-------------|
| Rank | Code | Description | | MGD | (\$mil) | (\$/Kgal) | Grade | Score | Grade | Score | Grade | Score | Grade | Score | Grade | Score | |
| 136 | S-9 | <p>Confluence - Alafia River Potable - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the confluence of the North and South Prong's of the Alafia River. Initial modeling results have concluded there is approximately 5.3 mgd of additional flow, with a minimum reservoir size of 15000 acre-ft and a minimum diversion capacity of 200 mgd. This option requires 15 miles of additional piping from Bartow to the confluence of the Alafia River.</p> | <p>PCSWSP Costs based on 15 miles of piping from Bartow to the Confluence of the Alafia River, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs.</p> | 5.3 | \$156.6 | \$6.50 | 2.1 | 64 | 4 | 100 | 3 | 30 | 0 | 0 | 2 | 20 | 214 |
| 137 | S-18 | <p>Peace River near Zolfo Springs - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace River. Initial modeling results have concluded there is approximately 13.3 mgd of additional flow, with a minimum reservoir size of 37,000 acre-ft and a minimum diversion capacity of 259 mgd. This project requires an additional 20 miles of piping from Zolfo Springs to the grid. The cost estimate assumes Polk County will receive only 6.65 MGD of the total available supply.</p> | <p>PCSWSP Costs based on 20 miles of piping from Zolfo Springs to Bartow, transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs.</p> | 6.7 | \$188.1 | \$6.23 | 2.7 | 80 | 3 | 75 | 2 | 20 | 0 | 0 | 2 | 20 | 195 |
| 138 | S-17 | <p>Peace Creek Canal Polk County - This project would consist of the construction of a surface water treatment facility and associated reservoir through the development of a regional partnership to supply Polk County and its municipalities with surface water from the Peace Creek. This option assumes 20% of the flow at Bartow.</p> | <p>PCSWSP Costs based transfer pumping, conventional surface water treatment and storage. Unit costs are capital and O&M costs.</p> | 1.1 | \$44.9 | \$9.02 | 0.4 | 13 | 4 | 100 | 3 | 30 | 0 | 0 | 5 | 50 | 193 |

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