

REGULATORY TEAM REVIEW OF SOLUTIONS PLANNING TEAM PROJECTS

The attached table provides the Regulatory Team's review of the Solutions Planning Team's Projects. This review consists of several components: (1) a planning level review for permissibility, (2) identification of consumptive use permit program inconsistencies between the water management districts which may impact each project, (3) identification of Chapter(s) 373 or 403, F.S., impediments, if any, associated with each project, and (4) identification of unusual, non-Chapter 373, F.S., considerations. This information is provided to assist the Solutions Planning Team and that Team's effort to fulfill the statutory requirement to list water supply development project options from which users may choose and that have undergone initial screening for feasibility and have a likelihood of being permissible. (See §373.709(2)(a)2 and FDEP's Guidance for Improved Linkage between Regional Water Supply Plans and the Consumptive Use Permitting Process, March 23, 2012)

The identified projects were all reviewed from a planning level perspective. Moreover, each project has been reviewed as single project; a cumulative review of how projects may perform when considered cumulatively, with other projects, has not been conducted. The fact that there has been a planning-level determination should not be interpreted as a permitting determination or application of a water management district's (WMD's) consumptive use permitting criteria. Before such a determination can be made, all details of the project's design and operation must be prepared by an applicant and submitted to the appropriate WMD in a permit application. The application must then be reviewed for consistency with all of the WMD's consumptive use permitting criteria applicable to the project, including established MFLs and other environmental protection criteria. The proposed projects would be further refined during the final design and the permit application review process to address all permitting criteria. Examples of such refinements may include, but are not limited to, such matters as: (1) setting specific criteria and schedule for when water can be withdrawn, (2) design of riverine intake structure(s), (3) addition of off-line storage facilities, (4) if appropriate, mitigation, (5) wellfield operation program, (6) interference with existing legal users, (7) demand calculation, and >>>list others as appropriate to reflect table>>>>.

In the CFWI region, key criteria in determining whether an application meets the conditions for issuance include whether the proposed consumptive use satisfies resource protection standards and does not result in interference with existing legal users. The CFWI process has previously identified concerns with minimum flows and levels (MFLs) and impacts to wetlands among other water resource constraints.

Many of the reviewed projects are regional projects that propose transport and use of ground or surface water across county and / or water management district boundaries. (These projects are identified in the attached table.) Such projects require consideration of

additional statutory requirements. First, Section 373.223(3), F.S., requires the water management districts to consider the factors listed in this statute in determining whether the proposed use is consistent with the public interest. Further, as required by Section 373.223(3), F.S., each WMD will use the information in its applicable regional water supply plan as the basis for its consideration of the special public interest criteria (“local sources first”) during its review of the permit application. As to transfer of groundwater across district and / or county boundaries, Section 373.2295, F.S., applies and further defines the public interest test of Section 373.223, F.S. The statutory requirements regarding interdistrict transfers of groundwater are further detailed in Appendix >>>.

DRAFT REGULATORY TEAM REVIEW OF SOLUTIONS PLANNING TEAM PROJECTS

11/24/14

Project name	Project description	Planning Level Review for Permittability*	Identification of consumptive use permit program inconsistencies between the WMDs which may impact the project	Identification of Chapter(s) 373 or 403, F.S., impediments or benefits, if any, associated with project	Identification of unusual, non-Chapter 373, F.S., considerations
TECO Polk Power Reuse (Original CFWI Project #100)	This is an ongoing reclaimed water supply project within the SWFWMD portion of Polk County to supply 10 MGD of reclaimed water, expandable to 17 MGD, from the Lakeland, Mulberry and Polk Southwest Wastewater Treatment Plants to the TECO Polk Power Station. The ongoing project is cooperatively funded by TECO and SFWMD. It will be owned by TECO. The three utilities (Lakeland, Mulberry and Polk County) have agreed to supply TECO with excess reclaimed water for a period of 30 years.	The project appears to be reasonably permittable from a planning level perspective based on the following: <ul style="list-style-type: none"> • CUP 11747 was issued by SWFWMD to TECO recognizing the use of reclaimed water at the Polk Power Station. • Further CUP permits should not be required for this project. • Permit modifications may be required from FDEP for the Lakeland, Mulberry and Polk Southwest Wastewater Treatment Plants as the project is expanded to 17 MGD. 	None anticipated. This project is located entirely within SWFWMD.	None known.	None known.
Project RENEW	This Orlando Utilities Commission (OUC) project proposes to provide 9.2 MGD of reclaimed water from the City of Orlando's Iron Bridge Water Reclamation Facility (WRF) or raw wastewater diverted from the Iron Bridge WRF service area and treated at the Conserv II WRF to northwest Orange County to offset potential adverse impacts from OUC's full CUP allocation. Project RENEW was accepted by SJRWMD in 2006 to bring 8.55 MGD of reclaimed water to the City of Apopka and 0.65 MGD to Winter Garden.	The project appears to be reasonably permittable from a planning level perspective based on the following: <ul style="list-style-type: none"> • OUC's existing CUP authorizes the implementation of Project RENEW and provides an impact offset and substitution credit equivalent to 9.2 MGD of permitted water use by OUC. • The FDEP permits for the Iron Bridge WRF and/or the Conserv II WRF may have to be modified to reflect reclaimed water use in northwest Orange County. 	None anticipated. The 2004 Interagency Agreement between SJRWMD and SFWMD grants SJRWMD full permitting authority with regards to implementation of Project RE-NEW.	None known.	None known.
St. Johns River Near Yankee Lake Project	This project will develop a surface water source and would supply water from a nontraditional source. (Note: SJRWMD considers all sources other than fresh groundwater to be nontraditional.) It will also involve the addition of new storage capacity for surface water and will utilize surface water captured from the St. Johns River, a brackish water source. Project benefits would include new potable water that could be used for public supply type use, and possibly for aquifer replenishment.	The project appears to be reasonably permittable from a planning-level perspective. The fact that there has been a planning-level determination should not be interpreted as the determination or application of the SJRWMD's consumptive use permitting criteria. Before such a determination can be made, all details of the project's design and operation must be prepared by a permit applicant and submitted to SJRWMD in a permit application. The application must then be reviewed for consistency with all of the SJRWMD's consumptive use permitting criteria applicable to the project, including established MFLs and other environmental protection criteria. The proposed project would be further refined during the final design and the permit application review process to address all permitting criteria. Examples of such refinements may include setting specific criteria and schedule for when water can be withdrawn, the ongoing operation of the river intake structure, the addition of off-line storage facilities, and, if appropriate, mitigation. The St.	None identified.	None identified.	None identified.

Insert Caveat Language (e.g.: *Each project has been reviewed as single project; a cumulative review of how projects may perform when considered cumulatively, with other projects has not been conducted.)

		<p>Johns River Water Supply Impact Study, completed by the St. Johns River Water Management District in 2012, provides state-of-the-art models and methodologies that are available to assist in completing a project design to address environmental permitting criteria.</p> <p>As noted above, one of the key criteria in the permit application review will be whether the proposed consumptive use is “in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.” See Rule 40C-2.301(2)(i), F.A.C. Minimum flows and levels have been established for the St. Johns River at Lake Monroe [Rule 40C-8.031(1)(i), F.A.C.] and the St. Johns River at SR 44 [Rule 40C-8.031(1)(f), F.A.C.]. These minimum flows and levels would apply if a consumptive use permit were to be sought for this project.</p> <p>Because this is a regional project that would provide water for use across county boundaries, the Governing Board will also consider the factors in Section 373.223(3), F.S., as part of the completed permit application for a specific project, in making a determination of whether the project is consistent with the public interest pursuant to Section 373.223(5), F.S. As required by Section 373.223(3), F.S., SJRWMD will use the information in its applicable regional water supply plan as the basis for its consideration of the special public interest criteria (“local sources first”) during its review of the permit application.</p>			
<p>St. Johns River Near State Road 46 Project</p>	<p>This project will develop a brackish surface water source and will supply water from a nontraditional source. (Note: SJRWMD considers all sources other than fresh groundwater to be nontraditional.) The project includes an intake for surface water from the St. Johns River, brackish surface water treatment and concentrate management facilities, point-of-connection ground storage, and a potable water transmission system.</p>	<p>The project appears to be reasonably permittable from a planning-level perspective. The fact that there has been a planning-level determination should not be interpreted as the determination or application of the SJRWMD’s consumptive use permitting criteria. Before such a determination can be made, all details of the project’s design and operation must be prepared by a permit applicant and submitted to SJRWMD in a permit application. The application must then be reviewed for consistency with all of the SJRWMD’s consumptive use permitting criteria applicable to the project, including established MFLs and other environmental protection criteria. The proposed project would be further refined during the final design and permit application review process to address all permitting criteria. Examples of such refinements may include setting specific criteria and schedule for when water can be withdrawn, design of the river intake structure, the addition of off-line storage facilities, and, if appropriate, mitigation. The St. Johns River Water Supply Impact Study, completed by the St. Johns River Water Management District in 2012, provides state-of-the-art models and methodologies that are available to assist in completing a project design to address environmental permitting criteria.</p> <p>As noted above, one of the key criteria in the permit application review will be whether the proposed consumptive use is “in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.” See Rule 40C-2.301(2)(i), F.A.C. MFLs have</p>	<p>None identified.</p>	<p>None identified.</p>	<p>None identified.</p>

		<p>been established for the St. Johns River at Lake Monroe [Rule 40C-8.031(1)(i), F.A.C.] and at SR 44 near DeLand [Rule 40C-8.031(1)(f), F.A.C.]. The MFLs at both of these locations would apply if a consumptive use permit were sought for this project. Because this is a regional project that would provide water for use across county boundaries, the Governing Board will also consider the factors in Section 373.223(3), F.S., as part of the completed permit application for a specific project, in making a determination of whether the project is consistent with the public interest pursuant to Section 373.223(5), F.S. As required by Section 373.223(3), F.S., SJRWMD will use the information in its applicable regional water supply plan as the basis for its consideration of the special public interest criteria (“local sources first”) during its review of the permit application.</p>			
<p>St. Johns River/Taylor Creek Reservoir</p>	<p>This project will develop a fresh surface water source and would supply water from a nontraditional source. (Note: SJRWMD considers all sources other than fresh groundwater to be nontraditional.) It will also involve the addition of new storage capacity for surface or groundwater and will utilize surface water captured from the St. Johns River and Taylor Creek Reservoir. The project includes an intake for surface water from the St. Johns River, point-of-connection ground storage, and a potable water transmission system. A key component of the project includes off-stream storage of water withdrawn from the St. Johns River in Taylor Creek Reservoir and a possible additional reservoir.</p>	<p>The project appears to be reasonably permissible from a planning-level perspective. The fact that there has been a planning-level determination should not be interpreted as the determination or application of the SJRWMD’s consumptive use permitting criteria. Before such a determination can be made, all details of the project’s design and operation must be prepared by a permit applicant and submitted to SJRWMD in a permit application. The application must then be reviewed for consistency with all of the SJRWMD’s consumptive use permitting criteria applicable to the project, including established MFLs and other environmental protection criteria. The proposed project would be further refined during the final design and the permit application review process to address all permitting criteria. Examples of such refinements may include setting specific criteria and schedule for when water can be withdrawn, design of the river intake structure, the addition of off-line storage facilities, and, if appropriate, mitigation. The St. Johns River Water Supply Impact Study, completed by the St. Johns River Water Management District in 2012, provides state-of-art models and methodologies that are available to assist in completing a project design to address environmental impact permitting criteria.</p> <p>As noted above, one of the key criteria in the permit application review will be whether the proposed consumptive use is “in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.” See Rule 40C-2.301(2)(i), F.A.C. Minimum flows and levels have been established for the St. Johns River at SR 50 [Rule 40C-8.031(1)(h), F.A.C.], the St. Johns River at Lake Monroe [Rule 40C-8.031(1)(i), F.A.C.], the St. Johns River at SR 44 [Rule 40C-8.031(1)(f), F.A.C.], and Taylor Creek [Rule 40C-8.031(1)(e)]. The minimum flows and levels at all four of these locations would apply if a consumptive use permit were to be sought for this project.</p> <p>Because this is a regional project that would provide water for use across county boundaries, the Governing Board will also consider the factors in Section 373.223(3), F.S., as part of the completed permit application for a specific project, in making a</p>	<p>None identified.</p>	<p>None identified.</p>	<p>None identified.</p>

		determination of whether the project is consistent with the public interest pursuant to Section 373.223(5), F.S. As required by Section 373.223(3), F.S., SJRWMD will use the information in its applicable regional water supply plan as the basis for its consideration of the special public interest criteria (“local sources first”) during its review of the permit application.			
Grove Land Reservoir & Stormwater Treatment Area	The proposed Grove Land Reservoir and STA (GLRSTA) is located in northern Okeechobee and southern Indian River counties. The project consists of a 5,000 acre reservoir, 2,000 acre storm water treatment area (STA), intake/discharge structures, conveyance improvements and other associated facilities. The GLRSTA Project is selling storage and treatment, not water. The reservoir water supply would consist of excess stormwater runoff captured from the C-25, C-24, and C-23 basins via the C-25, C-24 and C-23 Canals owned by the South Florida Water Management District (SFWMD). The reservoir would also be able to store water flows from the C-52 watershed via the C-52 flow-way owned by the St. Johns River Water Management District (SJRWMD). As part of this Project, the hydraulic connection between these two water management districts would be re-established. Water from the reservoir would enter the stormwater treatment area (STA) which would be sited north of the reservoir. The STA would reduce total phosphorus (TP) and total nitrogen (TN) concentrations. This treated water could be discharged to the SJRWMD C-52 flow-way (and subsequently north to the St. Johns River) or to the SFWMD’s C-25 Canal (and subsequently south to potential water users).	The project appears to be reasonably permissible from a planning-level perspective. To the extent a water use permit is required for the diversion of water, it is anticipated that such permit would be issued by SFWMD since the source supply is in SFWMD. The fact that there has been a planning-level determination should not be interpreted as the determination or application of the district’s consumptive use permitting criteria. Before such a determination can be made, all details of the project’s design and operation must be prepared by a permit applicant and submitted to SFWMD in a permit application. The application must then be reviewed for consistency with all of the SFWMD’s consumptive use permitting criteria applicable to the project. The proposed project would be further refined during the final design and permit application review process to address all permitting criteria. To the extent that future projects include actual water withdrawals from the St. Johns River in SJRWMD resulting from augmented flows from this project, the SJRWMD’s consumptive use permitting criteria would be applicable to those future withdrawal projects. One of the key criteria in the permit application review will be whether the proposed consumptive use is “in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.” MFLs have been established at various locations in the St. Johns River downstream of the project. All of the relevant MFLs in the St. Johns River would be applicable in the evaluation of the permits for those future withdrawal projects. See, for example, the permissibility discussion for the following projects: St. Johns River/Taylor Creek, St. Johns River Near Yankee Lake and St. Johns River Near SR 44. Because this is a regional project that would provide water for use across county boundaries, the Governing Board will also consider the factors in Section 373.223(3), F.S., as part of the completed permit application for a specific project, in making a determination of whether the project is consistent with the public interest pursuant to Section 373.223(5), F.S. As required by Section 373.223(3), F.S., SJRWMD and SFWMD may use the information in its applicable regional water supply plan as the basis for its consideration of the special public interest criteria (“local sources first”) during its review of the permit application.	None identified.	In addition to a water use permit, this project would involve activities requiring an environmental resource permit pursuant to Part IV of Chapter 373, F.S. That permit would likely be issued by SJRWMD, since the project would be partially within SJRWMD, and would divert new water flows into the SJRWMD that could potentially impact the SJRWMD’s Upper St. John River Basin Project. The proposed project would need to meet all applicable ERP permitting criteria. Of particular importance would be criteria concerning not increasing flooding and not causing a violation of water quality standards.	None identified.
C-1 Rediversion Project (C-1 Borrow Pit Reservoir)	The project proposal is for an enhancement to the C-1 Rediversion Project currently being constructed by SJRWMD, to include modification of that project for a below grade reservoir; intake with adjustable weir; stormwater pump station; water quality treatment system and Supervisory	The project appears to be reasonably permissible from a planning-level perspective. This project would essentially be a modification of a larger project already permitted, and currently being constructed by SJRWMD. A modification to the ERP project would be required. The fact that there has been a	None identified.	None identified.	None identified.

	Control and Data Acquisition (SCADA) system.	<p>planning-level determination should not be interpreted as the determination or application of the environmental resource permitting criteria. Before such a determination can be made, all details of the project's design and operation must be prepared by a permit applicant and submitted as part of the permit application. The application must then be reviewed for consistency with all of the environmental resource permit criteria applicable to the project.</p> <p>To the extent that future projects include actual water withdrawals from the St. Johns River in SJRWMD resulting from augmented flows from this project, the SJRWMD's consumptive use permitting criteria would be applicable to those future withdrawal projects. One of the key criteria in the permit application review will be whether the proposed consumptive use is "in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S." MFLs have been established at various locations in the St. Johns River downstream of the project. All of the relevant MFLs in the St. Johns River would be applicable in the evaluation of the permits for those future withdrawal projects. See, for example, the permissibility discussion for the following projects: St. Johns River/Taylor Creek, St. Johns River Near Yankee Lake and St. Johns River Near SR 44.</p> <p>Because this is a regional project that would provide water for use across county boundaries, the Governing Board will also consider the factors in Section 373.223(3), F.S., as part of the completed permit application for a specific project, in making a determination of whether the project is consistent with the public interest pursuant to Section 373.223(5), F.S. As required by Section 373.223(3), F.S., SJRWMD may use the information in its applicable regional water supply plan as the basis for its consideration of the special public interest criteria ("local sources first") during its review of the permit application.</p>			
TWA 160 Acre Site Indirect Potable Reuse Reclaimed Water	Toho Water Authority (TWA) proposes to develop an indirect potable reuse project using its rapid infiltration basins located on the Lake Wales Ridge within the high recharge area for the Floridan Aquifer. Through a high rate application of reclaimed water, a groundwater bubble would be created under the ridge. Wells would be constructed down-gradient of the groundwater bubble to draw water for treatment after being transmitted and filtered through over one thousand feet of sand. The permitted application rate to the RIBs could allow up to 5 mgd of production.	<p>The project appears reasonably permissible from a planning level perspective based on these factors:</p> <ul style="list-style-type: none"> • The 160 Acre Rapid Infiltration Basin site has received a variance from FDEP allowing a high rate of application at double the regulatory rate. • The project will require FDEP permitting for the treatment of withdrawn groundwater and for application of the reclaimed water. Although a project of this nature may not have been previously permitted by FDEP, there is no known fatal flaw to preclude DEP approval. • The project should reasonably meet the Water Management District requirements for groundwater withdrawal. • The project would withdraws 80-90% of the quantity of reclaimed water applied and does not increase the quantity of water withdrawn from the aquifer. 	None anticipated.	None known.	The key permitting issues will be associated with FDEP requirements for water quality of the reclaimed water to be applied to the RIBs and the degree of monitoring and treatment required for the finished water.

<p>TWA West Ditch Stormwater for Reuse Augmentation Reclaimed Water</p>	<p>This Toho Water Authority (TWA) project proposes to capture stormwater from the drainage ditch that drains the west side of the older portion of the City of Kissimmee and passes in proximity to the TWA South Bermuda Water Reclamation Facility (WRF). The stormwater would be diverted to several storage ponds to be constructed on institutional land adjacent to the South Bermuda WRF and treated at the South Bermuda WRF in conjunction with the permitted withdrawal of surface water from Shingle Creek to supplement reclaimed water from the facility. The project is estimated to provide approximately 1.5 mgd with a 60% reliability. The project would also provide some water quality benefits to Lake Tohopekaliga through the diversion/removal of the discharge of nutrients to the lake.</p>	<p>The project appears to be reasonably permissible from a planning level perspective based on the following:</p> <p>The project will require a CUP for the withdrawal and potentially an ERP for the stormwater holding/retention pond (although DEP may take final action on the ERP under its existing MOU with SFWMD).</p> <p>Provided the holding/retention ponds do not have berms in excess of three feet there should not be any special permitting required related to an impoundment. It is not anticipated that berms will be in excess of three feet.</p> <p>Permitting will be required from FDEP for treatment of stormwater for mixing with the reclaimed water produced by the South Bermuda WRF.</p>	<p>None anticipated.</p>	<p>None known.</p>	<p>None known.</p>
<p>Polk County Distributed Wellfield Project</p>	<p>The project includes a total of 16 new Lower Floridan aquifer (LFA) wells distributed throughout Polk County at or near the project partner's existing water treatment facilities. This project will provide an additional 9.84 million gallons per day (mgd) of additional groundwater for the region. Because the LFA is expected to be brackish in this area, water withdrawn from the proposed wells will be blended with fresh Upper Floridan aquifer (UFA) water to meet the required drinking water standards so specialized treatment would not be necessary.</p> <p>This distributed Lower Floridan project has been identified as an alternative to a portion of the projected public supply from the permitted Polk County Southeast Wellfield project. The Project would spread the LFA withdrawals across a larger area than just the Southeast Wellfield Project, potentially reducing resource impacts. If this project proceeds forward and is permitted for the full 9.84 mgd, the remaining 20.16 mgd out of the 30 mgd of future demands of this region will still need to come from the Southeast Wellfield.</p>	<p>There are concerns on the permissibility of this project as currently proposed, based on a number of factors. All of the proposed wells are located in the Southern Water Use Caution Area (SWUCA), where 7 out of 15 water bodies are not meeting the minimal levels adopted by SFWMD. Based on the groundwater modeling conducted by the CFWI Hydrologic Assessment Team (HAT), the withdrawals from this project may produce up to 0.3 feet of additional lowering of water levels in the UFA beneath lakes not meeting minimum levels. A review of projected water level drawdowns in the surficial aquifer indicates the potential for the project to also result in the lowering of non-MFL water bodies. The project is also anticipated to cause further lowering of the Lake Wales Ridge wells level that is projected to be below the threshold value as a result of 2015 pumping. Another concern is an additional 3.4 mgd of UFA water above the current permitted allocation would need to be withdrawn in order for the LFA water blending to successfully eliminate the need for specialized treatment.</p> <p>The planning level review indicates concern regarding satisfying conditions for issuance for the project's duration, as may be requested, including potential interference with existing legal users and water resource impacts. The project's demand is a related matter.</p> <p>In order for this Project to satisfy the permitting criteria, refined groundwater modeling may be necessary to hone in on the impacts to MFL water bodies identified in the zone of influence. In addition, refinements to the wellfield operating program, modification of the actual withdrawal rates, and a detailed environmental monitoring program may be necessary during the permit application process to minimize resource impacts and satisfy the conditions for issuance of a permit.</p>	<p>Each District has slightly different numeric wetland impact criteria that may affect the permissibility of Projects differently, depending on the permitting agency. There may be other permitting inconsistencies between the Districts. However, there is an existing Memorandum of Understanding (MOU) between the three Districts that details how the review of water use applications that involve inter-district transfers of water and applications near District borders are handled. This is designed to alleviate inconsistencies in permitting criteria.</p>	<p>There is a potential concern of the Project regarding the interference of existing legal users of water and potential impacts to MFL water bodies. This would need to be evaluated in further detail during the application process.</p>	<p>The feasibility of this project may be dependent upon funding, and the steps necessary to secure that funding. Polk County and SFWMD are in the process of finalizing an agreement referred to as the Central Florida Development Agreement, which is the foundation for the funding of alternative water supply projects within Polk County and addresses the formation of a regional water supply entity between Polk County Utilities and their municipal project partners. In addition, the Polk County Southeast Wellfield project has already been permitted to supply up to 30 mgd of base-load public supply to many of the same municipal partners identified for the Distributed Wellfield Project. The feasibility of this Project and the actual quantity of</p>

					groundwater withdrawals will be dependent on execution of the above development agreement and also Project Participation Agreements for this Project as well as for the Southeast Wellfield Project.
South Lake Wellfield	<p>The South Lake Wellfield project is a collaborative effort between the members of the South Lake Regional Water Initiative (SLRWI) which includes Lake County government, the communities of Clermont, Mascotte, Groveland, Minneola and Montverde and Lake Utility Services, Inc (LUSI).</p> <p>The project involves the development of a Lower Floridan aquifer (LFA) wellfield or series of wellfields located in south Lake County south of the City of Clermont. A total of four production wells are planned to deliver a total of 12.73 million gallons per day (mgd), which is the estimated deficit of demand for the SLRWI Area in 2035. The project includes the construction of a new wellfield(s), a brackish groundwater treatment facility, a concentrate disposal well, a water storage tank, a transmission pump station and transmission mains to facilitate water wheeling among the SLRWI partners.</p>	<p>This project appears to be reasonably permissible from a planning level perspective, although concerns exist regarding satisfying conditions for issuance for the project's duration, as may be requested, including potential interference with existing legal users and water resource impacts. The project's demand is a related matter.. The fact that there has been a planning-level determination should not be interpreted as the determination or application of the appropriate water management district's consumptive use permitting criteria. Before such a determination can be made, all details of the project's design and operation must be prepared by a permit applicant and submitted to district in a permit application. The application must then be reviewed for consistency with all of the district's consumptive use permitting criteria applicable to the project, including established MFLs and other environmental protection criteria. The proposed project would be further refined during the final design and the permit application review process to address all permitting criteria.</p> <p>The project partners listed above have already entered into an interlocal agreement setting forth the structure for cooperatively bringing this water supply project forward.</p> <p>The SLRWI members are in the process of conducting a study to help finalize quantities of water required by each entity, perform further groundwater modeling including lowering existing wells to the Lower Floridan to compliment the South Lake Wellfield project, and recommend water wheeling alternatives between SLRWI members. Results of the study, expected by mid to late 2015, are expected to identify the best strategy and combination of projects to reduce MFL impacts while yielding sufficient water to satisfy future area demands.</p> <p>Project refinements may occur prior to the application process. The actual number and placement of wells will be determined by the outcome of exploratory testing of the Lower Floridan and the modeling effort. The size and depth of wells will also depend on the findings of the exploratory testing.</p> <p>Modeling of this wellfield project by the CFWI Hydrologic Assessment team (HAT) indicates potential impacts to four water bodies with adopted minimum flows and levels (MFLs). North and South Lake Apshawa has 0.3 feet of impact in the Upper Floridan aquifer below the lakes, and Starbuck and Wekiwa springs have 0.1 and 0.2 cubic feet per second (cfs) impact,</p>	<p>Each District has slightly different numeric wetland impact criteria that may affect the permitability of Projects differently, depending on the permitting agency. There may be other permitting inconsistencies between the Districts. However, there is an existing Memorandum of Understanding (MOU) between the three Districts that details how the review of water use applications that involve inter-district transfers of water and applications near District borders are handled. This is designed to alleviate inconsistencies in permitting criteria.</p>	<p>There is a potential concern of the Project regarding the interference of existing legal users of water and potential impacts to MFL water bodies. This would need to be evaluated in further detail during the application process.</p>	<p>None identified.</p>

		<p>respectively. The model also predicts non-MFL impacts in one area of Seminole County. Although the model does show impacts, producing water from the Lower Floridan should minimize the potential for impacts when compared to traditional Upper Floridan sources.</p> <p>At a minimum, the following water bodies would need to be considered during project design and permitting: Boggy Marsh, Cherry Lake, Lake Emma, Lake Louisa, Lake Lucy, Lake Minneola, North Lake Apshawa, Pine Island Lake, South Lake Apshawa, Rock Springs, Starbuck Springs, Wekiwa Springs.</p>			
Reedy Creek Recharge	<p>The Reedy Creek Recharge (RCR) project includes several components, including stormwater compensatory treatment, flood protection and surficial aquifer recharge. This effort meets multiple outcomes in flood protection, water quality, natural systems and water supply.</p> <p>The project is a stormwater treatment project that initially focuses 4 MGD of recharge to areas that are shown in the regional groundwater model to have lower surficial aquifer conditions now that are projected to worsen in the future. This project will develop-protect existing groundwater withdraws in the vicinity of the enhanced recharge while providing quantifiable water quality compensatory treatment alternative for future or in-lue of existing stormwater treatment.</p> <p>The project components include a water elevation control weir to protect the area from flooding; an intake structure and low-head pump; and receiving wetlands/surface water storage areas where the recharge can take place. Permit authorization will be sought through the Environmental Resource Permitting (ERP) process. Further, an applicant may pursue options to modify existing groundwater withdraw permits in the area to recognize the resulting enhanced recharge conditions that become apparent with the operation of the system. The ultimate finished water capacity of the entire watershed area is in the range of 60-70 MGD.</p>	<p>The project is most likely permissible through the Environmental Resource Permit process. The final design will require an evaluation of the potentially altered downstream ecosystems and evaluating the enhanced wetland system performance upstream. Currently, there are no Consumptive Use Permits associated with this project. Any Consumptive Use Permits proposed that will benefit from the RCR will need to be evaluated based on the Water Management District's Conditions for Issuance and are most likely to be permissible.</p>	None identified.	None identified.	None identified.
City of Winter Garden - Conceptual Plan for Stormwater Capture, Reuse & Aquifer Recharge	<p>The Conceptual Plan for Stormwater Capture, Reuse and Aquifer Recharge is developed by Andreyev Engineering, Inc., to present an approach to capturing stormwater runoff for reclaimed water augmentation and for artificial aquifer recharge when irrigation water is not required. The project includes the following: cost analysis, aquifer recharge basin analysis, storage capacity, ground-water flow modeling, review of available properties for recharge, identify and review available surface water bodies, identification and selection of source stormwater sites, identification of artificial aquifer recharge sites to discharge the excess reclaimed water sources, and review of the drainage basin data from the City's Drainage Master Plan and estimation of the amount of runoff. The projected stormwater capture and augmentation of the reclaimed</p>	<p>The conceptual level details provided in the project summary indicate an excellent potential for permissibility. The described activities at the four sites, which include the construction of ponds and rapid infiltration basins, conversion of wetlands to recharge systems, conveyance infrastructure, and a mechanical filter and disinfection system, all appear reasonably permissible from a planning perspective. The project activities will require ERP (Environmental Resource Permits) prior to construction, as the described activities exceed ERP thresholds. The project may also require a WUP/CUP (Water Use/Consumptive Use Permit) for proposed pumping of stormwater from a pond to a reclaimed water system, if permitting thresholds are exceeded. Other 403 permits may also be required from the FDEP (Florida Department of Environmental Protection) for the construction of rapid infiltrations systems or water treatment system. The ERP</p>	None identified.	None identified.	None identified.

	water sources is 2.0 million gallons per day (mgd) and the projected aquifer recharge is up to 1.5 mgd.	permit review process will need to address the potential for adverse quantity and quality impacts, and will need to address potential wetland impacts to demonstrate no functional loss of wetlands. Co-mingling of reclaimed water into ponds that discharge to impaired water bodies may need to demonstrate net improvement of water quality for the combined discharges.			
Lake Wailes Recovery Project	<p>The Lake Wailes Recovery Project is a stormwater transmission project to transfer flows from the Peace Creek Canal (PCC), when available, to Lake Wailes for Minimum Flows and Levels (MFL) recovery. Lake Wailes is listed by the Southwest Florida Water Management District as not meeting its established minimum water levels. This is an alternative water supply (AWS) project that will develop an augmentation water source for MFL recovery from a nontraditional stormwater supply. There are two proposed routing alternatives. The North Corridor alternative allows for the augmentation of North Lake Wales that is then conveyed to Lake Wailes, The South Corridor alternative utilizes a proposed Rapid Infiltration Basin (RIB) west of Lake Wailes.</p> <p>The projected finished water capacity is 1.4 mgd based on the estimated annual average flows available. The project components will have a 6.0 mgd maximum flow design capacity, based on the high-flow availability of supply from the PCC and the viable capacity of pipeline and pumping station. The beneficial recovery of the lake level is estimated at 0.2 to 2 feet.</p>	The project summary provides an excellent summary of potential permissibility. The project appears reasonably permissible from a planning perspective. A consumptive use permit will be required for either option as the project involves the diversion of water for either lake augmentation or a RIB. The permitting evaluation process will include the review of potential impacts to downstream users of the PCC including wetlands, surface water and existing legal users based on the withdrawal quantity and schedule. The project will also most likely require an Environmental Resource Permit due to the proposed pipeline construction and possibly a permit from the Florida Department of Environmental Protection for the RIB or a water quality treatment facility. The Project summary also indicates a necessity for the review of the potential of water quality/nutrient loading of Lake Wailes.	None identified.	None identified.	None identified.
Polk County Regional Alafia River Basin Project SU150	<p>Demand projections show that utilities within Polk County will need 10 mgd of water supply in the western portion of the county for 2035 and beyond. In order to meet this demand, the Polk County region has been pursuing several possible sources of supply. This includes harvesting some of the remaining yield from the Alafia River which would require locating one or more intake structures, which could be along the south or north fork, or a combination of locations. The project requires developing storage options, permitting, conveyance, and designing and building a surface water treatment plant.</p> <p>Over 40% of the Alafia River basin is within Polk County. The river water supply source is seasonal, with available flow in the rainy season, and less or no flow available in the dry season. Storage methods will be needed to equilibrate the supply availability with the demand. A side stream reservoir, aquifer storage and recovery project, and/or other basin management may be necessary to conjunctively use the river supply with other sources or stored water.</p>	A Consumptive Use Permit has not been issued for this project. Upon submittal of an application, the project will require an evaluation of the District's Conditions for Permit Issuance as well as the Recovery Strategies for the Southern Water Use Caution Area, Northern Tampa Bay Water Use Caution Area, and Dover/Plant City Water Use Caution Area.	The project will require an evaluation of permissibility in relation to the Southwest Florida Water Management District's Water Use Caution Areas including the Southern Water Use Caution Area, the Northern Tampa Bay Water Use Caution Area, and the Dover/Plant City Water Use Caution Area.	None identified.	None identified.

Judge Farms Project	<p>Judge Farms Project is stormwater water storage facility utilizing natural topography to create approximately a 200 acre reservoir. It is currently being permitted as a 6 MGD supplemental reclaimed water source. The water storage facility receives inflows pumped from three tributaries, the Judge Farms ditch, Mill Slough, and the City of Kissimmee East City Drainage Ditch. Additionally the reservoir will receive stormwater runoff from the adjacent development of the remaining Judge Farms property, approximately 400 acres, stormwater flow from the Heritage Park complex and direct rainfall.</p>	<p>Permits for this project are currently under review by the South Florida Water Management District. A Request for Additional Information was sent by the South Florida Water Management District on April 14, 2014 requesting clarification and additional information pertaining to the Consumptive Use Permit. In part, the outstanding issues associated with the permit application include documentation to support a reasonable demand, reasonable assurances that the project will not interfere with existing legal uses of water particularly those downstream of the proposed diversion, the submittal of an operating plan, reasonable assurances that the proposed withdrawals and hydrologic alterations will not adversely impact wetlands and other surface water features, and a modification of an existing Environmental Resource Permit.</p>	<p>None identified.</p>	<p>None identified.</p>	<p>None identified.</p>
----------------------------	---	--	-------------------------	-------------------------	-------------------------