

Appendix O

Supplemental Irrigation Policy

This Appendix addresses the potential need for a developer-provided, onsite supplemental supply system for meeting irrigation demands. It identifies the information to be provided, conditions under which a supplemental supply is required, and conditions for implementation of a supplemental supply if it is determined to be required.

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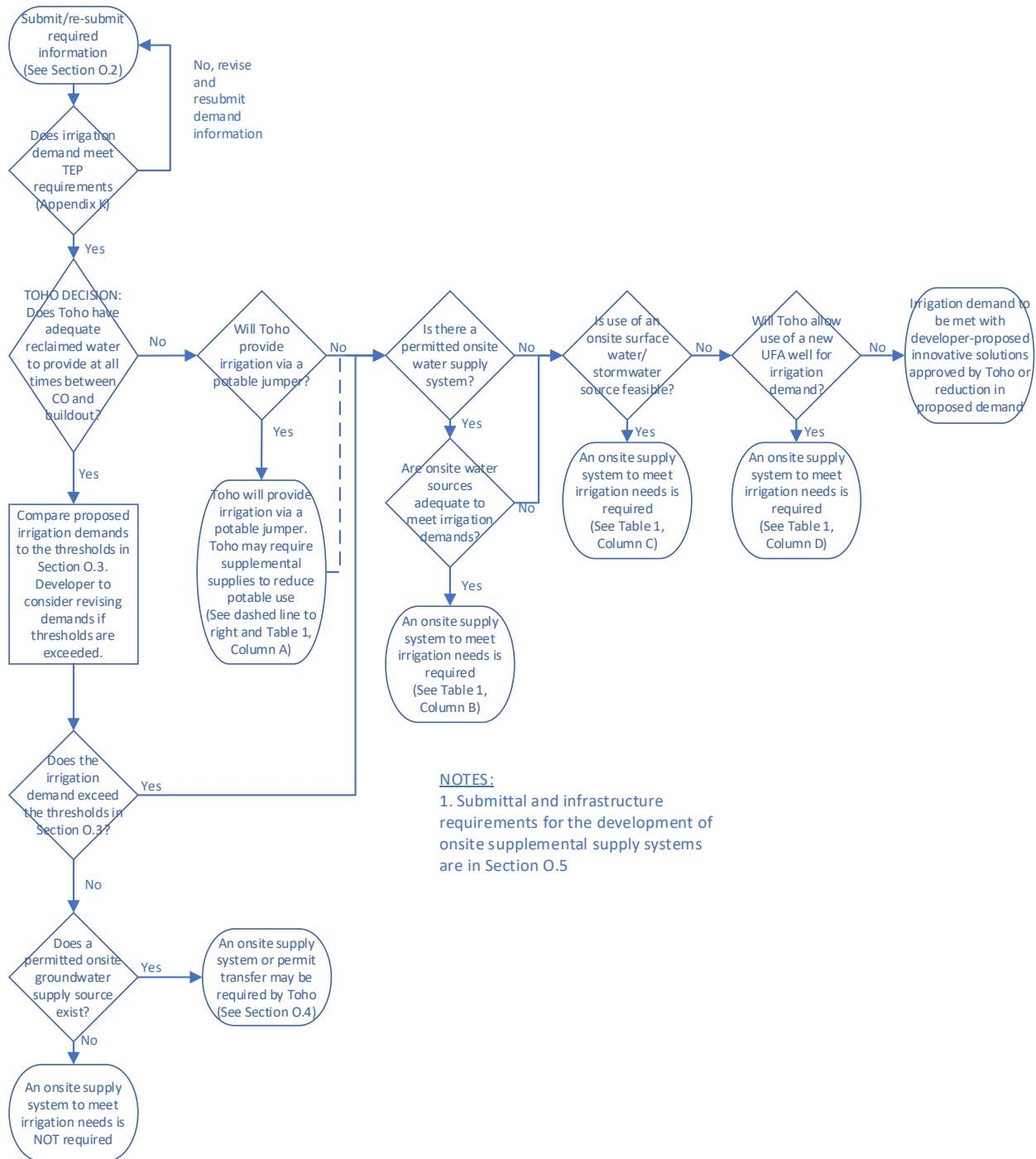
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Section O.1 - Review Process for Determining if a Developer-Provided, Onsite Supplemental Irrigation Supply System is Required

The process of determining if a development requires an onsite supplemental supply system is presented below. In the event that a development is not required to construct a developer-provided, onsite supplemental irrigation system per these requirements, then construction of such a system may still be authorized, but will require approval by the CEO.



Section O.2 – Initial Submittal Requirements

Initial submittal requirements are as follows:

Submittal Requirement	<i>Developments Which Do Not Require a Master Utility Plan (MUP)</i>		<i>Developments Which Require a MUP</i>
	Residential Developments in Excess of 250 Units	All Other Projects without a MUP	All
Projected Wastewater Flow - Entire Project 184 gpd/DU Residential Toho Standards for Non Residential	X	X	X
Projected irrigable area and irrigation demand (Ave Day and Max Day) at buildout (as required in Appendix K)	X	X	X
An annual and monthly water balance (reclaimed water supply vs. irrigation demand)	X	X	X
Projected annual wastewater flow/reclaimed water supply until build-out	X		X
Projected annual irrigable area and irrigation demand until build-out	X		X
Annual water balance until buildout	X		X
Monthly water balance until buildout	X		X

Section O.3 - Irrigation Use Limits for Residential Developments

- Comply with the limits of the Toho Efficiency Program as presented in Appendix K including annual application rate (inches/year) for all irrigated areas.
- Additional average day and maximum day volumetric limits:

Area	Water Use Limit On A Per Lot Basis	
	Average Day (gpd per lot)	Maximum Day (gpd per lot)
Entire Development (includes all lots, common areas, etc.)	234	284*
Common Areas (ROWs, trails, amenity centers, etc.)	50	100*

* Maximum day volumetric limits may be exceeded with the use of a permanent supplemental supply controlled and managed by the developer

Section O.4 - Supplemental Supply Options and Other General Requirements

The supplemental supply process refers to several supplemental supply options. The supply options in addition to other general requirements are detailed below.

- All customers shall use available reclaimed water from Toho before using approved supplemental supply sources.
- Toho reserves the right to request transfer of an on-site supplemental system to be transferred to Toho's ownership. Systems transferred to Toho (generally Floridan Aquifer Wells or large (>200,000 gpd) surface water or surficial aquifer well systems with supplemental treatment) may be eligible for reimbursement of costs in the form of cash or system development charge credits at Toho's discretion up to that incurred for construction and connection of the water source to Toho's system.
- Toho reserves the right to inspect supplemental supply systems to ensure available reclaimed water supplies are used before supplemental supply sources. However, Toho has the right to request a development to use their available supplemental supply sources in lieu of reclaimed water to assist the operation of Toho's regional reuse distribution system
- Depending on the supplemental supply source type, Toho reserves the right to limit supplemental supply usage only to common areas not connected to Toho's reclaimed water supply system
- Toho may require the development of an onsite supplemental irrigation system or transfer of the water use permit when there is an existing and permitted Floridan aquifer source on site.
- If a potable water jumper will be used, then Toho may require the use of the Developer-Provided, Onsite Supplemental Irrigation Supply System prior to use of potable water for irrigation.

- Supplemental supplies shall be metered using a Toho-approved meter. Developer owned and maintained supplemental supplies shall be reported to Toho on a monthly basis.

Section O.5 - On-Site Supplemental Supply System Infrastructure and Submittal Requirements

If a supplemental supply system is determined to be required, then the following additional submittals will be required prior to plan approval:

- Proposed supplemental supply sources and an estimate of the annual and monthly supply available from each source to meet supplemental supply demands.
- A plan depicting the following:
 - The location of all connections to Toho's reuse distribution system and the connection configuration (e.g., backflow and meters)
 - The location of supplemental supply sources/infrastructure (e.g., wells, surface water intakes/pumps, etc.)
 - The location of all connections between the supplemental supply systems and the internal development reuse distribution systems and the connection configuration. This can be a direct connection between the supplemental supply source and the reuse distribution system, or a separate supplemental supply distribution system and the reuse distribution system (if the developer elects to segregate segments of the development to be served only supplemental supplies on either a permanent or temporary basis).
- Detailed internal reuse distribution system layout
- Detailed internal supplemental supply distribution system layout (if applicable)
- The location of all connections to Toho's reuse distribution system and the connection configuration (e.g., backflow and meters)
- The location of supplemental supply sources/infrastructure (e.g., wells, surface water intakes/pumps, etc.) and details on the design of these systems (e.g., pumps, meters, valves, etc).
- The location of all connections between the supplemental supply systems and the internal development reuse distribution systems and the connection configuration.
 - This can be a direct connection between the supplemental supply source and the reuse distribution system, or a separate supplemental supply distribution system and the reuse distribution system (if the developer elects to segregate segments of the development to be served only supplemental supplies on either a permanent or temporary basis).

These connections shall be equipped with a control valve that will allow the reuse distribution system to use available reclaimed water before supplemental supply sources.

Table 1. Supplemental Supply Sources and Conditions

Summary of Applicable Options for Supplemental Sources		Column A	Column B	Column C	Column D
	Potable Jumper	Existing Permitted On-site Source(s) Available	New on-site surface water, stormwater, or surficial aquifer wells used to supplement existing sources or meet peaks	Developer-Provided, Supplemental Irrigation Supply System Using a New Floridan Aquifer Groundwater Source When Other Existing or New Sources are not Adequate	
Criteria	Subject to Toho's sole review and approval	Existing permitted sources to be prioritized for supplemental needs to the extent feasible.	New on-site surface water, stormwater, or surficial aquifer wells used to supplement existing sources or meet peak flows		
Meets All Demands?	Other supplemental sources may be required by Toho to offset some or all potable irrigation demands	If existing on-site sources do not meet demands, then other supplemental sources will be required by Toho to offset remaining irrigation demands	If this type of supplemental source does not meet demands, then other supplemental sources will be required by Toho to offset remaining irrigation demands	Subject to Toho review and approval in addition to issuance of applicable Water Use Permit.	
Supplemental Source Type					
Surface Water / Surficial Aquifer Wells Generally suitable for irrigating common areas or other isolated private systems (i.e. commercial projects with no public owned reuse systems). Supplemental systems shall be owned, operated and maintained by the developer.	-	OK	OK	--	
Surface Water / Surficial Aquifer Wells with Supplemental Treatment Considered for all irrigation demands on larger projects (>200,000 gallons/day where reuse piping systems can be fully isolated from Toho's main reuse system). Systems of this scale may be either owned, operated and maintained by the developer or transferred to Toho ownership (including WUP), operation, and maintenance at Toho's sole discretion.	-	OK	OK	--	
Floridan Aquifer Wells Generally suitable for supplementing all irrigation designed as reuse systems. Floridan aquifer wells may be either owned, operated and maintained by the developer or transferred to Toho ownership (including WUP), operation, and maintenance at Toho's sole discretion.	-	OK	--	OK, with Toho Approval	
Billing for services	All customers will be metered and billed in accordance with Toho's billing policies for potable jumpered systems.	For systems or the portions of systems that are solely self supplied (no active service from Toho), no monthly base fee or usage charges will apply for the unserved portion of the system. Where services are provided by Toho, monthly base charges and water provided by Toho will be subject to Toho's adopted rates and fees. No usage charges apply to water self supplied by the Developer.			
Discontinuation when reuse becomes available	Toho will convert the system to reuse with no action from the developer unless provided by the DSA.	For systems not transferred to Toho, the supplemental supply may be retained by the developer for a back-up source subject to Toho's review and compliance with all applicable regulatory requirements.			