THE NATURE CONSERVANCY COMMENTS - JULY 15, 2016

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Comments are highlighted and shown as strike/underline text or as inserted comments on DEP document distributed at 6/30/16 teleconference

Example Draft Language for Definition of Harm to the Water Resources

As discussed at the last regulatory team meeting:

"Harmful to the water resources" or "Harm to the water resources" means ~~is~~ an adverse impact to ecosystem structure or ecosystem functions ~~as~~ evaluated as provided by the Conditions for Issuance of Permits in 40X-2.301 (1)(g) and ~~in~~ the Applicant's Handbook.

Commented [[=]1]: Clearly ties the definition to the phrase used in the statute (harmful to the water resources) and the COI (harm to the water resources) and provides a clear link between the definition and the COI which was previously missing

Significant harm is more severe than harm and is the fundamental adverse alteration of ecosystem structure, ecosystem functions, or important environmental values recognized in the State Water Resources Implementation Rule (Rule 62-40.473, F.A.C.).

February 3. 2016 COI (those in color are those discussed in this document):

40X-2.301 Conditions for Issuance of Permits.

(1) To obtain a consumptive use permit, renewal, or modification, an applicant must provide reasonable assurance that the proposed consumptive use of water, on an individual and cumulative basis:

(a) Is a reasonable-beneficial use;

(b) Will not interfere with any presently existing legal use of water; and

(c) Is consistent with the public interest.

(2) In order to provide reasonable assurances that the consumptive use is reasonable-beneficial, an applicant shall demonstrate that the consumptive use:

(a) Is a quantity that is necessary for economic and efficient use.

(b) Is for a purpose and occurs in a manner that is both reasonable and consistent with the public interest;

(c) Will utilize a water source that is suitable for the consumptive use;

(d) Will utilize a water source that is capable of producing the requested amount;

(e) Except when the use is for human food preparation or direct human consumption, will utilize the lowest quality water source that is suitable for the purpose and is technically, environmentally, and economically feasible;

(f) Will not cause harm to existing offsite land uses resulting from hydrologic alterations;

(g) Will not cause harm to the water resources of the area in any of the following ways:

1. Will not cause harmful water quality impacts to the water source resulting from the withdrawal or diversion;

2. Will not cause harmful water quality impacts from dewatering discharge to receiving waters;

3. Will not cause harmful saline water intrusion or harmful upconing;

4. Will not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters; and

5. Will not otherwise cause harmful hydrologic alterations to the water resources of the area;

(h) Is in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.; and

(i) Will not use water reserved pursuant to Subsection 373.223(4), F.S

PLEASE NOTE THIS IS A DRAFT INTENDED TO DRIVE FURTHER DISCUSSION ON THESE ISSUES WITH THE REG TEAM.

Each section below is color coded to show where language came from.

In addition, for each section, a table including the sections of each District's Applicant's Handbook is provided for convenience only. Some have been abbreviated in an attempt to include only relevant portions, but I tried to note those with ellipses. You may want to refer to the entire handbook.

For the purposes of the reg team review, the concept language is color coded for convenience:

Green Text = COI Language
Black Text = SFWMD Handbook language
Purple Text = SJRWMD Handbook language
Red Text = SWFWMD Handbook language
Brown Text = STOPPR+2 draft language
Underlined text represents small deviation from one of the above.

Harmful water quality impacts to the water source resulting from the withdrawal or diversion

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
3.5 Pollution of the Water Resources The issuance of a water use permit shall be denied if the withdrawals would cause significant degradation of surface water or groundwater quality through the induced movement of pollutants into a water resource that is not polluted. Significant water quality degradation may result from altering the rate or direction of movement of pollutants, as evidenced by the predicted influence the water withdrawals would have on inducing movement of the pollutants or as indicated by a sustained increase in background levels in pollutant concentrations.	3.5 POLLUTION OF THE WATER RESOURCES. A WUP application shall be denied if a water withdrawal would cause harmful water quality impacts to the water sources resulting from the withdrawal or diversion, causing pollutants to migrate in the aquifer. Generally, movement of a contamination plume is considered harmful if the withdrawal would cause violations to water quality standards in areas that previously would have been unaffected. In evaluating this criterion, the District will consider: A. Whether the withdrawal would alter the rate or direction of movement of a plume (horizontally or vertically) that has been defined by the DEP or the EPA. B. Whether the withdrawal would increase the potential for harm to the public health and safety.	None?	The issuance of a water use permit shall be denied if the withdrawals would cause significant degradation of surface water or groundwater quality through the induced movement of pollutants into a water resource that is not polluted. "Significant degradation of surface or groundwater quality" means: (a) the induced movement of pollutants into a water source that is not polluted, which causes a violation of water quality standards in areas that would have previously been unaffected; or (b) the induced alteration of the rate or direction of the movement of pollutants, ~~as evidenced by the predicted influence the water withdrawals would have on inducing movement of the pollutants or~~ as indicated by a sustained increase in background levels in pollutant concentrations.

Commented [[=]2]: Edit not intended to change meaning, meant to simplify and clarify.

Harmful water quality impacts from dewatering discharge to receiving waters

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
2.3.2.B.2. **Criteria for Use Classes;** Applicants for all individual dewatering permits must satisfy the conditions of issuance (Rule 40E-2.301, F.A.C.). … In order to provide reasonable assurances that water reserved in Rule 40E-10.041, F.A.C., will not be withdrawn, all water from the dewatering activity shall be retained onsite. If the applicant demonstrates that retaining the water onsite is not feasible, the project shall be modified to demonstrate, pursuant to Subsection 3.11, that reserved water will not be withdrawn. … Permit applications for a dewatering permit must: a. Provide reasonable assurances that the project will not cause harm to the resource, existing legal uses, offsite land uses, and wetland environments or cause harmful saline water intrusion or movement of pollutants, as described in Chapter 3 of this Applicant's Handbook. … …d. Provide reasonable assurances that all dewatering water will be retained on the project site, unless the applicant demonstrates that it is not technically feasible to retain the dewatering water onsite. If any offsite discharge is requested due to demonstrated technical infeasibility of onsite retention, the applicant must provide the following information with the permit application: i. Documentation of authorization that allows the applicant to discharge directly into the receiving water body and/or adjacent lands (e.g., NPDES or ERP permit), and a demonstration that the receiving water body or adjacent lands are capable of accepting the dewatering discharge; ii. An operational plan which demonstrates that the discharge to the receiving water body will meet all applicable State Water Quality standards prior to discharge; iii. An operational plan which demonstrates that the discharge to	**2.4.6 MINING OR DEWATERING.** Applicants who have obtained and are in compliance with a National Pollutant Discharge Elimination System (NPDES) or Environmental Resource Permit for dewatering shall be found to not cause harmful water quality impacts from dewatering discharge to receiving waters.	**2.3 Reasonable-Beneficial Use Criteria (g)(2)** The use must not cause harmful water quality impacts from dewatering discharge to receiving waters. Applicants who have obtained and are in compliance with a National Pollutant Discharge Elimination System (NPDES) or Environmental Resource Permit for dewatering shall be considered to not cause harmful water quality impacts from dewatering discharge to receiving waters.	The use must not cause harmful water quality impacts from dewatering discharge to receiving waters. Applicants who have obtained and are in compliance with a National Pollutant Discharge Elimination System (NPDES) or Environmental Resource Permit for dewatering shall be considered to not cause harmful water quality impacts from dewatering discharge to receiving waters.

protected wetlands will not contain turbidity levels in violation of State Water Quality standards (must be less than 29 NTU above background levels) prior to discharge; …f. Provide reasonable assurances that fresh dewatering water will not be discharged to saline tidal waters, unless the applicant demonstrates that it is not technically feasible to prevent discharge to saline water and requests specific authority from the District for discharge. Saline dewatering water, as defined in this Applicant's Handbook, may be discharged to tidewater; …			

Harmful saline water intrusion or harmful upconing

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
Upconing - Upward migration of mineralized or saline water as a result of pressure variation caused by withdrawals. Saline Water Interface - Hypothetical surface of chloride concentration between freshwater and saline water where the chloride concentration is 250 mg/L at each point on the surface.	upconing – process by which saline water, which underlies fresh water in the same or different aquifers, rises up into the fresh water zone as a result of pumping water from the fresh water zone (U.S.G.S., August 1989). saline water interface – any plane or surface within the transition zone between fresh water and saline water that is defined by a specific concentration of total dissolved solids.	?	(a) For purposes of this definition "upconing" means the process by which saline water underlying a fresh water zone in the same or different aquifers, rises into the fresh water zone as a result of pressure variations caused by withdrawals. (b) For purposes of this definition "saline water interface" means any plane or surface within the transition zone between fresh water and saline water that is defined by a specific concentration of total dissolved solids. (c) For purposes of this definition "saline water intrusion" means the movement of more saline water laterally inland into a fresh water aquifer from coastal areas; the movement of more saline water vertically upward into a fresh water aquifer; any other movement of saline surface water into a fresh water aquifer; or any movement of saline surface water or ground water into a fresh water surface water body.

Commented [[=]3]: What definition is this referring to? Is this meant to be a definition of "upconing" that is embedded in another definition?

Commented [[=]4]: What definition is this referring to? Is this meant to be a definition of "saline water interface" embedded in another definition?

Commented [[=]5]: What definition is this referring to? Same issue about being embedded in another definition. Also, this definition appears to include "upconing" as part of "salt water intrusion". Note that the standard COI currently treats upcoming and saltwater intrusion as two separate things.

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
3.4 Saline Water Intrusion A water use permit application will be denied if the application requests freshwater withdrawals that would cause harm to the water resources as a result of saline water intrusion. Harmful saline water intrusion occurs when: A. Withdrawals result in the further movement of a saline water interface to a	**3.4 SALINE WATER INTRUSION.** A WUP application shall be denied if the application requests	**3.4 Saline Water Intrusion** The use must not cause harmful saline water intrusion or harmful upconing. Harmful saline water intrusion or harmful upconing is defined as saline water encroachment which detrimentally affects the applicant or other existing legal users of water, or is	"Adverse impact from saline water intrusion" means an impact caused by withdrawals of ~~fresh~~ water that results in the further movement of a saline water interface to a greater distance inland toward a freshwater source. The District shall

greater distance inland toward a freshwater source except as a consequence of seasonal fluctuations; climatic conditions, such as drought; or operation of the Central and Southern Flood Control Project, secondary canal systems, or stormwater systems. B. Withdrawals result in the sustained upward movement of saline water. Sustained upward movement is the level of movement that persists when the withdrawals have ceased. When the saline interface occurs beneath the point of withdrawal, the maximum amount of pumpage from any well shall be constrained as follows: [EQUATION] In order to provide reasonable assurances that harmful saline water intrusion will not occur, the applicant shall demonstrate that: 1. A groundwater divide (mound of freshwater) greater than one foot higher than the potentiometric head at the saline water source exists between the withdrawal point and the saline water source (defined by the location of the 250 mg/L isochlor); or, 2. A hydrologic analysis of groundwater flow demonstrates that there will be no further net inflow of groundwater from the saline water source toward the withdrawal point; except as a consequence of seasonal fluctuations; climatic conditions, such as drought; or operation of the Central and Southern Flood Control Project, secondary	quantities that would cause harmful saline water intrusion, or harmful upconing. Harmful saline water intrusion occurs if the Applicant's withdrawals are projected to cause movement of the saline water interface, or upconing that adversely affects, or is predicted to adversely affect, other existing legal uses of water; the Applicant; or the public health, safety, and general welfare. Compliance with the performance standards for	otherwise detrimental to the public interest as defined in Section 3.10. The District shall consider the following factors for determining whether saline water intrusion or upconing is harmful: (a) Movement of a particular saline water interface to a greater distance inland or towards a wellfield than has historically occurred as a consequence of seasonal fluctuations or drought. A saline water interface is defined as a zone of dispersion between two geochemical types of groundwater or a zone of change between areas of groundwater with significantly different chloride concentrations. (b) The amount and rate of increase from background levels in chloride concentrations at the base of the aquifer or producing zone within the area of influence of the well field. Background levels are the chloride concentrations that existed before withdrawals commenced. (c) Whether there has been a detrimental change in the geochemistry of the groundwater at the base of the aquifer or producing zone within the area of influence of the wellfield towards	take into consideration ~~except as a consequence of:~~ seasonal fluctuations, climatic conditions, such as a drought; or operation of the Central and Southern Flood Control Project, secondary canals or stormwater systems ~~that adversely affects or is predicted to adversely affect other existing legal uses of water, the applicant or the public health, safety and general welfare~~. "Adverse impact from saline water upconing" means an impact caused by withdrawals of fresh water that result in the sustained upward movement of saline water ~~that adversely affects or is predicted to adversely affect other existing legal uses of water, the applicant or the public health, safety and general welfare~~. Sustained upward movement of saline water is one that persists when the withdrawals have ceased.

canal systems, or stormwater systems, or, 3. Other evidence shows saline water intrusion will not cause harm to the wellfield and water resource, if pumpage is allowed or increased. Should the applicant's proposed withdrawals occur in an area where the saline water interface is unstable (as demonstrated by increases in measured chloride concentration levels within the influence of the proposed use), the applicant shall determine the cause of the saline movement and the extent of future movement through the duration of the permit and shall demonstrate that the proposed withdrawal will not cause harmful saline intrusion through the duration of the permit.	Permittees encompassed within the Comprehensive Plan set forth in Rule 40D-80.073, F.A.C., shall be addressed in such Rule.	a saline water composition. An example of such a change in geochemistry is where a newly constructed well may yield a bicarbonate type water initially, but after withdrawals begin the well (or nearby wells) yield a sodium chloride type water. This change is an indication that intrusion of saline water or upconing has taken place during the withdrawal of water. In each situation, the determination of harmful saline water intrusion or harmful upconing will be made on a case-by-case basis. ***See also* 2.3(g)3., Reasonable-Beneficial Use Criteria**	

Harmful hydrologic alterations to natural systems, including wetlands or other surface waters

THE BELOW ARE SECTIONS OF THE HANDBOOKS THAT MAY BE BENEFICIAL IN REVIEWING THIS TOPIC.

EVALUATION OF IMPACTS TO THE WATER RESOURCES:

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
3.3 Evaluation of Impacts to Water Resources This Section establishes the standards and thresholds for protection of wetlands and other surface waters from harm pursuant to the condition for permit issuance in Rule 40E-2.301, F.A.C., including ensuring a water use shall not be harmful to the water resources of the area and is otherwise consistent with the overall objectives of the District. The standards and thresholds specified herein shall apply to all water uses, including applications for the initial use of water and modifications and renewals of consumptive use permits, and authorized water uses, herein referred to as the "water use". In its evaluation of the applicant's water use, the District shall consider the extent of hydrologic alterations caused by the applicant's water use, except as otherwise provided herein. To provide reasonable assurances of compliance with the condition of issuance in Rule 40E-2.301, F.A.C., an applicant must demonstrate that hydrologic alterations caused by the water use shall not adversely impact the values of wetland and other surface water functions so as to cause harm to the: A. Abundance and diversity of fish, wildlife and listed species; and, B. Habitat of fish, wildlife, and listed species. For the purposes of this Section, an adverse impact to the value of wetland and other surface water functions in violation of the above shall constitute "harm." This Section requires assessment of whether impacts of a water use constitute harm. If a water use would cause harm, then the applicant must comply with the elimination or reduction of harm provisions pursuant to Subsection 3.3.5, and mitigation requirements of	**3.3 EVALUATION OF IMPACTS TO WATER RESOURCES.** The withdrawal of water must not cause adverse impacts to environmental features. Where appropriate, District staff will review the Applicant's submittal and identify the environmental features that are directly related to the water resources of the District and evaluate the impact of the Applicant's withdrawal, combined with other withdrawals, on those environmental features. District staff may inspect the site to delineate environmental features and evaluate the effects of withdrawal. If withdrawals are determined by the District to have impacted or anticipated to impact environmental features, an Applicant shall supply additional information regarding the existing status and condition of associated environmental features. This information may consist of aerial photographs, topographic maps, hydrologic data, environmental assessments or other relevant information. Baseline hydrologic and/or environmental data collected prior to permit application shall be provided if available and requested by the District. Environmental features that will be evaluated by District staff when determining impacts include: 1. Surface water bodies such as lakes, ponds, impoundments, sinks, springs, streams, canals, estuaries, or other watercourses. 2. Wetland habitats. 3. On-site environmental features and their relationship to local and regional landscape patterns. 4. Habitat for threatened or endangered species. 5. Other environmental features which are dependent upon the water resources of the District. Potential environmental impacts will be evaluated by	3.7 Otherwise Harmful (d) The use must not cause harmful hydrologic alterations to natural systems, including wetlands or other surface waters (on site or off-site). A proposed use will be denied as not reasonable-beneficial if the use would alter the existing hydrology and cause an unmitigated adverse impact to natural systems, including wetlands or other surface waters. Methods for avoiding harm include: reducing the amount of water withdrawn, modifying the method or schedule of withdrawal, mitigating the damages caused, or not increasing the	To Be Further Discussed at Reg Team Meeting TNC Comment: The avoidance and minimization of impacts prior to mitigation is an important concept that should be included in the CFWI CUP rules. The DEP should work on consistent language for consideration by the Reg Team, including examples of the types of actions that could be explored by CUP applicants to avoid or minimize unpermittable impacts.

Subsection 3.3.6. Impacts to wetlands and surface water bodies associated with wetland enhancement, restoration, creation, preservation or other mitigation permitted pursuant to Part IV of Chapter 373, F.S., or other wetland regulatory program implemented by a local, regional, or federal governmental entity, shall be considered under this Section. Impacts on wetlands and other surface waters not caused by the water use, including, but not limited to, impacts caused by existing surface water management activities, drainage, water table lowering, roads, levees and adjacent land uses, are not considered under this Section. The hydrologic characteristics resulting from construction or alterations undertaken in violation of Chapter 373, F.S., or District rule, order or permit shall be evaluated based on historic, pre-violation conditions, as if the unauthorized hydrologic alteration had not occurred.	comparing the existing natural system to the predicted post withdrawal conditions. Previous physical alterations to environmental features, such as drainage systems or water control structures will be considered. The District's objective is to achieve a reasonable degree of protection for environmental features consistent with the overall protection of the water resources of the District. Listed below are the performance standards District staff will use to ensure that adverse impacts to environmental features do not occur. Impacts to canals, springs, and estuaries are considered under the streams criteria. Impacts to ponds, sinks, and impoundments are considered under the lakes criteria. Compliance with the performance standards shall be addressed as specified in Rule 40D-80.073, F.A.C. for Permittees encompassed within the Comprehensive Plan.	potential for flooding. An applicant must avoid or mitigate impacts to wetlands or other surface waters wherever they are located. (e) The use must not otherwise cause harmful hydrologic alterations to the water resources of the area.	

DELINEATION, WETLANDS EVALUATED

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
A. Delineation Wetlands and other surface waters within the area of influence of the water use, delineated pursuant to Rules 62-340.100 through 62-340.600, F.A.C., as ratified by Section 373.4211, F.S., are subject to this subsection, except as provided in Subsection 3.3.1.B, below. In accordance with Subsection 62-340.300(1), F.A.C., reasonable scientific judgment shall be used to evaluate the existence and extent of a wetland or other surface water, including all reliable information, such as visual site inspection and aerial photo interpretation, in combination with ground truthing. In addition, relevant information submitted pursuant to Chapter 62-340, F.A.C, in support of an ERP/SWM Permit shall be considered. Field delineations of wetlands and other surface waters boundaries shall be required if such boundaries are in dispute. In determining the location and category of wetlands and other surface waters, the applicant may consult several sources of information for guidance, as part of the information identified in Subsection 3.3.2. This includes the staff reports of previously issued ERP and SWM Permits for the site and adjacent sites, NWI Maps, Land Use/Land Cover maps, NRCS soils maps, formal and informal wetland determinations conducted by the District, and wetland maps produced by local	**3.3.1.1.1 WETLANDS EVALUATED.** In reviewing an application for a WUP, the District evaluates impacts to wetlands that are predicted to occur as a result of water withdrawals for those wetlands defined in section 373.019(27), F.S. and Rule 62-340, F.A.C. **3.3.1.1.2 WETLANDS NOT EVALUATED.** The District will not consider impacts to isolated wetlands less than 0.5 acres, unless: a. A wetland is used by endangered	?	To Be Further Discussed at Reg Team Meeting TNC: The legislature has ratified a unified wetland delineation method for wetlands and other

governments. District staff may inspect the site to confirm the location, categorization and delineation of wetlands and surface waters, and other site specific information. Site specific topographical data including elevations of hydrologic indicators, wetland boundary and bottom elevations shall be required in the event that the categorization of a wetland or other surface water is in question. In the event that access to offsite wetlands or other surface waters has been denied by the property owner, the District and the applicant shall mutually agree on a method of establishing the locations, categorizations and delineations of the offsite wetlands or other surface waters. **B. Exclusions** Harm to the following wetlands and other surface waters shall not require elimination or reduction of harm and mitigation, under this Section: 1. Isolated wetlands one half (1/2) acre or less in size unless: a. The wetland or other surface water is used by threatened or endangered species; [Nothing herein is intended to relieve an applicant of the obligation to comply with the Florida Fish and Wildlife Conservation Commission (FWC) rules pertaining to listed species, and with the Federal Endangered Species Act.] ~~a.~~b. The wetland or other surface water is located in an area of critical state concern designated pursuant to Chapter 380, F.S.; or, c. The wetland or other surface water is connected by standing or flowing surface water at seasonal high water level to one or more wetlands, where the combined wetland acreage is greater than one half acre. 2. Wetlands or other surface waters which have been authorized to be impacted to the extent established in a construction approval through an ERP or a SWM Permit issued under Part IV of Chapter 373, F.S. 3. Constructed water bodies including borrow pits, mining pits, canals, ditches, lakes, ponds, and water management systems, not part of a permitted wetland creation, preservation, restoration or enhancement program. However, consideration of the design functions of water management systems shall be considered by Section 3.6, Existing Offsite Land Uses. 4. Wetlands or other surface waters to the extent they have been specifically authorized to be impacted or mitigated pursuant to Subsections 3.3.5, 3.3.6, or 3.3.7 in a consumptive use permit, unless the applicant proposes additional impacts.	or threatened species designated in Rules 68A-27.003 and 68A-27.005, F.A.C. The District considers that a wetland is used by designated endangered or threatened species if reasonable scientific judgment indicates that the wetland provides a habitat function including, but not limited to, nesting, reproduction, food source, or cover for such species. b. A wetland is located in an area of critical state concern designated pursuant to Chapter 380, F.S. c. Two or more wetlands regardless of property boundaries have a combined area greater than 0.5 acre and are connected by standing or flowing surface water during average wet season high water levels. This connection can be established by water elevation indicators such as lichens, adventitious roots, water stains, soil profiles, aerial photos or other acceptable measures.		surface waters (Rule 62-340, F.A. C.), so this is not an issue. The differences between the exclusions from the requirement to avoid, minimize or mitigate being used by the three Distrticts (either by rule or practice) should be explained and discussed with the Reg Team.

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CATEGORIZATION, PERFORMANCE STANDARDS

SFWMD	SWFWMD	SJRWMD	Concepts for CFWI
3.3.3 Categorization of Wetlands and Other Surface Waters Wetlands and other surface waters subject to consideration under this Subsection are grouped into three categories based on their normal hydrologic characteristics and their susceptibility to harm as a result of hydrologic alteration from water use withdrawals. Normal hydrologic characteristics are defined as the	**3.3.1.1.4 PERFORMANCE STANDARDS.** a. Wet season water levels	?	To Be Further Discussed at Reg Team

hydropattern that would occur without the impact of any authorized or unauthorized water uses. In cases where existing surface water management “works” have permanently altered the normal hydrologic characteristics of the wetland or other surface water, the categorization shall be based on the resulting hydrology caused by the permanent alteration. Alterations that can effect wetland hydrology include canals, ditches, roads, structures or levees. The hydrologic characteristics resulting from construction or alterations undertaken in violation of Chapter 373, F.S., or District rule, order or permit, shall be evaluated based on historic, pre-violation conditions, as if the unauthorized hydrologic alteration had not occurred. Wetlands and other surface waters are subject to evaluation under this Section, in accordance with the following: Category 1: Natural lakes, deep ponds, rivers, streams, deepwater slough systems, coastal intertidal wetlands, and cypress strands that are permanently flooded throughout the year, except in cases of extreme drought. These include "permanently flooded" and "intermittently exposed" surface waters in the NWI maps. Category 2: Seasonally inundated wetlands including cypress domes, emergent marshes, cypress strands, mixed hardwood swamps, or shrub swamps and exhibit standing water conditions throughout most of the year. These include "semi-permanently flooded" or "seasonally flooded" wetlands in the NWI maps. Category 3: Temporarily flooded and saturated wetlands including wet prairies, and shallow emergent marshes, as well as seepage slopes, bayheads, hydric hammocks, and hydric flatwoods. These include "temporarily flooded" and "saturated" wetlands in the NWI maps. This subsection shall be applied on a case by case basis to categorize wetlands and other surface waters based on their normal hydrologic characteristics and susceptibility to harm as a result of hydrologic alterations from water use withdrawals. **3.3.4 "No Harm" Standards and Thresholds** To demonstrate that no harm will occur to wetlands and other surface waters, reasonable assurances must be provided by the applicant that the narrative standard for Category 1, 2 and 3 wetlands and other surface waters in Subsection 3.3.4.A is met. For Category 2 wetlands, demonstration that the narrative standard is met shall be achieved through complying with the numeric threshold set forth in Subsection 3.3.4.B, unless such threshold is deemed by the District to be inapplicable due to the site specific considerations identified in Subsection 3.3.4.C. Site specific considerations may render the numeric threshold inapplicable. In these cases, the applicant shall demonstrate that harm as defined in the narrative standard in Subsection 3.3.4.A will not occur, notwithstanding the numeric threshold. The analysis for determining harm shall include an assessment of the projected hydrologic alterations caused by the water use and a cumulative assessment encompassing surface waters. In circumstances of cumulative contributions to harm, an applicant shall only be required to address its relative contribution of harm to the wetlands and other surface waters. In the evaluation of the applicant’s water use, the District shall consider the extent of hydrologic alterations to wetlands and other surface waters caused by the applicant's water use based upon analytical or numerical modeling, or monitoring data, as required by Subsection 3.1.1 and this subsection. The determination of harm shall consider the temporary nature of water use drawdowns and seasonal application of certain water uses. Such consideration includes a determination of whether the hydrologic	shall not deviate from their normal range. b. Wetland hydroperiods shall not deviate from their normal range and duration to the extent that wetlands plant species composition and community zonation are adversely impacted. c. Wetland habitat functions, such as providing cover, breeding, and feeding areas for obligate and facultative wetland animals shall be temporally and spatially maintained, and not adversely impacted as a result of withdrawals. d. Habitat for threatened or endangered species shall not be altered to the extent that utilization by those species is impaired. **3.3.1.2 LAKES PERFORMANCE STANDARDS.** Water levels in lakes shall not deviate from the normal rate and range of fluctuation, to the extent that: a. Water quality, vegetation, or animal populations are adversely impacted; b. Flows to downgradient watercourses are adversely impacted; and/or c. Recreational use or aesthetic qualities of the water resource are adversely impacted.		Meeting. TNC: See end of document for suggested questions for submittal to the WRAT.

alteration is constant or if it recovers seasonally. **A. Narrative Standard** For Category 1, 2, and 3 wetlands and other surface waters, an applicant shall provide reasonable assurances that hydrologic alteration caused by the water use shall not adversely impact the values of wetland and other surface water functions so as to cause harm to the: 1. Abundance and diversity of fish, wildlife and listed species; and, 2. Habitat of fish, wildlife, and listed species. **B. Numeric Thresholds for Category 2 Wetlands** Unless site specific considerations identified pursuant to Subsection 3.3.4.C exist indicating the following numeric threshold for Category 2 wetlands is not applicable, the water use shall not be considered harmful when the modeled drawdown resulting from cumulative withdrawals in the unconfined aquifer beneath all portions of the wetland is less than 1.0 feet. Water use withdrawals shall be modeled based on a maximum monthly allocation simulated for 90 days without recharge and as otherwise directed under Subsection 3.1.2. If the applicant chooses to use an alternative simulation condition, the narrative standard in Subsection 3.3.4.A shall apply. **C. Site Specific Considerations** Site specific information shall be submitted by the applicant, if requested by the District or if otherwise deemed relevant by the applicant, for determining whether the narrative standard in Subsection 3.3.4.A is met, including whether the numeric threshold in Subsection 3.3.4.B is applicable. The applicant shall provide site specific information on the local hydrology, geology, actual water use or unique seasonality of water use, including, but not limited to: 1. Site specific hydrologic or geologic features that affect the projected drawdown shall be evaluated, including the existence of clay layers that impede the vertical movement of water under the wetland, preferential flow paths, seepage face wetlands that receive high rates of inflow, or the effects of soil depth and type on moisture retention, to the degree that actual field data support how these factors affect the potential for impacts of the water use on the wetland or other surface water. 2. If the applicant asserts that the actual water use has not caused harm to wetlands or other surface waters, site specific information on the condition of the wetlands or other surface waters in question must be provided in conjunction with pumpage records or other relevant evidence of actual water use to substantiate the assertion. Applicable monitoring data as described in Subsection 3.1.1 shall be submitted, if available. 3. Other relevant factors or information in assessing the potential for harm to wetlands and other surface waters, such as the condition, size, depth, uniqueness, location, and fish and wildlife utilization, including listed species, of the wetland or other surface water.	**3.3.1.3 STREAMS PERFORMANCE STANDARDS.** a. Flow rates shall not deviate from the normal rate and range of fluctuation to the extent that water quality, vegetation, and animal populations are adversely impacted in streams and estuaries. b. Flow rates shall not be reduced from the existing level of flow to the extent that salinity distributions in tidal streams and estuaries are significantly altered as a result of withdrawals. c. Flow rates shall not deviate from the normal rate and range of fluctuation to the extent that recreational use or aesthetic qualities of the water resource are adversely impacted.		

TNC suggested questions for submittal to the WRAT:

1. Are the three categories of wetlands and other surface waters used by the SFWMD in their CUP rules appropriately reflective of the types of wetlands found in the CFWI Area? If not, what categories would be appropriate?

2. SFWMD applies a narrative harm standard to all three wetland categories, and in addition applies a more specific numeric standard to Category 2 wetlands. Does adequate literature or CFWI-specific data exist to determine whether or not the numeric standard for Category 2 wetlands is appropriate to demonstrate that harm will not occur within the CFWI? Does the available information for CFWI wetlands indicate a different standard is appropriate?

3. The SFWMD rules provide that site specific considerations may render the numeric thresholds for Category 2 wetlands inapplicable. These considerations are listed in Subsection 3.3.4.C of the Applicant's Handbook. Would these considerations be applicable to CFWI wetlands? Are there additional or different considerations that would be appropriate?

4. Is adequate data available for CFWI wetlands/surface waters to establish a numeric harm standard for Category 1 or 3 wetlands?

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