COMPREHENSIVE WATERSHED MANAGEMENT WATER USE TRACKING PROJECT

Project Glossary



Southwest Florida Water Management District 2379 Broad Street Brooksville, FL 34604-6899

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Project Glossary

1 Purpose

This document includes a list of definitions, acronyms and abbreviations and is a supporting document to the Comprehensive Watershed Management (CWM) Water Use Tracking Project. The intent is to provide a common and consistent terminology that will be used during the duration of the project. Some terms were obtained in part or in whole from other District glossaries when they pertained to this project, but no source glossaries were revised as a result of any updates or corrections made herein.

2 Definitions

Terms are listed in alphabetical order.

Term	Description
A	
Abandoned Well	A well the use of which has been permanently discontinued. Any well shall be deemed abandoned when it is in such a state of disrepair that continued use for the purpose of obtaining groundwater, disposing of water or liquid wastes, or observation is impracticable.
Actual crop	The acres and type of crop that was actually irrigated and is reported on forms annually or seasonally by permittees having 100,000 gpd or more on a drought annual average basis in the NTBWUCA and SWUCA.
Actual Use	The amount of water in gallons that is pumped in a year by a permittee or permittees, divided by 365 days per year. The only way to know actual use is to require the pumpage to be metered and reported.
Agricultural Irrigation Monitoring Program (AIM)	Agricultural Irrigation Monitoring Program.
Agricultural Water Use Model (AGMOD)	A computer program that calculates agricultural water use allotments (a.k.a. allocation rates) for plants and crops. It uses local climate, acreage, soil type, irrigation efficiency, and planting and harvesting schedules to calculate pre-plant and crop establishment irrigation, supplemental irrigation, cold protection, and other irrigation requirements. A complete description is on Part C of the Basis of Review for Water Use Permit Applications.



Term	Description
Allocation Quantities	The allocation rate converted to annual average gallons per day.
Allocation Rate	The amount of water, in vertical inches over one acre of crop calculated via AGMOD for irrigation of a specific crop based on the location, soil, climate, planting date(s), harvest date(s), irrigation method (NTBWUCA) or mandatory irrigation efficiency (SWUCA). It is a limit on water use in addition to the permitted quantity limit such that in the SWUCA and the NTBWUCA, a permittee may not exceed the allocation rate for the actual crop grown even if it is below the permitted irrigation quantity.
Alternative Source of Water	Reclaimed water or captured excess stormwater that is used instead of permitted quantities from ground water or naturally occurring surface waters.
Ambient Groundwater Quality Monitoring Program (AGWQMP)	A statewide program designed to characterize the quality of ground water in the major aquifers of Florida. Monitoring is accomplished through the analysis of ground water samples obtained from an extensive network of monitor wells. The AGWQMP is a cooperative program between each of the five Florida Water Management Districts and the Department of Environmental Protection.
Annual Average Daily Withdrawal	The total volume in gallons permitted to be withdrawn on an annual basis divided by 365 and expressed in gpd.
Aquifer	Geologic materials that contain groundwater in pore spaces and which are permeable enough to yield useful quantities of ground water to wells and to natural springs.
Arc Internet Map Service (ArcIMS)	A software product sold by ESRI. This product provides a means of developing interactive maps accessible via the Internet or Intranet.
Arc Spatial Data Engine (ArcSDE)	An application server that facilitates storing and managing spatial data (raster, vector, and survey) in a DBMS and makes the data available to many kinds of applications. ArcSDE allows you to manage geographic data in one of 4 different databases: IBM DB2, IBM Informix, Microsoft SQL Server, and Oracle. It is also the key component in managing a multi-user spatial database.
Area of Concern	Geographic areas that warrant special considerations during the permitting process. Some are jurisdictional, such as the areas bordering other water management districts where a Memorandum of Understanding (MOU) is Required; others are areas where water resources are stressed such that additional withdrawals do not meet criteria for issuance of water use permits. These are the wellfield-impacted area of Hillsborough, Pasco and Pinellas Counties (WIA), and the



Term	Description
	Hillsborough River ground water basin (HRGWB) outside of the SWUCA, and the Plant City-Dover area and the Shell and Joshua Creek area inside the SWUCA.
Artifacts	The documents specified in a system's development case that are due to be delivered.
Assigned irrigation efficiency	The irrigation efficiency required in the SWUCA regardless of irrigation method.
Augmentation	The process of adding water to a surface water body by withdrawing it from another surface water body or from an aquifer.
В	
Basin, Aquifer	The lateral area of an aquifer having a common central point or common line of lowest pressure toward which ground water flows. It is bounded on all sides by no-flow barriers.
Basin, Watershed	A regional topographic low area that is drained by one river or stream, also known as a watershed.
Basis of Review	Basis of Review for Water Use Permit Applications; A document incorporated by Rule 40D-2.019, Florida Administrative Code into Chapter 40D-2 that provides guidance on application of the Chapter 40D-2 rules.
С	·
Cancelled Permit	A permit that was cancelled due to non-use before it reached its expiration date. Cancellation only means that the permit was logically deleted from the RDBS and not that the Governing Board revoked it.
Capped Well	A ground water well that has been sealed in a watertight manner. No quantities are permitted to a capped well.
Competing Applications	Two or more applications for water use permits, which otherwise comply with Chapter 40D-2 Rules and with Governing Board orders, that are pending for a quantity of water that is inadequate for both or all, or which for any reason are in conflict. The Governing Board will be able to approve or modify the applications in a manner which best serves the public interest as determined by the Governing Board once such rule language is adopted into Chapter 40D-2 and implemented.
Cone of Depression	The vertical depression of the water table or reduction of pressure in the potentiometric surface of aquifers due to pumping ground water or lowering the level of a surface water body.
Conservation	The beneficial reduction of water use through voluntary or mandatory altering of water use practices, reduction of distribution losses or installation and maintenance of low water use systems,



Term	Description
	fixtures, or devices.
Construction phase of the Rational Unified Process (RUP)	The third phase of RUP, where the system is constructed based on the baseline architecture.
Consumptive Use	Use of any fresh or saline water, which reduces the supply from which it is withdrawn or diverted.
Contiguous	Sharing a boundary or edge. Touching or only separated by lesser roads. With respect to property, land owned by a single entity that is not separated by a county, state or interstate road.
Conveyance Loss	Any loss of water between the withdrawal point and location of actual use. This includes, but is not limited to, lateral or vertical seepage through the sides and bottom of a ditch or canal, evaporation from an open ditch, or leakage from pipes and fittings.
Credit Balance	The amount of water conserving credits the permittee has, which are available to use at the site they were earned when needed. The maximum amount available to use for each instance is the drought annual average quantity for the crop actually grown.
Crop Protection Quantity / Maximum Quantity	The amount of water permitted to be pumped in a 14-hour, 18-hour, or 24-hour period in a single 24-hour day for the purpose of protecting crops from frost and freeze damage or from heat stress.
Crop Reports (Agricultural Water Use Forms – NTBWUCA)	Same as the Irrigation Water Use Reports, but for permittees in the NTBWUCA having a WUP for 100,000 gpd or more on an annual average basis. The District supplies enough forms to last several years, which are manually analyzed by staff.
Crop Reports (Irrigation Water Use Reports – SWUCA)	Reports on actual crops irrigated. In the SWUCA, permittees having drought annual average quantities or standard annual average quantities greater than 100,000 gpd have to submit information on the actual crops irrigated on forms the District sends to them each season or each year. The crop reports are used to determine compliance with the allocation rate limit and to calculate water-conserving credits for eligible crops. These forms are formatted to be scanned into the RDBS and analyzed using the IBM computer and AGMOD.
D	
Development Case	A document that provides specific guidance for the software development of a system. It outlines what artifacts (deliverables) will be produced, what tools and templates will be used, when artifacts will be produced, and what level of formality of artifacts.



Term	Description
Dewatering	The process of removing water.
Discharge Control Device	The element of a discharge structure that allows the gradual release of water under controlled conditions. Can be referred to as the bleed-down mechanism or "bleeder." Examples include orifices, notches, weirs, and effluent filtration systems.
Discharge Structure	A permanent structural device, usually made of concrete or metal through which water is discharged from a site, usually at a specific rate to a ditch or other conveyance system, a receiving water body, or treatment area.
District Regional Water Use Model (DRWUM)	A District-wide ground water flow model, using the U.S.G.S. MODFLOW code in Ground Water Vistas used in Resource Regulation to describe affects of proposed and existing withdrawals of water from the surficial, intermediate, and Floridan aquifers.
Domestic Use	The use of water for the individual personal household purposes of drinking, bathing, cooking, or sanitation, and irrigation of less than an acre of crop that is used only for the residence. All other uses shall not be considered domestic.
Drawdown (Also see Cone of Depression)	The reduction in hydraulic head or the amount by which the water level is lowered at a point caused by the withdrawal of water from an aquifer.
Drought Annual Average Quantities	For crops that utilize effective rainfall, the annual average quantities permitted for irrigation based on a 2-in-10 drought (see definition under "drought"). Crops grown under plastic mulch are permitted for zero effective rainfall. This terminology does not apply to areas outside of the SWUCA.
Е	
Earned Credits	In the SWUCA, a permittee can add to their water conserving credit balance if they use less than the standard annual average for the actual crop grown if that crop has been determined to utilize effective rainfall. This volume is "earned" and the quantity is added to the Credit Balance for future use.
Eastern Tampa Bay Water Use Caution Area (ETBWUCA)	A former WUCA located in southern Hillsborough, and westwest-central Manatee and Sarasota Counties that is now incorporated into the SWUCA.
Effective Rainfall	The amount of rain that contributes to the water requirements of a plant.
Effluent	A liquid waste from a manufacturing or treatment process, in its natural state or partially or completely treated, that discharges into the environment.



Term	Description
Elaboration phase of the Rational Unified Process (RUP)	The second phase of RUP, where the key risks are addressed, the skeleton of the architecture of the system is built, and the project plan is refined.
Environmental Systems Research Institute (ESRI)	The vendor for the District GIS software.
Estimated Use	The amount of water in gallons that is estimated to have been used by a permittee or permittees, divided by 365 days per year. The estimation is made using relationships and equations and is explained more fully in the Estimated Water Use books. It is used to try and capture the total water used by un-metered water users.
Evapotranspiration	The total loss of water to the atmosphere by evaporation from the land and water surface and by transpiration from plants.
Existing Legal Use of Water	Water use that is permitted under Chapter 40D-2, Florida Administrative Code or is exempt under Rule 40D-2.051.
Existing permit	The current revision of a water use permit that has either not passed its expiration date or has passed its expiration date but has an application pending.
Expired permit	A WUP that has passed its expiration date and does not have an application pending.
F	
Florida Administrative Code (FAC)	A compilation of the rules and regulations of state agencies that have been filed with the Department of State pursuant to the provisions of Chapter 120, Florida Statutes.
Florida Department of Environmental Protection (DEP) Contaminated Sites	 Sites that are listed by the FDEP as containing certain contaminants in the ground water. These sites Include: Contamination assessment reports sites (CARS). Bartow service office contamination assessment report sites (BSOCARS) are CARS sites within the Bartow Service Office that have been field verified. Ethylene Dibromide (EDB) groundwater contamination sites. State funded hazardous waste clean-up sites (hazwaste) National priority list hazardous waste (EPA Superfund) sites (NPL) Permitted solid waste disposal sites (landfills) (SOLIDWASTE).
Floridan aquifer	A regional aquifer, made up of limestones, dolomites and anhydrites that is wholly confined in the southern portion of the District (SWUCA) and partially confined to unconfined in the northern portion of the District. It extends northward through southern Georgia and eastward to the Atlantic coast of Florida. In



Term	Description
	west-central Florida, it is divided into the upper Floridan aquifer, which is predominantly a freshwater aquifer and the lower Floridan aquifer, which contains highly mineralized water and is unsuitable for potable use or for irrigation.
Flow Meter	A device attached to the mainline from a well or to a surface water intake pipe which measures the volume of water flowing through it.
Freshwater	An aqueous solution with a total dissolved solids (TDS) concentration less than 500 milligrams per liter (mg/L).
G	
Gal/Day/ft	Gallons per day per foot. The unit of measure to describe transmissivity of an aquifer.
Gal/Day/ft ²	Gallons per day per square foot.
Gal/Day/ft ³	Gallons per day per cubic foot. One unit of measure to describe leakance in a confining unit.
Gpcd	Gallons per capita day: the gallons of water used per person per day
Gpd	Gallons per day.
Gpm	Gallons per minute.
Gang Well	A system where two or more water wells are coupled together with a common header or manifold.
General WUP	A WUP for \geq 100,000 gpd but less than 500,000 gpd on an (standard) annual average basis.
Geographic Information System (GIS)	A computerized database that is specifically designed to store, retrieve, display and analyze data referenced to specific geographic locations.
Governing Board	A board appointed by the Governor of Florida. The governing board of the Southwest Water Management District has the responsibility as authorized in chapter 373 and other chapters of the Florida Statutes, to direct a wide range of programs, initiatives, and actions by the staff at the District. These programs include, but are not limited to, flood control, regulatory programs, water conservation, education, and supportive data collection and analysis efforts.
Ground Water	Water in an aquifer.
Ground Water Model	Mathematical simulation of the flow of water through an aquifer, usually using a computer.
Ground Water Vistas	The program used to construct ground water flow models to evaluate impacts to the resource due to existing and proposed



Term	Description
	withdrawals of water from the aquifer systems. The U.S.G.S. MODFLOW code is used.

Н	
Highlands Ridge Water Use Caution Area (HRWUCA)	A former WUCA, located on the Highlands Ridge of Highlands and Polk Counties that is now incorporated into the SWUCA.
Hillsborough River GW Basin	An Area of Concern. The area surrounding the Hillsborough River in which the ground water of the Floridan aquifer flows toward the Hillsborough River.
Hydrogeology	The scientific study of the properties, distribution, and effects of water on the earth's surface, in the soil and underlaying rocks, and in the atmosphere.
Hydrograph	A graphical representation of the properties of streams, rivers, lakes, and aquifers over time. Properties measured are variation in flow, discharge, temperature, or levels.
Hydrologist	One who practices hydrology. At the District, geologists and engineers who evaluate water use permit applications are referred to as hydrologists.
Hydrostatic Level	The level relative to ground level or sea level that to which water will rise in a pipe that is open to the atmosphere.
I	
Impact Assessment	The evaluation of the effects caused by withdrawing water from a natural system.
Inception phase of the Rational Unified Process (RUP)	The first phase of RUP, where the needs of the system are determined. The vision statement, scope of the system, and risks are defined at this point, and the project plan is produced.
Individual WUP	A WUP for 500,000 gpd or more on an (standard) annual average basis.
Initial Credits	In the SWUCA, new plants that utilize effective rainfall are given a volume of water in gallons when the use is first permitted, called an initial credit. The volume of water is intended to provide a safeguard against two back-to-back years of drought. The initial credit is equal to twice the difference between the irrigation rate under average rainfall and the irrigation rate under a 2-in-10 drought. When the SWUCA Phase 1 rules were implemented, permits for irrigating plants that utilized effective rainfall were modified and given an initial credit.
Intermediate aquifer	An aquifer system comprised of three major water-bearing zones:
system	PZ-1, PZ-2 and PZ-3 that are interbedded with impermeable clays



	and sandy clays. The intermediate aquifer system is primarily composed of the Hawthorn Formation and parts of the Tampa Limestone Formation and exists only in the southern portion of the District (in the SWUCA).
Impoundment	Any lake, reservoir, pond, or other containment of surface water occupying a bed or depression in the earth's surface and having a discernible shoreline.
Irrigation	The application of ground water or water from a surface water body to supplement natural rainfall when the amount of rainfall does not meet the plant's needs for optimum growth.
Isohyetal Maps	Maps used to determine rainfall amounts.
Isolated Wetlands	Any wetland without a direct connection to a lake, stream, estuary or marine waters.
L	
Lapsed Quantity	The reasonable/beneficial historically used quantity associated with reduced, abandoned, or retired water use permits that either impacted Minimum Flows and Levels, or that occurred before December 31, 1999. An applicant can request the District take into account the benefits of reduced impact due to these quantities. All conditions for issuance, except for impact to the MFL's, must be met.
Limestone	A bedded sedimentary deposit consisting chiefly of calcium carbonate (CaCO ₃).
Lithologic	Of and pertaining to the description and classification of a rock.
Logical deletion from the RDBS	The permit and all its attributes or a part of a permit is made inactive from a database standpoint such that it does not count toward current totals, but its history is retained.
M	
Meter threshold	A lower limit of permitted over which all permittees are required to record and report meter readings. In the SWUCA, the lower limit is 100,000 gpd on a standard or drought annual average basis, whichever is larger; in the NTBWUCA the lower limit is 100,000 gpd on an annual average basis, and outside of a WUCA, the lower limit is 500,000 gpd on an annual average basis. On a case-by-case basis, WUPs under this lower limit may be required to be metered.
MGD or mgd	Million gallons of water per day.
Minimum Flood Level	The highest level to which a surface water body shall be allowed to fluctuate without interference except as approved by the Board for the purpose of conserving the waters in the State so as to realize their full beneficial use. Such level shall be expressed as



	an elevation, in feet above mean sea level.
Minimum Flows and Levels (MFL)	One criteria used by the District in evaluating applications for water use permits. MFL's, set forth in Chapter 40D-8, F.A.C., represent the point at which further withdrawals would cause significant harm to water resources or ecology of any area.
Minimum Rate of Flow	The limit at which further withdrawals from a stream or other watercourse would be significantly harmful to the water resources or ecology of the area.
Minimum Water Level	The level of the water table or of the potentiometric surface of water in an aquifer or the level of surface water at which further withdrawals would be significantly harmful to the water resources of the area.
Mitigation	An action or series of actions to offset adverse effects caused by another action. With respect to water use regulation, the effects are impacts that would otherwise cause a water use application to fail to meet the conditions for issuance in Rule 40D-2.301. Mitigation actions usually involve restoration, enhancement, creation, preservation of water levels, water quality or protected environments.
Mitigation of Minimum Flow and Level Impacts	When an applicant is in compliance with all issuing conditions except for MFL's, they can propose a mitigation plus recovery action of the projected impact as a net benefit to the impacted Minimum Flow and Level water body. Mitigation can include contribution to one or more District water resource development projects.
Monitor Site	Any site on which there is a well, piezometer, flow meter, gauge, evaporation pan, weir, that measures a property of an aquifer, surface water body or environmental feature.
Monitor Well	A well used to monitor hydrologic data, such as water levels or water quality parameters.
Most Impacted Area (MIA)	Most impacted area of the Eastern Tampa Bay Water Use Caution Area.
N	
Net Benefit	Activities or measures that will result in an improvement to a Minimum Flow or Level water body that more than offsets the impact of a proposed withdrawal.
New Water Sources Initiative (NWSI)	An alternative sources development program initiated in FY 94 by the Governing Board in response to groundwater concerns in Water Use Caution Areas.
Non-Regulated Use	Any use of water that is exempted from regulation by the provisions of F.S. Chapter 373.
Northern Tampa Bay	An area of critical water resource concerns that includes all of



Water Use Caution Area (NTBWUCA)	Pinellas and parts of Pasco and Hillsborough Counties that was created on June 28, 1989 to address ground water withdrawals that have resulted in the lowering of lake levels, destruction or deterioration of wetlands, reduction in stream flow, and salt water intrusion into the Floridan aquifer.
Notice of Violation (NOV)	A Notice of Violation (NOV) is a letter sent by Certified mail that advises a permittee that they have violated a condition of their permit, or is sent to a non-permittee advising them that they have violated a District or State law. It also gives the violator the opportunity to rectify the violation informally before legal action is taken.
0	
Open Hole Interval	That part of a water well that is uncased, constituting the interval from which water is drawn
Oracle	A database designed specifically for the Internet. Oracle is available in four editions: Enterprise, Standard, Standard Edition One, and Personal. It features full XML database functionality, Real Application Clusters, and self-tuning and self-management capabilities to improve DBA productivity and efficiency.
Outstanding Florida Waters (OFW)	Water bodies which exhibit unique character, in terms of quality and value, designated by the State for additional protection from further pollution and degradation.
Overdraft	Ground water withdrawal in excess of the amount of water that can be withdrawn from the ground water basin annually without producing an undesired result; specifically the rules of the SWFWMD state pumping from a well at such a flow rate that the resulting water level is below sea level or causes environmental damage on the land surface.
P	
Partial standby	A withdrawal point that has a standby use in addition to a fully permitted use.
Partial Transfer	The transfer of only a portion of an existing WUP when only a portion of land covered by the existing WUP is sold or conveyed to another entity or person. A new WUP number is given. If no changes occur to the land use and quantities per withdrawal point, it is an administrative procedure.
Peak Month Quantity	The maximum quantity permitted to be withdrawn on a monthly basis divided by the number of days in the month and expressed in gpd.
Perched Water	Water that is restricted from downward movement by impermeable material beneath, which in turn overlies porous, unsaturated rock.



Percolation	To seep, drain or permeate through a porous substance or filter, such as the infiltration of water into sand/soil.
Permeability	Capacity for transmitting a fluid, measured by the rate at which a fluid of standard viscosity can move a given distance through a given interval of time.
Permit Class	The process by which a WUP was issued: Renewal (R), Modification (M), Letter Modification (LM), SWUCA Automatic (SA), or SWUCA Manual (SM).
Permit Number	An 11-digit number that identifies each permit application received at the District. The first 2 digits identify the type of permit, the next 6 digits are the base number, and the last 3 digits are the revision number.
Permit Number - Base	A unique 6-digit number given to identify each permit application. This number starts at the third place in the complete permit number, and if the sequence does not have 6 digits, preceding zeros are placed.
Permit Number – Revision	The part of the permit number that indicates the number of iterations the permit has undertaken. It starts at 000, and is incremented by one each time a renewal or modification is received for that permit. This figure is separated from the rest of the permit number by a period.
Permit Type	Individual, General, or Small General WUPs
Permitted Quantities	The annual average (standard annual average and drought annual average in the SWUCA), peak month and maximum quantities in gallons per day that are based on the existing or anticipated use for the duration of the permit term and based on the proposed use given on the water use permit application.
Piezometers	Small diameter, shallow wells used to measure water levels in unconfined aquifers. They are open to the atmosphere at the top.
Platinum Report Facility (PRF)	An end-user reporting tool that allows users to query the IBM mainframe and create reports.
Pollutant	Any substance that is harmful to plant, animal or human life. Stormwater is the major source of pollutants to Florida's lakes, estuaries, and streams.
Potable Water	Drinking water whose chemical constituents do not exceed the limits set forth in the State Safe Drinking Water Act.
Potentiometric Surface	A surface that represents the pressure head in a confined aquifer and is defined by the levels to which water will rise in a well that fully penetrates the aquifer.
Predominant Use / Use Type	The major use of permitted water/the major use type of a permit. There are five categories of water use: Agricultural, Public Supply, Industrial/Commercial, Recreation/Aesthetic, and Mining/Dewatering. A WUP is categorized by the predominant



use category to which most of the standard annual average quantities are permitted. However, quantities for all use types are shown in the RDBS. A well constructed for the purpose of supplying water to a public water system, as permitted under Chapters 17-500, 17-555, 17-560, and 10D-4. Quality Water The Quality Water Improvement Program (AQIP) was established by the District to design, plan and implement well plugging operations required to restore hydrologic conditions altered by improperly constructed or deteriorated well casings. QWIP activity targets the suppression of interaquifer contamination of potable water, degradation of surface water quality from the uncontrolled discharge of artesian wells and chemical contamination. R Rational Unified Process (RUP) Reasonable-Beneficial Use Reasonable-Beneficial Use Recharge A software development strategy that is iterative, architecture-centric, and use-case driven. There are four phases to RUP, the inception, elaboration, construction, and transition phases. The use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner that is both reasonable and consistent with the public interest. Water that: 1: has received at least secondary treatment and is reused after flowing out of any plant or other works used for the purpose of treating, stabilizing, or holding wastes; or 2: has been reclaimed after use for irrigation (tailwater recovery), industrial (recycle circuit, or other means. Regional Observation Monitor Well Program (ROMP), established by the District, targets the design, planning and construction of a network of ground water monitor wells to record water levels and water quality and to locate the fresh/saltwater interface. The program's major objectives are to accurately define the aquifers and confining beds within the District boundaries, determine the hydrologic characteristics of the aquifers and freshwater/saltwater interface. Regulatory Database			
Public Water Supply Well Water system, as permitted under Chapters 17-500, 17-555, 17-560, and 10D-4. The Quality Water Improvement Program (AQIP) was established by the District to design, plan and implement well plugging operations required to restore hydrologic conditions altered by improperly constructed or deteriorated well casings. QWIP activity targets the suppression of interaquifer contamination of potable water, degradation of surface water quality from the uncontrolled discharge of artesian wells and chemical contamination. R Rational Unified Process (RUP) A software development strategy that is iterative, architecture-centric, and use-case driven. There are four phases to RUP, the inception, elaboration, construction, and transition phases. The use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner that is both reasonable and consistent with the public interest. Recharge Reclaimed Water Reclaimed Water Reclaimed Water Reclaimed Water Regional Observation Regional Observation Monitor Well Program (ROMP), established by the District, targets the design, planning and construction of a network of ground water monitor wells to record water levels and water quality and to locate the fresh/saltwater interface. The program's major objectives are to accurately define the aquifers and confining beds within the District boundaries, determine the hydrologic characteristics of the aquifers and freshwater/saltwater interface.		quantities are permitted. However, quantities for all use types are	
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Quality Water Improvement Program (QWIP) Quality Water Improvement Program (QWIP) Residual Unified Process (RUP) Reasonable-Beneficial Use Recharge Recharge Reclaimed Water Reclaimed Water Regional Observation Monitor Well Program (ROMP), established by the District, targets the design, plan and implement well plugging operations required to restore hydrologic conditions altered by improperly constructed or deteriorated well casings. QWIP activity targets the suppression of interaquifer contamination of potable water, degradation of surface water quality from the uncontrolled discharge of artesian wells and chemical contamination. A software development strategy that is iterative, architecture-centric, and use-case driven. There are four phases to RUP, the inception, elaboration, construction, and transition phases. The use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner that is both reasonable and consistent with the public interest. Water that: 1: has received at least secondary treatment and is reused after flowing out of any plant or other works used for the purpose of treating, stabilizing, or holding wastes; or 2: has been reclaimed after use for irrigation (tailwater recovery), industrial (recycle circuit, or other means. Regional Observation Monitor Well Program (ROMP), established by the District, targets the design, planning and construction of a network of ground water monitor wells to record water levels and water quality and to locate the fresh/saltwater interface. The program's major objectives are to accurately define the aquifers and confining beds within the District boundaries, determine the hydrologic characteristics of the aquifers and freshwater/saltwater interface.	Q		
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System (RDBS)	data, including Environment Resource Permits (ERP), Water Use Permits (WUP), Well Construction Permits (WCP), and Compliance Tracking items.
Relocated Quantities	Quantities of water that have been moved from one permitted property to a different permitted property through the water use permitting process, subject to meeting all Chapter 40D-2 permitting rule criteria. Under existing rules, the relocated quantities do not have to have been used. Under proposed SWUCA Phase II rules, only used quantities may be relocated.
Reservoir	Any artificial or natural holding area that contains or will contain the water impounded by a dam.
Reuse	Reclaimed water supplied by a wastewater treatment plant or excess stormwater received from another entity or self-supplied.
Revoked Permit	A permit that was either voluntarily revoked (with the consensus of the permittee) or involuntarily revoked (without the consensus of the permittee) by the District Governing Board due to non-use of the water or due to violations of the terms and conditions of the permit (See Rule 40D-2.341, Florida Administrative Code).
S	
Safe Yield	The amount of water that can be withdrawn from a ground water system without producing unacceptable impacts.
Saline Water	Water having a TDS concentration greater than 500 mg/L and less than that of seawater.
Saline Water Interface	A zone between freshwater and seawater where the TDS concentration changes from less than 500 mg/L to greater than 500 mg/l respectively.
Salt Water Intrusion	The movement of saline water inland from the seacoast or upward from a saline water aquifer into a fresher water body or aquifer.
Saturated Zone	The zone in an aquifer in which all pores are filled with water.
Sealing Water Well	A well used in mining operations for cooling and lubricating pumps along slurry pipelines. An ancillary use is to add water to the slurry.
Seasonal High Water Level (SHWL)	The highest elevation to which the level in a surface water body is expected to rise during a normal wet season.
Seasonal High Water Table (SHWT)	The highest elevation to which groundwater in the surficial aquifer is expected to rise during a normal wet season.
Semi-Confined Aquifer	A completely saturated aquifer that is bounded above by a semi- pervious layer and below by a layer that is either impervious or semi-impervious.
Service Area	The geographical region in which a water utility distributes water for public supply use and bills customers directly for such use.
Serviced area	Water provided to an area not owned or controlled by the



	permittee on which there are no withdrawal facilities.
Sinkhole	A depression in the land surface formed either by collapse of the roof of an underground cavern or channel or by solution of near surface carbonate rocks.
Small General WUP	A WUP for less than 100,000 gpd on an (standard annual average basis.
Southern Water Use Caution Area (SWUCA)	A 5,000 square mile water use caution area covering all or portions of eight counties extending from the southern halves of Hillsborough and Polk Counties in the north to the southern District boundary. It was established by the Governing Board to address declining lake levels, declining seasonal and average ground water levels, water quality degradation, and adverse impacts to water users.
SWUCA Automatic (SA) (Permit Class)	SWUCA Automatic: A WUP in the SWUCA that was modified automatically via an IBM program to change quantities and add SWUCA Phase 1 special conditions.
SWUCA Manual (SM) (Permit Class)	SWUCA Manual: A WUP in the SWUCA that was modified automatically via an IBM program to add SWUCA Phase 1 special conditions but for which site-specific quantities were calculated by District staff.
Standard Annual Average Quantities	For crops that utilize effective rainfall, the annual average quantities permitted for irrigation based on average (5-in-10) rainfall conditions. For crops grown under plastic mulch or in greenhouses, the standard annual average is the same as the drought annual average (see below). This terminology does not apply to areas outside of the SWUCA.
Standby for alternative source	Water quantities in the natural resource (ground water or surface water) that is not used because the permittee uses an alternative source of water instead.
Standby quantities	Annual average quantities permitted to a standby well generally equal to twice the peak month quantity divided by 365 days per year. This allows use of the standby withdrawal point for two months until the original withdrawal point can resume production.
Standby well or withdrawal point	A withdrawal point that is not used unless problems occur to another withdrawal point such that it cannot operate. At that time, the standby withdrawal point is pumped for that use until the original withdrawal point can resume production.
State Water Policy (Chapter 17-40 Florida Administrative Code)	The comprehensive statewide policy as adopted by DEP pursuant to Section 373.026 and Section 403.061, Florida Statutes setting forth goals, objectives, and guidance for the development and review of programs, rules, and plans relating to water resources. All WMD programs and rules must be consistent with State Water Policy.



Supplemental Irrigation	The amount of irrigation water necessary to augment rainfall so that a sufficient quantity is available to a plant for optimum growth.
Surface Water	Water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classified as surface water when it exits from the spring onto the earth's surface.
Surface Waters of the State	Those surface waters regulated pursuant to subsection 403.031(12), Florida Statutes.
Surficial aquifer	The unconfined aquifer made up of recent fluvial sediments located at the surface.
System Efficiency (Irrigation)	The ratio of the volume of water beneficially used to the volume withdrawn from an aquifer or surface water body.
T	
Tailwater	Irrigation water that runs off on the land surface after application to crops. It is sometimes collected in ponds and reused if the crop type allows.
Technical Information Planning Series (TIPS)	A series of technical assistance documents (water conservation, lakes management, etc) created by the Planning Department to assist local governments and others in effective water resource management.
Topographic Map	Detailed, graphic representation of the land surface elevations of a region.
Transferred WUP	A WUP that is transferred to the new landowner when that person or entity purchases or otherwise acquires all of the land for which water is permitted and all withdrawal facilities. If there are no changes to the permit and use, it is an administrative procedure. The same WUP number is used.
Transition phase of the Rational Unified Process (RUP)	The fourth phase of RUP, where the software is tested and released to the end users.
Transmissivity	The rate at which water is transmitted through a unit width of an aquifer under a unit hydraulic gradient. It equals the hydraulic conductivity multiplied by the aquifer thickness.
Two in Ten Drought	A drought, the severity of which statistically happens on the average of twice in a given ten-year period.
U	
Unconfined Aquifer	A permeable geologic unit or units only partly filled with water and overlying a relatively impervious layer. Its upper boundary is formed by a free water table or phreatic level under atmospheric pressure.
Unsaturated Zone	The zone in an unconfined aquifer, usually starting at the land
·	



	surface, that contains both water and air; also called the vadose
	zone or zone of aeration.
Upconing	Upward migration of water through a semi-confining layer into an upper geological unit, aquifer or formation caused by higher pressure existing in a lower geologic unit, aquifer, or formation.
Use Case	A methodology used in systems analysis to identify, clarify, and organize the requirements that people have for a system. A use case reflects the goals of the system, shows how people will interact with it, and identifies the scenarios that can occur in it.
Use Code Use Code Quantities	An alpha-numeric code for the specific use for permitted water, such as citrus irrigation, spring tomato irrigation, residential potable supply, golf course irrigation, sand and gravel dewatering, personal sanitary use, fire fighting/testing, general product manufacturing, power plant emission control, etc. Each specific use has a standard annual average quantity. Some have drought annual average quantities, peak month quantities, and maximum or crop protection quantities.
Use of Credits	When the permittee has a balance of credits, they can utilize them when they need more water than what their permitted average quantities are. The new limit of average quantities will be equal to the drought quantities assigned to the permit.
Use Quantities	The total standard annual average quantities for any predominant use type.
W	
Water Audit	An accounting procedure that describes all the gains and losses of water in a water utility system. The regulatory purpose of a water audit is to accurately determine the amount of unaccounted-for water (UAW) in a water distribution system.
Water Conserving Credits	A volume of water credited to a water use permit under SWUCA Phase 1 rules for crops that utilize effective rainfall. The credit allows the permittee to irrigate above the standard annual average allocation rate when needed. The permittee is limited in this by the drought annual average allocation rate.
Water Management District	Any flood control, resource management, or water management district operating under the authority of this chapter.
Water Resource Development Project	District projects such as flow enhancement or aquifer recharge, or quantities retired through District land acquisition that are expected to increase the amount of water available over and above that of the Minimum Flows or Levels.
Water Table	The surface of a body of unconfined ground water at which the pressure is equal to that of the atmosphere; defined by the level where water within an unconfined aquifer stands in a well, which penetrates the unconfined aquifer far enough to hold standing



	water.
Water Use Caution Area (WUCA)	A geographic region within the District where the District Governing Board has adopted rules or issued an order imposing special requirements for water use permittees and applicants to implement regional action to address cumulative water withdrawals which are causing or may cause adverse impacts to the water and related land resources or the public interest.
Water Use Permit (WUP)	A permit issued by the District authorizing the use of water from a ground water or surface water body for a specific need, pursuant to 40D-2, Florida Administrative Code.
Water Use Permit (WUP) Revision	The three-digit decimal number attached to a WUP number. A WUP is issued for a specific water use on a specific piece of property. All modifications and renewals of the WUP are given a new revision number, and the WUP polygon outline usually stays the same.
Watershed	The geographic area from which water in a particular stream, lake or estuary originates. All lands in the watershed drain toward the stream, lake or bay and contribute pollutants to these waters. The District has approximately 13 major watersheds within its jurisdiction.
Weir	A discharge structure used for the controlled release of water volumes.
Well	Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, acquisition, development, or artificial recharge of ground water. This term, when used without modifiers and in the context of this project, does not include any well for the purpose of obtaining or prospecting for oil, natural gas, minerals, or products of mining or quarrying; for inserting media to dispose of oil brines or to repressure oil-bearing or natural gas-bearing formation; for storing petroleum, natural gas, or other products; or for construction purposes.
Well Completion	Termination of all construction, repair, modification or abandonment activities.
Well Completion Report	A form adopted in Chapter 40D-1 and required to be submitted under Chapter 40D-3, Florida Administrative Code that describes the construction characteristics of a well as well as the rock or sediments encountered during its construction.
Well Construction Permit	A permit, required to be obtained from the District under Chapter 40D-3, Florida Administrative Code, prior to construction, repair, modification, or abandonment of any water well.
Well Seal or Well Cap	An arrangement or device approved by the District that prevents contaminants from entering the well at the upper terminus.



Wellfield	Multiple wells under common ownership or control, which may or may not be located on contiguous land parcels, intended to supply a common service area. Term usually associated with public water supply.
Wellfield Impacted Areas (wia)	An area of concern where the water resources are stressed due to public supply wellfields in Pinellas, Pasco, and Hillsborough Counties.
Wetlands	Those areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydria or alluvial or possess characteristics that are associated with reducing soil conditions described above. These species, due to morphological, physiological or reproductive adaptions, have the ability to grow, reproduce, or persist in aquatic environments or anaerobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads bogs, cypress domes and strands, slough, wet prairies, reveries, swamps and marshes, hydric seepage slopes tidal marshes, mangrove swamps and other similar areas.
Withdrawal Facility or Withdrawal Point	Any well, surface water intake system or diversion from which water is withdrawn for use, including any irrigation system used to apply water on site.