## **Quality Assurance Code Definitions**

The table below gives the meaning of each of the quality assurance codes that appear in the ValueQualifier/QACode column of files created by the Water Atlas Data Download tools. Where there is no value in the Data Source(s) column, the code definition shown conforms to the Florida Department of Environmental Protection standard used by most data providers. Where Data Source(s) are indicated, the interpretation shown is non-standard or unique to the data provider.

Data Source(s)	Code	Meaning
	!	Data deviate from historically established concentration ranges.
	*	Not reported or not analyzed due to interference
	?	Data are rejected and should not be used
	Α	Value reported is the mean of two or more determinations
	В	Results based upon colony counts outside the acceptable range
	D	Field measurement
	Е	Composite sample from multiple stations
	F	Indicates female sex
	G	The analyte was detected at or above the method detection limit in both the sample and the associated field blank, equipment blank, or trip blank, and the blank value was greater than 10% of the associated sample value. The value in the blank shall not be subtracted from associated samples.
	Н	Value based on field kit determination
	I	Result value is between the laboratory method detection limit and the laboratory practical quantitation limit.
	J	Estimated value questionable or not accurate
	K	Actual value is known to be less than the value given
	L	Actual value is known to be greater than the value given
	M	Presence of material verified, but not quantified
	N	Presumptive evidence of presence of material
	0	Sampled for but analysis lost or not performed
	Q	Sample held beyond accepted holding time
	R	Significant rain in the past 48 hours
	S	Secchi disk visible to bottom of waterbody. The value reported is the depth of the waterbody at the location of the Secchi disk measurement
	Т	Value reported is less than the laboratory method detection limit
	U	Material was analyzed for but not detected
	V	Analyte was detected in both the sample and the associated method blank

Data Source(s)	Code	Meaning
	W	Value observed is less than lowest value reportable under T code. This code is used when a
		positive value is not observed or calculated for a result, i.e., the test instrument or calculation is
		not capable of producing negative values.
	Χ	Indicates, when reporting results from a Stream Condition Index Analysis (LT 7200 and FS 7420),
		that insufficient individuals were present in the sample to achieve a minimum of 280 organisms
		for identification (the method calls for two aliquots of 140-160 organisms), suggesting either
		extreme environmental stress or a sampling error.
	Υ	Analysis form unpreserved or improperly preserved sample
	Z	Too many colonies were present - the numeric value represents the filtration volume.
SJRWMD_HYDRO, SWFWMD_HYDRO	1	Good continuous records
SJRWMD_HYDRO, SWFWMD_HYDRO	2	Good quality edited data
SJRWMD_HYDRO	3	Good quality data obtained from USGS
SJRWMD_HYDRO	4	Provisional data obtained from USGS
SJRWMD_HYDRO	26	Good daily read records
SJRWMD_HYDRO	30	Irregular Time Rate Data - weekly/monthly read.
SJRWMD_HYDRO	76	Reliable interpolation
SJRWMD_HYDRO	77	Correlation with other station, same variable
SJRWMD_HYDRO	79	Records partly estimated
SWFWMD_HYDRO	79	Fewer than 24 values in daily aggregate
SJRWMD_HYDRO, SWFWMD_HYDRO	80	Accumulated
SJRWMD_HYDRO	81	Wet day within accumulated rainfall period
SJRWMD_HYDRO	82	Linear interpolation across gap in records.
SWFWMD_HYDRO	83	Verification Value
SWFWMD_HYDRO	84	Could not locate site
SWFWMD_HYDRO	85	Canker Alert - no site access
SWFWMD_HYDRO	86	Site destroyed
SWFWMD_HYDRO	87	Weeds too high to read gage
SWFWMD_HYDRO	88	No access to site
SWFWMD_HYDRO	89	Gage Missing
SWFWMD_HYDRO	90	Less than
SWFWMD_HYDRO	91	Greater than
SWFWMD_HYDRO	95	Estimated
SWFWMD_HYDRO	96	Override
SWFWMD_HYDRO	97	Surveyed

Data Source(s)	Code	Meaning
SWFWMD_HYDRO	98	Below staff gauge
SJRWMD_HYDRO	104	Records estimated
SJRWMD_HYDRO, SWFWMD_HYDRO	140	Provisional data - quality unknown
SJRWMD_HYDRO	150	Rating table extrapolated due to inadequate gauging information
SJRWMD_HYDRO, SWFWMD_HYDRO	151	Data Missing
SWFWMD_HYDRO	153	Above staff gauge
SWFWMD_HYDRO	154	Out of service
SJRWMD_HYDRO	175	Below instrument threshold
SJRWMD_HYDRO	201	Data not recorded
SJRWMD_HYDRO	254	Rating Table Exceeded
SJRWMD_HYDRO	255	Data Not Recorded
SWFWMD_HYDRO	!	Data are provisional
SJRWMD_WQ	#	See project manager remarks
SEMCO_WRAD	\$	Calculated by retrieval software. Numerical value was neither measured nor reported to the
		database, but was calculated from other data available during generation of the retrieval report
LAKECO_SWWQ	*	Surrogate outside QC limits
SWFWMD_HYDRO, USGS_NWIS	<	Less than result value
SJRWMD_WQ	>	Field blank analyte value was high (> 2 x MDL).
SWFWMD_HYDRO, USGS_NWIS	>	Greater than result value
SWFWMD_HYDRO	Α	Accumulated sum or total
LAKECO_SWWQ	В	Analyte detected in blank and sample
PINELLAS	С	Multiple interpretations – contact laboratory manager
SEMCO_WRAD	С	Calculated from other data available
SWFWMD_HYDRO	С	Canker Alert - no site access
LAKECO_SWWQ	С	Coelute
SARASOTAES_WQ	С	Laboratory rechecked the data.
SARASOTA_COASTALCREEK_WQ	C	Laboratory rechecked the data.
SWFWMD_HYDRO	D	Out of service
LAKECO_SWWQ	D	Diluted
PINELLAS	DIL	Diluted
SWFWMD_HYDRO	Е	Estimated
LAKECO_SWWQ	Е	Exceeds calibration range
SWFWMD_HYDRO	F	Fewer than 24 values in daily aggregate
LAKECO_SWWQ	F	Calculated from higher dilution

Data Source(s)	Code	Meaning
PINELLAS, SEMCO_WRAD	G	Value reported is the maximum of two or more determinations
SWFWMD_HYDRO	G	Site destroyed
LAKECO_SWWQ	G	Greater than result value
SWFWMD_HYDRO	Н	Weeds too high to read gage
LAKECO_SWWQ	1	Insufficient sample
SWFWMD_HYDRO	J	No access to site
LAKECO_SWWQ	J	Estimated value less than quantitation limit
SFWMD_WQ	J1	Surrogate % rec exceeded
SFWMD_WQ	J2	No known QC criteria exist
SFWMD_WQ	J3	Precision or accuracy criteria not met
SFWMD_WQ	J4	Matrix interference
SFWMD_WQ	J5	Improper laboratory or field protocol
SWFWMD_HYDRO	L	Could not locate site
SWFWMD_HYDRO	M	Data missing
SWFWMD_WQ	M	Presence verified but not quantified – result value is PQL
LAKECO_SWWQ	M	Matrix interference
PINELLAS	MCL	Maximum Contamination Level for a regulated analyte
PINELLAS	MDL	Method Detection Level for an analyte
LAKECO_SWWQ	N	Not measured
PINELLAS	NA	Not Applicable – no sample collected nor field data to enter
SFWMD_WQ	NOB	No bottle sample
SFWMD_WQ	NVZ	Not a valid zero value contact laboratory manager
PINELLAS	Р	Bacteria were present in a sample
SEMCO_WRAD	Р	Too numerous to count
SJRWMD_WQ	Р	Presumptive evidence of presence of material
SWFWMD_HYDRO	Р	Gage missing
SFWMD_WQ	PMF	Contact project manager
SFWMD_WQ	PMR	Contact project manager
PINELLAS	QNS	Sample Quality Insufficient for analysis
PINELLAS	S	Laboratory test
SEMCO_WRAD	S	Laboratory test
SWFWMD_HYDRO	S	Surveyed
LAKECO_SWWQ	S	Surrogate
LAKECO_SWWQ	V	Detected value

Data Source(s)	Code	Meaning
SEMCO_WRAD	W	Value observed is less than the lowest value reportable under remark "T"
SWFWMD_WQ	W	Well construction aspects may influence values
LAKECO_SWWQ	W	Between CRD and IDL
SEMCO_WRAD	Χ	Value is quasi vertically-integrated sample
SWFWMD_HYDRO	Χ	Below staff gage
SWFWMD_WQ	X	Estimated value not accurate
LAKECO_SWWQ	Х	None
SWFWMD_HYDRO	Υ	Above staff gage