Interim Guidance for Routine Surface Water Quality Monitoring During Extended Drought

Continue to conduct **routine** surface water quality monitoring (SWQM) activities according to commitments specified in the statewide Coordinated Monitoring Schedule (CMS) <<u>http://cms.lcra.org/</u>>.

Collect and report data according to the following guidelines:

- 1. Schedule, and travel to SWQM monitoring sites, as you would normally do to meet routine commitments on the CMS;
 - If you know, or can determine, reliably that the scheduled monitoring site is dry, it is not necessary to travel to the site. Report a value of 6 for Flow Severity (Parameter Code 01351) and Days Since Last Significant Precipitation (Parameter Code 72053).
- 2. Upon arrival at the monitoring site, photo document flow/reservoir level conditions, photo document even if the monitoring site is dry.
- 3. If the monitoring site is on a lake or reservoir where it is possible to safely launch a boat, and navigate to within 400 meters of the established monitoring station, go ahead and collect routine water monitoring data (field, conventional water samples, etc.). Also, if available, record reservoir stage as published by the Texas Water Development Board on their website (Parameter Code 00052), and the reservoir percent full (Parameter Code 00053). This information can be accessed at:

Reservoir Storage Summary

NOTE: The information on the Texas Water Development Board website goes away after 28 days. So you will need to get the information related to monitoring efforts as soon as possible relative to sample date.

If it is not possible to access the lake/reservoir because the water level is such that it is not possible to safely launch a boat, or if boat ramps is closed report a value of $\underline{1}$ for parameter code 00051 (reservoir access not possible - level too low). Similarly, if you know, or can determine reliably that the lake/reservoir cannot be accessed due to unsafe conditions, or closed ramps then you do not need to travel to the site and report a value of $\underline{1}$ for parameter code 00051.

- 4. If it is a stream/river monitoring site, and there is water present at the site within ± 400 meters of the established monitoring station, and minimum size meets dimensions as described in item 5 below, go ahead and collect routine water monitoring data (field, conventional water samples, etc.) as described in CMS. If possible, report total depth at the site where the sample is collected (Parameter Code 82903).
- 5. Determine pool characteristics according to the following guidance:
 - A pool is defined as anything greater than or equal to 10 meters in length and greater than or equal to 0.4 meters in depth.
 - The total length of the reach upstream/downstream of a sample station to determine pool coverage should be between 500 and 800 meters. The actual length of the survey should be recorded in the comments section.
 - A physical measurement is the preferred method for determining percent pool coverage, but a visual estimate can also be made. If a GPS is used in conjunction with a mapping software

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(e.g. Google Earth), then two significant figures should be reported. If a rangefinder is used, two significant figures should be reported. If a visual estimate is made, then only one significant figure should be reported.

- The GPS survey would begin by zeroing the tracking function on the GPS unit and walking upstream until several bends are included or the stream characteristics begin to repeat, or access is not available. Record the GPS position on the upstream end. A similar distance should be walked on the downstream portion and that position recorded. The main pool within this area should be measured for length, width and depth. The length of any additional pools within the reach should be summed and added to the main pool to get a percent coverage.
- Report the following pool characteristics:
 - 89864 Maximum pool width (meters)
 - 89865 Maximum pool depth (meters)
 - 89869 Pool length in meters (meters)
 - 89870 Percent pool coverage in 500 meter reach.
- Also, report description of where the main pool is located in relation to the bridge crossing in the comments section along with any other pertinent details such as presence of fish, mussels, or other wildlife. Photographs upstream and downstream of the bridge and of the main pool are encouraged.
- 6. Even if the monitoring site is dry, create a sample event in SWQMIS with one sample set, for field data.
- 7. If monitoring is targeted-routine, the minimum data required to be reported in order to meet CMS commitments are, Flow Severity (Parameter Code 01351) and Days Since Last Significant Precipitation (Parameter Code 72053).
 - If the stream channel at the monitoring site contains water, but there is no flow, report 1 for Flow Severity, and flow value of 0 cfs for parameter code 00061.
 - If the stream channel at the monitoring site contains no water, report a value of 6 for Flow severity, and do not report a result for flow (parameter code 00061).
 - It is appropriate to report the actual number of days Since Last Significant Precipitation (PC 72053), even if the value is greater than 7. For collectors that manually enter data into SWQMIS, when you save the results page in SWQMIS and have entered a value for Days Since Last Significant Precipitation you may get a system-generated message indicating that this value is an outlier. Go ahead and verify the outlier, and click the save button again. For collectors who submit data in flat files, when you report values for Days Since Last Significant Precipitation, you will need to enter a '1' at the end of the row if the value is an outlier. Everyone should note the statewide outlier maximum for this parameter has now been set to detect outliers at 75 days.
- 8. Be sure to note comments indicating drought condition, and other observations in the Collectors Observations section.
- 9. Primary staff contact:

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For Use Attainability Analyses, or other monitoring directed specifically at addressing water quality issues for 303d listed water bodies in water bodies significantly affected by the extreme drought conditions contact TCEQ Water Quality Standards Team and/or TCEQ Surface Water Quality Monitoring Team prior to collecting samples.