

<p>Monitoring Method Guidance CN 0.74c (March 2021)</p>	<p>RECOMMENDED CONTENT OF NARRATIVE DATA REPORTS FOR CLEAN WATER ACT 305(B)/303(D) REPORTING PURPOSES</p> <p>Massachusetts Department of Environmental Protection Division of Watershed Management- Watershed Planning Program 8 New Bond St., Worcester, MA. 01606</p>	
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Purpose: To provide guidance to external groups regarding the recommended content of narrative data reports, submitted to the Massachusetts Department of Environmental Protection, Division of Watershed Management (DWM)-Watershed Planning Program (WPP) along with data spreadsheets. NOTE: Data reports are **optional** when submitting data.

Background: DWM-WPP often uses water quality data from non-MassDEP groups, such as grant recipients; local, state and/or Federal agencies; environmental consultants and volunteer monitoring organizations, to assess waterbody health and develop cleanup plans for impaired waterbodies. In addition to data submittals (using DWM-WPP's standard EXCEL template), "external" data are sometimes accompanied by monitoring reports in narrative form. Reports are not required by DWM-WPP as part of data submittals but can provide needed context to support the data spreadsheets.

Recommended content:

1. Cover letter. Provide a brief cover letter explaining what data are being submitted, project contact persons, and a statement that the approved project QAPP was followed in generating the data.
2. Cover page. Include project name/title, lead organization, author(s) and report date.
3. Introduction. Provide background information related to the monitoring, such as funding source(s), water quality-related issues of concern and objectives of the monitoring.
4. Methods Used. List all field and lab methods that were employed during the project. Reference Standard Methods, EPA, group SOPs, etc. as appropriate.
5. Locations Sampled. Provide detailed sampling station maps/tables showing or describing precise locations where samples were taken. If possible, include precise lat-long coordinates.
6. Results: Provide tabular field measurement data and laboratory data, including that for quality control samples, in a clear and organized format. Include raw laboratory data reports, completed fieldsheets and completed chain-of-custody forms in appendices. Also provide important metadata, such as sample collection dates/times, analysis dates/times, exact station location descriptions, sample ID numbers, analytical method used with method detection limits (MDLs) and reporting detection limits (RDLs), weather, field observations and measurement units.
7. Quality assurance, quality control and data validation (in main report or in an appendix): Discuss the extent to which the QAPP was implemented (e.g., were there any deviations from the approved QAPP? And if so, what were they, and what are the implications of the change(s), if any?). Consider including the following information in the **QA/QC section** of the report.
 - Current contact information for project personnel, including project manager, quality control officer and database manager
 - Type and number of QC samples taken during the project (e.g., field blanks, duplicates, etc.)
 - QC results and discussion of both field and laboratory quality control sample results (including overall precision of field duplicates (as relative percent difference, or RPD), blank contamination (if any), analytical accuracy for known PE samples (if any), holding time exceedances, etc.)
 - QC evaluation for any field or lab audits that may have been done
 - Type, extent and dates of actual field equipment calibration and maintenance (with supporting documentation as appropriate)
 - Discussion of how data validation process was implemented and how the results of validation affected the project data (e.g., were data quality objectives (DQOs) met, as outlined in the QAPP; were any identified QC problems applied to whole survey samples and/or analytical sample batches). Also, what were the specific data validation steps performed to accept, qualify, and censor project data. List data qualifier symbols used, if any (e.g., "J" for 'estimated' by laboratory).

- Data completeness (i.e., any missing data)
 - Database management system employed
 - Other project information as they may have affected sample data and lab QC data
8. **Discussion:** Data analyses and discussion of results can provide important information that should be included in the reports. Although DWM is mainly interested in the quality-assured tabular data, graphic displays of the data can also be helpful.
 9. **Conclusion(s):** Summarize findings and provide recommendations for additional monitoring and/or remedial actions to improve water quality.
 10. **Appendices.** Include complete set or example completed copies of relevant appendices for raw laboratory data and raw field data (including survey dates), completed fieldsheets and completed sample chain-of-custody forms, as well as any other relevant documentation.

When to submit reports: For MassDEP's CWA 305(b) and 303(d) assessment and reporting purposes, submittals of surface water quality data/information are welcome at any time, with the following caveats regarding use by MassDEP in decision-making. Quality-controlled data submitted prior to the date(s) (listed on the webpage) may be considered in the development of the Integrated Report, dependent on the planned cycle-specific assessment workload. Data submitted after the listed deadline(s), including during the public comment period, will not be considered for the current assessment cycle, but may be reviewed and considered in a subsequent cycle, dependent on the workloads planned for future assessment cycles. Current submittal dates are listed here: <https://www.mass.gov/guides/external-data-submittals-to-the-watershed-planning-program>.

How to submit reports: While optional, electronic files are preferred for report submittals. These can be sent via email (SubmitWQData@state.ma.us) or CD-ROM.

Where to submit data: Electronic report files can be sent via e-mail to the following address (along with data files): SubmitWQData@state.ma.us.

For regular mail delivery, reports can be sent to the following address:

External Data Coordinator
Massachusetts Department of Environmental Protection
Bureau of Water Resources, Division of Watershed Management, Watershed Planning Program
8 New Bond St., Worcester, MA. 01606