

Australian Government

Assessment Requirements for NWPHYD005 Process and report hydrographic time series data

Release: 2

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Modification History

Release 2. Minor document layout changes, no content changes

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes:

- applying analytical tools for hydrographic data
- applying and recording field verification checks including at least one of:
 - electrical conductivity (EC) on-site meter reading
 - flood marks
 - groundwater down the casing tape check
 - peak level indicators
 - rainfall storage or calibration check
 - staff gauge reading
 - survey level
 - well tape check
- assessing the performance and limitations of the monitoring systems and sites employed in monitoring the network/catchment
- collecting samples
- communicating technical information using communication technology with relevant personnel, management and stakeholders
- compiling, analysing, storing, archiving and verifying data
- estimating failed periods required by stakeholder, using:
 - applying peak stage level or total stored rainfall checks
 - copy and paste
 - · estimation using standard processes and software
 - historical data
 - nearby sites and related parameters
 - verification of information
- gathering and interpreting complex documentation and applying it to the specification of hydrographic data collection and reporting procedures
- · identifying and assessing the characteristics of hydrographs and pluviometer traces
- identifying and responding effectively to operational problems

- identifying, reporting and resolving potential and actual problems
- interpreting and applying technical documentation to the collection, analysis and reporting of hydrographic data
- producing hydrographic data reports to support organisational decision making
- using information and data management computer systems

Knowledge Evidence

- · computer software relevant to the analysis and archiving of hydrographic data
- continuous data verification techniques
- hydrographic cycle and its impact on the conditions and objectives of hydrographic time series data management
- mathematical and scientific techniques relevant to the analysis of hydrological and hydrographic data
- measurement methods for collection and checking continuous hydrometric, hydrological and hydrographic data in the field
- policies and standard operating procedures for data analysis
- water sampling and testing procedures

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations. Where this is not appropriate, assessment must occur in suitable simulated workplace operational situations reflecting actual workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment currently used in industry
- applicable relevant documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037 Assessment Requirements for NWPHYD005 Process and report hydrographic time series dataDate this document was generated: 7 December 2022

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