HYDROLOGY PROJECT

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Training module # SWDP - 33

How to report on stage discharge data

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with
HALCROW, TAHAL, CES, ORG & JPS

Table of contents

1. Module context

While designing a training course, the relationship between this module and the others, would be maintained by keeping them close together in the syllabus and place them in a logical sequence. The actual selection of the topics and the depth of training would, of course, depend on the training needs of the participants, i.e. their knowledge level and skills performance upon the start of the course.

2. Module profile

Title	:	How to report on stage discharge data
Target group	:	Hydrologists, Data Processing Centre Managers
Duration	:	One session of 60 minutes
Objectives	:	After the training the participants will be able to*:* • Prepare report on stage-discharge data
Key concepts	:	• Observational network • Stage-discharge relations in graphical and arithmetical form • Data validation and quality aspects
Training methods	:	Lecture, software
Training tools required	:	Board, OHS, Computer
Handouts	:	As provided in this module
Further reading and references	:	

3. Session plan

No	Activities	Time	Tools
1	***General*** • Overhead - highlighted text • Overhead - Table	10 min	

4. Overhead/flipchart master

5. Handout

Add copy of Main text in chapter 8, for all participants.

6. Additional handout

These handouts are distributed during delivery and contain test questions, answers to questions, special worksheets, optional information, and other matters you would not like to be seen in the regular handouts.

It is a good practice to pre-punch these additional handouts, so the participants can easily insert them in the main handout folder.

7. Main text

Contents

How to report on stage discharge data

1. General

- **Published reports are the primary visible output of the Hydrological Information System. The principal reports will be with respect rainfall, climate and streamflow and will cover the water year (from 1 June to 31 May). A limited amount of stage discharge data will be incorporated with reports on streamflow. Reports have several purposes**

  - **to provide information for use in planning and design.** Stage discharge data are not directly used, but they can provide an indication of the reliability of derived streamflow data. Sufficient information should be provided for this purpose.
  - **to advertise the work of the HIS and its capability and to create interest and awareness amongst potential users.**.
  - **to provide feedback to data producers and acknowledge the contribution of observers and co-operating agencies.** The HIS is an integrated system in which data are transferred by stages from the field, to local and regional offices for data entry, processing and validation. The annual report shows how observations at individual stations are integrated in the network. It provides an encouragement to observers and data processors to ensure that the raw and processed data are reliable.

The HIS provides opportunities for storage, retrieval and reporting on magnetic media and there is now no necessity to publish all available data from contributing stations. There is no necessity to report on every discharge observation made during the year. The parameters of individual stage discharge relationships also need not be reported but must be available on request to users along with time series of discharge.

The following table of summary information for each station is recommended as a guide to gauging effort and the reliability of the ratings:

	Current year		Previous record	
	Level	**Flow**	**Level**	**Flow**
Maximum observed				
Maximum gauged				
Minimum observed				
Minimum gauged				
Number of gaugings in the year				
Number of ratings in the year				
Overall standard error of rating (1)				
Overall standard error of rating (2)				
Overall standard error of rating (3)				
Last date of change of rating				