HYDROLOGY PROJECT

Technical Assistance

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Training module # SWDP - 05

How to receive data at different levels

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with
HALCROW, TAHAL, CES, ORG & JPS

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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 receive data at different levels
Target group	:	Assistant Hydrologists, Hydrologists, Data Processing Centre Managers
Duration	:	One Session of 90 minutes
Objectives	:	After the training the participants will be able to*:* • Know the procedures for receipt of data at various levels • Organise data into temporary databases at various Data Processing Centres
Key concepts	:	• Registry of receipt of data • Feedback for non-receipt of data • Raw database and processed databases • Dedicated databases in HYMOS
Training methods	:	Lecture
Training tools required	:	OHS
Handouts	:	As provided in this module
Further reading and references	:	

3. Session plan

No	Activities	Time	Tools
1	***General*** • Receipt of data at different levels	5 min	OHS 1
2	***Targets*** • Data Processing Plans • Target dates	5 min	OHS 2 OHS 3
3	***Auditing of receipt*** • Illustration - Record of receipt	5 min	OHS 4
4	***Feedback***	2 min	
5	***Filing***	3 min	
6	***Wrap up***	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 receive data at different levels

1. General

- **Data are transferred by stages through the processing system**, from field to Sub-divisional office to Division and hence to State or Regional Data Processing Centres. In order that routine processing proceeds smoothly the following features of data administration are essential:
  - targets
  - auditing
  - feedback
  - filing

- **At each stage in the process target dates for receipt and for onward transmission are prescribed.**

- **A record of receipt and date of receipt for each station record is maintained** for each month of the year in suitably formatted registers.

- **Where records are not received by the target date at each office or are received in an incomplete or unsatisfactory form, follow-up action is taken with the next lowest level to identify the source of the problem.**

- **Data collected in the field are delivered to a Sub-divisional office** in a variety of media, as hand-written forms and notebooks, charts or digital data files on magnetic media. **Arrangements must be made for the storage of raw paper records** after entry to computer files.

From the Sub-divisional office raw and processed data on magnetic media will be sent to Divisional data processing centres with the accompanying primary validation report. Wherever considered appropriate for conveying comments, listing of data with data validation remarks have to be sent along with the data on magnetic media. Similarly, from Divisional to State/Regional data processing centre data will be sent on magnetic media along with comments/report on secondary data validation.

2. Targets

As already noted in Module 3 target dates are prescribed for the receipt and despatch of raw and processed data from each office. These are shown in Table 1 where the bracketed figure refers to the month following the month in which the data have been observed or measured. Thus data measured in June must be received in the Sub-divisional office by 4 July and processing completed at the State/Regional Data Processing Centre by 31 August.

Table 1 Target dates for data processing and archiving

Stage	Receipt	Entry/Validation, etc.	Dispatch
Subdivision	4 (1)	10 (1)	10 (1)
Division	15 (1)	31 (1)	31 (1)
Data Processing Centre	5 (2)	31 (2)	Raw data: 15 (2) Processed data: End of water year
Data Storage Centre	31 (2)	-	As and when requested and available

3. Auditing of Receipt

It is important to maintain a record of receipt of data so that problems of data collection or transmission can be identified at an early stage. Receipt is recorded on the day of delivery. Such records are maintained in each office through the system and an example for stage data is shown in Fig. 1. These records of receipt have two purposes:

- To provide a means of tracking misplaced data
- To identify the cause of delay beyond a target date whether late from the field or delay at a processing office and hence to follow up with corrective measures.

Failure to audit receipt may result in a much longer period of lost data. It is recommended that a date is set for follow up action should data not be received, say a further 5 days after the target receipt from the field station.

4. Feedback

There is a requirement for action to be taken when data fail to arrive by a target date. A few additional days (no more than 5) should be given to allow for postal delays or transport problems. The station or office must then be contacted by telephone or post and an explanation requested for the delay. The date of feedback contact should also be noted on the record of receipt, e.g., Fig. 4.1.

5. Filing

Whilst the purpose of computer processing and archiving hydrological data is to store field records and derived data in digital form, the original paper records must be filed in a way that they are readily retrieved. Permanent storage of hard-copy records will be in Divisional offices. Facilities for storage of hard-copy forms and charts must also be logical and structured and it is recommended that all time series data are stored by station rather than by year as it is most often in this format that the data are subsequently required.

HYDROLOGICAL INFORMATION SYSTEM, W R DEPTT., MAHARASTRA

RECORD OF RECEIPT OF WATER LEVEL DATA

Name of Data Processing Centre: ……...

Name of Basin/Sub-basin: …… Year: ……..

STATION	Time interval of data	Staff/ Chart/ DWLR	Date of Receipt of Data for the Observation made during the Month of											
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Station 1	Thrice daily	Staff	3/2	2/3	2/4	1/5	7/6	10/7	1/8	2/9	2/10	6/11	3/12	1/1/81
	Hourly	Chart	N.A.	N.A.	N.A.	N.A.	N.A.	10/7	1/8	10/9	2/10	6/11	3/12	N.A.
Station 2	Thrice daily	Staff	N.A.	N.A.	N.A.	N.A.	N.A.	2/7	5/8	2/9	3/10	4/11	2/12	N.A.
Station 3	Thrice daily	Staff	N.A.	N.A.	N.A.	N.A.	N.A.	5/8	5/8	3/9	4/10	1/11	5/12	N.A.
Station 4	Daily	Staff												
	Non-equal	DWLR												
etc.														

Remarks .....
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Fig. 4.1 Example of record of receipt form for water level data