# Himachal Pradesh I&PH Deptt.

## <u>Data Dissemination and Pricing Policy for</u> <u>Surface Water Data under Hydrology Project - II</u>

#### 1. Introduction

The National Water Policy of India envisages that "the prime requisite for resource planning is a well developed information system. A standardized national information system should be established with a network of data banks and data bases, integrating and strengthening the existing Central and State level agencies and improving the quality of data and processing capabilities. There should be free exchange of data among the various agencies and duplication in data collection should be avoided. Apart from the data regarding water availability and actual water use, the system should also include comprehensive and reasonably reliable projections of future demands for diverse purpose."

Water is one of the five physical elements (Pancha bhoota) of the environment. It is an integral part of the ecological cycle and is finite in its presence yet infinite because of its recycling properties through hydrological cycle. Availability of sufficient and quality data is a prime requisite for proper planning, management and development of water resources.

Keeping in view, the need of standardized national information system the concept of Hydrological Information System (HIS) was brought under the World Bank aided Hydrology Project. The primary role of the HIS is to provide reliable hydrological, hydro-geological and meteorological data for long term planning, design and management of water resource for improved productivity and cost effectiveness of water related investments in the country.

The Surface Water (SW) network for quality and quantity monitoring in the State to be installed under HP-II comprises of 35 new/upgraded sites in which 14 Manual Bridge sites, 9 Bridge Outfit sites, 8 Bank Operated Cableway sites and 4 Head Weir sites have been proposed. Out of the 35 proposed sites Automatic Water Level Recorder's (AWLR) will be installed in 25 sites. Various procurements related to SW network are in advance stages and data is likely to flow in shortly.

16 Snow gauges (SG), 4 Fully climatic stations (FCS), 2 Weather Stations (WS), 101 standard rain gauges and 35 autographic/ automatic rain gauges (SRG/ARG) have been proposed under hydro meteorological network. Part of the network has been established and data is being received.

5<sup>th</sup> meeting of the State Level Hydrological Information System Steering Committee (SLHISSC) was held under the Chairmanship of Chief Secretary to the Govt. of Himachal Pradesh, on 03/01/2011 in which it was desired by the Chairperson that the State should take a lead and prepare a rational Data Pricing Structure for adoption.

Ministry of Water Resource, Govt. Of India has prepared a National Hydrological Data (Surface Water) Pricing and Dissemination Policy, January 2008. The proposed draft policy for the State is in line with the Draft National Policy and envisages that hydrological data is made available to the user at a reasonable cost as recovering the total expenditure incurred for making the data available to the user would itself turn out to be a deterrent for easy dissemination of data.

This data dissemination and pricing policy has been prepared for Surface Water data. Since the pricing structure of the data would depend on the type and volume of data requested, the data and information generated under the HIS has been classified as under:-

#### 2. Type of Data

The Surface Water data collected falls in category as given below:

#### (A) Surface Water:

- Daily Discharge Values (including velocity, manning's 'n' values etc.) both observed & interpolated/extrapolated and any analysis or derivation of the values like yearly/monthly/ten-daily flows etc.
- 2 Gauge values/water levels observed at uniform time interval or non-uniform time interval.
- 3 Suspended/bed Sediment flow values including fine, medium and coarse sediment, both observed & interpolated/extrapolated and any analysis or derivation of the values like yearly/monthly/ten-daily flows etc.
- 4 Water quality parameters observed at site or analyzed in the laboratories.
- 5 Cross-sections, longitudinal sections, other topographical information and river morphology related data.

#### (B) Meteorological:

- 1 Surface data (FCS).
  - (a) Temperature Min-Max, Dry Bulb, Wet Bulb.
  - (b) Wind Direction & Speed.
  - (c) Moisture Relative Humidity.
  - (d) Precipitation Measured in millimetres.
  - (e) Evaporation In millimetres.
  - (f) Sunshine Total hrs. of bright sunshine.
- 2 Autographic Data (ARG).
  - (a) Rainfall.
  - (b) Temperature.
  - (c) Relative Humidity.

- (d) Wind Speed.
- (e) Sunshine duration.
- 3 Rainfall data.
  - (a) Daily.
  - (b) Weekly.
  - (c) Monthly.
  - (d) Annual.
- 4 Snowfall data.
  - (a) Daily.
  - (b) Snow Water Equivalent.

#### 2.1 Frequency of Observation

The general frequency of hydrological data collection has been given as below;

however, the policy covers the data collected in other times also:

Gauge Data/ Water level (Non Monsoon) – Daily at 08:00, 13:00 & 18:00 hrs.

Gauge Data (Monsoon) - Hourly Gauge for whole day.

Discharge data - Daily Sediment data - Daily

Water Quality - As per protocol issued by WQAA.

X-Sections of the rivers

Surface Data

Autographic Data

Rainfall / Snowfall data

- Twice in a year.

- Twice daily

- Hourly

- Daily

The frequency may vary as per custom requirement/ site conditions.

#### 3. Data Dissemination Procedure:

The proposed data dissemination procedure is as under:

- a. User has to make a request to Superintending Engineer, Hydrology/ In-charge of State Data Centre, who is the custodian of data, through paper mail, E-mail etc.
- b. The request has to come from an officer not below the rank of Gazetted officer in case of Government Department, Head of Department in case of University/
  Research Institutions, Head of the Organisation in case of Autonomous Bodies of Central / State Governments / Agencies / Societies / Public Sector Undertaking / Company / Commercial Organization or individual as the case maybe.
- c. The data availability will be examined and user will be informed by the authorized officer as designated by the Superintending Engineer, Hydrology/ In-charge of State Data Centre about the availability and cost of the data.
- d. Only the raw and validated data of surface water will be provided to the users.
- e. The requester will inform the custodian/ authorized officer about his willingness for further processing.
- f. The custodian will be competent authority for approval for supply of data.
- g. The data will be released by the authorized officers as decided by the Custodian after collection of charges from the user.
- h. User shall submit following under taking before collecting the data:

- Appropriate technical and organizational measures shall be taken against un-authorized or unlawful processing of data against accidental loss or destruction of, or damage to data.
- Data shall not be transferred to any other agencies in India or Foreign agencies / Consultants and adequate level of protection shall be ensured.
- A copy of the report which utilizes the data shall be submitted by the user to the data provider department with due acknowledgement.
- i. The requested data shall normally be released in 7 working days after receipt of application along with cost of data.
- j. Any inference drawn based on the data supplied will be the sole responsibility of the users and the owner agency will not be responsible for any kind of loss or damage in any form occurring due to the use of data. While best efforts have been made for providing accurate data, but the department can accept no responsibility for omissions, errors or subsequent changes and will not be responsible for any damages / losses caused due to the use of the data provided.

#### 4. Data Requesters and Pricing Structure:

• The data requester has been categorized as per the table given below and the price of data shall be charged accordingly.

Sl. No.	Data Requester	Price Charged
1	Ministry / Department of Central / State	Free of cost
	Government/ Panchayati Institutions	
2	Local Bodies / Water User Agencies	As per pricing
3	Indian Educational Institutions for academic	Free of cost.
	research / Indian Students	
4	Autonomous Bodies of Central / State	As per pricing
	Governments/ Agencies/ Societies	
5	Public Sector Undertaking	As per pricing
6	NGO / Project related or other Research	As per pricing
7	Private Companies / Commercial Organizations	As per pricing
8	Student of other Countries	As per pricing

#### 5. Data Pricing Principle:

- In tune with the National Policy the total expenditure incurred towards observation / collection / compilation of data is not proposed to be charged from the data requester as the high cost of data may be a deterrent to the data user.
- Marginal costs such as cost towards the staff engaged in locating and retrieving the information, computer usage giving effect to the users request, cost of maintenance, cost of consumables, printing, postage, etc shall be charged from the user.

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### **Rates for Dissemination of Meteorological Data**

• The unit cost of retrieval and dissemination of the Meteorological data has been worked out and is placed at Annex-A & Annex-B. Based on it the following pricing structure for various basic Meteorological data is proposed:

Item	Rate in ₹	
1. Rainfall.	1.25/per record + Media & Postal Cost	
2. Surface data (FCS/AWS).	2.50 /per record+ Media & Postal Cost	
3. Autographic data (ARG).	2.50/ per record+ Media & Postal Cost	
4. Snowfall data.	1.25/per record + Media & Postal Cost	

Rate for Average Weekly data = Twice the rate per record +Media cost + Postage Rate for Average Monthly data = Five times the rate per record +Media cost + Postage

Rate for Average Yearly data = Ten times the rate per record + Media cost + Postage

Note: Record is one day data for one station.

### Unit Cost for Processing of Data request

## **Data Type Rainfall / Snowfall**

1	No. of man hours required for collecting one days data	1 man hrs.
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_	A C + C 1	D 100.00
2	Avg. Cost of one man hour	Rs.120.00
3	Cost of Labour for collecting one days record	Rs 120.00
4	Total No of records containing one days data	1
5	Cost of Labour for collecting one data record	Rs 120.00
6	Cost of Labour for scrutiny, keying, verification and	Rs. 17.00
	archival of one data record	
7	Total cost of labour for one data record (5+6)	Rs. 137.00
8	Cost of material	Rs. 10.00
9	Overhead charges (150% of labour)	Rs. 205.50
10	Cost of one data record (7+8+9)	Rs. 352.50
11	Departmental service charges (20%)	Rs. 70.50
12	Total cost of one data record (10+11)	Rs 423.00
13	Cost to be charged to single user (0.3% of Rs 423.00)	Rs 1.27
		sayRs. 1.25

## Data Type Surface / Autographic data

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1	No. of man hours required for collecting one days data	2 man hrs.
2	Avg. Cost of one man hour	Rs.120.00
3	Cost of Labour for collecting one days record (120 x 2)	Rs 240.00
4	Total No of records containing one days data	1
5	Cost of Labour for collecting one data record	Rs 240.00
6	Cost of Labour for scrutiny, keying, verification and	Rs. 17.00
	archival of one data record	
7	Total cost of labour for one data record (5+6)	Rs. 257.00
8	Cost of material	Rs. 10.00
9	Overhead charges (150% of labour)	Rs. 385.50
10	Cost of one data record (7+8+9)	Rs. 652.50
11	Departmental service charges (20%)	Rs. 130.50
12	Total cost of one data record (10+11)	Rs 783.00
13	Cost to be charged to single user (0.3% of Rs 783.00)	Rs 2.34
		sayRs. 2.50

## Cost on Media ( To be charged from all type of user)

CD	₹ 20/-
Hardcopy Per page B/W A4	₹ 2/-
A3	₹ 5/-
Hardcopy Per page Color A4	₹ 20/-
A3	₹ 50/-

Postal Charges As applicable.