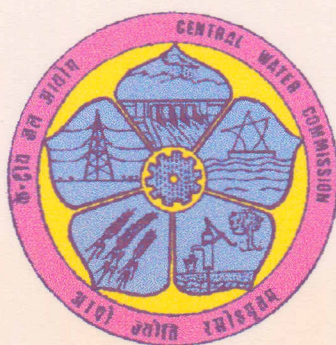


**GOVERNMENT OF INDIA  
CENTRAL WATER COMMISSION**



**GUIDELINES AND LEGENDS  
FOR PREPARATION OF MAPS**

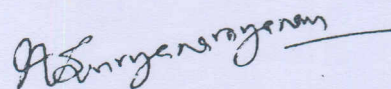
FEBRUARY 1997

RIVER DATA COMPILATION DIRECTORATE  
NEW DELHI



## PREFACE

Maps are helpful in giving a pictorial representation of various activities of an Organisation. At present different Wings and Organisations of CWC are preparing maps which are of different sizes and follow diverse legends. It has been felt necessary to follow a uniform procedure so that any map prepared in any CWC office is of the requisite standard. Guidelines on preparation of maps specifying the DO's and DON'Ts alongwith the standardised legends to be followed in preparing the maps in CWC are enclosed. The guidelines have been prepared in R.D.C. Directorate of CWC. Suggestions, if any, may be sent to them for consideration.



(N. SURYANARAYANAN)

MEMBER (RM)  
CENTRAL WATER COMMISSION



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**CENTRAL WATER COMMISSION  
RIVER DATA COMPILATION DIRECTORATE**

**DOs & DON'Ts FOR PREPARATION OF MAPS**

DOs	DON'Ts
<b>1. BOUNDARIES</b>	
All boundary lines shall be shown distinctly as under :	1. Don't use any other legend to represent International, State or catchment boundaries.
<b>1.1 INTERNATIONAL:</b>	
Thick Chain dotted line in <b>black</b> colour with <b>yellow</b> skirting. No gap between skirting and broken line.	
<b>1.2 STATE/UNION TERRITORY:</b>	2. Don't deviate from the actual International or state boundary lines from that indicated in the Survey of India Maps.
Thin chain dotted line in <b>black</b> colour with skirting in <b>orange</b> colour. No gap between skirting and broken line. If river is a dividing line, the mid course of the river shall be the boundary line of the State and shall be shown as <b>black</b> dotted line without skirting.	
<b>1.3 CATCHMENT:</b>	
Thick continuous line in <b>purple</b> colour.	
<b>1.4 SUB BASINS:</b>	
Sub basins shall be shown in contrast colours without any demarcation line. No administrative boundary of CWC office be shown in basin maps. The state/ UT boundaries are to be shown as per(1.2) above. The back-ground of the maps shall be white.	



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**DOs****DON'Ts**

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**1.5 MARINE LINE:**

Marine line shall be drawn in **dark blue** colour and Sea/ Ocean to be shown in **light blue** colour.

**2. HIGHWAYS****2.1 NATIONAL HIGHWAYS:**

All National Highways shall be shown in **red** continuous line of 1.5 mm thickness. Highway No. shall be written within the 4 mm **white** colour square with **yellow** colour semicircle of 4 mm dia at the top of the square.

Don't write the Number of the Highways in various places.

**2.2 STATE HIGHWAYS:**

All State highways and other important roads shall be shown in **red** continuous line of 1 mm thickness. Highway No. shall be written within the 4 mm **white** colour square with **green** colour semicircle of 4 mm dia at the top of the square.

**2.3 DESTINATION:**

Write destination in the direction of the highway at the end of the highway in **black** ink.



DOs	DON'Ts
<b>3. RIVERS &amp; WATER BODIES</b>	
<b>3.1 RIVERS:</b>	
<p>All major rivers and tributaries shall be shown in <b>blue</b> continuous lines. In the initial reaches the river shall be shown in single thin line and subsequently change to thicker or double lines depending on the width of the river.</p>	<p>1. Don't show all minor water courses and make the map clumsy.</p>
<p>(i) Major and important tributaries on which sites are located shall be shown in <b>blue</b> continuous lines.</p>	<p>2. Too much forking due to several small tributaries joining a river / tributary need not be shown unless there is a site located on it.</p>
<p>(ii) Names of main rivers and tributaries shall be written neatly in <b>blue</b> colour parallel to the course of the river in inclined letters, first letter being capital and rest of the letters small.</p>	<p>3. Don't forget to show major water storage bodies like lakes, reservoir, tanks and ponds within the area.</p>
<p>(iii) Lakes and Reservoirs shall be shown in <b>blue</b> colour closed area. The names of the reservoirs shall be written in smaller capital letters in <b>blue</b> colour parallel to the periphery of the reservoir.</p>	
<b>3.2 CANALS:</b>	
<p>Canals shall be shown as <b>blue</b> continuous lines of thickness 1.5 mm with 1 mm <b>blue</b> spikes alternately on both sides.</p>	



DOs	DON'Ts
<b>4. MULTIPURPOSE / MAJOR IRRIGATION PROJECTS ( Storage )</b>	
Multipurpose / Major Irrigation Projects shall be shown as equilateral triangle of 6 mm size on river with one side perpendicular towards downstream.	
4.1 EXISTING:	
Blue colour	
4.2 ONGOING:	
Red colour	
4.3 UNDER CONSIDERATION:	
Yellow colour	
4.4 MONITORED BY CWC:	
Red colour circle of 4 mm dia touching the perpendicular side of the triangle.	
<b>5. HYDROELECTRIC PROJECTS ( Power Stations )</b>	
Hydroelectric Projects shall be shown as square of 4 mm size on river with one side perpendicular.	
5.1 EXISTING:	
Blue colour	
5.2 ONGOING:	
Red colour	
5.3 UNDER CONSIDERATION:	
Yellow colour	



DOs	DON'Ts
<b>6. HYDROELECTRIC PROJECTS WITH STORAGE</b>	
<p>Hydroelectric Projects with storage shall be shown as equilateral triangle of 6 mm size with square of 4 mm size attached to one vertical side of the triangle.</p>	
<b>6.1 EXISTING:</b>	
<p>Blue colour</p>	
<b>6.2 ONGOING:</b>	
<p>Red colour</p>	
<b>6.3 UNDER CONSIDERATION:</b>	
<p>Yellow colour</p>	
<b>7. HYDROELECTRIC PROJECTS WITH RUN-OF-THE-RIVER</b>	
<p>Hydroelectric Projects with run-of-the-river shall be shown as rectangle of 8mm x 4mm size with square of 4 mm size attached to the rectangle on the upstream side.</p>	
<b>7.1 EXISTING:</b>	
<p>Blue colour</p>	
<b>7.2 ONGOING:</b>	
<p>Red colour</p>	
<b>7.3 UNDER CONSIDERATION:</b>	
<p>Yellow colour</p>	



DOs	DON'Ts
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## 8. COMMAND AREA

### 8.1 COMPLETED:

Completed command area shall be shown in **green** colour.

### 8.2 ONGOING:

Ongoing command area shall be shown in **green** colour with **yellow** hatches.

### 8.3 PROPOSED:

Proposed command area shall be shown in **yellow** colour.

## 9. DIVERSIONS

### 9.1 BARRAGES:

Barrages shall be shown as of 4mm x 2mm size **red** rectangle across the river.

### 9.2 WEIRS:

Weirs shall be shown as of 4mm x 1mm size **red** rectangle across the river.

## 10. HYDROLOGICAL OBSERVATION SITES

Size of the letters shall be different for various types of sites as detailed below:

GDS		Letters in 4 mm size in <b>black</b> ink
GDQ		
GDSQ		
GD		Letters in 3 mm size
G		Inclined letters in 2 mm size

**CHAMPADANGA  
SINGAVARAM  
KOLLEGAL**

**RIDHORE**

**SURAJGARH**



DOs	DON'Ts
Different types of hydrological observation sites shall be shown as under :	Don't deviate from the approved shape, size and colour of the symbols specified to represent a particular type of site.
10.1 GAUGE SITE:	
Blue circle of 4 mm dia.	
10.2 GAUGE DISCHARGE SITE:	
Yellow Circle of 4 mm dia.	
10.3 GAUGE, DISCHARGE & SEDIMENT SITE:	
Red circle of 4 mm dia.	
10.4 GAUGE, DISCHARGE & WATER QUALITY SITE:	
Green star of 6 mm dia. with inscribed yellow circle of 4 mm dia.	
10.5 GAUGE, DISCHARGE, SEDIMENT & WATER QUALITY SITE:	
Green star of 6 mm dia. with inscribed red circle of 4 mm dia.	
10.6 FLOOD FORECASTING SITE:	
Black circle of 6 mm dia. with two bands of four red colour horizontal strips.	
11. WATER QUALITY LABORATORIES	
11.1 SITE WATER QUALITY LABORATORY:	
Green circle of 4 mm dia.	
11.2 DIVISIONAL WATER QUALITY LABORATORY:	
Pink circle of 4 mm dia.	



DOs	DON'Ts
11.3 REGIONAL WATER QUALITY LABORATORY:	
Purple circle of 4 mm dia.	
The symbols shall be :	
(i) of exact size & colour	
(ii) made from chart paper	
(iii) shall be pasted on the map	
12. IMPORTANT PLACES	
12.1 NATIONAL CAPITAL:	
Name of the National capital NEW DELHI shall be written below the Tricolour National Flag of size: 12 mm (L) 7.5 mm (W) with each strip 2.5 mm, in thicker black colour letters of 4mm size.	
12.2 STATE/ UNION TERRITORY CAPITALS:	
Name of the capitals shall be written below the National Flag of size: 8 mm (L) 6 mm (W) with each strip 2 mm, in black colour letters of 3 mm size.	
12.3 AERODROME/AIRPORT:	
Aerodrome /Airport shall be shown with a symbol of aeroplane in a square of 5 mm size.	
12.4 All other important places shall be shown with 3mm dia golden colour circle and the name of the place in yellow rectangular box (made out of yellow chart paper) in medium letters of 3mm size.	1. Don't show too many places which may make the map clumsy.  2. Don't write names of places too close to each other



	DOs	DON'Ts
13.	<b>CWC OFFICES</b>	
	All CWC offices shall be shown as under:	
13.1	<b>CHIEF ENGINEER OFFICE:</b>	
	Red hexagon of 10 mm size.	
13.2	<b>CIRCLE OFFICE:</b>	
	Yellow circle of 10 mm dia.	
13.3	<b>DIVISION OFFICE:</b>	
	Green equilateral triangle of 9 mm size.	
13.4	<b>SUB-DIVISION OFFICE:</b>	
	Purple square of 4 mm size.	
13.5	<b>CE+CIRCLE+DIVISION+SUB-DIVISION OFFICE:</b>	
	If there are more than one office at one place, the smaller symbol shall be pasted on the bigger one. The size of symbols has to be such that they fit into each other with equal margin on all sides.	
14.	<b>SIZE, ORIENTATION, NUMBERING etc.</b>	
14.1	<b>PAPER ORIENTATION &amp; SIZE:</b>	
	The scale of the map shall be chosen to accommodate it in standard A3 size (if necessary this may be correspondingly enlarged to A2 size). However, the longer side of A3 size or shorter side of A2 size i.e. 420 mm shall be the binding side for the preparation of the Atlas.	



DOs	DON'Ts
(i) North shall be shown vertically upwards. Latitude/Longitude to be written in thin letters in the beginning of the axis drawn in thin lines.	
(ii) Size of headings shall be in 8 mm size bold letter in <b>black</b> colour written at the right side at top corner of the map.	
(iii) C W C shall be written in 6 mm bold letters in <b>black</b> colour at the right side bottom corner followed by drawing No.	
(iv) Numbering of maps shall be as under :	
(a) River Basin maps shall be numbered from B1 to B20.	
B1: Indus	
B2: Ganga-Brahmaputra-Meghna	
a) Ganga	
b) Brahmaputra	
c) Barak & others	
B3: Godavari	
B4: Krishna	
B5: Cauvery	
B6: Subernarekha	
B7: Brahmani-Baitarni	
B8: Mahanadi	



DOs	DON'Ts
B9: Pennar	
B10: Mahi	
B11: Sabarmati	
B12: Narmada	
B13: Tapi	
B14: West Flowing rivers from Tapi to Tadri	
B15: West Flowing rivers from Tadri to Kanyakumari	
B16: East Flowing rivers between Mahanadi and Pennar	
B17: East Flowing rivers between Pennar and Kanyakumari	
B18: West flowing rivers of Kutchch and Saurashtra including Luni	
B19: Area of inland drainage in Rajasthan desert	
B20: Minor rivers draining into Myanmar(Burma) & Bangladesh	
(b) Jurisdiction maps shall be numbered as J1, J2,.....for each region.	
(v) Specifications of paper shall be as under:	
(a) For wall display, the paper shall be of glossy white Art card of 220 GSM.	



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**DOs**

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**DON'Ts**

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- (b) For atlas, the paper shall be **white** Art paper (silver coated) of 110 GSM.
- (vi) Margin to be shown in two lines **red** and **green** 1 mm thick with 2 mm space between inner & outer lines.( Inner line **red** & outer line **green** )



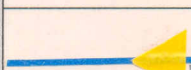
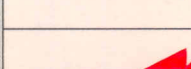
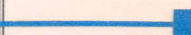




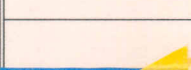


# LEGEND

Sl.No.	NAME	SYMBOL
<b>1</b>	<b>BOUNDARIES</b>	
1.1	INTERNATIONAL: INDIA; OTHERS	
1.2	STATE / UNION TERRITORY	
1.3	CATCHMENT	
1.4	SUB-BASINS	
1.5	MARINE LINE	
<b>2</b>	<b>HIGH WAYS</b>	
2.1	NATIONAL	
2.2	STATE	
2.3	DESTINATION	
<b>3</b>	<b>RIVERS &amp; WATER BODIES</b>	
3.1	RIVERS / TRIBUTARIES	
3.2	CANALS	







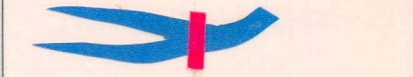



# LEGEND

Sl.No.	NAME	SYMBOL
<b>4</b>	<b>MULTIPURPOSE / MAJOR IRRIGATION PROJECTS (storage)</b>	
4.1	EXISTING	<div>US      DS</div> 
4.2	ONGOING	
4.3	UNDER CONSIDERATION	
4.4	MONITORED BY CWC	
<b>5</b>	<b>HYDROELECTRIC PROJECTS ( Power Stations )</b>	
5.1	EXISTING	
5.2	ONGOING	
5.3	UNDER CONSIDERATION	
<b>6</b>	<b>HYDROELECTRIC PROJECTS WITH STORAGE</b>	
6.1	EXISTING	
6.2	ONGOING	
6.3	UNDER CONSIDERATION	












# LEGEND

Sl.No.	NAME	SYMBOL
<b>7</b>	<b>HYDROELECTRIC PROJECTS WITH RUN-OF-THE-RIVER</b>	
7.1	EXISTING	
7.2	ONGOING	
7.3	UNDER CONSIDERATION	
<b>8</b>	<b>COMMAND AREA</b>	
8.1	COMPLETED	
8.2	ONGOING	
8.3	PROPOSED	
<b>9</b>	<b>DIVERSIONS</b>	
9.1	BARRAGES	
9.2	WEIRS	












## LEGEND

Sl.No.	NAME	SYMBOL
<b>10</b>	<b><i>HYDROLOGICAL OBSERVATION SITES</i></b>	
<b>10.1</b>	<b>GAUGE (G)</b>	
<b>10.2</b>	<b>GAUGE-DISCHARGE (GD)</b>	
<b>10.3</b>	<b>GAUGE-DISCHARGE-SEDIMENT (GDS)</b>	
<b>10.4</b>	<b>GAUGE-DISCHARGE-WATER QUALITY (GDQ)</b>	
<b>10.5</b>	<b>GAUGE-DISCHARGE-SEDIMENT-WATER QUALITY (GDSQ)</b>	
<b>10.6</b>	<b>FLOOD FORECASTING SITE (FF)</b>	
<b>11</b>	<b><i>WATER QUALITY LABORATORIES</i></b>	
<b>11.1</b>	<b>SITE WATER QUALITY LABORATORY</b>	
<b>11.2</b>	<b>DIVISIONAL WATER QUALITY LABORATORY</b>	
<b>11.3</b>	<b>REGIONAL WATER QUALITY LABORATORY</b>	



# LEGEND

Sl.No.	NAME	SYMBOL
12	<b>IMPORTANT PLACES</b>	
12.1	NATIONAL CAPITAL	 <b>NEW DELHI</b>
12.2	STATE CAPITALS	 <b>LUCKNOW</b>
12.3	AERODROME / AIRPORT	
12.4	OTHER IMPORTANT PLACES	 <b>AGRA</b>
13	<b>CWC OFFICES</b>	
13.1	CHIEF ENGINEER	
13.2	CIRCLE	
13.3	DIVISION	
13.4	SUB DIVISION	
13.5	CE + CIRCLE + DIV. + SUB-DIV. OFFICES	
14	<b>SIZE, ORIENTATION, NUMBERING, etc.</b>	
14.1	PAPER ORIENTATION & SIZE	<div> <div>BINDING SIDE</div> <div>A3</div> </div> <div> <div>BINDING SIDE</div> <div>A2</div> </div> <div>420 mm</div>