

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI  
Original Application No. 341/2022**

**IN THE MATTER OF:**

DEEPAK AWASTHI

...APPLICANTS

VERSUS

STATE OF UTTAR PRADESH

...RESPONDENT

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**Through**

Date: 02.04.2025  
Place: New Delhi

**PRIYANKA SWAMI**  
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**COMPLIANCE REPORT ON BEHALF OF IRRIGATION DEPARTMENT  
STATE OF UTTAR PRADESH ALONGWITH THE SUPPORTING  
AFFIDAVIT.**

**MOST RESPECTFULLY SHOWETH**

1. The present Compliance Report is respectfully submitted in compliance with the Order dated 07April 2025 passed by this Hon'ble Tribunal in OA No. 341/2022 (Deepak Awasthi vs State of U.P. and Others).
2. That following directions for the State were passed by the Hon'ble Tribunal vide order dated 07.04.2025:

Hon'ble Tribunal on 19.11.2024 had recorded the statement of Counsel for State of UP in respect of demarcation of flood plain zone with 01 meter contour. The, relevant extracts of the order dated 19.11.2024 is as under:

*"1.----- she has specifically clarified on instructions that these coordinates are prepared based on 100 years return period in terms of clause 3(l) of The River Ganga (Rejuvenation, Protection and Management) Authorities Order of 2016 with one-meter contour interval."*

Earlier direction of the Tribunal was to demarcate the flood plain zone with 01 meter contour but affidavit dated 02.04.2025 filed on behalf

*pe*

of Principal Secretary, Irrigation Department, State of UP states that flood plain has been demarcated by taking note of the one-meter grid spacing DEM (Digital Elevation Model) for precise flood plain demarcation. This has been stated in the said affidavit as under:

*"2.....This analysis was based on the 100-year return period for flooding, and the one metre grid spacing DEM (Digital Elevation Model) was given due consideration in verifying the boundaries of the flood plain area."*

Thus, we require respondent no.7-Principal Secretary, Irrigation Department, State of UP to explain the above deviation from the order of the Tribunal by filing the additional affidavit within four weeks.

3. It is submitted that Survey of India provided Irrigation Department with a large amount of data vide letter no. 4189/39-C-ED (Court Case) dated 07.08.2024 pertaining to the Flood Plain Zone of River Ganga which was analysed and used as per the latest technology called DIGITAL ELEVATION MODEL (hereinafter referred to as DEM Technology) which was handed over to NIH for exercise of delineation and demarcation of the Flood Plain Zone of River Ganga.

True copy of the letter no. 4189/39-C-ED (Court Case) dated 07.08.2024 has been annexed herein as **ANNEXURE- 1.**

It is further submitted that the communication made by the Irrigation Department to the National Institute of Hydrology (NIH), Roorkee vide letter no. 366/मु0अभि0(सू0प्र0सं0) dated 08.08.2024 regarding the handing over of data received from the Survey of India, has been annexed herein as **ANNEXURE- 2.**

4. It is respectfully submitted that, the Survey of India, **through Covering Letter No. T-1477/39-C-ED (Court Case), dated 09.04.2025, with reference to the letter no. 4189/39-C-ED (Court Case) dated 07.08.2024,**

*Pr*

mention here that the covering letter mentioned above, revalidates and confirms that the maps of 1-meter Contour interval so prepared and provided on 21.02.2025 have been prepared by using the same DEM Data, provided by the office of Survey of India to the Irrigation Department, U.P. That the relevant and operative part of the letter no. T-1477/39-C-ED (Court Case) dated 09.04.2025 received from Survey of India has been given as under:

“विषय: उत्तर प्रदेश राज्य का 1 मीटर कंटूर इंटरवल (**Contour Interval**) मानचित्र उपलब्ध कराने के सम्बन्ध में संदर्भ:

1. इस कार्यालय का पत्र संख्या त- **4189/39-C-ED** (कोर्ट केस0 दिनांक **07/08/2024**
2. इस कार्यालय का ई-मेल दिनांक **21/02/2025**
3. आपके कार्यालय का पत्र संख्या **1814 / मु0 अभि० (सू०प्र०सं०) / लखनऊ दिनांक 07/04/2025**
4. आपके कार्यालय का पत्र संख्या **1829/मु० अभि० (सू०प्र०सं०) / लखनऊ दिनांक 08/04/2025**

महोदय,

उपरोक्त संदर्भित पत्र व विषय में आपको अवगत कराना है कि इस कार्यालय के संदर्भित पत्र (1) के अन्तर्गत आपको **DEM data** उपलब्ध कराया गया था।

जिसकी **vertical accuracy 0.5 मीटर** है तथा **Pixel resolution 1 मीटर** है। अर्थात् 1 मीटर पोस्टिंग (**Grid Spacing**) है। पुनः आपके अनुरोध पर दिनांक 21 फरवरी, 2025 को ई-मेल द्वारा 1 मीटर इंटरवल का कंटूर मानचित्र इस कार्यालय द्वारा उपलब्ध करवाया गया। यह प्रमाणित है कि दिनांक 21/02/2025 को उपलब्ध कराया गया 1 मीटर इंटरवल का कंटूर मानचित्र पूर्व में दिनांक 07/08/2024 को उपलब्ध कराये गये **DEM** डाटा से ही तैयार किया गया है।

भवदीय,

अधिकारी सर्वेक्षक तकनीकी

अधिकारी



True copy of the letter no. T-1477/39-C-ED (Court Case) dated 09.04.2025 along with maps has been annexed herein as **ANNEXURE- 3**.

5. It is germane to mention here that NIH vide letter no. SWHD/NIH/2025-26 dated 17.04.2025 addressed to the Chief Engineer (Sone), Irrigation and water Resources Department, State of Uttar Pradesh, a brief report and additional maps have been provided to the Irrigation Department. That a reference has been given to the letter no. SWHD/NIH.2023-2024 dated 20.12.2024, through which report of study "Flood Plain Zone (FPZ) Delineation of the Ganga River from Unnao to Balia" including Flood Plain Zone (FPZ) Delineation of the Ganga River in Sarjupurba colony in District Kanpur was submitted and provided to the Chief Engineer (Sone), Irrigation and water Resources Department, State of Uttar Pradesh.

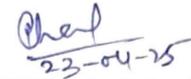
True copy of the letter no. SWHD/NIH/2025-26 dated 17.04.2025 along with brief report and 1m Contour Map in Kanpur District has been annexed herein as **ANNEXURE- 4**.

6. It is important to submit here these maps evidently show the **1m Contour interval** which have been considered for the final demarcation of the Flood Plain Zone of River Ganga. That the **1-meter Contour interval markings** on these maps delineate the areas susceptible to flooding based on the **100-year highest flood return level**. In accordance with this demarcation, boundary pillars have been installed at intervals of 200 meters, ensuring clear identification of the flood-plain zone as determined by the contour data.
7. I state that everything stated above has been stated by me in my official capacity on and derived from the official records and I state that nothing material has been concealed therefrom.
8. That in light of the above compliance steps, it is earnestly prayed that this Hon'ble Tribunal may graciously take note of the present Compliance Report and accept the actions taken by the Irrigation and Water Resources

R.

8. That in light of the above compliance steps, it is earnestly prayed that this Hon'ble Tribunal may graciously take note of the present Compliance Report and accept the actions taken by the Irrigation and Water Resources Department as fulfillment of its responsibilities under the Order dated 07 April 2025. The Department shall continue to extend its full cooperation and shall abide by any further directions that this Hon'ble Tribunal may be pleased to issue for ensuring the preservation and protection of the River Ganga in Kanpur Nagar District.

  
22/04/25  
**EXECUTIVE ENGINEER**  
**BARRAGE CONSTRUCTION**  
**DIVISION-2 KANPUR**

  
23-04-25  
**SUPERINTENDING ENGINEER**  
**IRRIGATION WORKS CIRCLE**  
**KANPUR**

  
23.4.25  
**CHIEF ENGINEER**  
**(RAMGANGA)**  
**IRRIGATION & WATER**  
**RESOURCES DEPARTMENT,**  
**KANPUR**

**Through**

Date:  
Place: New Delhi

**PRIYANKA SWAMI**  
ADVOCATE  
STANDING COUNSEL FOR STATE OF UTTAR PRADESH  
F-13, JANGPURA, NEW DELHI 110014  
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**DEEPAK AWASTHI**

**...APPLICANTS**

**VERSUS**

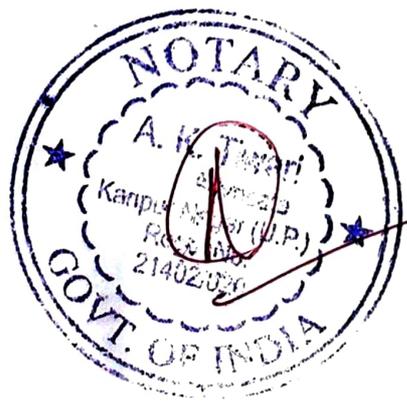
**STATE OF UTTAR PRADESH**

**...RESPONDENT**

**AFFIDAVIT**

I, Anil Garg aged about 53 years S/o Shri Ratan Lal Garg is presently posted as Principal Secretary, Irrigation and Water Resources Department, State of Uttar Pradesh, do hereby solemnly affirm and state as under:

1. That I am posted as stated above and well conversant with the facts of the present case and as such competent to swear this affidavit before this Tribunal.
2. That the accompanying report has been drafted by our counsel upon my instructions.
3. That the contents of the accompanying report are true and correct, and the knowledge has been derived from official records and nothing material has been concealed therefrom.

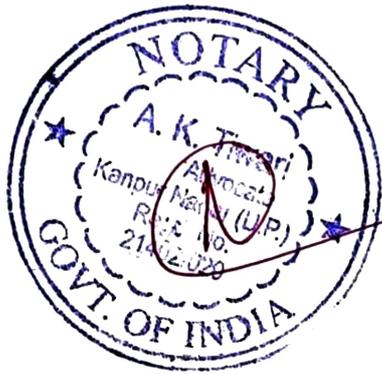


  
**DEPONENT**

VERIFICATION

Verified on solemn affirmation at on this 07 day of May 2025, that the contents of the foregoing affidavit are true and correct to the best of my knowledge and no part of it is false and nothing material has been concealed therefrom.

↓  
**DEPONENT**



Sworn before me this day of May  
by Shri. [Signature] who in the  
Contents of this affidavit have been  
read over and explained to his duly  
Identified Sr. [Signature]

A.K. Tiwari (Advocate)  
Govt. Notary, Kanpur (U.P.)  
7/5/25

भारत सरकार  
GOV. OF INDIA

टेली-फैक्स / Tele fax - 0522-2720631  
दूरभाष / Telephone 0522-2720638  
ई-मेल / E-mail: upgdc.sola@gov.in (Tech)  
upgdc-board@up.nic.in (Admin)

विभाग का कार्यालय / Office of Director  
उत्तर प्रदेश नदी निकास विभाग / Directorate of Inland  
मार्ग विकास / Inland Waterways  
उत्तर प्रदेश, गंगा (उत्तरी क्षेत्र)  
Uttar Pradesh, Ganga (Northern Zone)  
5, विभूति कान्त, कानपुर नगर, लखनऊ-226016 (UP)  
5, Vibhuti Kant, Kanpur Nagar, Lucknow-226016 (UP)

पत्र सं० नं० 4189 / 39-1-1(कोई केस)

दिनांक: 07/08/2024

सेवा में,

श्री सुप्रभात सिंह  
मुख्य अभियन्ता,  
सूचना प्रणाली संगठन  
सिंचाई एवं जल संसाधन विभाग 30 प्र०,  
परिकल्प भवन, तेलीबाग,  
लखनऊ।

विषय:- उत्तर प्रदेश राज्य का 1 मीटर कंटूर इन्टरवल (Contour Interval) मानचित्र उपलब्ध कराने के संबंध में।

संदर्भ:- आपके कार्यालय का पत्र क्रमांक सं. 327/मु.अधि./सू.प.सं./2024-25 दिनांक 22/07/2024

महोदय,

उपरोक्त संदर्भित विषय में आपको अवगत कराना है कि आपके द्वारा की गयी वांछित गंगा नदी के फ्लड गेज (उन्नाय से बलिया) के 1 मीटर Contour Interval का साफ्ट कोपी डाटा (Lidar Data) आपके कार्यालय से आये अधिकारी श्री हेमंत कुमार, सहायक अभियन्ता को दिनांक 07/08/2024 को इस कार्यालय के Invoice No. RK/3773/UPGDC/LUCKNOW दिनांक 07/08/2024 के द्वारा उपलब्ध करा दिया गया है।

उक्त डेटा इस आशय के साथ आपको सुपूर्द किया जा रहा है कि उपरोक्त डेटा का उपयोग केवल विषयक कार्य हेतु किया जायेगा तथा इसके अलावा डेटा को आपके द्वारा किसी व्यक्ति व संस्था के साथ साक्षा नहीं किया जायेगा तथा डेटा की पूर्ण सुरक्षा की जायेगी।

- संदर्भ:-
1. Invoice No. RK/3773/UPGDC/LUCKNOW दिनांक 07/08/2024
  2. आपके कार्यालय का पत्र क्रमांक सं. 327/मु.अधि./सू.प.सं./2024-25 दिनांक 22/07/2024

SE, AMISC  
E/M/A  
दिनांक: 08/08/2024  
08/08/24

मुख्य अभियन्ता  
सूचना प्रणाली संगठन  
उत्तर प्रदेश के महासचिव, देहली के सूचना संगठन

2. अगर महासचिव, उत्तरी क्षेत्र, कानपुर के सूचना संगठन

3. सीएम सील, भारत के महासचिव, कानपुर के सूचना संगठन

श्री हेमंत कुमार सिंह  
07/08/24  
(सोपना मीन)  
अधीक्षण सहायक  
मुख्य निदेशक

प्रेषक,

मुख्य अभियन्ता,  
सूचना प्रणाली संग्रह,  
सिंचाई एवं जल संसाधन विभाग, उ०प्र०,  
परिकल्प भवन, रोलीबाग, लखनऊ।

ANNEXURE-2

प्रेष,

आ० ए०के० सोहानी,  
वैज्ञानिक जी, प्रमुख, सातवीं जल एवं जल विज्ञान प्रभाग,  
राष्ट्रीय जल विज्ञान संस्थान (NII), रुड़की, उत्तराखण्ड।

पत्रांक:- 366/मु०अभि०(सू०प्र०सं०)/2024-25

लखनऊ, दिनांक: 08 अगस्त, 2024

विषय:- गंगा नदी के Segment B, Phase-II (उन्नाव से बलिया) का Flood Plain Zone (FPZ) के निर्धारण एवं सीमांकन (Delincation & Demarcation) हेतु Survey of India से प्राप्ता 01 मी० कंटूर इन्टरवल (Contour Interval) मानचित्र/डेटा हरतगत कराने के संबंध में।

महोदय,

आ० राष्ट्रीय हरित अधिकरण द्वारा दिनांक 11.07.2024 को दिये गये निर्देशों का अनुपालन करते हुए सर्वे ऑफ इंडिया, लखनऊ कार्यालय से गंगा नदी के Segment B, Phase-II (उन्नाव से बलिया) का Flood Plain Zone (FPZ) के निर्धारण एवं सीमांकन (Delincation & Demarcation) हेतु 01 मी० कंटूर इन्टरवल (Contour Interval) मानचित्र की वांछना की गई थी, जिसके क्रम में सर्वे ऑफ इंडिया द्वारा दिनांक 07.08.2024 को 01 मी० कंटूर इन्टरवल (Contour Interval) डेटा (LIDAR data) साफ्ट कॉपी में उपलब्ध करा दिया गया है।

उक्त डेटा का कुल Volume- 798 GB है, जिसको कार्य की महत्ता के दृष्टिगत रखते हुए आपसे अनुरोध है कि तत्काल किसी जिम्मेदार अधिकारी को नामित कर डेटा प्राप्त करने हेतु 1TB की hard disk के साथ भेजने का कष्ट करें, जिससे कि उक्त प्राप्त डेटा तत्काल आपको अग्रिम कार्यवाही हेतु अग्रसारित की जा सके।

उपरोक्त डेटा इस आशय के साथ आपको हरतगत किया जा रहा है कि इसका उपयोग केवल विषयक कार्य हेतु किया जायेगा तथा इसके अलावा इस डेटा का प्रयोग किसी भी परिस्थिति में न तो किसी अन्य कार्य के लिए किया जायेगा और न ही किसी अन्य व्यक्ति व संस्था के साथ साझा किया जायेगा तथा डेटा की पूर्ण सुरक्षा की जायेगी।

  
(सुप्रभात सिंह)  
मुख्य अभियन्ता (सू०प्र०सं०)  
08/08/2024

पत्रांक:- /मु०अभि०(सू०प्र०सं०)/2024-25/तदिनांक:

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है।

1. मुख्य अभियन्ता (शारदा सहायक), सिंचाई एवं जल संसाधन विभाग, उ०प्र०, लखनऊ।
2. मुख्य अभियन्ता (सोन), सिंचाई एवं जल संसाधन विभाग, उ०प्र०, वाराणसी।
3. मुख्य अभियन्ता (जल संसाधन), सिंचाई एवं जल संसाधन विभाग, उ०प्र०, लखनऊ।
4. अधीक्षण अभियन्ता, एफ०एम०आइ०एरसी, सिंचाई एवं जल संसाधन विभाग, उ०प्र०, लखनऊ।

(सुप्रभात सिंह)  
मुख्य अभियन्ता (सू०प्र०सं०)



टेली-फैक्स/Tele-fax - 0522-2720634  
दूरभाष/Telephone-0522-2720638  
ई-मेल/E-mail: up.gdc.soi@gov.in (Tech)  
upgdc-lko@up.nic.in (Admn)

भारत सरकार  
GOVT. OF INDIA



निदेशक का कार्यालय/Office of Director  
भारतीय सर्वेक्षण विभाग/Survey of India  
मानचित्र भवन/Manchitra Bhawan  
उत्तर प्रदेश भू-स्थानिक निदेशालय (उत्तरी क्षेत्र)  
Uttar Pradesh G.D.(Northern Zone)  
5, विभूतिखण्ड, गोमतीनगर, लखनऊ -226010(उ०प्र०)  
5, Vibhuti Khand, Gomti Nagar, Lucknow-226010 (UP)

पत्र संख्या:- त- 1477 /39-C-ED (Court case)

दिनांक:- 09/04/2025

सेवा में,

श्री सुप्रभात सिंह, मुख्य अभियंता  
सूचना प्रणाली संगठन, सिंचाई एवं जल संसाधन विभाग उ. प्र.  
परिकल्प भवन तेलीबाग , लखनऊ (उ.प्र.)।

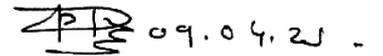
विषय: उत्तर प्रदेश राज्य का 1 मीटर कंटूर इंटरवल (Contour Interval) मानचित्र उपलब्ध कराने के सम्बन्ध में

- संदर्भ: 1. इस कार्यालय का पत्र संख्या त- 4189/39-C-ED(कोर्ट केस0 दिनांक 07/08/2024  
2. इस कार्यालय का ई-मेल दिनांक 21/02/2025  
3. आपके कार्यालय का पत्र संख्या 1814/मु0अभि0(सू0प्र0सं0)/लखनऊ दिनांक 07/04/2025  
4. आपके कार्यालय का पत्र संख्या 1829/मु0अभि0(सू0प्र0सं0)/लखनऊ दिनांक 08/04/2025

महोदय,

उपरोक्त संदर्भित पत्र व विषय में आपको अवगत कराना है कि इस कार्यालय के संदर्भित पत्र (1) के अन्तर्गत आपको DEM data उपलब्ध कराया गया था। जिसकी Vertical accuracy 0.5 मीटर है तथा Pixel resolution 1 मीटर है। अर्थात् 1 मीटर पोस्टिंग (Grid Spacing ) है। पुनः आपके अनुरोध पर दिनांक 21 फरवरी, 2025 को ई-मेल द्वारा 1 मीटर इन्टरवल का कन्टूर मानचित्र इस कार्यालय द्वारा उपलब्ध करवाया गया। यह प्रमाणित है कि दिनांक 21/02/2025 को उपलब्ध कराया गया 1 मीटर इन्टरवल का कन्टूर मानचित्र पूर्व में दिनांक 07/08/2024 को उपलब्ध कराये गये DEM डाटा से ही तैयार किया गया है।

भवदीय,



(पवन कुमार द्विवेदी)

अधिकारी सर्वेक्षक/तकनीकी अधिकारी

कृते निदेशक

प्रतिलिपि:- अपर महासर्वेक्षक, उत्तरी क्षेत्र दिल्ली कैंट को सूचनार्थ प्रेषित।



**राष्ट्रीय जलविज्ञान संस्थान**  
 (जल शक्ति मंत्रालय, जल संसाधन, नदी विकास एवं गंगा संरक्षण विभाग,  
 के अधीन भारत सरकार की समिति)  
 जलविज्ञान भवन, रुड़की-247 667 (उत्तराखण्ड) भारत  
**National Institute of Hydrology**  
 (A Government of India Society under Ministry of Jal Shakti,  
 Department of Water Resources, R.D. & G.R.  
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Phone : +91-1332-272108, 272106

No. SWHD/NIH/2025-26

Date: April 17, 2025

**Superintending Engineer,  
 Flood Management Information System Centre  
 Irrigation and Water Resources Department, Govt. of UP**

**Sub.:** Additional maps for the report "Flood Plain Zone (FPZ) Delineation of the Ganga River from Unnao to Ballia"

**Ref.:** Our letter No. SWHD/NIH.2023-2024 dated 20-12-2024

Sir,

The report of study "Flood Plain Zone (FPZ) Delineation of the Ganga River from Unnao to Ballia" was submitted with reference cited letter. Additional maps and brief discussion are enclosed herewith.

With Regards,

Head, Surface Water Hydrology Division  
 National Institute of Hydrology, Roorkee

## **Flood Plain Zone (FPZ) Delineation of the Ganga River from Unnao to Ballia**

The broad scope of this report was to demarcate the flood plain of the river Ganga from Unnao to Ballia corresponding to once in hundred years return period flood.

The digital data of 798 GB of 1 m grid size (pixel resolution of 1 m and vertical accuracy of 0.5 m) Digital Elevation Model (DEM), obtained from the Survey of India (letter No. 4189/39-ED(कोर्ट केस) dated 7/8/2024) was provided to NIH, Roorkee by the Irrigation and Water Resources Dept. Govt. of UP (336/मु0अभि0(सु0प्र0सं0)/2024-25, dated 8/8/2024). This DEM is having 1 m pixel resolution (horizontal resolution/grid size) and 50 cm vertical accuracy as per SOI. 1 m contour interval map (vector data) is generated from this DEM was also provided by the survey of India. The raster data i.e. DEM is used in the hydraulic modelling software (HEC RAS) to represent topography. Surveyed river cross-section and embankment data provided by Irrigation and Water Resources Department Govt. of U.P. were also used in the HEC RAS model. The HEC RAS model is calibrated by comparing simulated and observed water levels of historical events.

Flood corresponding to once in hundred year return period at six gauging sites of Central Water Commission (CWC) were estimated from the historical annual maximum flood data using L-moments based flood frequency approach.

The estimated floods corresponding to once in hundred year return period are provided as input to the calibrated HEC RAS model. The flood inundation extent was simulated using the HEC RAS model. The simulated flood inundation extent was compared with maximum flood inundation extent from satellite data from Joint Research Centre (JRC) and Remote Sensing Applications Centre, Uttar Pradesh [RSAC,UP (NRSC)].

The final hydraulic model result shows small islands within the flood extent causing inundation gaps. These gaps have been filled to get final inundation boundary area. It is observed that the gap filled inundation extent from hydraulic model (HEC RAS) mostly encompass the inundation extent of satellite-based approach. The KML file and tabular value of coordinates (Longitude, Latitude) are also provided for ground truth verification and demarcation. The following sample maps have also been given here for reference:

1. Delineated flood plain overlaid on 1 m contour from SOI- Part I
2. Delineated flood plain overlaid on 1 m contour from SOI- Part II
3. Delineated flood plain from Unnao to Balia overlaid on 0.5 m DEM from SOI
4. Delineated flood plain overlaid on 1m Contour map from SOI (District Prayagraj, Sheet No. G44P15N) at 1:10000 Scale
5. Delineated flood plain overlaid on 1m Contour map from SOI (District Prayagraj, Part of Sheet No. G44P15N) at 1:4000 Scale
6. Delineated flood plain overlaid on 1m Contour map from SOI (District Mirjapur, Sheet No. G44Q08B) at 1:10000 Scale
7. Delineated flood plain overlaid on 1m Contour map from SOI (District Mirjapur, Part of Sheet No. G44Q08B) at 1:4000 Scale

8. Delineated flood plain overlaid on 1m Contour map from SOI (District Varanasi, Sheet No. G44R03N) at 1:10000 Scale
9. Delineated flood plain overlaid on 1m Contour map from SOI (District Varanasi, Part of Sheet No. G44R03N) at 1:4000 Scale

It is recommended that the flood plain zone lines should be put on web portal for easy excess to the public and various developmental activities. Irrigation and Water resources Department U.P. should keep in his custody DEM, 1 m Contour maps and Flood Plain zone boundary and other relevant maps and GIS data for future use.

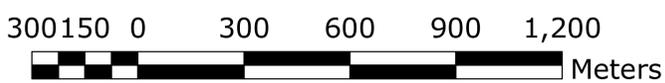


# SURVEY OF INDIA

## CONTOUR (1M INTERVAL) PLAN OF FLOOD PLAIN ZONING OF RIVER GANGA (FROM UNNAO TO BALLIA)



SCALE 1:10,000



CONTOUR INTERVAL (1m)		
115	121	127
116	122	128
117	123	129
118	124	130
119	125	131
120	126	132