

BIO-DATA

1. Name Bhopal Singh
2. Post held at present Director General, NWDA
3. Address
Office Address National Water Development Agency
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Phone Nos 011-26519164/41033995
09910301746(M)
4. Date of Birth 8th July, 1965
5. Nationality Indian
6. Key Areas Hydrology, Environmental Flows, Planning
and Designing of Water Resources Structures,
Inter-State Issues etc

7. Educational Qualifications

Sl. No.	Degree	Institute / Board	Year of Passing	Division	Subjects
1.	M. E.	University of Roorkee	1995	First Hons*	Hydrology
2.	B. Tech.	Indian Institute of Technology , Delhi	1986	CGPA 7.96 on 10 Points Scale	Civil Engineering

*Awarded Chancellor's Gold Medal

8. Professional Experience

Sl. No.	Office/ Institution	Post Held	From	To	Scale	Nature of Duties
1	NWDA	Director General	27 th Jan. 2020	Till Date	Level-15	Driving the interlinking of rivers programme in the country as per National Perspective Plan(NPP) for the optimum utilization of water resources in the country
2	UGBO, CWC	Chief Engineer	14 th Nov, 2017	27 th Jan. 2020	Level-14	Management of hydro-meteorological data observations of river Ganga and its tributaries, flood warning/forecasting at important locations in basin, monitoring of water quality and morphological characteristics of the river, compilation, collation and dissemination of hydro-meteorological data of the basin, Environmental flow monitoring and management, Appraisal and monitoring of irrigation, CAD&WM and RRR projects in the basin, compilation of water resources information of the basin, reassessment of yield of the basin etc. Coordination and liaising with state authorities.
3	HRM, CWC	Chief Engineer	1st Nov,	5 th Nov,	Level-14	Handling policy, administration and establishment matters of

			2016	2017		the Commission, Implementing e-governance programme such as eBhavishya, eHRMS, eOffice etc. Restructuring of the organization, planning and implementing training needs in the organization, liaising with ministry on various matters
4	HSO, CWC, New Delhi	Director	Aug. 2008	31 st Oct, 2016	PB4 37400-67000 Gr Pay 10000 (from 24-5-10 onwards) Gr pay 8700 till 23-5-10	Examination of FR/DPR of water resources projects from hydrology angle and finalization of their hydrological design parameters. Detailed hydrological studies of various projects either on consultancy basis or assigned by CWC/MOWR. Development of Hydrological Design Aids(SW) under HP-II. Implementation of project-Preparation of PMP Atlases for various river basins in the country. Review design flood studies of projects under DRIP or referred by states. Environmental flow assessment for various projects
5	Monitoring & Appraisal Dte., CWC, Shimla	Director	July 2006	Aug. 2008	14300-400-18300 (pre revised)	Appraisal and Monitoring of Irrigation Projects in Himachal Pradesh. Assistance to the state government in the development and management of water resources in the Himachal Pradesh Snow Hydrology Studies involving data collection, validation, compilation and extension of Snow Hydrology to all Himalayan River basins for issuing snowmelt run-off forecast. Collection, validation and compilation of hydro-meteorological data in Satluj basin and development of flood warning system.
6	HSO, CWC, New Delhi	Dy. Director	May 2006	July 2006	12000-375-18000 (pre revised)	Examination of water resources projects from hydrology angle.
7	WAPCOS (I) Ltd, New Delhi/	Dy. Chief Engineer	May 2001	Apr 2006	14300-400-18300	Preparation of Business Proposals related to water resources development.

	Gurgaon				(pre revised)	Hydrological Studies Godavari basin, GLIS and many other projects. Feasibility Study of Rural Electrification with end use infrastructure development (irrigation), Zimbabwe Rehabilitation study of Amir Ghazi Dam & Quargha Reservoir project in Afghanistan. Carrying Capacity Study of Teesta Basin, Dam break analysis of Nagarjuna Sagar Tailpond dam and preparation of Disaster Management Plan.
8	NBP, CWC, New Delhi	Dy. Director	Dec 1995	Apr 2001	10000-325-15200 (pre revised)	Consultancy works on Sardar Saraovar Dam and Narmada Main Canal, Planning and designing of Sabarmati Canal Syphon, Saurashtra branch canal falls, canal escapes on NMC, Kutch Branch canal, Indra Sagar Power House, Left bank Shaft Spillway of Tehri Dam.
9	IIT Roorkee	Trainee Officer/AD /DD IIT	July 1994	Dec 1995	From 7-4-95 10000-325-15200 (pre revised) Till 6-4-95 2200-75-2800-100-4000	Various courses on Hydrology, Detailed Project on Hydrological studies of Narmada Basin, Dissertation on "Flood Frequency Studies using L-Moments".
10	NBP, CWC, New Delhi	Assistant Director	Mar, 1989	July 1994	2200-75-2800-100-4000 (pre revised)	Consultancy works on Narmada Main Canal System of Sardar Sarovar Project involving various planning, layout and design issues. Designing of Cross drainage works of NMC, Designing of Canal Head Power House of Sardar Sarovar Project.

9. Trainings/Conference/Workshops/Seminar Attended

(A) India

Sl.No.	Subject of training / Workshop	Venue	Year and Duration
1.	Environmental Geo-hazards Management and Mitigation Strategy for Himachal Pradesh	Mandi	4-5 June, 2007
2.	Performance Evaluation of Water Resources Projects	NWA, Pune	10-12 Nov, 2007
3.	National Snow Science Workshop organized by SASE	Chandigarh	11-12 January, 2008

4.	International Conference on Water, Environment, Energy and Society (WEES-2009)	New Delhi	12-16 January, 2009
5.	5 th Regional Conference of ICID on "Improvement in Efficiency of Irrigation Projects through Technology Upgradation and Better Operation & Maintenance "	New Delhi	9-11 December, 2009
6	38th Session of WMO/ESCAP Panel on Tropical Cyclones"	New Delhi	5th June, 2011
6	International Workshop on " Piano Key Weir for In-stream Storages and Dam Safety"	New Delhi	May 30-June 1, 2012
7.	Seminar on" Sedimentation in Reservoirs"	New Delhi	21-12-2012
8	Training on " eWater Source"	New Delhi	18-22 March, 2013
9	Training on" Disciplinary Proceedings"	ISTM, New Delhi	5-8 August, 2013
10	Training on Storm Analysis and PMP Atlas	Noida	19-23 May, 2014
11	Training Course on" Remote Sensing and GIS Applications in Water Resources" organized by IIRS, Dehradun	Dehradun	19-23 August, 2014
12	Tropical Ecology Congres-2014	JNU, New Delhi	10-12 December, 2014
13	International River Interface Cooperation(RIC) Software	IIT Delhi	1-3 December, 2015
14	IInd National Dam Safety Conference	IISc Bangalore	12-13 January, 2016
15	Management Development Programme	YASHADA, Pune	8-12, February, 2016
16	19 th International River Symposium	New Delhi	12-14 September, 2016
17	Leadership Development Programme for Senior Officials of Ministry of Water Resource	IIM Ahmedabad	25-28 April, 2017
18	International Dam Safety Conference	Trianthapura m	23-24 January, 2018
19	Ist International Conference on Sustainable Water Management	Chandigarh	10-11 December, 2018
20	International Conference on River Health-Assessment to Restoration	IIT, BHU	14-16 February, 2019
21	International E-flow Workshop	New Delhi India-EU Partnership	21-22 October, 2019
22	2 nd International Conference on "Sustainable Water Management	Pune NHP, MoJS	5-8 November, 2019

(B) Abroad

1.	Training on Flash Flood Warning Software " Riverware Sentry" developed by Riverside Technology Incorporated, USA	Fort Collins, Colorado, USA	21-25 January, 2008
2	Exposure Visit To Japan with regard To Dam Safety And Management Issues	Japan	7-12 March, 2016
3	Training on Dam Safety and Reservoir Management	Deltares (Netherlands Spain, Switzerland	15-26 May, 2017

(C) Foreign Assignments

(As a part of WAPCOS (I) Ltd Team)

- Visited Zimbabwe for two month in July-August, 2002 as an Irrigation and Water Supply Expert for the Feasibility Study of Rural Electrification with end use infrastructure development (irrigation), Zimbabwe.
- Visited the Amir Ghazi Dam & Quargha Dam in Afghanistan for two weeks in December, 2002 as Irrigation and Water Supply Expert of the team and formulated remedial measures and rehabilitation plan along with their bill of quantities and cost estimates of the two dams and their water supply system.
- Visited Koga Irrigation and Watershed Project in Ethiopia as Hydrology Expert for two weeks in January, 2005 and studied the environment impact of the project and its management.

10. Publications

- "Some Design Aspects - Sabarmati Canal Siphon" - Bhagirath, CWC, 1996.
- "L-Moments in Flood Frequency Analysis" Jal Sansathan, CWC, 1998.
- "Hydrological Studies of Godavari Basin" WAPTECH, 2004.
- "Dam Break Analysis and Disaster Management Plan for Nagarjunasagar Tailpond Dam" WAPTECH, 2004.
- "Implementation of Real Time Data Acquisition Network and Flood Warning System on River Satluj by CWC" presented in the 'Workshop on Environmental Geo-hazards Management and Mitigation Strategy for Himachal Pradesh' held at Mandi, H.P. from 4-5th June, 2007.
- "Snow Hydrology Studies by Central water Commission" presented in 'National Snow Science Workshop' held at Chandigarh on 11-12 January, 2008.
- "Hydrologic safety of Dams in India" Workshop on Dam Safety Management organized by CBIP, 29-30 September, 2011.
- "Hydrologic safety of Dams in India" India Water Week 2012.
- "Design Flood Synthesis" Workshop on Design Flood Issues, November, 2013.
- "Review of Design Flood Criteria" Workshop on Design Flood Issues, November, 2013.
- Development of Hydrological Design Aids (SW)-An Overview, India Water Week, 2015.
- Preparation of Probable Maximum Precipitation Atlases for Major River Basins of India, India Water Week, 2015.
- Minimum Environmental/Ecological Flows-Views of CWC, India Water Week, 2015.
- Impact of Design Storm Duration on Design Flood, 1st National Dam Safety Conference, 2015.
- Design Flood Review of Almatti Dam, 11nd National Dam Safety Conference, 2016.
- Incorporating the Impact of Climate Change on Design Flood, 1st International Conference on Sustainable Water Management, 2018.
- Perspective on Issues and Challenges in the Implementation of CADWM, 2nd CADWM Conference, 28th May, 2019.
- Challenges in the Implementation of E-flows in Ganga Basin, 6th India Water Week, 2019, September, 2019.

11. Membership of Professional Societies

- Indian Water Resources Society.
- Indian Geotechnical Society, Delhi Chapter.
- Indian Society for Rock Mechanics and Tunneling.