

# Hydrographer, Waterworks

**Aliases:** Hydrographic Surveyor

**Industry/Sector(s):** Education, Training and Research

## JOB DESCRIPTION <sup>1</sup>

The tasks a Hydrographer, Waterworks is expected to perform include:

- Analysing hydrographic data to determine trends in movement and utilization of water
- Reading meters and gauges to measure water flow and pressure in streams, conduits and pipelines
- Recording data
- Measuring water level in lakes, reservoirs and tanks
- Calculating seepage and evaporation rates for dams and reservoirs
- Measuring depth of water in wells and test holes to determine groundwater level
- Measuring snow characteristics to evaluate water yield from snow runoff
- Preparing graphs and charts to illustrate water patterns
- Positioning sluice gates to direct water onto spreading grounds
- Installing, calibrating and maintaining metering instruments
- Recommending locations for metering stations and instrument placement

## WORK ENVIRONMENT <sup>1, 2</sup>

- It is not a desk job
- Need not handle a team
- Local travelling is a part of this job role
- Part-time work and contractual jobs may be available
- Work from home option is not available

### Working hours

- Organizations usually work for 5/6 days a week and 8/9 hours everyday. This may vary from organization to organization
- Shift system may be available
- Overtime may be required

### Is the job suitable for a candidate with special needs?

*This may vary from organization to organization*

## EDUCATIONAL QUALIFICATIONS AND TRAINING <sup>3</sup>

Preferably, degree in civil engineering

## KEY COMPETENCIES <sup>1</sup>

- Knowledge of relevant tools and equipment required
- Knowledge of practical application of engineering science and technology
- Skilled in using power tools, and installing, operating, testing and maintaining instruments
- Knowledge of bathymetry, hydraulics, hydrology, meteorology and geohydrology
- Skilled in measuring, gauging and surveying
- Knowledge of bore holes
- In-depth knowledge of hydrology analysis

## DESIRABLE COMPETENCIES <sup>1</sup>

- Good communication skills
- Hard-working

## AVAILABLE SKILL TRAINING AND LEARNING INSTITUTES

Colleges providing degree in civil engineering across India

## AVAILABLE SKILL TRAINING SCHEMES/SCHOLARSHIPS

For scholarship and schemes, use further links like:

- <https://scholarships.gov.in/>

## SAMPLE OF TRAINING AND LEARNING COURSES

<https://targetstudy.com/courses/engineering/>

## CAREER PROGRESSION PATH <sup>4</sup>

Intern → **Hydrographer, Waterworks** → Senior Hydrographer, Waterworks → Deputy Director of the Department → Director of the Department

*The progression is indicative*

## EXPECTED EARNINGS <sup>3</sup>

•For candidates with experience - Rs 15,600 to Rs 39,100 per month

*These figures are indicative and subject to change*

## REQUIRED WORK EXPERIENCE <sup>3</sup>

Generally, 3 years of experience required in hydrographic survey

## PROBABLE EMPLOYERS <sup>3</sup>

- Natural resources research institutes
- Government bodies
- NGOs
- Private research consulting firms

## KEYWORDS

- Waterworks Hydrographer
- Hydrographic Surveyor

## OCCUPATIONAL CODES AND STANDARDS

Standard	Code	Description
NCO 2015	2114.5500	Hydrographer, Waterworks
ISCO 2008	2114	Geologists and Geophysicists
NIC 2008	72100	Research and experimental development on natural sciences and engineering
QP Reference	Not available	Not available
NSQF	Not available	Not available

## REFERENCES

1	National Classification of Occupations Division 2
2	<a href="http://www.ccdisabilities.nic.in/page.php?s=reg&amp;t=def&amp;p=list_jobsNew">http://www.ccdisabilities.nic.in/page.php?s=reg&amp;t=def&amp;p=list_jobsNew</a>
3	<a href="http://iwai.nic.in/showfile.php?lid=935">http://iwai.nic.in/showfile.php?lid=935</a>
4	<a href="http://dget.nic.in/upload/uploadfiles/files/publication/Des-Div-2.pdf">http://dget.nic.in/upload/uploadfiles/files/publication/Des-Div-2.pdf</a>