

## Hydrology in the National Weather Service



Hydrologists in the National Weather Service (NWS) come from diverse backgrounds in the earth sciences and engineering. Hydrologist positions in the NWS are available both at Weather Forecast Offices (WFOs) and River Forecast Centers (RFCs) across the country. Some hydrologist positions are also located at national centers and NWS headquarters.

RFCs and WFOs each have an important role in accomplishing the hydrologic mission of the NWS. RFCs use computer models to create the river forecasts and flash flood guidance products which WFOs then use as a decision-making guide for issuing flash flood and river flood watches and warnings to the public.

### How To Apply

To start, visit [www.usajobs.gov](http://www.usajobs.gov)

- Type “hydrologist” into the SEARCH JOBS text box labeled “what: (job title, keywords)” and click the “search jobs” button to begin your search
- If you are not currently a government employee, look for vacancies in your search results where the “Who may apply” line says “Public”
- Click on a vacancy announcement you are interested in for more details about duties and qualifications.
- Follow instructions in the vacancy announcement to submit your application!



### National Weather Service

#### Our Mission:

The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy.

### Arkansas-Red Basin River Forecast Center

10159 E. 11th Street, Suite 300  
Tulsa, OK 74128  
Fax: 918.832.4101

[www.srh.noaa.gov/abrfc](http://www.srh.noaa.gov/abrfc)

## Arkansas-Red Basin River Forecast Center

# So you want to be a Hydrologist?



[www.srh.noaa.gov/abrfc](http://www.srh.noaa.gov/abrfc)

## Career Opportunities For NWS Hydrologists

### Service Hydrologist (SH) / Senior Service Hydrologist:

Service hydrologists serve as the local hydrologic expert at Weather Forecast Offices (WFOs) and are responsible for the WFO's hydrologic watches and warnings. There are 122 WFOs across the country and the majority employ an SH.

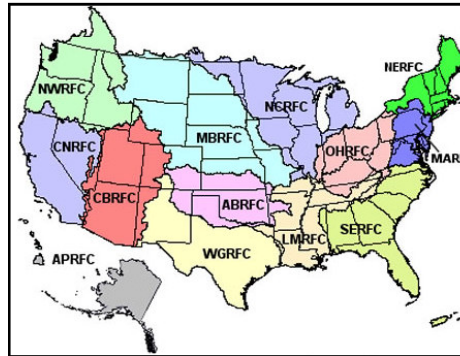
### Hydrologic Forecaster / Senior Hydrologic Forecaster:

Hydrologic forecasters work at one of 13 River Forecast Centers (RFCs). They are responsible for the daily production of river forecasts, flash flood guidance, data summary products, execution of the river forecast computer model and coordination of river forecasts as required.

**Service Coordination Hydrologist:** Leads the RFC effort to identify and meet customer requirements for hydrologic service and information.

**Development & Operations Hydrologist:** Provides direction for the integrated implementation and operational support of high levels of technology used at the RFC.

**Hydrologist-In Charge:** Provides managerial and technical oversight for all RFC activities.



NWS River Forecast Centers

## Degree Requirements for a Hydrologist in the NWS

A degree in physical or natural science, or engineering that included at least 30 semester hours in any combination of courses in hydrology, the physical sciences, geophysics, chemistry, engineering science, soils, mathematics, aquatic biology, atmospheric science, meteorology, geology, oceanography, or the management or conservation of water resources. The course work must have included **at least 6 semester hours in**

The NWS operates 24 hours a day, 7 days a week and most positions require at least some shift work.

**calculus (including both differential and integral calculus), and at least 6 semester hours in physics.**

Please refer to the following website for more information (Hydrologist is the 1315 series):  
<http://www.opm.gov/qualifications/standards/IORs/>

## Benefits Available to NWS Hydrologists

- Competitive Salary:

With a bachelor's degree, starting salary is usually GS-5 (\$30,000) with promotion potential in many positions to GS-12 (\$67,000) after 4 full years. Starting salary can be higher based on education or experience. Senior positions can earn between \$80,000 and \$104,000 and management pay scales are upwards of \$95,000.

These numbers are based on the 2009 pay scale for the "rest of US" outside major metropolitan areas and could be higher depending on the location of employment. More info at: [www.opm.gov/oca/09tables/indexGS.asp](http://www.opm.gov/oca/09tables/indexGS.asp)

- Annual and Sick Leave
- Group Health and Life Insurance
- Generous Retirement Benefits

## Other Useful Links

Jetstream: Careers in the NWS (includes information about degrees related to hydrology):  
<http://www.srh.noaa.gov/jetstream/nws/careers.htm>

American Meteorological Society Career Guide:  
<http://www.ametsoc.org/atmoscareers/>

Careers in the National Weather Service (includes qualifications and student opportunities):  
<http://www.weather.gov/careers.php>