

Water Resources Engineer

Design the systems that move, store, clean and hold back water. Floods, dams, storm drains, drinking water and rivers.

TYPICAL PAY

\$100,840

a year, full time

PAY RANGE

\$68k to \$163k

starting to experienced

TIME TO QUALIFY

4 to 8 years

after high school

DEMAND

Good

job outlook

LICENCE NEEDED

Yes

regulated job

WHERE YOU WORK

Engineering consulting firms, city and state water agencies, federal...

How you get there

- 1 High school diploma** Grade 12
Calculus and physics are the two that matter. Getting into calculus in your senior year is worth planning for in your sophomore year.
- 2 Accredited engineering degree** 4 years
A bachelor's in civil or environmental engineering from a program accredited by ABET (the national accreditor for engineering degrees). Most state boards will not license you without it.
- 3 Fundamentals of Engineering exam** Final year
The first national exam, normally taken in your final year of school. Passing makes you an engineer in training.
- 4 Work under a licensed engineer** 4 years
Four years of engineering experience signed off by a Professional Engineer. This is where you learn hydraulics on real projects.
- 5 Principles and Practice of Engineering exam** After 4 years of work
Choose the civil depth exam in water resources and environmental engineering. Pass it, pay your state board, and you are licensed.

Pros and cons

- + A four-year degree that starts near \$70,000
- + A license that is portable and legally protected
- + Work that visibly stops houses flooding
- Eight years to a full license, with two hard exams
- The degree is demanding and the dropout rate is high
- Projects move slowly. Something you design may be built in six years

Optional boosts

Hydraulic and hydrologic modeling. GIS (geographic information systems). A master's in water resources. Floodplain management certification.

Good to know

The country grades its own infrastructure

The American Society of Civil Engineers publishes a report card for America's infrastructure, giving letter grades to categories including dams, levees, drinking water and stormwater. It is written by engineer...

A third of the water workforce can retire

The Environmental Protection Agency estimates that roughly one-third of the water sector workforce is eligible to retire within 10 years. That is the operators, the engineers and the managers all at on...

Where these numbers come from

My Next Move: Civil Engineers (17-2051.00)
National Council of Examiners for Engineering and Surveying: the Principles and Practice of Engineering exam
ABET, the accreditor for engineering degrees
American Society of Civil Engineers

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: <https://career.help/us/careers/water-resources-engineer>



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