



Get to know a King County

Stream Scientist

We work to make rivers and streams safe and healthy for people, fish, and wildlife.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

King County stream scientists test for pollution, monitor how water quality changes over time, and examine how streams are affected by development, agriculture, and climate. We also help identify pollution sources, reduce human impacts, and guide community planning and environmental protection efforts. The data we work with are typically related to water chemistry (temperature, dissolved oxygen, nutrients, pH); bacteria in streams and stormwater drainages; and chemicals from stormwater runoff.

A typical week for a Stream Scientist might include:

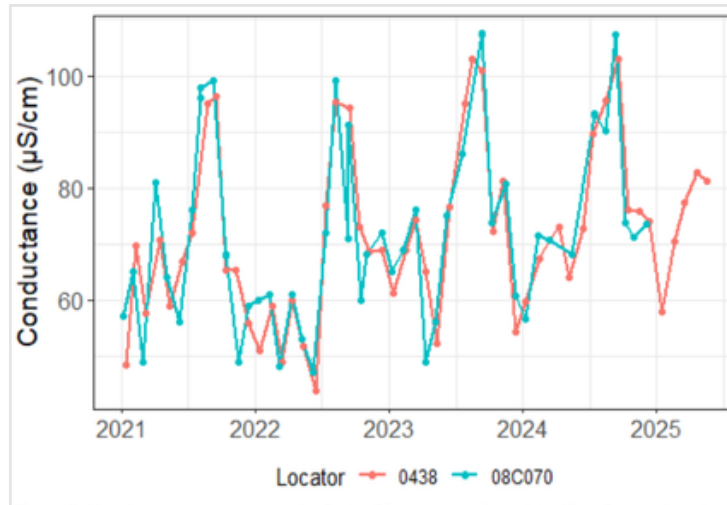
Fieldwork (1-2 days)

Collect water samples and measure temperature, pH, and dissolved oxygen



Data analysis (2 days)

Review sample results and use software like Excel or R to track trends or changes in water quality over time



Communications (1-2 days)

Report findings, create public materials, and plan and coordinate with colleagues





Becoming a King County

Stream Scientist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Stream scientists often have degrees in fields like:

- General biology
- Environmental science
- Hydrology
- Natural resources

Compensation

Early career King County Stream Scientists typically earn **\$38-\$49 per hour**.

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Experience with these may help you get internships or jobs in stream science.

Field equipment:

- Multiparameter meter (YSI, Hydrolab)
- Flow meter
- R-Cards for bacteria monitoring

Software:

- R and R Studio
- GIS software (ArcGIS or QGIS)
- Microsoft Office applications

Learn more our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs:

water quality; environmental scientist; aquatic scientist; stream ecologist; hydrologist

Questions? Email us!

science@kingcounty.gov



Get to know a King County

Freshwater Fish Scientist

We collect, analyze, and explain fish and habitat data to inform conservation of aquatic natural resources.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Freshwater fish scientists conduct fish and habitat surveys in streams, rivers, and lakes, at times in challenging conditions and inclement weather. The data we collect typically relate to fish biology and ecology (identification, abundance, body condition) or habitat characteristics (large wood, substrate, habitat types). We analyze and evaluate these data to support fish population recovery, reduce harmful impacts, and inform land management decisions. We fill knowledge gaps, identify emerging issues, evaluate assumptions, and improve best available science for decision making.

A typical week for a freshwater fish scientist might include:

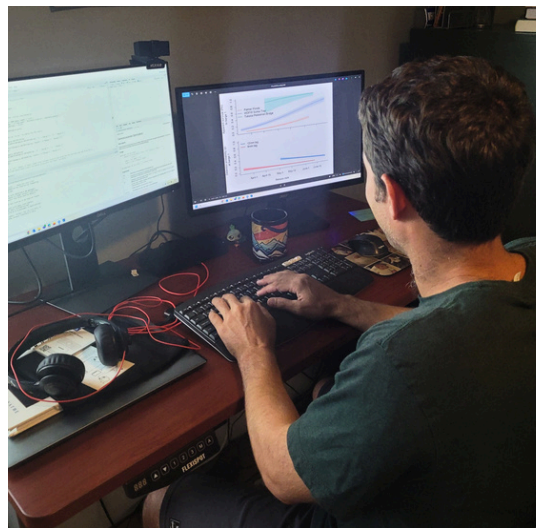
Field work (Seasonal; 2-4 or 0-1 days)

Collect fish and habitat data using techniques like electrofishing and netting. Solve problems in real time.



Data analysis (1-3 days)

Explore data with software like Excel and RStudio for statistical analysis and data visualization.



Project management (1-3 days)

Create reports and deliver presentations. Plan and coordinate work with partners.





Freshwater Fish Scientist



Areas of study

Fish scientists often have degrees in fields like:

- Fisheries Biology
- Aquatic Ecology
- Environmental Science
- Natural Resource Management

Compensation

Early career King County freshwater fish scientists typically earn **\$42-\$55 per hour**.

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Field experience and tools:

- Fish collection, ID, and tracking (electrofishing, netting, mark recapture)
- Stream surveys (large wood, substrate, canopy, and habitat classifications)
- GPS equipment (Trimble)
- Tablet and field sheet data entry

Office experience and tools:

- Database entry and management (Access, SQL, GitHub)
- Statistical analysis and data visualization (R/R Studio, Excel, Matlab, Python)
- Technical writing (reports, memos, data summaries)
- Presentations and public speaking

Learn more about our work:
kingcounty.gov/EnvironmentalScience



Get to know a King County **Field Hydrologist**

We monitor long-term stream conditions to inform projects and policy.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

A King County field hydrologist collects and manages data and equipment on streams, rivers, and lakes year-round. We often work in remote areas, challenging conditions, and inclement weather. Stream flow is our focus, but we also measure water level, temperature, turbidity, and precipitation. These data are used to monitor stream health and assist habitat restoration, stormwater management, and salmon recovery. We help others use large datasets, write reports, analyze data, and create data visualizations.

A typical week for a field hydrologist might include:

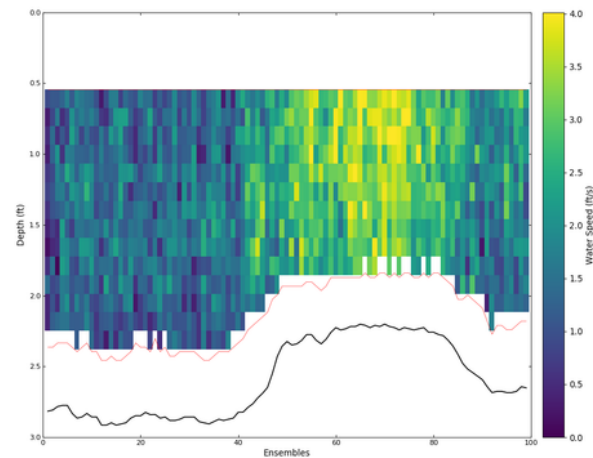
Fieldwork (2-3 days)

Follow standard operating procedures to take flow measurements, collect data, and install or maintain equipment.



Data analysis (1-2 days)

Process and QA/QC data. Make data publicly available by uploading to databases.



Project management (1-2 days)

Create reports, presentations, and data visualizations. Plan and coordinate with partners.





Becoming a King County

Field Hydrologist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Field Hydrologists often have degrees in fields like:

- Hydrology or Fluvial Ecosystems
- Environmental Sciences
- Natural Resource Management
- Climatology

Compensation

Early career King County field hydrologists typically earn **\$42-\$55 per hour.**

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Field experience and tools:

- Water quantity and quality data collection (pressure transducers, thermistors, turbidity meters, and multi-probes)
- Power and hand tools (drills, shovels, sledgehammers, saws, etc.)
- Stream flow measurement (handheld flow meters with wading rods, doppler rafts/ADCPs)

Office experience and tools:

- Data processing and database management, statistical analysis, and data visualization (Excel, R Studio, GitHub, SQL, ArcGIS, Python, and HOBOWare)
- Stream Rating Curve development (establishing mathematical relationship between water level and discharge)

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs: Hydrology, hydrologic technician, stream, fluvial, water quality, environmental scientist, field scientist, freshwater ecosystems, ecologist, aquatic ecologist, stormwater

Questions? Email us!
science@kingcounty.gov



Get to know a King County

Wetland Scientist

We support restoration projects and protect wetlands.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

A King County wetland scientist surveys native plant communities, collects soil samples, and measures water levels, often in challenging field conditions, to determine wetland boundaries and characterize their ecological functions. This data is combined with GIS and remote-sensing data to develop maps, analyses, and technical reports that inform policy, permitting, and restoration planning. Scientists may provide wetland restoration and mitigation design guidance to regulatory agencies to ensure they meet environmental regulations and support biodiversity.

A typical week for a wetland scientist might include:

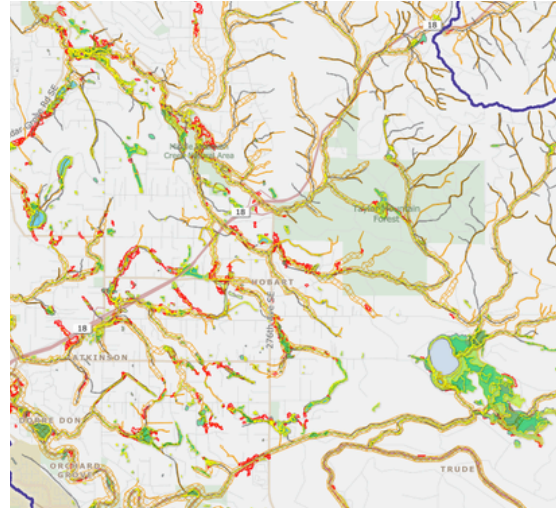
Fieldwork (1-3 days)

Collect samples, perform surveys, and maintain data collection equipment.



Data analysis (1-2 days)

Analyze survey, sample, and geospatial data.



Planning and reporting (1-2 days)

Review code and regulations. Present findings. Coordinate with partners.





Becoming a King County

Wetland Scientist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Wetland scientists often have degrees in fields like:

- Biology
- Environmental Science
- Natural Resource Management

Certification to advance career:

- Wetland Professional Certification

Compensation

Early career King County Wetland Scientists typically earn **\$42-\$55 per hour.**

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Field Experience:

- Identifying Plants
- Delineating Wetlands
- Collecting and classifying soil samples
- Operating Trail Cameras
- Using GPS Equipment

Office Experience:

- Working with datasets:
 - Vegetation community inventories
 - Aerial LiDAR data
 - Soil data
 - Hydrologic data.
- Processing data with programs like:
 - R Statistical Software
 - ArcGIS
 - GitHub
 - Excel

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs:

field technician, environmental scientist, natural resources specialist, restoration ecologist

Questions? Email us!
science@kingcounty.gov



Get to know a King County

Groundwater Scientist

We characterize natural and engineered effects on our physical landscape.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Groundwater scientists have expertise in hydrology and geology. We conduct fieldwork and analyze large datasets to measure and interpret natural conditions and landscape changes over time. Field work includes surveying natural and engineered stormwater conveyances (streams, lakes, wetlands, pipes, culverts), data collection, and identifying landscape features influencing these. We work with large datasets, including GIS aerial/satellite imagery, well water depth, and time-series data like streamflow. These watershed analyses inform regional natural resource policies and regulations.

A typical week for a Groundwater Scientist might include:

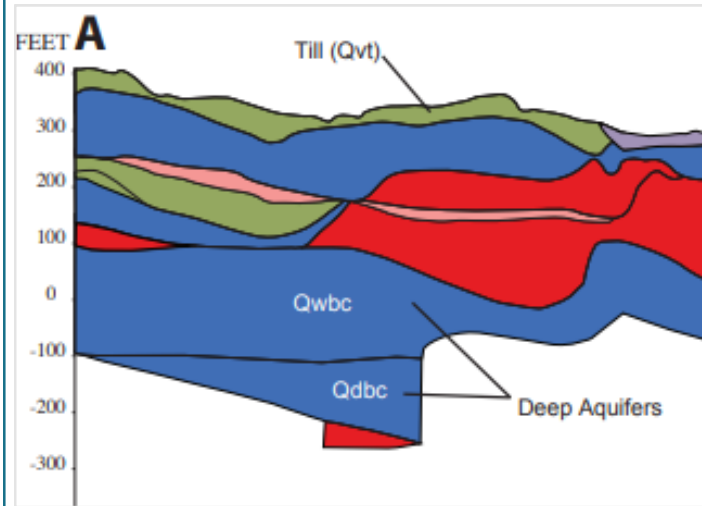
Fieldwork (1-2 days)

Collect groundwater and surface water data; manage data-collection instruments.



Data management & analysis (2 days)

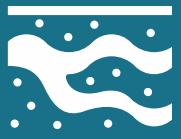
Update and use environmental data, often through statistical analysis, to produce visuals and figures.



Planning & collaboration (2 days)

Work with partners to plan, implement, and report on projects and inform policy decisions.





Becoming a King County

Groundwater Scientist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Groundwater scientists often have degrees in fields like:

- Earth Sciences
- Environmental Sciences
- Geology
- Hydrology

Certification to advance career:

- Hydrogeology license

Compensation

Early career King County groundwater scientists typically earn **\$42-55 per hour**.

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Field skills and experience:

- Following Standard Operating Procedures (SOPs) to collect groundwater and surface water data.
- Experience working outdoors in all weather

Office skills, experience, and tools:

- Aptitude in math, physics, chemistry, and statistics
- Management of datasets, data analysis, and data visualization using tools like:
 - ArcGIS
 - Python
 - R-Studio
 - SQL
 - Excel
 - MS Access
 - GitHub

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs: geologist, water quality, groundwater hydrologist, earth scientist, watershed hydrology technician, physical scientist

Questions? Email us!
science@kingcounty.gov



Get to know a King County

Ecotoxicologist

We track toxic chemicals and try to reduce their harm to people and the environment.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Ecotoxicologists identify and investigate environmental pollution problems and collaborate with environmental managers and policymakers to reduce levels of toxic chemicals, especially in waterways. We collect and analyze data to understand the impacts of various contaminants to humans, fish, and the environment. Importantly, we also clearly communicate our findings to officials and communities to improve health and safety for all.



A typical week for an ecotoxicologist might include:

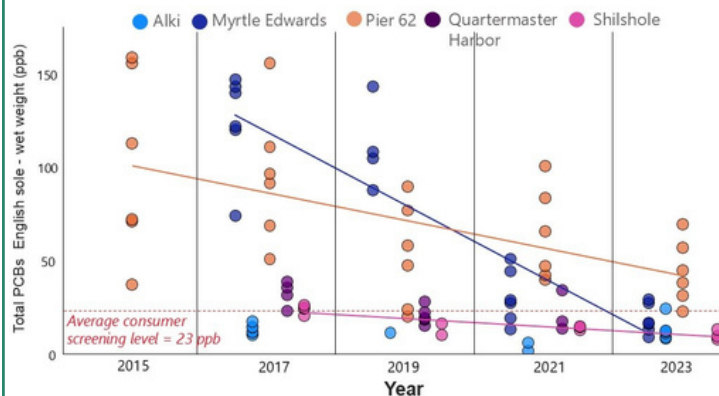
Fieldwork (1 day)

Collect samples, perform surveys, and maintain data collection equipment.



Data analysis (2 days)

Use environmental data, often through statistical analysis, to assess impacts of toxic chemicals and inform action.



Communicate findings (2 days)

Write project reports, present findings to stakeholders and conduct community outreach.





Becoming a King County Ecotoxicologist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

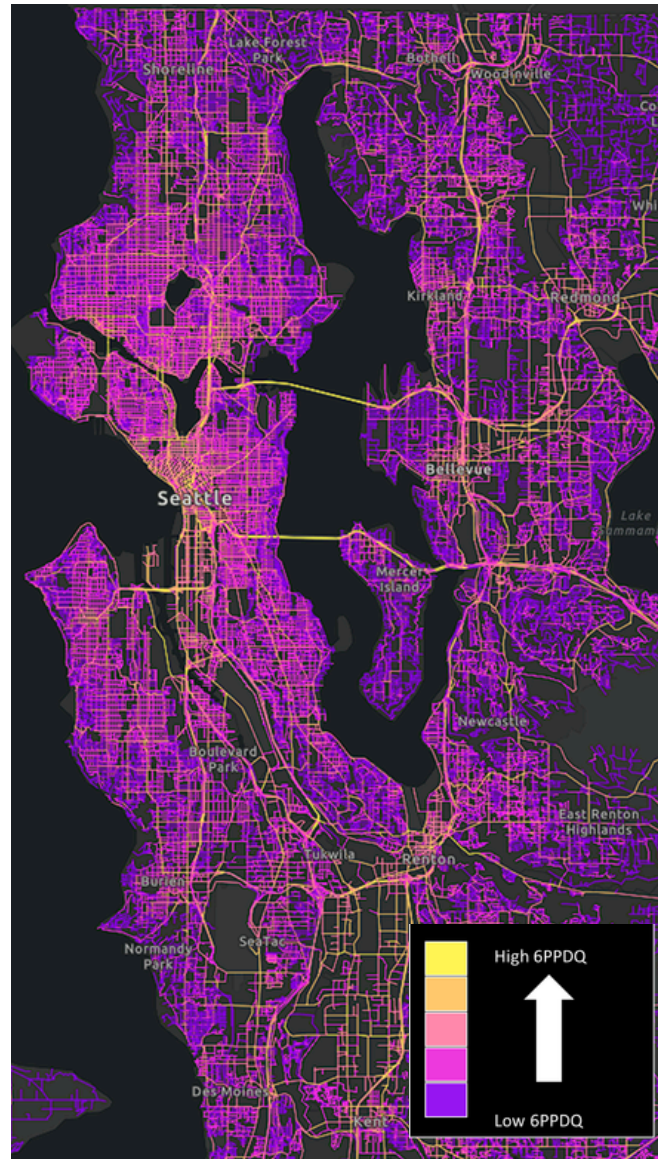
Ecotoxicologists often have degrees in fields like:

- Environmental science
- Natural resource sciences
- Biology
- Toxicology
- Chemistry
- Biochemistry
- Hydrology
- Zoology

Compensation

Early career King County Ecotoxicologists typically earn **\$43-\$52 per hour.**

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Field experience:

- Sampling water, sediment, and fish

Laboratory experience:

- Analytical chemistry experience:
 - Operation of LCMS, GCMS, ICP-MS instruments

Office experience:

- Analyzing data with programs like:
 - R statistical programming language
 - Excel
 - SQL
 - Python
 - ArcGIS or other GIS software
 - Power BI

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs: Environmental toxicologist, water quality planner, environmental scientist, risk assessor, ecotoxicologist, water quality scientist

Questions? Email us!
science@kingcounty.gov



Get to know a King County Lake Scientist

We work to make our lakes safe and healthy for people, pets, and wildlife.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

The King County lakes team works to understand lake health by monitoring nutrients, chlorophyll, temperature, water clarity, and plankton in lakes. We also monitor bacteria and toxic algae and work with the King County Environmental Lab and Lake Stewardship volunteers to collect water samples from dozens of lakes. Public Health uses these data to decide when to close a swimming beach or issue lake-use advisories.

A typical week for a Lake Scientist might include:

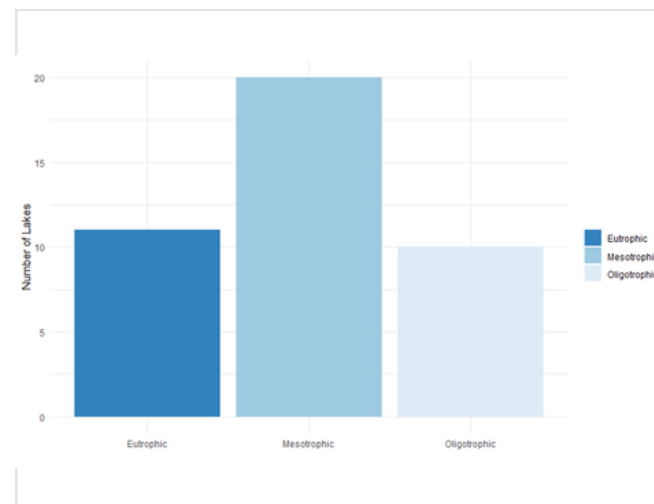
Field work (1-2 days)

Collect water samples and field observations.



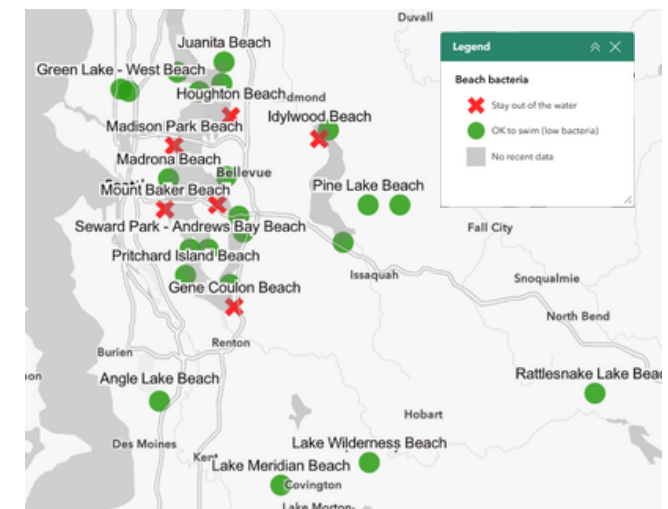
Data analysis (2 days)

Review sample results; Use software to summarize findings and track changes in water quality over time.



Communications (2 days)

Report findings, create public materials, and plan and coordinate with colleagues.





Becoming a King County

Lake Scientist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Lake Scientists often have degrees in fields like:

- Environmental Science
- Natural Resources
- Ecology
- Biology and Chemistry

Compensation

Early career King County Lake Scientists typically earn **\$42-\$55** per hour.

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



How to stand out

Experience with these may help you get internships or jobs.

Equipment and experience:

- Multiparameter meter (e.g. YSI, Hydrolab)
- Van Dorn water sampler
- Secchi Disk
- Fieldwork, including on or near water

Software:

- R for data processing and visualizations
- GIS Software (ArcGIS Pro)
- Microsoft Office - Excel, Word, PowerPoint

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs: water quality, limnologist (study of freshwater), environmental scientist, water resources management, ecology

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Formatos alternativos y servicios de traducción están disponibles. (206) 477-6151; retransmisión TTY: 711

Questions? Email us!
science@kingcounty.gov



Get to know a King County Marine Scientist

We apply scientific insight to help improve, understand, and protect Puget Sound.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

The King County marine team works in a number of programs to monitor water, sediment, and plankton from Puget Sound. Our team works with the King County Environmental Lab and our research vessel, the R/V SoundGuardian, to collect samples. Each monitoring activity helps us paint a picture of Puget Sound health and how it has changed over time. We pride ourselves on our long-term, high-quality, public datasets.

A typical week for a Marine Scientist might include:

Data Analysis (2-3 days)

Process, review and summarize data from the marine environment.

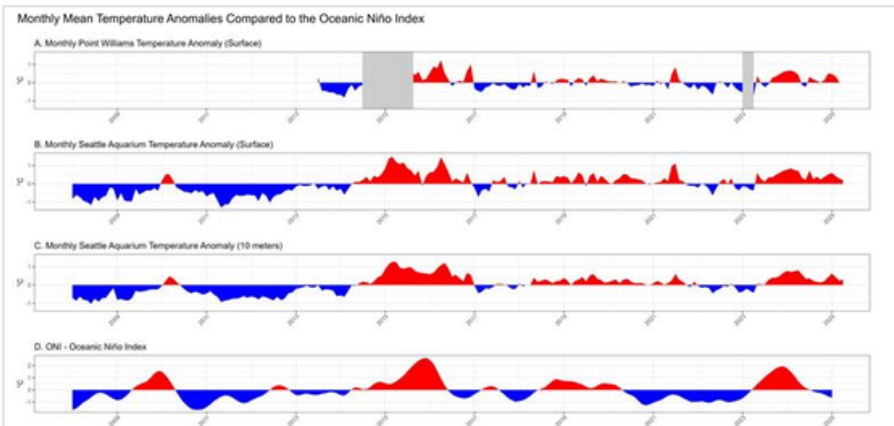


Figure 1. Monthly temperature anomalies from King County's Puget Sound moorings at Point Williams (A) and the Seattle Aquarium (B and C) compared to the Oceanic Niño index (D), the oceanic effect of ENSO. The baseline for temperature anomalies is the period of record for each mooring.

Research and Communications (2-3 days)

Write study plans, reports, and publications. Communicate data and findings with workgroups and partners. Read and interpret reports and publications from other institutions.





Becoming a King County Marine Scientist



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Marine Scientists often have degrees in fields like:

- Environmental Science with marine-focused coursework
- Marine Biology
- Oceanography

Compensation

Early career King County Marine Scientists typically earn **\$42-\$53 per hour**.

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



How to stand out

Technical skills:

- Knowledge of estuarine processes
- Understanding of marine environment and data collection methods, including:
 - Moorings or other autonomous systems, like Seagliders or Argo floats
 - Plankton and sediment
 - CTD (conductivity, temperature, and depth)
- Statistics and data analysis
- Data quality control

Software:

- R, Python, or Matlab for data analysis and visualization
- Data dashboards like Tableau

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs: marine, water quality, oceanography, Puget Sound

Questions? Email us!
science@kingcounty.gov



Get to know a King County

Science Communicator

We make science more understandable and useful through storytelling.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Science communicators make scientific research more accessible and useful. We work with scientists to translate complex topics for a variety of audiences, purposes, and channels. Effective science communication can help communities, partners, and policy makers understand the value of environmental research and make more informed choices about government regulations, agency investments, and individual actions.

A typical week for a Science Communicator might include:

Fieldwork (1 day)

Join scientists in the field to learn about and document their research in action.



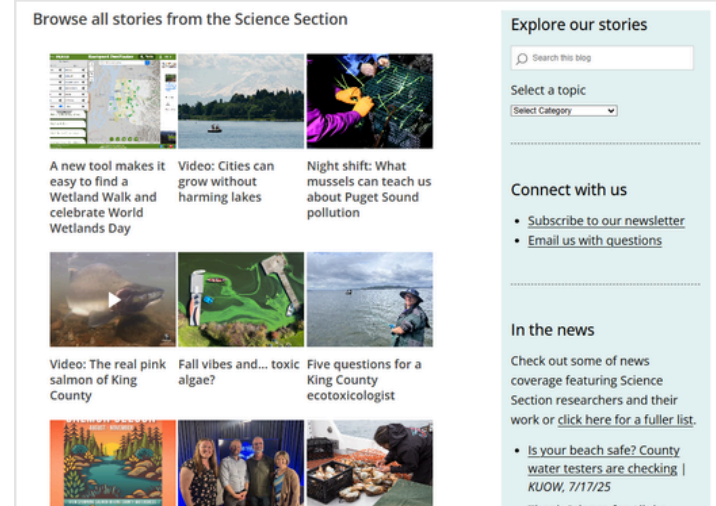
Collaboration (2 days)

Work with scientists to develop story ideas, reports, presentations, web pages, and educational materials



Creating (2 days)

Write for blogs, newsletters, and social media; Edit photos and video; Explore new ideas, strategies, and tools





Becoming a King County

Science Communicator



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Science communicators often have degrees in fields like:

- Communications or Marketing
- Journalism
- Biology, ecology, or other sciences

Compensation

Early career King County communications specialists typically earn **\$39-\$50 per hour**.

Benefits for King County employees may include medical, dental, and vision, plus ways to save for the future through pension and savings plans.



Stand out on applications

Creative skills and experience:

- Storytelling and content creation
- Eagerness to experiment and explore new ideas
- Ability to make complex information relatable and useful to diverse audiences

Technical and other skills:

- Audio/video production
- Website design (HTML and visual)
- Blogs and social media
- Accessibility best practices
- Partnership with people from varied cultural, economic, and educational backgrounds
- Basic knowledge of different science topics
- Understand scientific writing, data, and figures

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs:

Communications specialist, science educator, science outreach, science writer

Questions? Email us!
science@kingcounty.gov



Join the King County **Stream Team**

Our work supports long-term monitoring programs for King County streams.



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Field scientists on our Stream Team design and carry out standardized field surveys to collect freshwater macroinvertebrates (also called “stream bugs”) from streambeds. They also survey in-stream habitat and deploy sensors to monitor temperature in streams. Using biological indicators alongside physical and chemical data, they assess stream ecosystem health, pinpoint pollution or habitat stressors, and deliver findings that guide restoration projects, regulatory reporting, and watershed management decisions.

A typical week for the Stream Team might include:

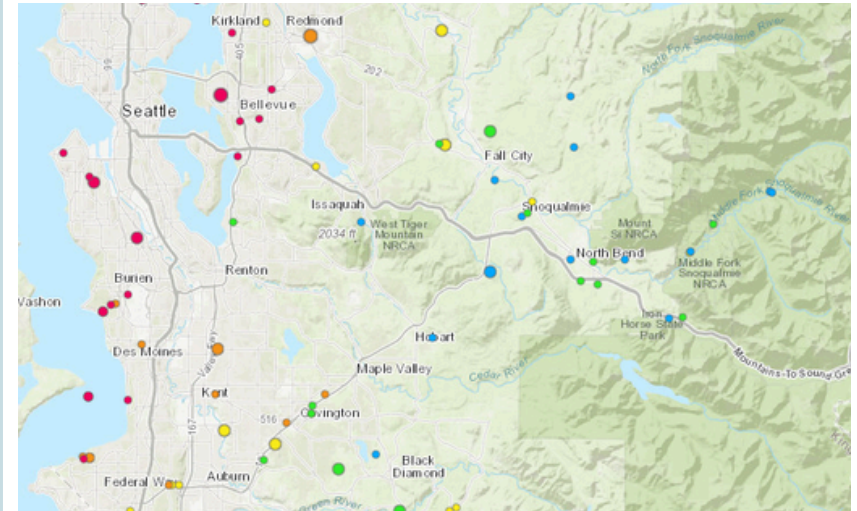
Field work (3-4 days)

Collect stream bug samples and evaluate in-stream habitat; install monitoring equipment such as temperature sensors.



Data entry and analysis (1-2 days)

Enter and QA/QC notes and data in long-term datasets. Review results and use software like ArcGIS, Excel or R to track trends and create maps.





Join the King County Stream Team



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Areas of study

Stream Team members are often pursuing degrees in fields like:

- Environmental Sciences
- Biology
- Natural Resources

Compensation

Members of the Stream Team are short-term seasonal employees.

People in this position typically earn \$24.77 per hour.



How to stand out

Field equipment:

- Multiparameter meter (e.g. YSI, Hydrolab)
- Continuous data loggers (e.g., water temperature and level loggers)
- Habitat survey and data collection tools (e.g., gravelometer, densiometer, stadiarods, measuring tape, rangefinders)
- Stream bug collection tools (kick net, D net, surber sampler, etc.)

Software:

- R for data processing and visualizations
- GIS Software (ArcGIS Pro)
- Microsoft Office (Excel, Word, PowerPoint)

Learn more about our work:
kingcounty.gov/EnvironmentalScience

Search these terms to see similar jobs: field technician, water quality, environmental scientist, natural resources specialist, aquatic scientist, aquatic ecologist

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