State of Washington
Dept. of Natural Resources
invites applications for the position of:
Fire Scientist

careers.wa.gov
Working for Washington State

SALARY:	$5,466.00 - $7,353.00 Monthly
	$65,592.00 - $88,236.00 Annually

OPENING DATE: 09/23/19

CLOSING DATE: 10/23/19 11:59 PM

DESCRIPTION:

Fire Scientist, Natural Resource Scientist 4
Forest Health and Resiliency Division – Olympia
Recruitment #2019-09-7793
This is a full-time permanent represented position.

Want to join something GREAT and make a difference?

The DNR Forest Health and Resiliency Division is looking to add to our growing team of natural resource professionals committed to restoring and managing the health of Washington's forests. This scientist position will serve as the agency's fire science lead responsible for conducting scientific analysis and research in support of 20-Year Forest Health Strategic Plan, 10-Year Wildland Fire Protection Strategic Plan, the Forest Action Plan, and other related plans and initiatives. This position will lead and integrate fire risk analysis and community wildfire risk reduction with landscape restoration planning. This position will serve as the agency expert in fire science independently performing original scientific research and analysis with publication of research findings in refereed publications.   This position will work collaboratively with DNR scientists, US Forest Service researchers, university researchers and other partners. In this role you will interact with a wide variety of scientists, land managers and stakeholders to help them understand complex scientific concepts and apply them in landscape restoration efforts.

If you are a scientist that has proven experience managing natural resources, assessing forest health conditions and risk, communicating complex scientific topics to technical and non-technical audiences, publishing research findings in refereed publications, and a passion and commitment to working collaboratively with internal and external stakeholders to create healthy, resilient forested landscapes we want to hear from you!

What will we trust you with?

- Lead analysis and methods development to quantify, analyze, and map wildfire probability, intensity, and risk in Washington State.

- Lead the development of a methodology to identify strategic treatment locations to reduce wildfire risks to communities and benefit wildfire response operations.
- Provide expertise in fire ecology and fire behavior to the DNR Forest Health and Resiliency Division and Wildfire Division teams in the development of landscape evaluations and larger scale restoration needs assessments and risk assessments.
- Utilize best available science, fire modeling applications, and other tools to model changes in wildfire probability and risks in planning areas under different vegetation management scenarios and climate change scenarios.
- Utilize remotely sensed and field datasets to monitor and quantify annual wildfire extent and severity across Washington. Develop relevant studies to analyze factors influencing burn severity, including treatments, and trends over time.
- Collaborate with research and management partners to conduct fire effects monitoring and other research projects that are relevant to DNR fire science needs. Produce peer-reviewed research papers and conference presentations to share results with the scientific community.
- Transfer scientific knowledge gained through fire science analysis and research efforts to a variety of technical and non-technical audiences including: DNR staff, DNR leadership, Washington State Legislature, natural resource professionals, land managers, forest stakeholders, forest collaboratives, forest ecologists, wildlife biologists, and fire ecologists.
- Being practical to help others apply science in their work.

Why work for DNR?

At DNR, we value public service, innovation and creative problem solving, safety and well-being, and leadership and teamwork. At DNR you'll support the vision of a sustainable future by using your skills to protect and manage the state's natural resources for both current and future generations. As a DNR employee, you'll work with the public's interest in mind as we manage more than 5 million acres of state-owned forest, range, commercial, agricultural and aquatic lands. But managing lands is only half of our story. We house the Washington Geological Survey, a dynamic program that is the primary source of geological products and services in support of decision making in Washington. We also protect other public resources such as fish, wildlife, water, and provide public access to outdoor recreation. Two of our largest and most important state-wide resource protection responsibilities are fire prevention and suppression, and overseeing forest practices.

We are nearly 1,500 employees strong and dedicated to making DNR a great place to work. Our mission is to serve Washington's lands and communities; build strong and healthy rural communities; enhance forest health and wildfire management; strengthen the health and resilience of our lands and waters; and increase public engagement and commitment to our public lands and resources. In partnership with citizens and governments, we provide innovative leadership and expertise to ensure environmental protection, public safety, perpetual funding for schools and communities, and a rich quality of life. At DNR we approach our work through the lens of making Washington a better place environmentally, economically and socially for current and future generations.

The Location

One of the world's most scenic places, Washington State offers breathtaking discoveries for people who love natural beauty and outdoor recreation, from the Pacific Coast shores to the rugged Cascade Mountains to the rolling hills of the Palouse. Your office will be located on the state capital campus and minutes from downtown and the South Puget Sound.

What makes DNR a great place to work?

- Transitioning to a modern work environment
- Mobile work
- Infants at work program
- Commitment to organizational health and wellness
- Diversity, Equity and Inclusion Council
- Leadership that empowers and supports employees
- Work/life balance
- Leadership development opportunities

- Educational aid and career development stipends
- Public Service Loan Forgiveness Eligibility
- Opportunities to participate in wildland fire suppression assignments
- Opportunities to stretch your professional skills
- A comprehensive benefit package that includes employer contributions toward health insurance, paid holidays, retirement plans, sick leave and vacation days.
  Visit http://careers.wa.gov/benefits.html for more information.

Why do people choose to work for DNR?

"I enjoy the clients I support and there are a ton of smart, fun, passionate people in this agency that I have the privilege of interacting with and learning from. DNR is a great place because of the people who are here. They are passionate, hard-working, loyal, intelligent, kind, and FUN! The aspects of the agency that speak to me are how diverse the work is that we do; from forests to grass lands, from mountain tops to under water, the composition of the agency made up by various different responsibilities makes it so interesting."

"I am committed to this agency's purpose, the Washington Geological Survey is an amazing place full of innovative, creative, and open-minded people, and I get great satisfaction from serving Washington's residents. I love it here because this place loves me. I like how I am made to feel valued, appreciated, and I feel that my skills are constantly being broadened. I am generally my only limitation."

"The idea of managing the resources in perpetuity really speaks to me. I like that the work DNR does tries to strike a balance between business and conservation and that I don't have to compromise one for the other because I am expected to do both. We are expected to be good stewards of the resources and the decisions we make mean something...in perpetuity."

Who are we looking for?

Required Qualifications:

The right candidate has:

- A Master's degree with a major study in major study in fire ecology, fire science, forest ecology, landscape ecology, forest management or a closely related field
- Three years of professional work experience applying a natural resource science education in a natural resource field. Work experience may include relevant experience during the course of obtaining a PhD.
- Graduate level knowledge and management experience in some combination of forest ecology, silviculture, forest health, and/or landscape ecology.
- Strong foundational knowledge and expertise in fire ecology of western US forests.
- Knowledge of major forest health issues in the Pacific Northwest and management strategies to address those issues.

- Experience in spatial and non-spatial modeling concepts and methods to study trends and predicted changes in forest conditions, wildfire risk, and values at risk over time.
- Advanced knowledge and experience using fire and vegetation models such as BEHAVE, FlamMap, FSim, FS Pro, FVS-FFE, and FCCS to predict fire effects and changes in vegetation.
- Advanced knowledge and expertise using remotely sensed data to analyze natural resources, including demonstrated proficiency in ArcGIS, R, and Python.
- Demonstrated ability to create maps, figures, and tables that effectively and creatively communicate results of analyses and research.
- Working knowledge of the Scientific Method, including sound understanding and working knowledge of experimental design, sampling procedures, systematic literature reviews, error assessment methods, data analysis procedures, and both spatial and non-spatial statistical techniques.
- The incumbent in this position is required to travel.

Desirable Qualifications:

- A PhD with a major study in fire ecology, fire science, forest ecology, landscape ecology, forest management or a closely related field.
- Knowledge of Pacific Northwest or similar ecosystems, including significant field experience.
- Proven experience implementing forest ecology and silvicultural concepts in a forest management context.
- Experience conducting fire history studies, including sample design, field collection of fire scar and tree ring data, lab processing and cross dating, and analysis to determine fire regime characteristics for a site.
- Excellent verbal and written communication skills to convey complex forest ecology science to technical and non-technical audiences, including land managers.
- Demonstrated strong organizational and project management skills.
- A successful record of publishing peer-reviewed research papers and reports, and presentation of research at scientific meetings and conferences.
- Knowledge and experience in applying climate change science to the study and analysis of forest ecosystems.
- Experience participating in multi-stakeholder forest collaboratives and understanding of how to effectively communicate and represent both science and agency policy to external partners.

APPLICATION PROCESS

To be considered you must apply online at www.careers.wa.gov (**Click on the APPLY button above**). You must complete the entire online application to be considered for the position.

- You must attach the following:
  - A letter of interest describing how your experience and qualifications relate to the position profile, required and desired position qualifications, and special position requirements.
  - A resume **including the names of three to five professional references**

Carefully review your application materials before submitting. **If you fail to submit the required documents or complete the entire online application, you may no longer be considered for the position by the supervisor.**

Application Status – once you submit your online application, you can check your status by logging into your account. Finalists for the position will be contacted by the hiring managers directly.

Questions? Please contact Chuck Hersey at 360-902-1045, chuck.hersey@dnr.wa.gov or e-mail us at DNRrecruiting@dnr.wa.gov.

Washington State Department of Natural Resources is an Equal Opportunity Employer and prohibits discrimination and harassment of any kind. We are committed to providing equal employment opportunities in a fair and impartial manner for all persons without regard to age, sex, marital status, sexual orientation, gender identity, race, creed, color, national origin, religion, pregnancy/parental status, genetic information, military status, political affiliation, criminal history or the presence of any sensory, mental or physical disability or the use of a trained service animal by a person with a disability. Persons with a disability who need assistance during the screening process or those needing

this announcement in an alternative format may contact DNR Recruiting staff (360) 902-1350 or (360) 902-1128. DNR may be contacted using the Washington State Telecommunications Relay Service (TRS) by dialing 711.

Fire Scientist Supplemental Questionnaire

* 1. Do you have a Master's degree with a major study in major study in fire ecology, fire science, forest ecology, landscape ecology, forest management or a closely related field?

   ❑ Yes
   ❑ No

* 2. Do you have at least three (3) years of professional work experience applying natural resource science education in a natural resource field. Work experience may include relevant experience during the course of obtaining a PhD?

   ❑ Yes
   ❑ No

* 3. Do you have experience in spatial and non-spatial modeling concepts and methods to study trends and predicted changes in forest conditions, wildfire risk, and values at risk over time?

   ❑ Yes
   ❑ No

* 4. Do you have advanced knowledge and experience using fire and vegetation models such as BEHAVE, FlamMap, FSim, FS Pro, FVS-FFE, and FCCS to predict fire effects and changes in vegetation?

   ❑ Yes
   ❑ No

* 5. Do you have advanced knowledge and expertise using remotely sensed data to analyze natural resources, including demonstrated proficiency in ArcGIS, R, and Python?

   ❑ Yes
   ❑ No

* 6. Do you have demonstrated ability to create maps, figures, and tables that effectively and creatively communicate results of analyses and research?

   ❑ Yes
   ❑ No

* 7. Where did you originally hear about this job (i.e. friend, newspaper, careers.wa.gov, specific job board website)?

* Required Question