**Position Description**

The College of the Environment fosters existing and new collaborations between outstanding faculty, staff and students who are engaged in the study of: the solar system and Earth’s dynamic land, water and atmosphere; the development and application of environmental engineering and technological advances; and the impact of policy and human actions on the environment, and the management of natural resources.

The School of Aquatic and Fishery Sciences (SAFS) is dedicated to sustaining healthy marine and freshwater environments. Our school comprises one of the largest and most diverse academic aquatic and fisheries sciences program in the United States. Our faculty conduct innovative research from the organism to the ecosystem scale, and are recognized leaders in aquatic biology, sustainable fisheries management, and aquatic resource conservation.

The School of Aquatic and Fishery Sciences values the strengths and professional experience that students, faculty, and staff bring to our community. We are committed to providing excellent education to all of our students, regardless of their race, gender, class, nationality, physical ability, religion, age, or sexual orientation. We are proud of the different roles that our students, staff, and faculty play in the community of the School and in the College of the Environment. We recognize that science is richer and the SAFS community is more vibrant when a diverse group of people participate the SAFS community.

The Gulf of Alaska (GOA) is a large and geographically complex region of the North Pacific Ocean, which has undergone regime shifts leading to persistent changes in environmental forcing and hence ecosystem reorganization.  It is an area where major impacts of climate change are expected. Some of the projected impacts include warming of the surface water, ocean acidification, changes in sea level, and an overall reduction in ecosystem productivity.  Further development of ecosystem models for the Gulf of Alaska is a priority for both evaluating climate change impacts and addressing other issues associated with ecosystem-based fisheries management. A spatially-explicit approach is considered necessary because spatial complexity occurs at multiple scales in the region. The GOA is characterized by a complex shoreline, a mosaic of benthic habitats, significant freshwater input from glacial run-off, and a shelf with multiple canyons and gullies.

The selected postdoctoral scholar will have a primary role in development of an Atlantis model for the Gulf of Alaska. The Atlantis model is a spatially-explicit, coupled physical-biological oceanographic model developed by Dr. Elizabeth Fulton (CSIRO, Ocean and Atmosphere Flagship). As an end-to-end ecosystem model, Atlantis is forced by high resolution physics and includes detailed representation of biogeochemistry, plankton and benthos dynamics, and growth, movement, and age-structured stock dynamics of fish and other higher-trophic-level species. The selected post-doctoral candidate will work closely with researchers at University of Washington and the Alaska Fisheries Science Center to synthesize available information for ecosystem modeling in the Gulf of Alaska. The Atlantis model will be calibrated and tested to meet performance standards. The Atlantis model will be used retrospectively to elucidate critical aspects of ecosystem structure and function, including the effect of the 2013-2016 marine heat wave, and to evaluate the system-level optimum yield for Gulf of Alaska groundfish, an important ecosystem reference point. Finally, the Atlantis model will be used to project ecosystem structure and productivity under scenarios of future climate conditions in the Gulf of Alaska. This position is a 12-month position with the possibility of extension.

Responsibilities Include:

* leading the development of an Atlantis model for the Gulf of Alaska.
* working closely with researchers at University of Washington and the Alaska Fisheries Science Center to synthesize available information for ecosystem modeling in the Gulf of Alaska.
* using the Atlantis model retrospectively to elucidate critical aspects of ecosystem structure and function
* evaluating the system-level optimum yield for Gulf of Alaska groundfish; and
* projecting ecosystem structure and productivity under scenarios of future climate conditions in the Gulf of Alaska.
* working collaboratively in a team setting and participate in group meetings; and
* preparing results and leading writing efforts for peer-reviewed publications and presentations at scientific conferences.

Postdoctoral scholars are represented by UAW 4121 and are subject to the collective bargaining agreement, unless agreed exclusion criteria apply. For more information, please visit the University of Washington Labor Relations website.

**Qualifications**

Required:

* PhD or foreign equivalent in Quantitative Ecology, Applied Statistics or a related field.
* Experience with ecosystem modeling.
* Analysis of spatial datasets, analysis using R.
* Superior written and oral communication skills.
* Ability to work in a collaborative setting.

**Instructions**

To apply please submit your application through Interfolio (<https://apply.interfolio.com/76343>) with the following:  (1) A letter of interest detailing your skills and experience. (2) A curriculum-vitae including publications. (3) Three letters of recommendation.

For questions about this position, including potential disability accommodations, please contact Katie Effert, at keffert@uw.edu or 206-685-6083.

**Equal Employment Opportunity Statement**

*University of Washington is an affirmative action and equal opportunity employer. All
qualified applicants will receive consideration for employment without regard to race, color, creed, religion, national origin, sex, sexual orientation, marital status, pregnancy, genetic information, gender identity or expression, age, disability, or protected veteran status.*

**Commitment to Diversity**

*The University of Washington is committed to building diversity among its faculty, librarian,
staff, and student communities, and articulates that commitment in the UW Diversity Blueprint
(*[*http://www.washington.edu/diversity/diversity-blueprint*](http://www.washington.edu/diversity/diversity-blueprint)*/). Additionally, the University’s Faculty Code recognizes faculty efforts in research, teaching and/or service that address diversity and equal opportunity as important contributions to a faculty member’s academic profile and responsibilities (*[*https://www.washington.edu/admin/rules/policies/FCG/FCCH24.html#2432*](https://www.washington.edu/admin/rules/policies/FCG/FCCH24.html#2432)