

From: Clint Moore
Subject: Postdoctoral Research Associate: Strategic Decision Making for Enhancing Habitat Connectivity in Great Lakes Restoration Efforts [[formatted for readability]]

The Great Lakes Restoration Initiative (GLRI) is a large US Federal program aimed at protecting and restoring the largest system of surface freshwater in the world. Participating federal agencies are committed to implement a science-based adaptive management framework to prioritize ecosystem problems to be targeted, select projects to address the problems, and assess the effectiveness of projects that are carried out. A new effort has started within GLRI through the Landscape Connectivity Working Group (LCW) to enhance corridors for species movement among terrestrial and aquatic habitat patches. The role of the LCW is to advise on strategic funding priorities, and how to measure progress toward GLRI goals and effectiveness of actions that were implemented. The working group is in the initial stages of strategic planning to define objectives, prioritize among alternative courses of action, and outline an approach to measure progress. Funds have been secured to hire an 18-month post-doctoral fellow to provide science support to the strategic planning process. The successful candidate will contribute a case study on how portfolio optimization approaches can be used to assist the project selection phase of the GLRI adaptive management framework.

Position Description: The overarching goal for the post doc is to provide scientific support to the LCW strategic planning process via literature synthesis, spatial analysis, and portfolio optimization. The post doc will work in direct support of the LCW, including representatives of US Environmental Protection Agency, US Forest Service, US Geological Survey, US Fish and Wildlife Service, Bureau of Indian Affairs, National Park Service, Natural Resource Conservation Service, and state agencies. The post doc will pursue the following objectives with regular input from members of the LCW:

- Provide science support to the LCW strategic planning process as determined by LCW leadership and post doc supervisors.
- Propose and carry out a spatial analysis of terrestrial and aquatic habitat connectivity for species with different dispersal capabilities and needs.
- Quantitatively explore alternative portfolios of land and water conservation opportunities to jointly maximize terrestrial- and aquatic connectivity.
- Recommend ecologically-based measures of success (i.e., ecological indicators) that the LWG can measure to track progress.
- Publish peer reviewed journal article(s).

The incumbent will work under the direction of Dr. Clint Moore (USGS, Georgia Cooperative Fish and Wildlife Research Unit, https://urldefense.proofpoint.com/v2/url?u=http-3A__www.coopunits.org_Georgia_People_Clinton-5FMoore&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeaTyN59ZLoI&m=UlOkXbVGZG466ISs32ksmaFdHHhdzyodpgEllnv4o&s=O-xa-BzsE5Xyh8q1QwtuHSntshd0KKO6ZSjX7mUfFol&e=) and will work closely with other members of the research team, Dr. Peter Esselman (USGS – Great Lakes Science Center; https://urldefense.proofpoint.com/v2/url?u=https-3A__www.researchgate.net_profile_Peter-5FEsselman&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeaTyN59ZLoI&m=UlOkXbVGZG466ISs32ksmaFdHHhdzyodpgEllnv4o&s=vDoUdF7CcSr_jw4OjgvsZVQlidPfaubes-Wq-4Pjf1Y&e=) and Dr. Seth Guikema (University of Michigan, https://urldefense.proofpoint.com/v2/url?u=http-3A__ioe-2Dguikema.engin.umich.edu&d=DwIF-g&c=Ngd-ta5yRYsqeUsEDgxhcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeaTyN59ZLoI&m=UlOkXbVGZG466ISs32ksmaFdHHhdzyodpgEllnv4o&s=Dtsph6gnSL-by3TtNI_OPCi77T3q-tFMjMsIOhE-yYuI&e=).

Qualifications: Applicants must hold a Ph.D. in ecology, natural resource management, biometrics, natural resource economics, applied mathematics, statistics, operations research, or related field. Candidates should be able to demonstrate through study, work experience, or publications the application of spatial analysis to problems in natural resources management. Competitive candidates will have one or more of the following qualifications: a background in spatial ecology and spatial planning, knowledge of ecosystem restoration, and facility in modeling, estimation, and optimization. The candidate must have excellent writing and interpersonal communication skills, and he/she must demonstrate commitment to timely completion of deliverables, commitment to publication of results in peer-reviewed outlets, and strong potential to work collaboratively with multiple agencies on a highly visible research topic. Occasional travel to

stakeholder meetings and scientific conferences is required. The candidate will be employed by the Georgia Cooperative Fish and Wildlife Research Unit at the University of Georgia in Athens. However, the need for a high degree of contact and face-to-face collaboration with USGS and other partner agencies requires that the candidate work from the USGS Great Lakes Science Center in Ann Arbor, MI throughout the appointment, with travel to Athens GA (3-4 times per year) for periods of focused work and collaboration. The candidate selected for the position must be able to meet eligibility requirements for work in the United States at the time the appointment is scheduled to begin and continue working legally for the proposed term of the appointment.

Compensation: This is a full-time, fixed-term, non-tenure-track appointment for up to 18 months. Extension of the appointment beyond 18 months is possible depending on funding availability and candidate performance. Annual salary is competitive and commensurate with education and experience. Benefits include health insurance options and paid leave; a full list of benefits offered by the University of Georgia may be found at www.hr.uga.edu/benefits. Extension of the appointment beyond year one is contingent on satisfactory performance.

To Apply: Interested candidates should provide in a *single PDF document* (1) a cover letter that addresses qualifications and skills in the areas of expertise listed above, (2) a current vita, (3) a transcript of PhD work indicating degree award date, and (4) the names and contact information of three references who can attest to the candidate's qualifications. Send applications and inquiries by email to Dr. Clint Moore, Assistant Unit Leader, Georgia Cooperative Fish and Wildlife Research Unit, ctmoore@uga.edu. Applications will be accepted until April 28, 2017, or until a suitable candidate is found.