### 2020 Cooperative Summer Field Training Program

**USGS Project Scientist**
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**Project start date**
5/15/2020

**Duration**
3 months

**Location**
Grand Canyon

**Type of Intern**
ESA

**Title of Project**
Aquatic Ecology of the Colorado River

**Background**
Our group has demonstrated that hydropower production at Glen Canyon Dam negatively impacts the health of the Colorado River in Grand Canyon by constraining the diversity and abundance of aquatic insects that are the foundation of river food webs. To try to mitigate these negative impacts, the Bureau of Reclamation is testing environmental flows known as Bug Flows. Our group is studying aquatic insect and ecosystem response to this environmental flow release.

**Objectives**
The objectives of this study are to determine the effectiveness of the Bug Flow environmental flow experiment that the Bureau of Reclamation is testing at Glen Canyon Dam.

**Intern Tasks**
Participate in field work and collection of aquatic insects samples from Grand Canyon, process aquatic insect samples in the laboratory, participate in office tasks such as data entry and data checking, participate in regular lab meetings with our group.

**Expected Results and Benefits to the Intern**
Intern will gain valuable experience in field, laboratory, and office work associated with USGS evaluation of an environmental flow experiment being tested on the Colorado River at one of the largest dams in the US. Intern will also gain valuable experience working as part of a large and dynamic team that includes two PhD researchers, a MS researcher, a lab manager, and 6 other field technicians.

**Skills and Interests of Candidates**
We seek interns that have skills and interests in ecology in general. Experience and interest in aquatic ecology and prior experience identifying larval and adult aquatic insects are desired but not required.

**Project Type**
Field Work; Lab Work; Office Work;

**Project Discipline**
Ecology;