INTRODUCTION
Climate change poses a considerable threat to the biodiversity of high latitude and altitude ecosystems, with alpine regions across the world already showing response to warming (Lee et al., 2007). The loss of glaciers has been linked to a concurrent loss in biotic diversity of alpine and stream macroinvertebrates in particular (Finn et al., 2012, Jacobsen et al. 2012). Such changes will allow the colonization of some alpine streams by nonalpine macroinvertebrates, such as those requiring warmer temperatures (Brown et al. 2007). As meltwater contributions decline, changes in alpine stream macroinvertebrate community composition may be associated with lower suspended sediment concentration, and higher water temperature, electrical conductivity, and pH. Results suggest diversity (at a site) of streams presently fed by meltwaters will increase with future meltwater reductions. However, diversity (between sites) will be reduced as snow melt and glacier melt decrease because the habitat’s heterogeneity associated with spatiotemporal variability of water source contributions will become lower as meltwater contributions decline. Extinction of some endemic alpine species is predicted with reduced meltwater inputs, leading to decreased diversity (Brown et al. 2007). Baseline studies to evaluate existing aquatic macroinvertebrate communities are crucial to identifying the impacts of glacial ice recession and flow changes on the Dinwoody creek macroinvertebrate community.

STUDY AREA
The Dinwoody Glacier forms the fourth largest glacier in the Wind River Range of WY. The terminus is positioned at approx. 3400 m above sea level and its runoff eventually feeds into the Missouri/Mississipi river system. Macroinvertebrate samples were collected at two sites along Dinwoody Creek.

METHODS
At each sampling location, ten individual sample sites were selected from a 100-foot section using a random number generator. One composite sample was compiled based on collections from each of the individual sites (versus ten individual samples). In addition, 16 individual species were collected from the sample sites for later analysis and water quality assessment. Identification was performed in the field, and in the lab. Final confirmation of species was performed by, Rithron labs, of Missoula, Montana. Water quality data was also collected at each site. Seven total water samples were collected and HACH and LaMotte water quality tests used to determine pH, nitrates, phosphates, temperature, electrical conductivity (EC) and dissolved oxygen (DO).

DISCUSSION
Based on grab and composite samples, the current quality of water emerging from the glacier can be described as "excellent". The Diamesa are found in cold water systems; Cinygmu and Ameletus (Order: Ephemeroptera) are indicators of an excellent and healthy system, and the group of Zapada (Order: Plecoptera) are also considered to be species sensitive to changes in water quality. The presence of these macroinvertebrate species suggests that at present the quality of the meltwater from the Dinwoody Glacier is very good. Continuing melt, temperature changes, and possible release of chemical trapped in the ice may lead to a reduction of more sensitive species and in increase in species more resilient to those changes.

Evaluation of water chemistry parameters also suggest that present water quality is very good. Natural unpolluted rain water expected to be slightly acidic: average pH for these samples was 6.5 with acceptable pH ranges in WY 6.5 to 9.0 (WY Stream Team, 2014). Nitrate values were all very low – typical for glacial runoff – and revealed no evidence of nitrate contamination or eutrophication. Water temperatures were appropriately low, EC values were very low, and dissolved oxygen values generally averaged around 6.3mg/L. Acceptable ranges for DO are 6-12mg/L (WY Stream Team, 2014). These values provide a baseline; changes in subsequent years will be monitored and discussed.

CONCLUSION
Present evaluation of the biological and chemical constituents of the Dinwoody Glacier runoff suggests that the water quality is very good. This is appropriate for the headwaters of a stream located in a federally designated wilderness area. Impacts from human travelers, drilling operations to the west, and environmental and climatic changes may lead to changes in water quality. Given the role of the Dinwoody Glacier in providing water for downstream users, and the current trend of glacial recession, continuous monitoring is crucial.