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U.S. Forest Service Great Basin high elevation monitoring, Eastern California and Nevada

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The Humboldt - Toiyabe National Forest includes all National Forest lands in the Nevada portion of the Great Basin and part of the Eastern Sierra of California. In 2012 GLORIA monitoring was established on Mt. Wheeler of the Sweetwater Range, Bridgeport Ranger District. In addition, monitoring techniques to document change within various rare plant populations of that area has also been initiated. Additional high elevation monitoring on the Forest include studies to determine the effects of introduced elk grazing alpine vegetation at Mt. Moriah within the Snake Range, and introduced mountain goat transfer of invasive thistle in the Ruby Mountains. Other long term trend plots have been established across the Forest and can provide additional information for evaluating climate shifts. Also, specific demographic plots to evaluate establishment patterns for Tahoe star draba (*Draba asterophora* var. *asterophora*) have been monitored and maintained on both the Carson Ranger District, Humboldt - Toiyabe N.F. and on the Lake Tahoe Basin Management Unit. While many of these monitoring commitments were established in response to issues other than climate change, the robust nature of the data collected would also lend itself to additional interpretation. This presentation will summarize high elevation monitoring being conducted on the Humboldt - Toiyabe N.F. and will present potential research opportunities.