## Onaqui-Benmore, Great Basin (IRON, domain 15)

Location: **Onaqui-Benmore**, Great Basin (IRON, domain 15), ONAQ\_UT\_IRON Contact person: Jim Ehleringer, 801-581-7623, ehleringer@biology.utah.edu

Webpage: http:// neon-iron.org

Location within domain:

Latitude: 40.20 Longitude: -112.45 Base elevation: 1670 m

Ownership: BLM and USFS Access: currently open, grazed

Aquatic features: none

Proposed Wildland site: sagebrush steppe



**History**: The 'basin' of the IRON basin and range is a sagebrush steppe vegetation site that is managed by the BLM on the northern portion (Onaqui) and by the USFS on the southern portion (Benmore). Both portions are currently grazed by cattle as is characteristic throughout the domain. Sage grouse leks occur onsite and both state and federal efforts are underway to ensure preservation of this sagebrush vegetation. The Joint Fire Science (JFS) has established an extensive set of plots on the lower portion of the Onaqui to investigate sagebrush ecosystems and their responses to fire, cheatgrass invasion, and juniper encroachment. The Onaqui Mountains above the site are home to 125+ wild horses (Onaqui Wild Horse Management District). The Benmore location includes parcels where there has been an extensive set of long-term grazing treatments and crested wheatgrass planting trials.

**Key characteristics**: The Onaqui Mountains and Benmore locations are characteristics of the basin portion of the basin and range, with elevations of from ~1650-2000 m elevation. The extensive flat basin is dominated by sagebrush (*Artemesia tridentata*), with locations where cheatgrass (*Bromus tectorum*) and other invasives have invaded. The valley bottoms transition into Utah juniper woodlands (*Juniperus osteosperma*) on the slopes; junipers are extending to lower elevations because of existing fire policies (again characteristic of the Great Basin).

**Existing infrastructure**: There are 25 weather stations nearby (within 30 km) associated with Tooele County Department of Emergency Management and other federal and state agencies. Weather stations are in place at the JFS site. Eddy covariance measurements were collected for several years in sagebrush, juniper, and cheatgrass vegetation immediately to the north of the Onaqui site.

**Facilities**: There are no onsite facilities for either research or lodging. We propose to develop a modest facility in Vernon (a small nearby community), possibly on existing BLM lands that already have a fire station and landing strip, if an MOU can be obtained. The most extensive site research facility would be developed at or nearby the University of Utah (100 km distant) where extensive laboratories and dormitories already exist .