

**TABLE 1** Topography, climate, soil, tree cover, and understory vegetation at the Castlehead, Marking Corral, and Onaqui sites prior to treatments. Data from Pierson et al. (2010, 2015) or Williams et al. (2014) except where indicated by footnote.

|   | Castlehead, Idaho, USA  | Marking Corral, Nevada, USA                                | Onaqui, Utah, USA                          |
|---|---|--|--|
| Woodland community                      | western juniper <sup>1</sup>  | single-leaf pinyon <sup>2</sup> /Utah juniper <sup>3</sup> | Utah juniper <sup>3</sup>                  |
| Elevation (m) - Aspect                  | 1750 – SE facing  | 2250 – W to SW facing                                      | 1720 – N to NE facing                      |
| Mean annual precip. (mm)                | 364 <sup>4</sup>  | 299 <sup>4</sup>   | 298 <sup>4</sup>                           |
| Mean annual air temp. (°C)              | 7.4 <sup>4</sup>  | 6.9 <sup>4</sup>   | 9.2 <sup>4</sup>                           |
| Slope (%)                               | 10-25   | 10-15  | 10-15                                      |
| Parent rock                             | basalt and welded tuff <sup>5</sup>   | andesite and rhyolite <sup>6</sup>                         | sandstone and limestone <sup>7</sup>       |
| Soil association                        | Mulshoe-Squawcreek-Gaib <sup>5</sup>  | Segura-Upatad-Cropper <sup>6</sup>                         | Borvant <sup>7</sup>                       |
| Depth to bedrock (m)                    | 0.5-1.0 <sup>5</sup>  | 0.4-0.5 <sup>6</sup>                                       | 1.0-1.5 <sup>7</sup>                       |
| Soil surface texture                    | sandy loam,<br>59% sand, 37% silt, 4% clay  | sandy loam,<br>66% sand, 30% silt, 4% clay                 | sandy loam,<br>57% sand, 37% silt, 7% clay |
| Tree canopy cover (%) <sup>8</sup>      | 26 <sup>1</sup>   | 15 <sup>2</sup> , 10 <sup>3</sup>                          | 26 <sup>3</sup>                            |
| Trees per hectare <sup>8</sup>          | 158 <sup>1</sup>  | 329 <sup>2</sup> , 150 <sup>3</sup>                        | 476 <sup>3</sup>                           |
| Mean tree height (m) <sup>8</sup>       | 5.2 <sup>1</sup>  | 2.3 <sup>2</sup> , 2.4 <sup>3</sup>                        | 2.4 <sup>3</sup>                           |
| Juvenile trees per hectare <sup>9</sup> | 28 <sup>1</sup>   | 296 <sup>2</sup> , 139 <sup>3</sup>                        | 154 <sup>3</sup>                           |
| Shrubs per hectare <sup>10</sup>        | 2981  | 12065  | 4914                                       |
| Intercanopy bare ground (%)             | 88  | 64   | 79   |
| Common understory plants                | <i>Artemisia tridentata</i> Nutt. ssp. <i>wyomingensis</i> Beetle & Young; <i>Artemisia nova</i> A. Nelson; <i>Artemisia tridentata</i> Nutt. ssp. <i>vaseyana</i> (Rydb.) Beetle; <i>Purshia</i> spp.; <i>Poa secunda</i> J. Presl; <i>Pseudoroegneria spicata</i> (Pursh) A. Löve; <i>Festuca idahoensis</i> Elmer; and various forbs |  |  |

<sup>1</sup>*Juniperus occidentalis* Hook.

<sup>2</sup>*Pinus monophylla* Torr. & Frém.

<sup>3</sup>*Juniperus osteosperma* [Torr.] Little.

<sup>4</sup>Estimated from 4 km grid for years 1989-2018 from Prism Climate Group (2019).

<sup>5</sup>Natural Resources Conservation Service (NRCS) (2003).

<sup>6</sup>NRCS (2007).

<sup>7</sup>NRCS (2006).

<sup>8</sup>Trees ≥ 50 cm height, for Castlehead includes data from Williams et al. (2014) and one additional year.

<sup>9</sup>Trees 5 to 50 cm height, for Castlehead mean based on data from Williams et al. (2014) and one additional year.

<sup>10</sup>Shrubs ≥ 5 cm height, for Castlehead mean based on data from Williams et al. (2014) and one additional year.