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Introduction/Overview of P-j Woodland Encroachment and Expansion

Perhaps the most evident change in vegetation of the Great Basin during the past 140 years has been the dramatic expansion of pinyon and juniper (*Pinus sp.* and *Juniperus sp.*) woodlands (PJ), both in range and density, within the sagebrush ecosystem. Numerous studies have documented this woodland expansion and the resulting replacement of shrub-steppe communities (Cottam and Stewart 1940, Adams 1975, Burkhardt and Tisdale 1976, Nallion et. al. 1993, Gedney et. al. 1999, Tausch and West 1988, Miller and Rose 1995, 1999, Miller and Tausch 2001, Schaeffer et. al. 2003, Reiner 2004, Miller et. al. 2007, Miller et. al. 2008).

Much research has been done documenting the negative ecological impacts related to the expansion and infill of PJ woodlands outside of native areas and encroachment of these woodlands into sagebrush steppe (Baker and Shinneman, 2004; Blackburn and Tueller, 1970; Burkhardt and Tisdale, 1976; Rowland, et al., 2008; Soule and Knapp, 1999; Wall, et al., 2001; Wilcox and Davenport, 1995). Negative impacts associated with this expansion and encroachment includes, but is not limited to, loss of wildlife habitat, increased erosion, loss of herbaceous species, increase in conditions conducive to weed invasion, and decrease in water quantity and quality.

A large amount of additional wildlife habitat, particularly mountain big sagebrush sites, is at risk of further encroachment (Connelly, et. al. 2004). As trees begin to dominate sites, the shrub-grass-forb understory is essentially lost or greatly reduced through competitive exclusion (Tausch et. al. 1981, Schaefer et. al. 2003, Nallion, et. al. 1993, Weisberg and Greenwood 2007, Tausch et. al. 2009). Weisberg and Greenwood (2007) suggest that Utah juniper (*Juniperus osteosperma*), because of its flexible rooting structure, has a disproportionately strong effect on shrub cover relative to singleleaf pinyon (*Pinus monophylla*). Juniper's shallow roots, in addition to its deep roots, result in greater competitive ability for water in surface soil layers. Once PJ domination has occurred, conversion back to more diverse plant communities is not a simple process. A recent study in the Simpson Park Mountains (Weisberg et. al. 2007) helps to illustrate the problem, which is likely typical for many central Nevada mountain ranges. The Weisberg study found that woodland cover had increased 11 to 33 percent (depending on the scale examined) in just 30 years (between 1966 and 1995) primarily as result of infilling.

P-J encroachment into areas with streams, springs, seeps and associated riparian habitats, and also important sage grouse habitats including movement corridors is of particular concern. Such areas provide high value forage and a relative abundance of succulent forbs and insects crucial for sage grouse chick survival in late summer and fall (Atamian 2007). Research suggests that loss of quality brood rearing habitat is a major factor in sage grouse population declines (Aldridge and Brigham 2001, Connelly et al. 2004, Crawford et al. 2004, Gregg 2006). Also, research indicates that movement corridors with substantial PJ presence impairs sage grouse movement from nesting to brood rearing areas and increases predation opportunities by raptors and corvids.

Obviously, pinyon and juniper trees have always been present alongside rangelands but were found in limiting places with limited ground fuel resources for a fire to spread into places such has high elevations, rocky outcroppings, or alongside a stream or river. As fires become less and less common because of human involvement, trees have crept into rangelands and have caused the loss of valuable services and resources these landscapes provide. Researchers estimate that pinyon-juniper trees are increasing at a rate somewhere between 0.4% and 1.5% annually. In the Great Basin alone, that has resulted in 1.1 million acres transitioning to forests since 2000 (Ask an EXPERT, 2021).

Project Overview

The Eureka Conservation District (ECD) in conjunction with the Eureka County Wildlife Advisory Board to Manage Wildlife (ECABMW) and Eureka County Department of Natural Resources (ECDNR) (collectively, EC) in 2012 initiated serious efforts to take a more active role in managing and removing PJ in targeted areas of high value habitat primarily for mule deer and sage grouse. All of the target areas identified were primarily springs, seeps and streams and associated riparian habitats, and habitat connectivity corridors on mountain ranges.

The EC partners initially approached the BLM to move forward with hand thinning of PJ around select springs on BLM administered land. However, approvals have yet to come and are still in the works. However, in this process, it became apparent that thousands of acres of PJ existed on private lands with the bulk of these private lands having the target habitat characteristics identified that would benefit from PJ removal. EC started pursuing building relationships and gaining approvals with landowners and building funding to hire hand-crews with chainsaws to reduce the density of and selectively remove PJ from over 5,000 acres on private land on Roberts Mountain, the Diamond Range, and the Monitor Range in southern Eureka County. In 2016, BLM found a way to let EC move forward with removal of about 500 acres of PJ on public land in an area previously treated through chaining (in the late 1960s).

The overall project objective is to cut 100% of encroaching PJ (including all seedlings) out of designated treatment areas except trees avoided for unique characteristics (such as old-growth, nest trees or some shade trees). Since the private lands identified are intermingled with BLM administered land, the project is intended to mimic the natural disturbance process, not to clear the landscape of PJ entirely, but remove PJ that has encroached outside of PJ woodland ecological sites into sagebrush-steppe ecological sites. To create microhabitats for wildlife and underlying vegetation and to reduce per acre costs to treat more acreage, further treatment of the felled trees (such as limbing, scattering or piling) was not undertaken. Firewood and post collection has been highly encouraged however, to reduce fuel loading. The effectiveness of reducing downed fuels, at least in proximity to roads, by opening the area to public firewood collection was demonstrated in the Roberts Mountains beginning in autumn of 2009 after a BLM PJ thinning project and there has been the same result in the treatment units under this project that are close to roads.

The following Best Management Practices and treatment prescriptions were identified for the PJ cutting:

<u>Pre-Cutting Assessment</u>. Before cutting, target areas will be visited and assessed, with the chosen contractor present, to implement the final details to address specific resource issues and concerns on the ground prior to actual cutting commencing. This may include specifying areas to be avoided or that fall within the exceptions and limitations (listed below) due to high potentials for erosion, old growth trees, or areas that are considered primarily PJ woodlands according to Ecological Site Descriptions and the current ecological state and potential that these sites may be in. Areas to be avoided will be specifically brought to the attention of the contractor to be flagged or marked.

<u>Native American Traditional Values.</u> Avoidance is the preferred treatment for preventing effects to traditional/cultural/spiritual sites, activities, and resources and limit, reduce, or possibly eliminate any negative

impacts. Based on the nature of the project, the low possibility for disturbance, and information received by our office (and from our inspection of the properties) led to a determination that the project will have little to no potential effect on cultural resource sites. However, letters were sent out to tribal entities in Nevada. The Duckwater Tribe responded and were contracted to review the sites identified for treatment. Tribal monitors surveyed the sites identified as having potential tribal cultural resources and the sites were "cleared" by the Duckwater Tribe prior to cutting.

Raptor Nests. Trees having existing raptor nests in any condition will not be cut.

<u>Old Growth Trees</u>. Old growth trees and/or trees having cavities (almost always old growth trees) will not be cut. All trees will be examined prior to cutting to determine whether they meet the "relatively old growth" characteristics. These characteristics as described and depicted in Tausch et al. (USGS Circular 1335, 2009) include: crown shapes with flattened, rounded or uneven tops; branch structure having large branches near the base; dead branches with bark missing and/or covered by a light green lichen; bark thick, fibrous with well-developed vertical furrows; and leader growth in the upper quarter of the tree usually greater than one (1) inch. Based on historical documentation, the areas identified for cutting were not expected to have much old growth due to the fact that these areas were the source material for charcoal production during the smelting of lead ore in Eureka in the late 1800's.

<u>Shade Trees</u>. Some select trees showing signs of shade use by wildlife or cattle would not be cut in order to maintain their utility in providing shade. Signs of shade use by wildlife or cattle include manure, increased ground disturbance under tree, and increased browse use on the lower parts of the tree.

<u>Timing of Treatments</u>. It is intended to restrict timing of treatments in areas having occupied sage grouse leks and mule deer winter range. Cutting within 300 feet of occupied sage grouse leks will only occur between approximately June 15 and January 30. Treatments occurring within 0.6 miles of occupied leks, but not within 300 feet, will occur anytime during the year but will be restricted between approximately 6:00 PM to 9:00 AM. Treatments will be restricted in mule deer winter range during the late winter. So far, no cutting under the project has occurred before June 1 or after September 30.

<u>Areas of Slope</u>. In certain areas with slope where erosion is of higher concern, trees will be limbed up as high as possible and felled perpendicular to slope to mitigate erosion. In these areas, it is intended to get as much tree contact with the soil as possible.

Thinning would occur primarily in Phase I and Phase II woodlands (see box below for PJ woodland phase descriptions). Thinning of Phase III woodlands that retain substantial understory plants might also be undertaken in some circumstances.

• Phase I – trees are present but shrubs and grasses are the dominant vegetation that influence ecological processes (hydrologic, nutrient, and energy cycles) on the site;

• Phase II – trees are co-dominant with shrubs and herbs, and all three vegetation layers influence ecological processes on the site;

• Phase III – trees are the dominant vegetation and the primary plant layer influencing ecological processes on the site. Shrubs no longer dominate the understory.

from Tausch et. al. 2009

Dr. Tamzen Stringham, Rangeland and Riparian Scientist from the University of Nevada, Reno provide pre-cutting consulting to help highlight and address specific resource issues and concerns on the ground prior to actual thinning commencing.

Pre-cutting photos were taken of every selected site and GPS locations recorded so that the photo sites could be revisited, post-treatment, to monitor general response to treatments.

Project Results

Funding

In FY 2012-2013, ECABMW was able to convince the Eureka County Board of Commissioners to budget \$40,000 as seed money to get the project started and the ECD committed \$5000. This initial funding was leveraged as match towards multiple awards of funding. Overall, the following sources of funding have been applied for or otherwise successfully retained towards this project:

- Eureka County (2013 through 2020)- \$65,000
- Eureka Conservation District (2013 through 2020) \$101,000
- 2013 Wildlife Heritage Trust Account (#13-21) \$31,796
- 2013 NDOW Habitat Conservation Fee \$35,000
- 2013 Dream Tags Charitable Fund \$12,000
- 2014 Wildlife Heritage Trust Account (#14-06) \$35,000
- NDOW Landowner Incentive Program \$211,840
- 2014 Nevada Sage Grouse Habitat Grant Program \$2,857
- 2016 Nevada Sage Grouse Habitat Grant Program \$16,235
- 2019 Nevada Sage Grouse Habitat Grant Program \$25,000
- 2020 Nevada Sage Grouse Habitat Grant Program \$29,740

Total funds, not including in-kind, successfully committed for this project exceed \$565,400

Acreage Completed to Date

5,231 acres of PJ have been cut; 1,647 acres in 2013, 969 in 2014, 1,559 in 2015, 976 in 2016, and 80 in 2019. In 2019, 2020, and 2021, 2,772 acres of maintenance of previously treated areas were completed where small trees had started to grow or were previously missed or overlooked due to their small size. These trees were visible (after a few years of growth) and this maintenance was to re-visit these areas to remove all small trees detected.

Treatment Units and Sage Grouse Habitat

The map below shows the areas that have been treated under the project overlaid on the most recent sage grouse habitat map for Nevada.



Monitoring

Repeat photography for treated areas is available upon request.

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Precipitation Per Year



According to the Diamond Peak Snotel, the following are the recorded precipitation levels per water year.

















Repeat Photo Monitoring

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Frazier Fire

Below are pictures of a section of Roberts Mountain after the Frazier fire that give a great example of where pinyon and juniper trees are likely to be found due to the limiting ground fuels that would prevent a fire to spread.









June 13, 2013-447



June 23, 2021-20



June 13, 2013-448



June 23, 2021-21



June 13, 2013-449



June 23, 2021-22



June 13, 2013-450



June 23, 2021-24



June 13, 2013-451



June 23, 2021-25



June 13, 2013-452



June 23, 2021-26



June 13, 2013-453



June 23, 2021-27



June 13, 2013-454



June 23, 2021-28



June 13, 2013-455



June 23, 2021-30



June 13, 2013-456



June 23, 2021-31



June 13, 2013-458



June 23, 2021-48



June 13, 2013-459



June 23, 2021-49



June 13, 2013-460



June 23, 2021-50



June 13, 2013-461



June 23, 2021-51



June 13, 2013-462



June 23, 2021-52



June 13, 2013-463



June 24, 2021-77



June 13, 2013-464

June 24, 2021-78

June 13, 2013-465

June 24, 2021-79

June 13, 2013-469

June 23, 2021-43

June 15, 2013-470

June 23, 2021-44

June 15, 2013-471

June 23, 2021-45


June 15, 2013-472



June 23, 2021-40



June 15, 2013-473



June 23, 2021-41



June 15, 2013-474



June 23, 2021-39



June 15, 2013-475



June 23, 2021-38



June 15, 2013-477



June 23, 2021-54



June 15, 2013-478



June 23, 2021-55



June 15, 2013-479



June 23, 2021-56



June 15, 2013-480



June 23, 2021-57



June 15, 2013-481



June 23, 2021-59



June 15, 2013-482



June 23, 2021-60



June 15, 2013-483



June 23, 2021-61



June 15, 2013-484



June 23, 2021-62



June 15, 2013-485



June 24, 2021-64



June 15, 2013-486



June 24, 2021-65



June 15, 2013-487



June 24, 2021-66



June 15, 2013-488



June 24, 2021-68



June 15, 2013-489



June 24, 2021-69



June 15, 2013-490



June 24, 2021-70



June 15, 2013-491



June 24, 2021-75



June 15, 2013-492



June 24, 2021-76



June 30, 2015-705



June 24, 2021-81



June 30, 2015-706



June 24, 2021-80



October 28, 2019-1671



June 23, 2021-33



October 28, 2019-1672



June 23, 2021-34



October 28, 2019-1673



June 23, 2021-35



October 28, 2019-1674



June 23, 2021-53



November 20, 2020-2208



June 23, 2021-71



November 20, 2020-2209



June 24, 2021-72



November 20, 2020-2210



June 24, 2021-73



November 20, 2020-2211



June 24, 2021-74

Pastorino Canyon



June 1, 2016-805



June 28, 2017-186



June 25, 2021-1122



June 1, 2016-806



June 28, 2017-187



June 25, 2021 - 1123



June 1, 2016-814



June28, 2017-188



June 25, 2021-1124



June 1, 2016-818



June 28, 2017-184



June 25, 2021-1120


June 1, 2016-819



June 28, 2017-185



June 25, 2021-1121

Fiorenzi Ranch



June 1, 2016-820



June 28, 2017-189



June 25, 2021-1104



June 1, 2016-822



June 28, 2017-190



June 25, 2021-1105



June 1, 2016-837



June 29, 2017-204



June 24, 2021-1092



June 1, 2016-839



June 29, 2017-203



June 24, 2021-1091



June 1, 2016-838



June 29, 2017-205



June 24, 2021-1093



June 1, 2016-840



June 29, 2017-202



June 25, 2021-1095



June 1, 2016-843



June 28, 2017-191



June 25, 2021-1106



June 1, 2016-845



June 28, 2017- 192



June 24, 2021-1087



June 1, 2016-847



June 28, 2017-193



June 24, 2021-1088



June 1, 2016-848



June 28, 2017-194



June 24, 2021-1089



June 1, 2016-849



June 28, 2017-195



June 24, 2021-1090



June 1, 2016-850



June 28, 2017-196



June 24, 2021-1082



June 1, 2016-851



June 28, 2017-197



June 24, 2021-1083



June 1, 2016-852



June 28, 2017-199



June 24, 2021-1084



June 1, 2016-853



June 28, 2017-200



June 24, 2021-1085



June 1, 2016-854



June 28, 2017-201



June 24, 2021-1086



June 2, 2016-861



June 29, 2017-206



June 2, 2016-862



June 29, 2017-207



June 25, 2021-1096



June 2, 2016-864



June 29, 2017-208



June 24, 2021-1094



June 2, 2016-865



June 28, 2017-209



June 25, 2021-1097



June 2, 2016-866



June 28, 2017-210



June 25, 2021-1099



June 2, 2016-868



June 28, 2017-211



June 25, 2021-1098



June 2, 2016-869



JuJy 17, 2017-869 iphone



June 25, 2021-1100


June 2, 2016-870



July 17, 2017 870 iphone



June 25, 2021-1101



June 2, 2016-871



July 17, 2017 General Area 991



July 17, 2017 General Area 992



June 25, 2021-1102



June 9, 2016-901



June 28, 2017-177



June 25, 2021-1115



June 9, 2016-902



June 28, 2017-179



June 25, 2021-1116



June 9, 2016-903



June 28, 2017-181



June 25, 2021-1117



June 9, 2016-905



June 28, 2017-182



June 25, 2021-1118



June 9, 2016-906



June 28, 2017-183



June 25, 2021-1119

4-Eyed Nicks



October 28, 2019-1659



June 25, 2021-1107



October 28, 2019-1660



June 25, 2021-1108



October 28, 2019-1662



June 25, 2021-1109



October 28, 2019-1663



June 25, 2021-1110



October 28, 2019-1664



June 25, 2021-1111



October 28, 2019-1665



June 25, 2021-1112



October 28, 2019-1667



June 25, 2021-1113



October 28, 2019-1669



June 25, 2021-1114

Eunice's Place



June 16, 2015-653



June 28, 2021-1131



June 16, 2015-654



June 28, 2021-1130



June 16, 2015-655



June 28, 2021-1129



June 16, 2015-656



June 28, 2021-1128



June 16, 2015- 657



June 28, 2021-1127



June 16, 2015-658



June 28, 2021-1126



June 16, 2015-659



June 28, 2021-1125

Banks Ranch



June 16, 2015-648



June 28, 2021-1135



June 16, 2015-649



June 28, 2021-1134



June 16, 2015-650



June 28, 2021-1133



June 16, 2015-651



June 28, 2021-1132



June 16, 2015-652



June 28, 2021-1136



June 12, 2015-635



June 28, 2021-1138



June 12, 2015-636



June 28, 2021-1140



June 12, 2015-637



June 28, 2021-1141



June 12, 2015-638



June 28, 2021-1142



June 12, 2015-639



June 28, 2021-1143


June 12, 2015-640



June 28, 2021-1144



June 12, 2015-641



June 28, 2021-1145



June 12, 2015-642



June 28, 2021-1146



June 12, 2015-643



June 28, 2021-1147



June 12, 2015-644



June 28, 2021-1148



June 12, 2015-645



June 28, 2021-1149



June 12, 2015-646



June 28, 2021-1150



June 12, 2015-647



June 28, 2021-1151

Palmer Ranch



June 23, 2015-660



June 28, 2021-1152



June 23, 2015-661



June 28, 2021-1153



June 23, 2015-662



June 28, 2021-1154



June 23, 2015-663



June 28, 2021-1155



June 23, 2015-664



June 28, 2021-1156



June 23, 2015-665



June 28, 2021-1157



June 23, 2015-666



June 28, 2021-1158



June 23, 2015-667



June 28, 2021-1159



June 23, 2015-668



June 28, 2021-1160



June 23, 2015-669



June 28, 2021-1161



June 23, 2015-670



June 28, 2021-1162



June 23, 2015-671



June 28, 2021-1163



June 23, 2015-672



June 28, 2021-1164



June 23, 2015-673



June 28, 2021-1165



June 23, 2015-674



June 28, 2021-1166



June 23, 2015-675



June 28, 2021-1167



June 23, 2015-676



June 28, 2021-1168



June 23, 2015-677



June 28, 2021-1169



June 23, 2015-678



June 28, 2021-1170



June 23, 2015-679



June 28, 2021-1171



June 23, 2015-680



June 28, 2021-1172



June 23, 2015-681



June 28, 2021-1173



June 23, 2015-682



June 28, 2021-1174



June 23, 2015-683



June 28, 2021-1175



June 23, 2015-684



June 28, 2021-1176



June 23, 2015-685



June 28, 2021-1177



June 23, 2015-686



June 28, 2021-1178



June 23, 2015-688



June 28, 2021-1179


June 23, 2015-689



June 28, 2021-1180



June 23, 2015-690



June 28, 2021-1181



June 23, 2015-691



June 28, 2021-1182



June 23, 2015-692



June 28, 2021-1183



June 23, 2015-693



June 28, 2021-1184



June 23, 2015-694



June 28, 2021-1191



June 23, 2015-695



June 28, 2021-1192



June 23, 2015-696



June 28, 2021-1193



June 23, 2015-697



June 28, 2021-1195



June 23, 2015-698



June 28, 2021-1196



June 23, 2015-699



June 28, 2021-1198



June 23, 2015-700



June 28, 2021-1199



June 23, 2015-701



June 28, 2021-1200



June 23, 2015-702



June 28, 2021-1201



June 23, 2015-703



June 28, 2021-1202



November 16, 2020-2200



June 28, 2021-1185



November 16, 2020-2201



June 28, 2021-1186



November 16, 2020-2202



June 28, 2021-1187



November 16, 2020-2204



June 28, 2021-1196



November 16, 2020-2205



June 28, 2021-1197



June 1, 2015-613



June 28, 2021-1188



June 1, 2015-614



June 28, 2021-1189



June 1, 2015-615



June 28, 2021-1190



June 18, 2013-493



June 30, 2021-1203



June 18, 2013-494



June 30, 2021-1204



June 18, 2013-495



June 30, 2021-1205



June 18, 2013-496



June 30, 2021-1206



June 18, 2013-497



June 30, 2021-1207



June 18, 2013-498



June 30, 2021-1208



June 18, 2013-499



June 30, 2021-1209



June 18, 2013-500



June 30, 2021-1210



June 18, 2013-501



June 30, 2021-1215



June 18, 2013-502



June 30, 2021-1214



June 18, 2013-503



June 30, 2021-1213



June 18, 2013-504



June 30, 2021-1211



June 18, 2013-505



June 30, 2021-1212
Preston Creek



June 21, 2013-544



June 30, 2021-1226



June 21, 2013-545



June 30, 2021-1227



June 21, 2013-546



June 30, 2021-1228

Little Minoletti



June 21, 2013-536



June 30, 2021-1217



June 21, 2013-537



June 30, 2021-1218



June 21, 2013-538



June 30, 2021-1219



June 21, 2013-539



June 30, 2021-1220



June 21, 2013-540



June 30, 2021-1221



June 21, 2013-541



June 30, 2021-1222



June 21, 2013-542



June 30, 2021-1223



June 21, 2013-543



June 30, 2021-1224

Black Point Chaining



June 3, 2016-873



July 27, 2017-974



July 13, 2021-1254



June 3, 2016-875



July 27, 2017-975



July 13, 2021-1255



June 3, 2016-877



July 27, 2017-976



July 13, 2021-1241



June 3, 2016-878



July 27, 2017-977



July 13, 2021-1242



June 3, 2016-879



July 27, 2017-978



July 13, 2021-1243



June 3, 2016-880



July 27, 2017-979



July 13, 2021-1244



June 3, 2016-881



July 27, 2017-980



July 13, 2021-1245



June 3, 2016-882



July 27, 2017-981



July 13, 2021-1238



June 3, 2016-883



July 27, 2017-982



July 13, 2021-1237



June 3, 2016-884



July 27, 2017-983



July 13, 2021-1240



June 3, 2016-885



July 27, 2017-984



July 13, 2021-1246



June 3, 2016-886



July 27, 2017-985



July 13, 2021-1247



June 3, 2016-887



July 27, 2017-986



July 13, 2021-1248



June 3, 2016-888



July 27, 2017-987



July 13, 2021-1253



June 3, 2016-889



July 27, 2017-988



July 13, 2021-1249



June 3, 2016-890



July 27, 2017-989



July 13, 2021-1250



June 3, 2016-891



July 27, 2017-990


July 13, 2021-1251



June 3, 2016-892



July 27, 2017-991





June 3, 2016-893



July 27, 2017-992



July 13, 2021-1229



June 3, 2016-894



July 27, 2017-993



July 13, 2021-1230



June 3, 2016-895



July 27, 2017-994



July 13, 2021-1232



June 3, 2016-896



July 27, 2017-995



July 13, 2021-1233



June 3, 2016-897



July 27, 2017-996



July 13, 2021-1234



June 3, 2016-898



July 27, 2017-997



July 13, 2021-1235



June 3, 2016-899



July 27, 2017-998



July 13, 2021-1236



June 3, 2016-900



July 27, 2017-999



July 13, 2021-1237

Vinini Creek



June 19, 2013-506



July 14, 2021-1256



June 19, 2013-507



July 14, 2021-1257



June 19, 2013-508



July 14, 2021-1258



June 19, 2013-509



July 14, 2021-1259



June 19, 2013-510



July 14, 2021-1260



June 19, 2013-511



July 14, 2021-1261



June 19, 2013-512



July 14, 2021-1262



June 19, 2013-513



July 14, 2021-1263



June 19, 2013-514



July 14, 2021-1264



June 19, 2013-515



July 14, 2021-1265

Henderson



June 20, 2013-532



July 14, 2021-1278



June 20, 2013-533



July 14, 2021-1279



June 19, 2013-520



July 14, 2021-1282



June 19, 2013-521



July 14, 2021-1283



June 19, 2013-522



July 14, 2021-1284



June 20, 2013-523



July 14, 2021-1273



June 20, 2013-524



July 14, 2021-1274



June 20, 2013-525



July 14, 2021-1275



June 20, 2013-528



July 14, 2021-1285



June 20, 2013-529



July 14, 2021-1286



June 20, 2013-530



July 14, 2021-1280



June 20, 2013-531



July 14, 2021-1281


June 20, 2013-534



July 14, 2021-1276



June 20, 2013-535



July 14, 2021-1277



June 21, 2013-548



July 14, 2021-1267



June 21, 2013-549



July 14, 2021-1268



June 21, 2013-550



July 14, 2021-1269



June 21, 2013-551



July 14, 2021-1270



June 21, 2013-552



July 14, 2021-1271



June 21, 2013-553



July 14, 2021-1272



June 19, 2013-516



July 14, 2021-1290



June 19, 2013-519



July 14, 2021-1287



June 19, 2013-517

General area to show Mahogany



July 14, 2021-1292



July 14, 2021-1293

Nichols



June 24, 2013-554



July 15, 2021-1294



June 24, 2013-555



July 15, 2021-1295



June 24, 2013-556



July 15, 2021-1296



June 24, 2013-557



July 15, 2021-1297



June 24, 2013-558



July 15, 2021-1298



June 24, 2013-559



July 15, 2021-1299



June 24, 2013-560



July 15, 2021-1300



June 24, 2013-561



July 15, 2021-1301



June 24, 2013-562



July 15, 2021-1302



June 24, 2013-563



July 15, 2021-1303



June 24, 2013-564



July 15, 2021-1304



June 24, 2013-565



July 15, 2021-1305



June 24, 2013-566



July 15, 2021-1306



June 24, 2013-567



July 15, 2021-1307



June 24, 2013-568



July 15, 2021-1308



June 24, 2013-569



July 15, 2021-1308



June 24, 2013-570



July 15, 2021-1310

Rutabega



June 17,2014-130



July 16, 2021-1311



June 17,2014-131



July 16, 2021-1312



June 17,2014-132



July 16, 2021-1313



June 17,2014-133



July 16, 2021-1314



June 17,2014-134



July 16, 2021-1315



June 17,2014-135



July 16, 2021-1316



June 17,2014-136



July 16, 2021-1317


June 17,2014-137



July 16, 2021-1318





July 16, 2021-1319



June 17,2014-139



July 16, 2021-1320





July 16, 2021-1321





July 16, 2021-1322





July 16, 2021-1323



June 17,2014-144



July 16, 2021-1324



June 17,2014-145



July 16, 2021-1325



June 17,2014-146



July 16, 2021-1326



June 17,2014-147



July 16, 2021-1327



June 17,2014-148



July 16, 2021-1328



June 17,2014-149



July 16, 2021-1329



June 17,2014-150



July 16, 2021-1330



June 17,2014-151



July 16, 2021-1331



June 17,2014-152



July 16, 2021-1332

Faulkner Creek



June 13,2014-112



July 20, 2021-1345





July 20, 2021-1346



June 13,2014-114



July 20, 2021-1347



June 13,2014-115



July 20, 2021-1348





July 20, 2021-1349



June 13,2014-117



July 20, 2021-1350



June 13,2014-118





June 13,2014-119



July 20, 2021-1343



June 13,2014-120





June 13,2014-121



July 20, 2021-1341



June 13,2014-122





June 13,2014-123





June 13,2014-124



July 20, 2021-1338



June 13,2014-125



July 20, 2021-1337



June 13,2014-126



July 20, 2021-1336





July 20, 2021-1335



June 13,2014-128



July 20, 2021-1334





July 20, 2021-1333



June 10, 2015-617



July 20,2021-1351



June 10, 2015-618





June 10, 2015-619




June 10, 2015-620



July 20,2021-1354



June 10, 2015-621



July 20,2021-1355



June 10, 2015-622



July 20,2021-1356



June 10, 2015-623



July 20,2021-1357



June 10, 2015-624



July 20,2021-1358



June 10, 2015-625



July 20,2021-1359



June 10, 2015-626



July 20,2021-1360



June 10, 2015-627



July 20,2021-1361



June 10, 2015-628



July 20,2021-1362



June 10, 2015-629



July 20,2021-1363



June 10, 2015-630



July 20,2021-1368



June 10, 2015-631



July 20,2021-1367



June 10, 2015-632



July 20,2021-1366



June 10, 2015-633



July 20,2021-1365



June 10, 2015-634



July 20,2021-1364

Diamond Springs



June 21, 2014-164



July 21, 2021-1373



June 21, 2014-165



July 21, 2021-1374



June 21, 2014-166



July 21, 2021-1375



June 21, 2014-167



July 21, 2021-1369



June 21, 2014-168



July 21, 2021-1370



June 21, 2014-169



July 21, 2021-1371



June 21, 2014-170



July 21, 2021-1372



June 21, 2014-171



July 21, 2021-1379



June 21, 2014-172



July 21, 2021-1378



June 21, 2014-173



July 21, 2021-1376



June 21, 2014-174



July 21, 2021-1377



June 22, 2014-175



July 21, 2021-1381



June 22, 2014-176



July 21, 2021-1382



June 22, 2014-177



July 21, 2021-1383



June 22, 2014-178



July 21, 2021-1387



June 22, 2014-179



July 21, 2021-1384



June 22, 2014-180



July 21, 2021-1385



June 22, 2014-181



July 21, 2021-1386



June 22, 2014-183



July 21, 2021-1393



June 22, 2014-184



July 21, 2021-1394



June 22, 2014-185



July 21, 2021-1395


June 22, 2014-186



July 21, 2021-1388



June 22, 2014-187



July 21, 2021-1389



June 22, 2014-188



July 21, 2021-1390



June 22, 2014-189



July 21, 2021-1391



June 22, 2014-190



July 21, 2021-1392