

**OPEN SPACE ADVISORY COMMITTEE  
STAFF REPORT**

**MEETING DATE:** December 19, 2016

**AGENDA ITEM NUMBER:** 3D

**STAFF:** Ann Bollinger, Open Space Administrator

**REQUEST:** **For Possible Action:** To approve the monitoring report for the Horsecreek Ranch Conservation Easement for 2016.

**GENERAL DISCUSSION:** The Horsecreek Ranch Conservation Easement was purchased by Carson City in 2009 to protect the property from development. The Conservation Easement requires annual monitoring to insure that the property is being maintained and continues in good condition. The initial assessment condition photos were taken in 2009 and each year staff takes new photos at the same locations for comparison. The 2016 monitoring visit was conducted on June 20, 2016. The areas that continue to need continued monitoring are the lower drainage area, the cattle loafing area, and the channel headcut. In addition, weed monitoring and removal is anticipated to continue into future years. Mr. Fagen has extended his invitation to scout troops or volunteers to assist in this effort. The property continues to be in good condition, and the full report is attached.

**RECOMMENDED ACTION:** I move to approve the monitoring report for the Horsecreek Ranch Conservation Easement for 2016.

## **Carson City Open Space – Conservation Easement Monitoring**

**Date:** June 20, 2016

**Start time:** 8:00 a.m. departure from the office      **End time:** 3:15 p.m.

**Monitor(s):** Richard Wilkinson & Ann Bollinger (Carson City)

**Persons Attending Inspection (landowner or others):** William Michael Fagen

**Current Landowner(s):** William Michael Fagen (William Michael Fagen 2005 Trust)

**Mailing Address:** P.O. Box 703 Zephyr Cove, 89448

**Easement Address:** APNs 007-051-82, 007-051-83, and 007-051-84. Located approximately 2.5 miles west of the paved terminus of Kings Canyon Road.

**Easement size:** 175.33 acres      **Parcel size:** 3 parcels, 201 acres total

**On-site land use(s):** Agricultural in the meadow, open sagebrush and forest in the plan.

**Surrounding land uses(s):** On west, north, and east, the lands are under public ownership by Carson City Open Space and the U.S. Forest Service. The land use consists of undeveloped, dispersed recreation. On the south, the lands are under private ownership and the land use continues as agricultural.

### **Conservation Easement, Exhibit C, Prohibited Uses and Practices**

1. Impairment of Protected Values  
No change. The landowner is in compliance.
  
2. Commercial or Industrial Use  
No change. The landowner is in compliance.
  
3. Construction  
No change. The landowner is in compliance.
  
4. Subdivision  
No change. The landowner is in compliance.
  
5. Motorized Vehicles  
No change. The landowner is in compliance.

## Carson City Open Space – Conservation Easement Monitoring

### 6. Tree Cutting

No change. The landowner is in compliance.

### 7. Dumping

No change. The landowner is in compliance.

### 8. Soil Degradation

No change. The landowner is in compliance.

Near the southeast corner, one specific area is being monitored for landscape change. This low drainage area of the meadow appears to be vegetated and stable though a few isolated mounds or hummocks may be the result of cattle trampling. A qualitative assessment with the photo comparisons may be a little deceptive because of the time of year each photo was taken – either during the growing season or at the end of the season after grasses were grazed and/or died.

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## Carson City Open Space – Conservation Easement Monitoring

Photo Point: The photo of this drainage, located south of the cabins, has been included to document change and vegetation growth. N 39 07' 42.7" W 119 50' 10.2"

2010 Condition, photo taken November 1, 2010 (initial assessment – view west)



2016 Condition, photo taken June 20, 2016



## Carson City Open Space – Conservation Easement Monitoring

2013 Condition, photo taken July 23, 2013 (initial assessment – view south)



2016 Condition, photo taken June 20, 2016



## Carson City Open Space – Conservation Easement Monitoring

2013 Condition, photo taken July 23, 2013 (initial assessment – view south)



2016 Condition, photo taken June 20, 2016



## Carson City Open Space – Conservation Easement Monitoring

### 9. Water Quality Degradation

No change. The landowner is in compliance.

It should be noted that no specific measurements have ever been conducted to determine water quality. However, the average amount of surface water from Neal's Flume and two other springs is minimal and most of the water percolates into the ground to recharge the Carson City aquifer and/or reappear as groundwater discharge into Clear Creek. Due to these reasons, contamination from livestock grazing would be negligible.

### 10. Surface Alteration or Excavation

The linear excavation for the water pipeline to the cabins occurred prior to the signing of the conservation easement in March 2009. With that said, the visible impact has been monitored throughout the past few years. Natural revegetation seems to be occurring and the disturbed area is minimal. Staff is comfortable with removing any future discussion and monitoring on this photo point location.

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## Carson City Open Space – Conservation Easement Monitoring

Photo Point: The photo of the pipeline excavation area has been included to document change and vegetation growth. (Photo facing northwest)

2010 Condition (initial assessment), photo taken November 1, 2010



2016 Condition, photo taken June 20, 2016



## Carson City Open Space – Conservation Easement Monitoring

### 11. Fencing Restrictions

No change. The landowner is in compliance.

#### **Additional Comments:**

- Stewardship Account: There are no expenses to report. The account has a current balance of \$47,375.00.
- The irrigation ditch known as “Neal’s Flume” was dry during this field monitoring. It should be noted that the Baseline Condition Report also commented that the ditch is not used during the minimum flow periods of the north fork of Clear Creek due to significant conveyance losses on the ditch. While the upper meadow at Horsecreek Ranch was not currently receiving water from Neal’s Flume, two other springs were flowing and providing water to nearby areas.
- The Pasture Utilization and Condition Assessment was conducted by Ms. Bollinger and Richard Wilkinson, Open Space Administrator and Senior Natural Resource Specialist respectively. This Pasture Utilization and Condition Assessment included a visual observation of the monitoring plot as described in the Baseline Condition Report. A diversity of pasture, wetland-associated, and invasive grasses (cheatgrass) exhibited various utilization levels depending on species.
- Bull thistle remains present throughout the meadow but the number of plants seems to be decreasing. Mr. Fagen and staff are committed to working together towards the eradication. Mr. Fagen is receptive to volunteer projects and particularly scout projects to assist in the eradication effort; however, there is a short time frame for identification and removal (July-August). In 2016, a volunteer work day was conducted to assist with the bull thistle removal. Two truckloads were removed from the conservation easement area.
- The previous reports recommended the monitoring of the cattle loafing area located just outside the gated entrance to the cabins with the goal to limit further expansion. The following documentation provides photo points and respective measurements. The disturbed area consists primarily of cheatgrass and foxtail barley although sagebrush is starting to re-establish on the east edge of the disturbed area.

## Carson City Open Space – Conservation Easement Monitoring

2013 Condition, photo taken July 23, 2013 (initial assessment – view south):  
The bare area measures 157' north to south along the sagebrush.



2016 Condition, photo taken June 20, 2016:  
The bare area measures 163' north to south along the sagebrush.



## Carson City Open Space – Conservation Easement Monitoring

2013 Condition, photo taken July 23, 2013 (initial assessment – view west):  
The bare area measures 145' east to west along the gravel road.



2016 Condition, photo taken June 20, 2016:  
The bare area measures 148' east to west along the gravel road.



## Carson City Open Space – Conservation Easement Monitoring

- One distribution box located approximately in the middle of the meadow is in complete disrepair. The water is ponding rather than spreading throughout the ditches. This box should be replaced prior to the next irrigation season.

2013 Condition, photo taken facing east July 23, 2013 (initial assessment)



2016 Condition, photo taken June 20, 2016



**Carson City Open Space – Conservation Easement Monitoring**

- In addition to monitoring and evaluating the current conditions related to the terms of the conservation easement, staff believes that it is important to document external factors that could potentially affect the future condition of the property. Specifically, there are two items to mention. The first item is the endemic localized infestation of non-native insects around the alpine forests. About one mile above Horsecreek Ranch, the white satin moth has caused significant defoliation to the aspen trees around Spooner Summit and bark beetles have caused significant damage to the conifers between Spooner Summit and Glenbrook. The second item is to document the four consecutive years of below-average precipitation from 2012 through 2015 throughout the Northern Nevada region.

**Summary:**

The results of the 2016 audit of the Horsecreek Ranch Conservation Easement by Carson City demonstrate that the property generally continues to be in good condition and the landowner is in full compliance with both the letter and the spirit of the Easement. The report identifies two recommendations for active measures and likely coordination between Carson City and the landowner:

- 1) Replacement of the concrete distribution box
- 2) Continued removal of bull thistle

The landowner is cooperative about addressing, over time and in consideration of available resources, additional improvements to the conditions on the property in a joint effort with Carson City and other local agencies.

Written by: \_\_\_\_\_  
Richard Wilkinson Date

Reviewed by: Ann Bollinger 12/16/16  
Ann Bollinger Date

Landowner: \_\_\_\_\_  
William Michael Fagen Date

## Carson City Open Space – Conservation Easement Monitoring

Please indicate the number of the following attachments to this report. Be sure to date and sign all materials and provide a description or map showing where on-site photos and illustrations were taken:

Aerial photos

Ground photos (digital or other)

- 14 ground photos – Within the Report
- 34 ground photos – Baseline Report Repeat Photo Documentation
- Digital photos taken, copied into a written report

Maps and illustrations

Other:

Date Inspection Report Sent To Landowner: December 6, 2016

Baseline Report Repeat Photo Documentation

**Photo Point 1A (view northeast): A photo point located at the edge of the shrub dominated granitic fan and the irrigated meadow. This would be used to monitor shrub invasion into the meadow area indicating irrigation problems.**

2009 Baseline Condition, photo taken February 4, 2009:  
(GPS coordinate: N39° 08' 02.3" W119° 50' 11.8")



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 1B (view northwest): A photo point located at the edge of the shrub dominated granitic fan and the irrigated meadow. This would be used to monitor shrub invasion into the meadow area indicating irrigation problems.**

2009 Baseline Condition, photo taken February 4, 2009:  
(Photo possibly taken from the upper meadow, near the new GPS coordinate for Photo Point 2 updated in 2010: N39 07' 54.9" W119 50' 11.3")



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 2 (view south): A photo point located in bottom of the active stable drainage channel to the southeast of the house to monitor side slope stability.**

2009 Baseline Condition, photo taken February 4, 2009:  
(GPS coordinate updated in 2010: N39 07' 54.9" W119 50' 11.3")



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 3 (view south): A photo point located immediately east of the house in the active channel where rip-rap has been placed for stabilization.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 4A (view north): A photo point located at the most northern active headcut after required stabilization to monitor effectiveness.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 4B (detail): A photo point located at the most northern active headcut after required stabilization to monitor effectiveness.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 4C (detail): A photo point located at the most northern active headcut after required stabilization to monitor effectiveness.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 5 (view east): A photo point on the hillside conveyance ditch at a location where a previous washout has occurred to monitor ditch maintenance.**

2009 Baseline Condition, photo taken February 4, 2009



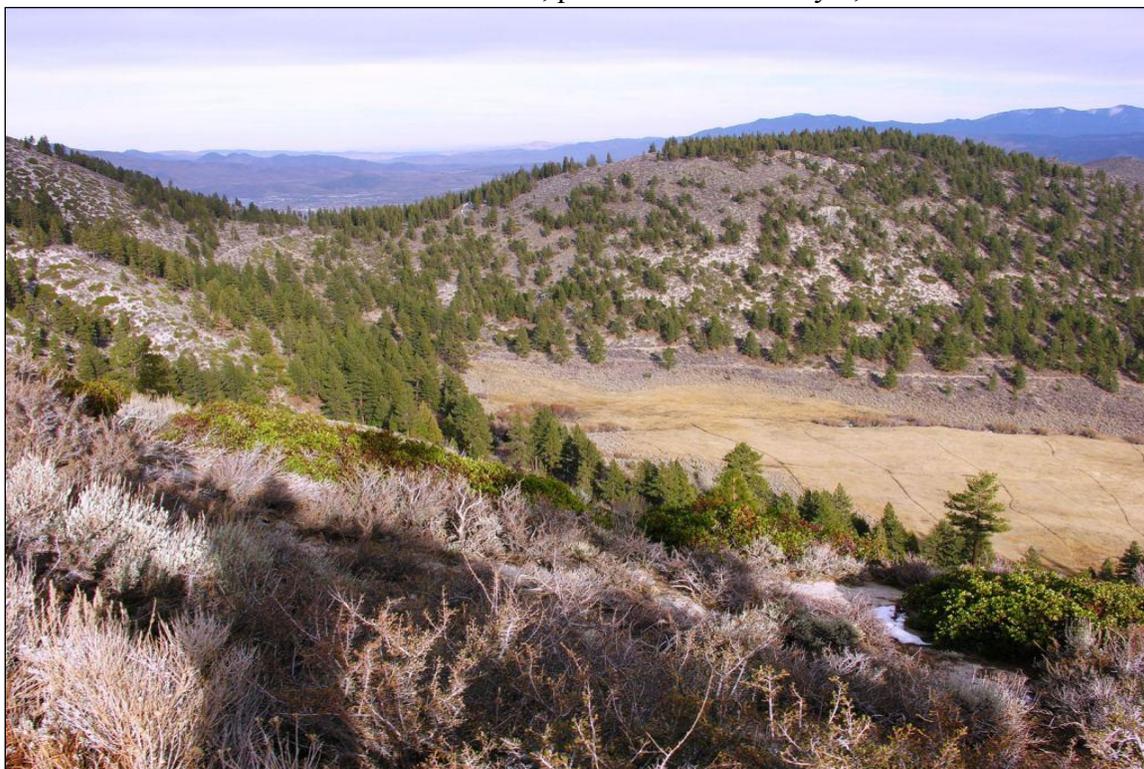
2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 6A (view north): A photo point from the Kings Canyon Road that would provide panoramic views of the ranch from a west to east perspective.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 6B (view center): A photo point from the Kings Canyon Road that would provide panoramic views of the ranch from a west to east perspective.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 6C (view south): A photo point from the Kings Canyon Road that would provide panoramic views of the ranch from a west to east perspective.**

2009 Baseline Condition, photo taken February 4, 2009



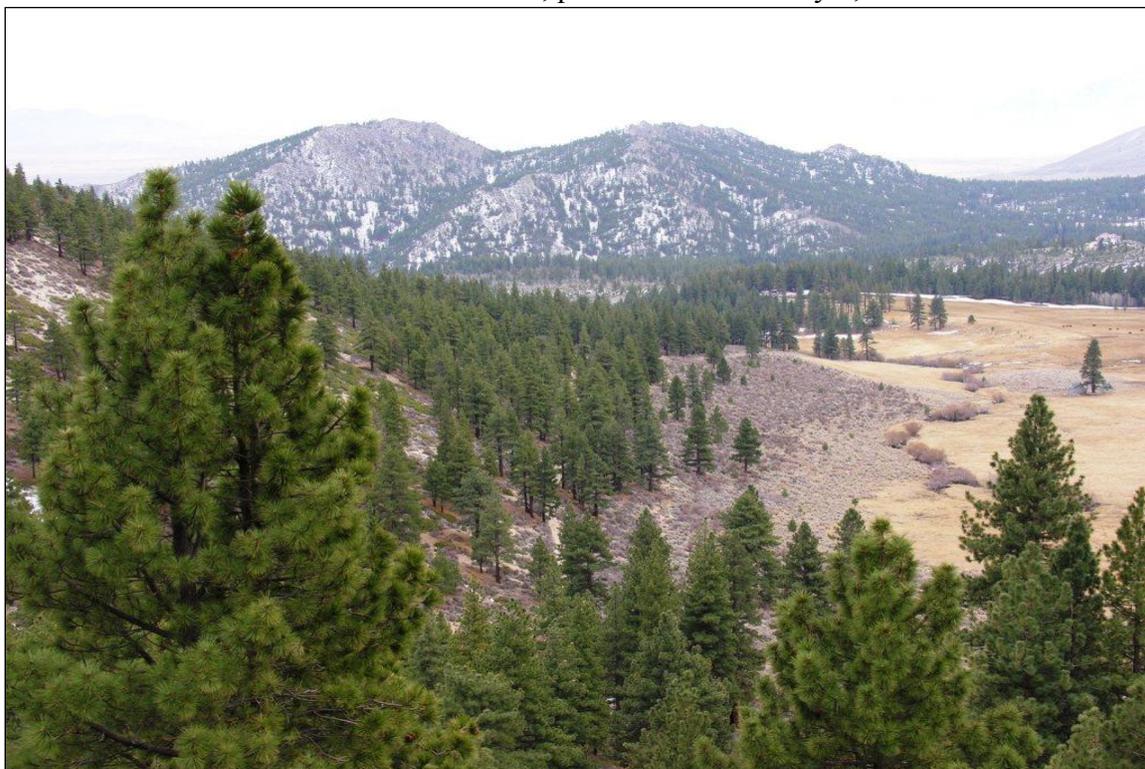
2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 7A (view southeast): A photo point from Kings Canyon Road that would provide panoramic views of the ranch from a north to south perspective.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



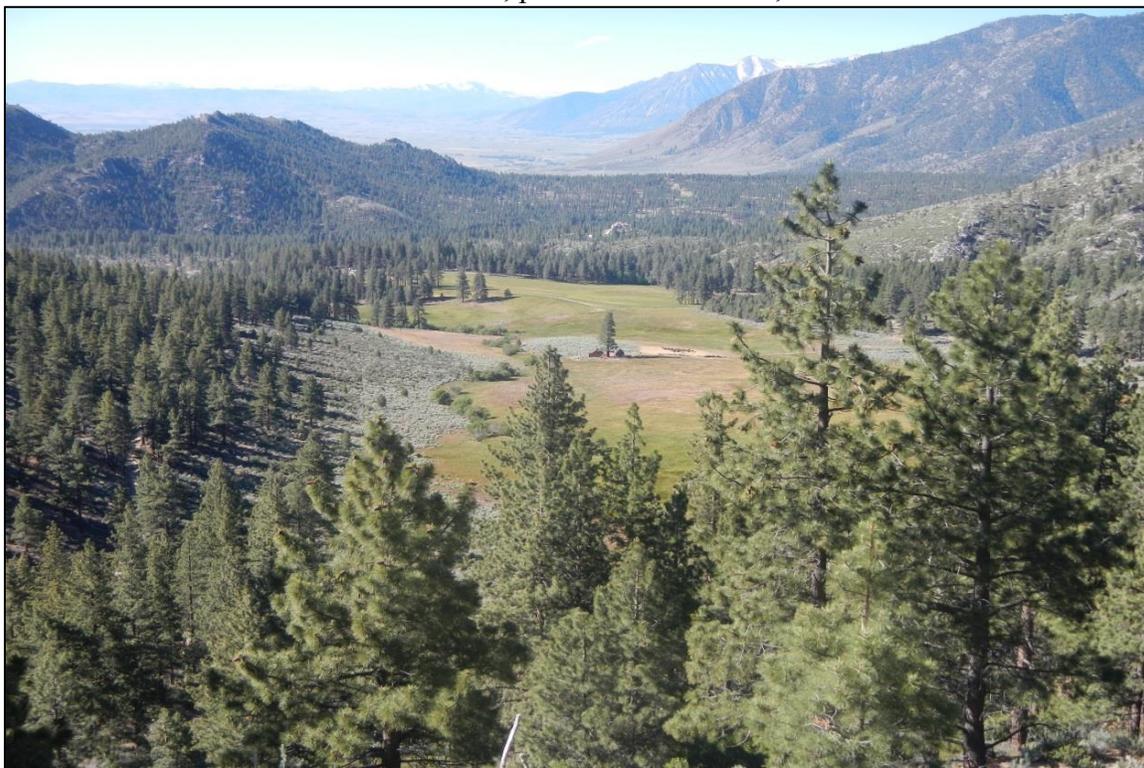
Baseline Report Repeat Photo Documentation

**Photo Point 7B (view south): A photo point from Kings Canyon Road that would provide panoramic views of the ranch from a north to south perspective.**

2009 Baseline Condition, photo taken February 4, 2009



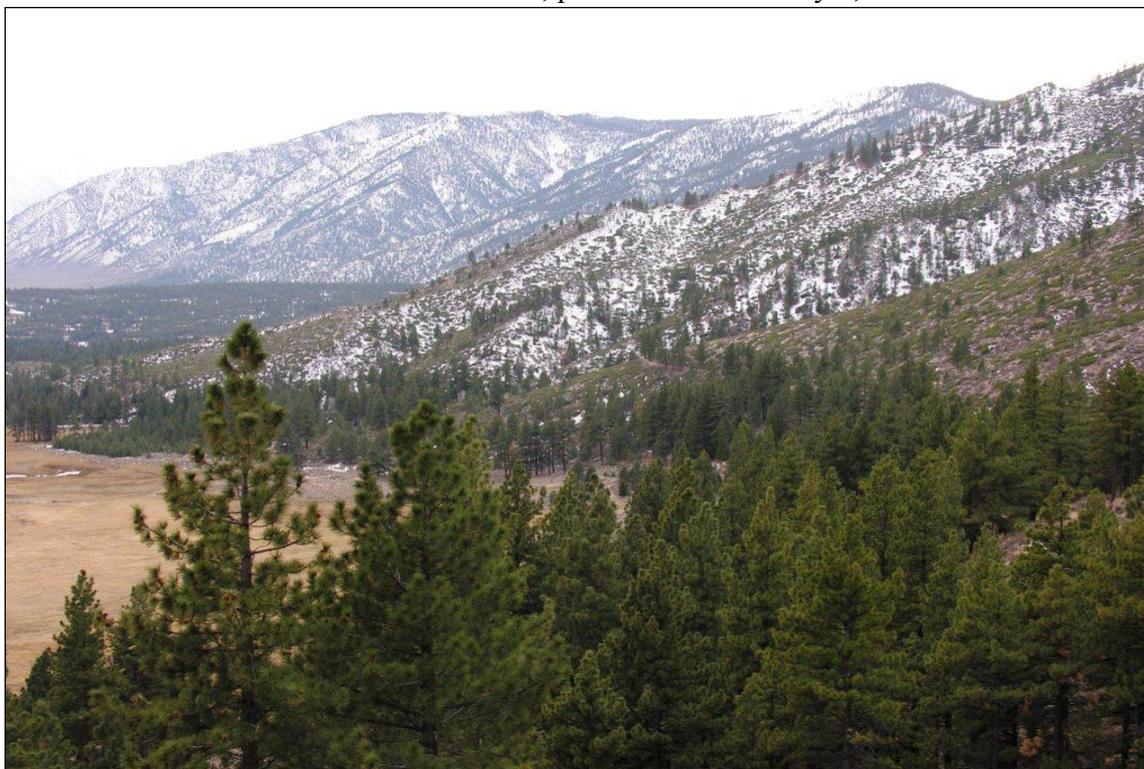
2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 7C (view southwest): A photo point from Kings Canyon Road that would provide panoramic views of the ranch from a north to south perspective.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 8A (view northwest): A photo point overlooking the meadow from the east to the west located next to the property corner along the new road.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 8B (view west): A photo point overlooking the meadow from the east to the west located next to the property corner along the new road.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016



Baseline Report Repeat Photo Documentation

**Photo Point 9: A permanently marked 100' x 100' area to monitor pasture condition. This annual inventory will be used to monitor not only pasture condition but irrigation efficiency, vegetative response to drought and appropriate livestock utilization.**

2009 Baseline Condition, photo taken February 4, 2009



2016 Condition, photo taken June 20, 2016

