

**OPEN SPACE ADVISORY COMMITTEE
STAFF REPORT**

MEETING DATE: February 27, 2012

AGENDA ITEM NUMBER: 3C

STAFF: Ann Bollinger, Natural Resource Specialist *AB*

REQUEST: For possible action to: recommend to the Board of Supervisors acceptance of the monitoring report for the Horsecreek Ranch Conservation Easement for 2011.

GENERAL DISCUSSION: The annual monitoring visit was conducted on October 25, 2011. Previous concerns with trespassers and vandalism were addressed in late 2010. With the assistance of two volunteers, weeds were hand-cut and removed. Weed monitoring and removal is anticipated to continue into future years and Mr. Fagen has extended his invite for scout troops to assist in this effort. The property continues in good condition, and the full report is attached.

RECOMMENDED ACTION: I recommend to the Board of Supervisors acceptance of the monitoring report for the Horsecreek Ranch Conservation Easement for 2011.

Carson City Open Space – Conservation Easement Monitoring

The above actions are permitted by the following conservation easement provisions:

Exhibit B, Permitted Uses and Practices:

3. *Improvements and Facilities*

(a) *Maintenance and Repair of Existing Improvements and Facilities. To maintain, repair, and improve existing structures, housing, fences, ... and other improvements and facilities anywhere on the Property.*

(b) *Construction of Additional Improvements and Facilities. Additional improvements and facilities..., and additional structures, such as inter alia, ... fences... shall be permitted.*

Exhibit C, Prohibited Uses and Practices:

3. *Construction. The construction, reconstruction, or replacement of structures, housing, roads, and other improvements and facilities except as provided in section 11 of this Easement and sections 1 and 3 of Exhibit B.*



Photo – At the upper gated entrance, a new three-strand barbed wire fence extends to the south.

Carson City Open Space – Conservation Easement Monitoring



Photo: At the southeast property corner with the USFS, a new gate was installed to control access.



Photo: At the southeast property corner with the USFS, private property and no trespassing signs were posted.

Carson City Open Space – Conservation Easement Monitoring

4. Subdivision

No change. The landowner is in compliance.

5. Motorized Vehicles

The change is positive and in the desired direction. The landowner is in compliance.

The previous report mentioned a few areas of trespass and the off-road tracks caused by dirt bike use. Since installation of the gate and barbed wire fence, the trespass and unauthorized vehicle use have dissipated.



Photo: The previously photographed dirt bike tracks were not apparent. View from the conservation easement uphill to the adjacent USFS lands on the east.

N 39° 08' 11.4" W 119° 50' 09.9"

6. Tree Cutting

No change. The landowner is in compliance.

Carson City Open Space – Conservation Easement Monitoring

7. Dumping

No change. The landowner is in compliance.

8. Soil Degradation

No change. The landowner is in compliance.

The following is an update and continued monitoring as referenced in the previous report: According to the Mr. Fagen, there was significant winter and spring runoff in the drainage located east of the cabins. Generally, the field conditions appear stable from last year and the vegetation seems to be establishing. Likewise for the lower meadow located south of the cabins. A few areas such as the headcut identified in Photos 4A – 4C should receive some stabilization work though, and Carson City will work with Mr. Fagen towards this goal.



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

9. Water Quality Degradation

No change. The landowner is in compliance.

Carson City Open Space – Conservation Easement Monitoring

10. Surface Alteration or Excavation

The previous report recommended monitoring for revegetation along the excavated pipeline area. During this field monitoring visit, preferred grass and forb species were not yet apparent. Rather, annual weeds such as cheatgrass and redstem filaree were most common. If natural revegetation is not successful within a few years, a mix of meadow grasses may need to be purchased and raked into the soil during the late fall months.



Photo: The photo of the pipeline excavation area has been included to document current condition and vegetation growth.

11. Fencing Restrictions

No change. The landowner is in compliance.

The fence installation along the east property line, as discussed above, is not constrained by the fencing restrictions identified for specific areas of the property.

Carson City Open Space – Conservation Easement Monitoring

Additional Comments:

- The irrigation ditch known as “Neil’s Flume” was dry during this field monitoring visit however everything seemed to be in working condition.
- The previous report mentioned the presence of bull thistle throughout the meadow and coordination for weed control. On August 24 and September 1, 2011, Mr. Fagen, Ann Bollinger, David Reese (Open Space Program volunteer), and Margie Evans (Carson City Weed Coalition) spent three to four hours each day clipping stems of near-flowering bull thistle plants. Approximately 17 bags were collected and disposed. Unfortunately, there was insufficient time to complete the job. The crew had focused on removal of flowering plants hence the smaller rosettes were generally left behind. Bull thistle is a biennial plant so flower development and seed production should be anticipated next year. In addition, there is an existing seed source and several years of weed control should be planned.
- Mr. Fagen inquired about rvegetation and management of the cattle loafing area located just outside the gated entrance to the cabins. This area is higher and drier compared to the rest of the meadow and it is highly desirable to the cattle. The high intensity use has resulted in bare ground and some growth of annual grasses (cheatgrass and foxtail). Perennial grasses and forbs were nonexistent. Staff discussed various options with Jay Davison (University of Nevada Cooperative Extension), Steve Walker (Walker and Associates), and Mr. Fagen. At this time, the decision was to “sacrifice” this area in exchange for protection of others areas. The loafing area will be monitored with the goal of limiting further expansion.
- Staff is pleased to report on an incident which occurred after the inspection and while driving off the property. At the uppermost gate near Kings Canyon Road, a driver had stopped and waited. He asked if we were aware that we were on private property and stated that trespassing was not permitted. We responded regarding Mr. Fagen’s knowledge and permission and stated our task of conducting a monitoring inspection of the easement. It was good to observe someone understanding the protection and enjoying scenic beauty of the conservation easement from Kings Canyon Road.
- Stewardship Account: Carson City shared the cost of gate and fence installation. The account has a current balance of \$47,875.

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Summary:

The results of the 2011 audit of the Horsecreek Conservation Easement by Carson City demonstrated that the property continues in good condition and that the landowner is in full compliance with both the letter and the spirit of the Easement. The landowner continues to improve the property in a number of ways, all consistent with the purpose of the Easement. 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. Previous concerns with trespassers and vandalism were addressed in late 2010. Weed control will require annual monitoring and removal, and Mr. Fagen has extended his invite for scout troops to assist in this effort, with July and August being the optimal months. Additional scout projects may include brush clearing along the road and repair of the water bars.

Written by:

Ann Bollinger

Ann Bollinger

Date: 1/23/12

Reviewed by:

Juan F. Guzman

Juan F. Guzman

Date: 1/23/12

Landowner:

William Michael Fagen

William Michael Fagen

Date: 1/25/12

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)

- 17 ground photos – Repeat Photo Documentation
- Digital photos taken, copied into a written report

Maps and illustrations

Other:

- Walker & Associates, Horse Creek Ranch Annual Pasture Utilization and Condition Assessment

Date Inspection Report Sent To Landowner: _____

Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 1A (north)



Photo 1B (north)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 2 (south)



Photo 3 (south)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 4A (north)



Photo 4B (detail)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 4C (detail)



Photo 5 (east)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 6A (north)



Photo 6B (center)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 6C (south)



Photo 7A (south)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 7B (south)



Photo 7C (south)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 8A (east)



Photo 8B (east)



Repeat Photo Documentation (as compared to the Baseline Condition Report)

Photo 9 (south)





Walker & Associates

661 Genoa Lane, Minden, Nevada 89423

October 27, 2011

TO: Juan Guzman, Open Space Manager – Carson City, Nevada

FROM: Steve Walker, Walker & Associates

SUBJECT: Horse Creek Ranch Annual Pasture Utilization and Condition Assessment

On October 25th, 2011 Walker & Associates conducted the annual pasture utilization and condition assessment at the Horse Creek Ranch property. This assessment is part of the property monitoring requirements as described in the Baseline Report for the Horse Creek Ranch Conservation easement. Annual vegetative assessment of a 100 foot by 100 foot plot in the irrigated area of the ranch – see Baseline Report map – is used to insure that grazing use of the irrigated pasture is maintained at a level that maintains herbaceous plant vigor and does not cause any resource deterioration – soil erosion/introduced annual weed invasion.

The 100 foot by 100 foot pasture-monitoring site is located immediately south of the center wood post that marks the southern boundary of the parcels excluded from the conservation easement. The western side of the monitoring area starts at the post and goes directly toward the large pine tree that sits between the two cottages to the south for 100 feet. From that point a right angle is established to go east 100 feet and then again to go north and then west. Right angles are developed at the southwest, southeast and northeast corners by using a tape and stakes to create a right angle with 30 by 40 foot sides and a 50-foot hypotenuse. The 40-foot side is the measured along the previously established line.

The pasture monitoring site was chosen to represent the two components of the irrigated pasture area – areas that are mostly saturated through the growing season and support wetland type plants - sedges, wire-grass and meadow foxtail - and areas more well drained that support facultative pasture grasses – tall fescue, timothy, blue grass and cinquefoil. There was no grazing occurring at the time of monitoring.

Results –

The utilization of the area was patchy with heavy utilization in the better-drained portions of the site and in the saturated areas that were sedge was the dominated species and lacked a wiregrass (*Juncus balticus*) component. In fact the entire meadow area seemed to exhibit this patchy grazing utilization based on the occurrence or absence of wiregrass. Generally about 55% of the plot was utilized. Since this was the second consecutive year of better than average water supply one could expect better forage production and less overall utilization assuming stocking rates are based on average water supply. The areas where wiregrass was dominant or co-dominant are not being grazed, causing an accumulation of litter (dead/decomposing plant material) and decreasing over-all forage production while enhancing rodent (gopher/meadow vole) habitat. Species composition within the plot is not changing and should maintain meadow type herbaceous species if the local hydrology (irrigation) is not altered although annual growth of the

forage species will be reduced in the un-grazed areas. Extensive gopher mounding was evident throughout the site, indicating soils were not saturated due to the cessation of irrigation with the exception of the southwest corner where standing water was apparent and no gopher tunneling was occurring.

If the goal of the conservation easement were to enhance red meat production then increasing the stocking rate or better confinement of the existing livestock on the meadow would be recommended. Assuming the goals are related to maintaining the meadow for its visual and wildlife habitat amenities, then the current livestock utilization and irrigation practices are achieving these goals. Walker & Associates would recommend that no management changes are necessary at this time and the conservation easement is being implemented per the agreements based upon this site assessment.

Trends –

Generally the transect area look like it had received adequate irrigation and utilization. The well-drained, unsaturated portions had some scattered invasion by bull thistle that should be monitored and if it appears to be spreading or dominating particular sites then a spraying program with possible pasture rest might be necessary. Pocket gopher activity was extensive on the un-saturated area. This activity is related to the fall cessation of irrigation allowing the soils to dry out and be accessible to these rodents. The fall green-up of the basal area of most species due to abundant fall precipitation was impressive. Utilization particularly by deer of this green-up was evident.

Recommendations –

Based on observations the irrigation and livestock utilization within the monitoring area was adequate. The bull thistle population needs to be monitored and in livestock utilization become more managed – pasture rotations become utilized if pasture condition starts to show a downward trend based on the annual observation.

Steve Walker - Walker & Associates