



Suzanne Steab < suzannesteab@utah.gov >

Fwd: edits

1 message

Daron Haddock < daronhaddock@utah.gov >
To: Suzanne Steab < suzannesteab@utah.gov >

Fri, Mar 21, 2014 at 8:15 AM

Suzanne,
I'm not sure you got these last edits that were submitted by Kirk. Anyway, here they are. Daron

----- Forwarded message -----

From: **Kirk Nicholes** < knicholes@altoncoal.com >
Date: Wed, Mar 19, 2014 at 11:34 AM
Subject: RE: edits
To: Joe Helfrich < joehelfrich@utah.gov >
Cc: "Daron Haddock (daronhaddock@utah.gov)" < daronhaddock@utah.gov >

Joe/Daron,

Here are the changes for the mistakes you found Joe. Should be able to just exchange pages.

Thanks Kirk

From: Joe Helfrich [mailto: joehelfrich@utah.gov]
Sent: Wednesday, March 19, 2014 8:38 AM
To: Kirk Nicholes
Subject: edits

Hey Kirk,

Check page 3-34, the word began, maybe started or initiated would be a better fit and page14 change Jan 31, 2014 to 2015.....Thanks, Joe

--
Joseph C. Helfrich

Wildlife Biologist

Utah Division of Oil Gas & Mining

801 538-5290 W

801 971-7685 M

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Daron R. Haddock

Coal Program Manager
Utah Division of Oil, Gas & Mining
(801) 538-5325

4 attachments

-  **Appendix 3-5 (final) page 14.pdf**
82K
-  **Appendix 3-5 (marked) page 14.pdf**
82K
-  **Chapter 3 Text (marked) page 34.pdf**
191K
-  **Chapter 3 Text (final) page 34.pdf**
191K

To establish effective plans for habitat improvement and connectivity, UDOGM, UDWR, ACD and interested biologists (such as Renee Chi, Amy Defreese, Kevin Heaton and Lisa Church) will be invited to meet and work on these plans. The purpose for these improvements is to increase connectivity for sage-grouse migration and critical sage-grouse nesting and brood-rearing habitat. The goal for habitat improvement will be returning a sustainable ecological condition (state) that facilitates plant community establishment and increased ecological resilience along with providing improved habitat for sage-grouse.

1700 acres are required during the life of the mine. Currently, 1200 acres remain to be treated, or approximately 240 acres per year. Although the addition of the 85.88-acre Dame Lease IBC does not include any permanent disturbance, ACD will complete an additional 344 acres of habitat improvement for sage-grouse. The mitigation work will be completed between Aug. 1, 2014 and Jan. 31, 2015. The emphasis of this work will consist of pinyon-juniper removal and some sagebrush/Rabbitbrush treatments. Treatment types (options for habitat improvement) associated with PJ removal include:

- 1) Chaining (and seeding if necessary)
- 2) Lop and scatter
- 3) Bullhog (and seed if necessary)
- 4) Bulldozer / track hoe for knocking trees down (stack and burn optional)
- 5) Prescribed fire (and seed if necessary) and chaining

Pinyon juniper removal efforts will be focused on the following areas (in order of treatment)

- 1) Private lands east of the mine site (Pugh and Heaton, see Figure 6)
- 2) Private lands south of Alton
- 3) Private lands within the occupied sage-grouse habitat regions delineated by the UDWR which includes PJ woodlands from immediately south of Sink Valley through Skutumpah Terrace (Drawing 3-9).

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- In 2007 the team has continued studies of the sage-grouse with biologists from DWR, the BLM, Southern Utah University (SUU), and the Coal Hollow Project by capturing, taking blood samples, and placing radio transmitters on several birds from March through May.
- In April 2007, two helicopter flights, arranged by Coal Hollow Project, were conducted to search for satellite leks of the sage-grouse.
- In May 2007, another raptor survey by helicopter was conducted by DWR that included the permit area and adjacent areas.
- In September 2007, sensitive plant species surveys were conducted during quantitative sampling of additional proposed disturbed and reference areas for mining years one through three of the project.
- In September 2007, additional quantitative sampling was conducted in meadow areas outside the permit area to be used as a companion study with other areas.
- In 2007, an excavator was used to remove over 10,000 invading juniper trees from the conservation area to reduce potential perching sites for raptors that can reduce the sage-grouse populations.
- Private land owners from Alton have been working to reestablish a migratory corridor between Hoyts Ranch and Alton by clearing juniper and Gambel oak and reseeding open areas with a seed mix consisting of perennial grasses and forbs. Preliminary monitoring results in 2009 indicate that the sage-grouse are beginning to use this corridor. This project was completed in 2011 consisting of 885 acres. Verification was documented in a letter from Director Baza addressed to Denise A. Dragoo, Esq dated May 16, 2012.
- To date, an ongoing monitoring program for radio-collared sage-grouse has been conducted with collaborations with DWR, the BLM, SUU and ACD.
- In 2012 habitat improvement work for sage-grouse was completed on 146 acres to the east of the property that included lop and scatter of pinyon/juniper and chemical treatment of Rabbitbrush.
- In 2012, two helicopter flights, arranged by Coal Hollow Mine, were conducted to search for satellite leks of the sage-grouse.
- Cronquist's phacelia (*Phacelia cronquistiana*; BLM sensitive) was identified as having potential to occur in the area of the mine. Surveys of potential habitats for this species were conducted in June 2012, and no individuals were found.
- In 2013 habitat improvement work for sage-grouse was started on 355 acres adjoining the west boundary of the Coal Hollow mine that included lop and scatter of pinyon/juniper. After assessment of the project in early 2014 by the BLM, it was decided that additional work needed to be done in the appropriate season of 2014 as per the letter dated 3/3/2014 from Lisa Church in Appendix 3-7.

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