

**OGMCOAL - Re: 0250005 Coal Hollow Task 4148 Seed mix changes**

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**From:** "Patrick Collins" <nebo@xmission.com>  
**To:** "Priscilla Burton" <priscillaburton@utah.gov>, <OGMCOAL@utah.gov>, <mt.n...>  
**Date:** 9/10/2012 10:58 AM  
**Subject:** Re: 0250005 Coal Hollow Task 4148 Seed mix changes  
**CC:** "Daron Haddock" <DARONHADDOCK@utah.gov>, "Joe Helfrich" <JOEHELFRICH@uta...>

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Priscilla,

Those were my off the cuff comments. Perhaps Kirk had other good reasons for the changes. Please explore that before you deny it.

Thanks,  
Patrick

-----Original message-----

**From:** Priscilla Burton <priscillaburton@utah.gov>  
**To:** OGMCOAL@utah.gov, Patrick Collins <mt.nebo@xmission.com>  
**Cc:** Daron Haddock <DARONHADDOCK@utah.gov>, Joe Helfrich <JOEHELFRICH@utah.gov>  
**Sent:** Mon, Sep 10, 2012 16:14:52 GMT+00:00  
**Subject:** 0250005 Coal Hollow Task 4148 Seed mix changes

Hello Patrick,  
We appreciate your comments. We plan to deny the proposed amendment.  
Thanks again for your time during your busy field season.

*Priscilla Burton*

Priscilla Burton, CPSSc  
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>>> Patrick Collins <mt.nebo@xmission.com> Friday, August 31, 2012 2:12 PM >>>  
Hello Priscilla:

I'm sorry for the delay in my response, I have been in the field constantly.

I have reviewed your email, including the original seed mixtures that I recommended to Alton Coal for the MRP, and also the proposed new seed mixtures that Kirk Nicholes provided to you.

Unless I am mistaken on the number of seeds per pound, there were no decimal errors for the rates of bitterbrush (15,000 seeds/lb) and lupine (12,500 seeds/lb). The recommended mixture provides 5.17 and 4.30 PLS/sq ft of those species, respectively. Those 2 species do make the rate per acre "heavy",

but it is because the seeds are so large.

I usually attempt to get a total of approximately 80 PLS/sq ft in my seed mixtures when drill seeding in the sagebrush zones (about double that for broadcast seeding methods). I have recommended a good representation of shrubs and forbs for sage-grouse and big game reasons, and grasses for cover, grazing and soil stabilization. Bitterbrush and winterfat are excellent browse species for deer; the sagebrush is good for deer winter range and sage-grouse habitat. The forb species recommended are especially beneficial for sage-grouse brood rearing as food and also for encouraging establishment of insects as a protein source.

I have not talked to Kirk yet about the reasons for the proposed changes. I did provide a footnote in the mixtures about seed commercial availability. Perhaps the recommended decrease in the rate by Kirk is that bitterbrush is scarce or very expensive?

Regarding Triticale as a cover crop. It's only my opinion, but I would not add it to the mixture. I would be concerned about the competition it may provide to the other native species for water and nutrients. Additionally, I am constantly hearing about the lack of "sterility" of the seeds. Again, others may disagree with my comments here.

Kirk may have other good reasons for the changes, I'm not sure until I speak with him (I left him a voice-mail earlier today). The bottom-line here is I prefer my original recommendations for the sagebrush/grass seed mixture, but the decision is of course that of ACD and DOGM.

I'm not sure this helped you, but let me know if you have additional comments.

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On 8/20/2012 3:30 PM, Priscilla Burton wrote:

Hello Patrick,  
Kirk Nicholes has proposed seed mix changes to include Triticale as a cover crop and to correct a decimal place error on the bitterbrush and lupine components in the seed mixes. He is getting ready for a fall seeding on a reclaimed section of the excess spoil pile, using the sagebrush/grass community mix. Since you created the original mix for the purpose of improving sagegrouse habitat, I'd like to give you an opportunity to review the revised mix to ensure that the revised mix will also work well for the grouse.

I've attached the current seed mix (stamped incorporated) and the revised mix. The changes seem to affect the proportions of the categories of vegetation (grass, forb, shrub). Does the revised mix still reflect the habitat requirements for sagegrouse? When triticale is not counted in the number of pounds pls/ac, is there enough seed being scattered/acre?

I know you are very busy with field work and your time is much appreciated.  
Thanks,

*Priscilla Burton*

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