

Illustration 60
Addendum 1
Analysis of Existing BLM Red Wash Reservoir #2 as
Point of Compliance for RP-A

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Introduction

RP-A was originally permitted as Technical Revision 72 in the fall of 2019. Blue Mountain Energy would like to change the location of the subsoil and topsoil stockpiles. Some topsoil and subsoil has been placed in the originally permitted locations, but as stockpiling progresses, it would be advantageous to shorten the haul distance and eliminate conflicts with the ongoing operation of haul trucks. The proposed configuration is shown on the revised Map 162.

Hydrology

The new stockpile areas still drain to the same Red Wash Reservoir #2 that is designated as our point of compliance. It is seemingly obvious to the author that a small area of disturbance in a large watershed would yield little change in the hydrology and sedimentology. The additional disturbed area amounts to 12.16 acres in a 416.6-acre watershed. Less than 3 percent of the land may have a slightly different curve number.

If the additional disturbed area is assumed to be revegetated, there is no change in the curve number. If the disturbed area is considered to be bare, the overall weighted curve number still does not change. Tables 1 and 2 show the previous and proposed curve number calculations.

Table 1. Original TR-55 Curve Number Summary

| JT | Red Wash Res. #2 | | | | |
|------------------------------------|--|-----------------------|--------------------|--------------|--|
| | Rio Blanco County, Colorado | | | | |
| | Sub-Area Land Use and Curve Number Details | | | | |
| Sub-Area Identifier | Land Use | Hydrologic Soil Group | Sub-Area Area (ac) | Curve Number | |
| Red Wash RP | Pinyon - juniper | (fair) B | 61 | 58 | |
| | Pinyon - juniper | (fair) D | 91.6 | 80 | |
| | Sagebrush (w/ grass understory) | (fair) C | 60.9 | 63 | |
| | Sagebrush (w/ grass understory) | (fair) D | 180.8 | 70 | |
| | Desert shrub | (fair) A | 22.3 | 55 | |
| Total Area / Weighted Curve Number | | | 416.6 | 69 | |
| | | | ===== | == | |

Table 2. Curve Number Summary with Bare Soil Stockpiles

JT

Red Wash Res. #2
With Stockpiles as Bare Soil
Rio Blanco County, Colorado

Sub-Area Land Use and Curve Number Details

| Sub-Area Identifier | Land Use | | Hydrologic Soil Group | Sub-Area Area (ac) | Curve Number |
|---------------------|------------------------------------|---------------------------------|-----------------------|--------------------|--------------|
| Red Wash | RFallow | Bare soil | D | 12.16 | 94 |
| | | Pinyon - juniper | (fair) B | 61 | 58 |
| | | Pinyon - juniper | (fair) D | 91.6 | 80 |
| | | Sagebrush (w/ grass understory) | (fair) C | 60.9 | 63 |
| | | Sagebrush (w/ grass understory) | (fair) D | 168.64 | 70 |
| | | Desert shrub | (fair) A | 22.3 | 55 |
| | Total Area / Weighted Curve Number | | | 416.6 ===== | 69 == |

Conclusion

The proposed change has essentially no effect on the hydrology of the watershed. Please refer to Illustrations 59 and 60 for the original SedCAD calculations.