Custer National Forest, Sioux Ranger District

Riley Pass Newsletter

March 2011

This newsletter provides information regarding ongoing reclamation work at the Riley Pass Abandoned Uranium Mines Site. Riley Pass is in the North Cave Hills portion of the Custer National Forest's Sioux Ranger District, approximately 25 miles north of Buffalo, SD. The 250 acre site consists of 12 bluffs first mined in the 1950s.

Special points of interest:

- *Tronox Bankruptcy Settlement*
- *Riley Pass Website*
- *2010 Bluff Reclamation.*
- *2010 Sediment Pond Repair.*
- *Planned 2011 Work.*

Tronox bankruptcy settlement

Tronox LLC is the responsible party for reclamation of approximately 80 percent of the Riley Pass abandoned uranium mine site. In October, 2008, Tronox, LLC. informed the Forest Service that it was stopping all work on the project, in violation of the consent order Tronox signed the previous year. In January 2009, Tronox filed Chapter 11 bankruptcy. Tronox informed the On-Scene-Coordinator at that time that all work would cease pending Chapter 11 reorganization.

Riley Pass is one of numerous sites included in a recent bankrupty case Settlement Agreement that created environmental response trusts and provides for Tronox to pay $270 million and certain other consideration to the environmental response trusts and Governmental Environmental Claimants. The final papers to resolve the Tronox bankruptcy case have been filed with the court, and the reorganization plan is effective. The initial payments for Riley Pass are anticipated to be coming soon.

Additionally, the United States is pursuing a pending fraudulent conveyance lawsuit against Tronox, its former parent, Kerr-McGee Corporation, and Anadarko Petroleum Corporation, which purchased Kerr-McGee. The fraudulent conveyance lawsuit alleges that Kerr-McGee and Anadarko defrauded Tronox and its creditors, including the United States, by imposing on Tronox all of Kerr-McGee's environmental liabilities without sufficient assets to satisfy those liabilities.

The Forest Service intends to begin reclaiming the Tronox bluffs as early as 2012. At 150 acres, Bluff B is the largest mine-impacted area in the Riley Pass site. Bluff B sediments are being transported down slope into sediment ponds. Eliminating the sediment source at Bluff B will likely be the highest reclamation priority of the Tronox bluffs. Future work will be completed at the remaining non-Tronox bluffs as funding becomes available. Clean-up of the entire site will likely take years to complete.

For more information on the bankruptcy settlement, please see the Department of Justice's website at: http://www.justice.gov/opa/pr/2010/November/10-enrd-1343.html or EPA's website at: http://www.epa.gov/compliance/resources/cases/cleanup/cercla/tronox/index.html

Riley Pass Website

The Forest Service is in the process of making additional information about the Riley Pass site more accessible to the public. Documents, maps, and photos regarding the clean-up work at Riley Pass will soon be available for download from the Custer National Forest website at: http://www.fs.fed.us/r1/custer/

A mailing list is also being maintained and compiled for this project. You can stay informed by either checking the website at your convenience, signing up for our email notification list to receive an email message whenever new information or newsletters are available on our website, or signing up for our mailing list to receive future editions of the Riley Pass Newsletter in hard copy format.

For specific requests, additional information, or to be added to the Riley Pass newsletter mailing list, please contact On Scene Coordinator, Mary Beth Marks, at mmarks@fs.fed.us or (406) 587-6709.

Completed 2010 Reclamation

Photo 1: 2010 Bluff K-2 final construction.

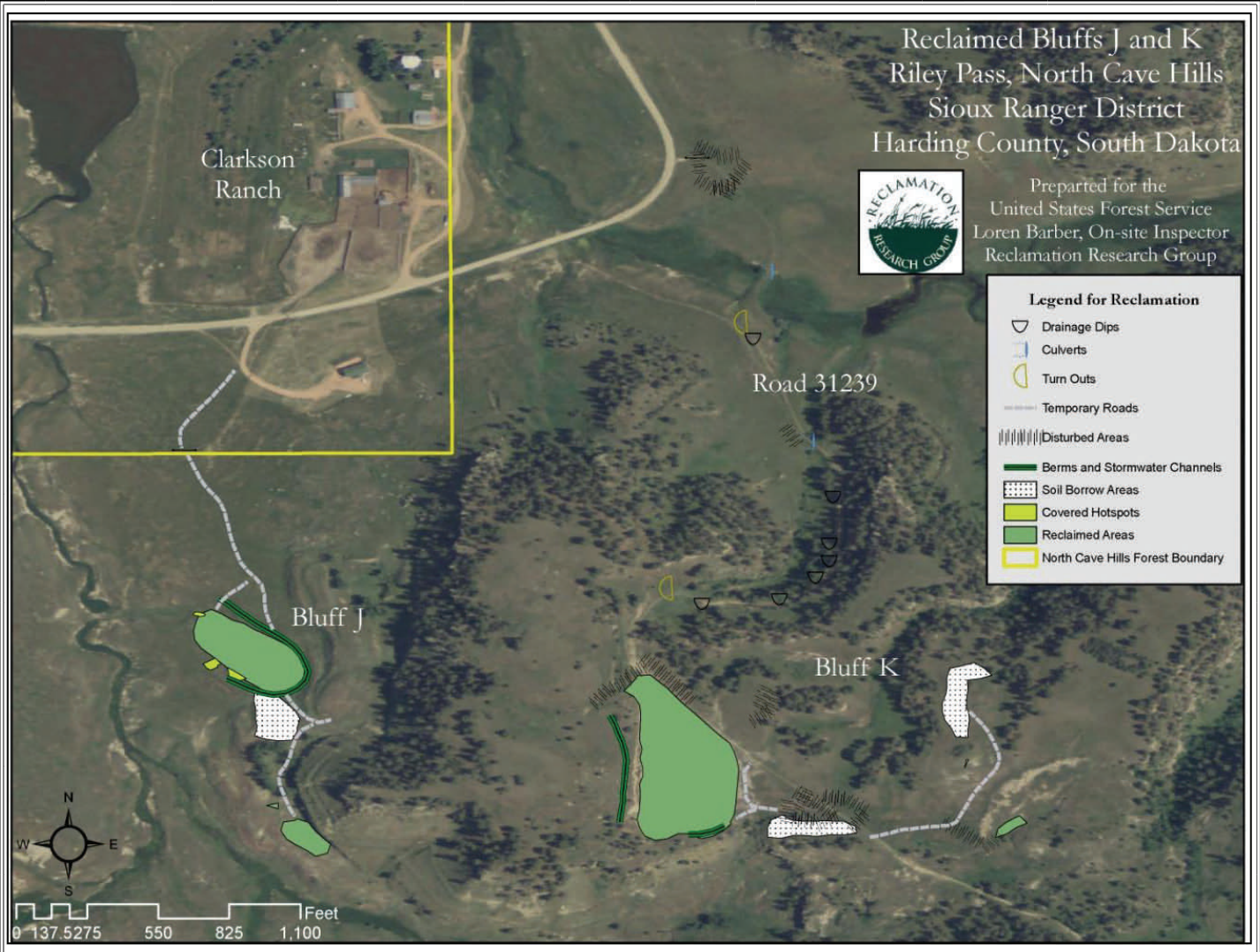
Riley Pass consists of 12 separate mined bluffs which range in size from a few acres to 150 acres. Mine wastes contain hazardous substances including arsenic, molybdenum, thorium, radium, and uranium. Human health and environmental issues are related to elevated levels of arsenic and radium 226. The clean-up approach is to consolidate, compact and then bury material containing contaminants that could pose an unacceptable risk to human health and the environment. Remaining erosive spoils material will then be re-graded up to the highwall of each bluff and the areas covered with clean borrow and revegetated.

2010 Bluffs J and K Reclamation

Bluffs J and K are the first Non-Tronox bluffs reclaimed by the Forest Service (see Photo 1 and Map 1). Work was completed in fall 2010 under contract by Belair Builders, Inc., with an estimated $350,000 total cost. At Bluff J, Belair covered two small areas of mine waste with clean borrow material and compost. Road access up to Bluff K was improved to facilitate equipment mobilization. Belair then excavated several areas of mine waste, placed it in the previously mined area against the Bluff K highwall, and compacted the material. Bluff J and K compacted mine waste and disturbed areas were covered with clean borrow material and compost. Drainage structures were constructed to route water in a manner that prevents erosion. Reclaimed areas were seeded with a mixture of native grasses, forbs, and legumes. Bluffs J and K will be fenced in 2011 to complete reclamation measures. The Forest Service will monitor Bluffs J and K to determine reclamation success and whether various aspects of the reclamation approach need to be revisited in designing work for other bluffs.

2010 Sediment Pond Repair

Several sediment ponds were previously constructed to capture waste-laden sediments eroding from Bluff B. Due to erosion and sediment transport, these ponds have been cleaned out numerous times, most recently in 2009. In addition to the 2010 bluff reclamation work, Belair repaired sediment capture pond dams that capture Bluff B runoff and sedimentation (see Photo 2). The 2010 dam repairs included installing sand filters in the dams to alleviate piping in clay materials. The estimated total 2010 dam repair cost is $100,000.



Map 1 (Above): Bluffs J and K reclamation.

Photo 2 (Right): 2010 Bluff B sediment pond dam repair.

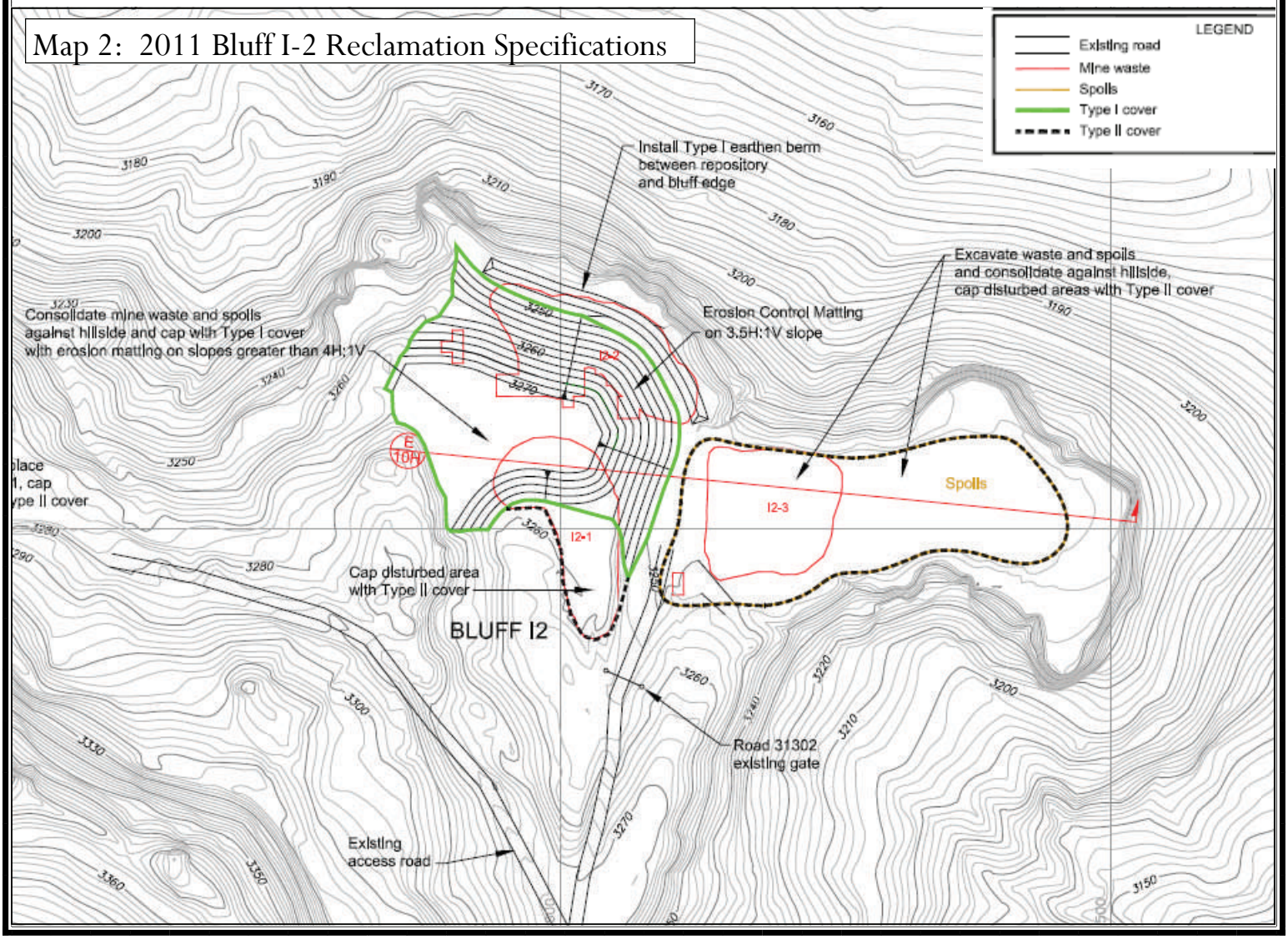
Planned 2011 work

Bluff I-2 Reclamation

The Forest Service is anticipating that funds will be available to reclaim Bluff I-2 as shown in Map 2. Contract design and specifications have been compiled. Planned work includes consolidating mine wastes and spoils against the hillside and capping it with clean cover. All disturbed areas will be seeded with a native weed-free seed mix. Steeper slopes will be covered with biodegradable erosion matting. An earthen berm will be constructed at the base of the reclaimed area to further prevent erosion and sediment transport.

Soil Borrow Area

Physical and chemical soil properties in a soil borrow area northwest of Bluff I-2 were evaluated in 2010 for soil depth and suitability as a growth medium. If funding is realized for Bluff I-2 reclamation, the borrow area will be utilized to provide clean soil cover to cap mine wastes. A temporary road will be constructed for hauling soil from the borrow area to I-2 and to provide soil for future reclamation of other mined bluffs. The upper portions of soil in the borrow area will be salvaged and utilized to re-cover the borrow area after soil is extracted and utilized at I-2. All disturbed areas will be reclaimed and seeded.

Road 3130 Improvements

Road 3130 provides access to Bluff I-2, the soil borrow area, and other mined bluffs where future reclamation is planned. Road improvements are needed to accommodate construction equipment access and soil transport. Road improvements planned for 2011 include construction of turn-outs to address safety issues, cattleguard replacements, ditch reconstruction, grading, re-surfacing, and installation of culverts and drainage dips.