

FEDERAL ENERGY REGULATORY COMMISSION FIELD INSPECTION REPORT

Date of Report Dates of Inspection	July 10, 2012 June 11-13, 2012	
Project	Ruby Pipeline, L.L.C. Ruby Pipeline Project Wyoming, Utah, Nevada, and Oregon Docket No.: CP09-54-000 Authority: Section 7(c)	
Personnel	FERC Project Manager: FERC Contractor: FERC Contractor Staff: Company Staff:	Dave Swearingen N/A N/A Dan Gredvig, John Jermyn, Lynn Christensen, and Mike Bonner

Inspection Summary		
<u>3</u>	Problem Area(s)	
<u>0</u>	Noncompliance(s)	
No	Follow-Up Letter Required	
No	Refer to Enforcement	

Introduction

Construction of the Ruby Pipeline Project was from July 2010 to July 2011, with in-service being granted on July 27, 2011. A previous post-in-service restoration inspection was conducted in October 2011.

The October 2011 inspection found that restoration and reclamation was proceeding satisfactorily and that the right-of-way was stable heading into the winter, but that much of the right-of-way was essentially bare. Minor issues regarding trash, erosion, missing water bars, and weeds were noted.

On June 11-13, 2012, I conducted an air and ground inspection of the Ruby Pipeline Project. This June 2012 inspection specifically targeted the state of right-of-way stability and restoration (e.g., status of seeding, revegetation, and presence of erosion). Only one landowner issue remained open (the Gladwill property at about milepost [MP] 575). Ruby reports that this is being litigated and is related to soil loss, contouring, and the re-establishment of a water channel. My inspection did not find any evident right-of-way problems on this tract other than patchy revegetation indicative of the majority of the route (I also noted that the tract is grazed).

The air inspection was conducted via helicopter overflight of the entire route as well as the former Vya construction camp site. The ground inspection was of portions of Spread 2 in Utah. The ground inspection allowed a close follow-up on issues and locations visited in previous inspections. All mileposts are approximate. Note that because of re-routes and variances, the mileposting for the "as built" pipeline varies up to 4 miles from previous designations, mostly in the western half of the project. Thus, certain ground features have somewhat different location designations compared to previous inspection reports.

Photos and descriptions are attached.

<u>June 11</u>: The inspection (helicopter) started at 8:45 AM. The entire day was sunny and warm, getting hotter in the afternoon. The inspection covered MPs 0-293 (Wyoming, Utah, and eastern Nevada).

<u>June 12</u>: The ground inspection took place in the morning and targeted specific locations from about MPs 92-106 in Utah that had previously experienced erosion or other problem area/non-compliance issues. Weather was partly cloudy and mild. The inspection continued in the afternoon via helicopter, covering MPs 293-344 in Nevada. Weather was sunny and hot.

<u>June 13</u>: The inspection of the remaining part of the route, covering central/western Nevada and Oregon (MPs 344-680), was conducted via helicopter. As before, the day started out sunny and warm, heating up as the day progressed.

The accompanying photo documentation shows examples of generally satisfactory right-of-way restoration, including rangeland, mountain passes and ridges, pasture and agricultural areas, wetlands, and waterbody crossings. Project-wide, agricultural and wetland areas looked very good. Waterbody crossings, including several that had been problematic during construction, looked good, with good revegetation and slope stability. Non-desirable vegetation, especially cheatgrass, was present on the right-of-way along portions of the route in Nevada; however, adjacent and nearby off-right-of-way land showed similar cheatgrass composition.

The main concern identified is the slow revegetation in many areas. <u>Aside from slow</u> revegetation progress, the only three issues documented as PROBLEM AREAS were 1) the presence of a particular weed in Utah (Dyer's woad, seen in various locations), 2) a few isolated instances of subsidence and sinkholes (seen at various locations over the length of the project), and 3) some downed silt fence. Photos and discussion of these PROBLEM AREAS are contained within the state-by-state inspection report, below.

Wyoming

The U.S. Bureau of Land Management (BLM) manages about 40 percent of the land crossed in Wyoming. The route is primarily open rangeland, with flat areas in the eastern portion (about MPs 0-30) trending towards hills and ridges in the west (MPs 30-47). The easternmost part of the route was essentially bare (**photos 1-4**). Some patchy greening was present starting about MP 29 (**photos 5-8**). Areas of previous subsidence at MP 27 (Rickman Creek) and MP 42.1 have been repaired (**photos 9 and 10**), but two large sinkholes were present at MP 41.3 (**photo 11**). **Photo 12** shows one of the many locations where sagebrush plantings have been attempted. It is too early to tell whether or not the planting effort in Wyoming will be successful.

Utah

About 25 percent of the route in Utah crosses BLM land, mostly in the western portion of the state. The State of Utah owns a tract in the Bear River Valley as well as some of the land to the west. Much of the mountainous area is private land, with a small amount (about 1.2 miles) of U.S. Forest Service (USFS) land crossed as well.

The route through Utah crosses the widest variety of land use and terrain types. Wetlands, large waterbodies, mountains and canyons, agricultural land, and open rangeland are all traversed. The right-of-way showed good revegetation in some areas, particularly in the east and in the higher elevations (**photos 13-14**) but bare areas and patches were predominant (**photos 15-28**). Side slopes appeared stable (**photos 29 and 30**). Areas of previous subsidence at MPs 137, 139, 162 (**photo 31**), and 191 had been repaired, but a new area at MP 75.1 was noted (**photo 32**). The State property in the Bear River Valley looked good (**photos 33-36**) as did some of the nearby slopes and waterbody crossings (**photos 37-42**).

The nuisance weed Dyer's woad was prevalent over much of the right-of-way between MPs 84-106 (**photos 43-45**). This species is also present in off-right-of-way areas, though it is apparently generally more concentrated on the right-of-way. Ruby reports that it is investigating eradication/control strategies. A large patch of yellow sweet clover was seen on the right-ofway at MP 140 (**photo 46**). This plant was not present off right-of-way, so Ruby will investigate whether it was there by design (i.e., part of a seed mix or planted by the landowner) or if it needs to be eradicated. The Brigham City Bench (MPs 106-109; **photos 47 and 48**) and the nearby large wetland flat area (MPs 110-115; **photos 49 and 50**) looked good.

Nevada

A majority of the route in Nevada (over 67 percent) is managed by the BLM. The remainder is private land. Land use is generally open rangeland, much of it used for ranching. Some crop agriculture is present. The terrain gradually trends more towards hills and ridges as it progresses to the west.

Photos 51-68 depict typical restoration and include examples of upland, wetland, and channel/waterbody crossings. Most areas show little revegetation, although some sporadic greening is present. The aforementioned cheatgrass issue was mostly between MPs 394-400 and 426-459 (**photos 69 and 70**). Several areas of sinkholes and subsidence were observed, especially between about MPs 329.5-340.2, at MP 504.5, and at MP 591 (**photo 71**). **Photo 72** shows one of the locations where sagebrush plantings have been attempted. It is too early to tell whether or not the planting effort in Nevada will be successful.

The Gladwill tract can be seen in **photos 73-76**.

The steep crossing at Twelve-Mile Creek was a major undertaking; the inspection confirmed that the slopes were stabilized and that restoration was proceeding satisfactorily (**photos 77-80**).

There were some locations that still had silt fence present; for example, the Marys River (MP 303; **photo 81**), the Humboldt River (MP 319; **photo 82**), an unidentified waterbody at MP 330.5, slopes at MP 349.5 and 361, Soldier Creek (MP 364.8; **photo 83**), a dry wash identified as China Creek (MP 367.2; **photo 84**), and perhaps other locations. In some cases the fencing was down. It was not clear whether these locations still required the use of silt fence or not. I instructed Ruby to assess each location and if the silt fence was necessary, to reinforce it. If it was not necessary, then it should be considered debris and removed.

The Vya construction camp has been completely dismantled and all infrastructure and equipment removed form the site. Restoration is proceeding satisfactorily (**photos 85 and 86**). Ruby had received a complaint that the Midas-Tuscarora Road was exhibiting damage-related issues and was not restored properly. However, the inspection followed the road and no non-compliance or problem areas were observed (**photos 87 and 88**).

Oregon

About 20 percent of the route in Oregon crosses USFS land, with an additional 16 percent crossing land managed by the BLM and the U.S. Bureau of Reclamation. The remainder of the route crosses private land. Much of the terrain is forested, with the exception of the flat, wet areas near Goose Lake. Some open rangeland is present in the easternmost portion.

Photos 89-105 depict typical restoration and include examples of rangeland, forest, ridges and slopes, wetlands, and waterbody crossings. Much of the right-of-way was left with rock and/or slash as the request of the various agencies. A sinkhole was observed at MP 642.5 (**photo 106**). Ruby is attempting the seedling planting program in Oregon, but is using bitterbrush and mountain mahogany rather than sagebrush (**photos 107 and 108**). It is too early to tell whether or not the planting effort in Oregon will be successful.

The Malin Lateral at the westernmost end of the route has been restored satisfactorily (**photos 109 and 110**).

Conclusions and Recommendations

Right-of-way stability was satisfactory, with the exception of the isolated instances of subsidence noted above. Many areas of the right-of-way were essentially bare, especially locations that were more recently completed and those at the tops of slopes in generally difficult terrain where little topsoil existed prior to construction. Much of this is related to precipitation patterns. Grazing pressures are also likely playing a role. Ruby states that it will continue seeding and revegetation, including eradication/control of the Dyer's woad and yellow sweet clover, as necessary. A follow-up helicopter inspection is recommended for Spring of 2013 to assess revegetation and weed issues. No further targeted ground inspections appear to be necessary.

Photo documentation: Wyoming

1-4) Bare ROW in eastern Wyoming

1) MP 0



2) MP 3; the Ruby ROW is on the far left



3) MP 18.5



4) MP 20; with restored crossing of Little Muddy Creek



5-8) Western Wyoming exhibits more greening of ROW in higher elevations, though patchiness is common

5) MP 30



6) MP 37; patchiness evident



7) MP 40; downslope is greener than ridge top



8) MP 47; greening is more uniform



- 9-10) Two locations where previous sinkhole/subsidence issues have been corrected.
- 9) MP 27; Rickman Creek



10) MP 42.1



11) MP 41.3; new sinkhole issue



12) MP 4.7; sagebrush seedling planting location



Photo documentation: Utah

13-14) Some areas in the eastern part of the state show good revegetation.

13) MP 70



14) MP 74.5; USFS land



15-28) Most of the Utah route exhibited patchy revegetation or bare areas. The further West, the more chance for bare ROW.



15) MP 53; west of Bear River HDD site

16) MP 56; grazed area



17) MP 60.5



18) MP 61; Woodruff Creek. The crossing is stable and revegetated while the surrounding ROW is patchy.



19) MP 63.2; Red Mountain



20) MP 74; USFS land



21) MP 77.5



22) MP 82



23) MP 88; Lime Kill Canyon



24) MP 102



25) MP 120; ROW transitions from bare to green at the PI



26) MP 125; within the Salt Creek Waterfowl Management Area



27) MP 139.2; sharp transition from bare to green



28) MP 173; area around Wildcat Hills Compressor Station



29-30) Side slopes were stable; revegetation sporadic

29) MP 91.5



30) MP 101.5; better than average revegetation but note Dyer's woad



31) MP 162; location near MLV #12 where previous subsidence issue has been corrected



32) MP 75.1; new sinkhole issue



33-36) State of Utah property in the Bear River Valley

33) MP 92



34) MP 92.5



35) MP 92; ground inspection; MLV #7



36) MP 92; ground inspection



37-42) Various slopes and waterbodies in the general area north of Brigham City

37) MP 93; La Plata Hill



38) MP 93; La Plata Hill; ground inspection



39) MP 95.5; crossing of West Fork of Bear River



40) MP 95.5; crossing of West Fork of Bear River; ground inspection



41) MP 94; ground inspection



42) MP 94; ground inspection; area of previous non-compliance (muddy run-off) has been restored



43-45) several of the Dyer's woad locations

43) MP 84



44) MP 101



45) MP 103.5



46) MP 140; yellow sweet clover



47-48) Brigham City Bench

47) MP 106



48) MP 106.5



49-50) large wetland flat area west of the Bench

49) MP 110



50) MP 112



Photo documentation: Nevada

51-68) Typical examples of the ROW across Nevada

51) MP 234.5



52) MP 242



53) MP 243.5; one of the few Nevada tracts in active agriculture



54) MP 269; good revegetation around MLV #24



55) MP 277



56) MP 287.7



57) MP 305; Hot Springs Creek



58) MP 332; wetland



59) MP 349.5



60) MP 350



61) MP 402



62) MP 412



63) MP 421; Soldier's Pass



64) MP 452; fenced grazing boundary has affected revegetation.



65) MP 481; area around the Desert Valley Compressor Station





67) MP 565; rare example of good revegetation in open Nevada rangeland





69-70) Cheatgrass is prevalent in certain areas, both on and off right-of-way

69) MP 394.8





71) MP 591; new sinkhole issue (not over the centerline)



72) MP 306; sagebrush seedling planting location



73-76) Gladwill tract under litigation

73) MP 575 (Gladwill 1)



74) MP 575 (Gladwill 2)



75) MP 575 (Gladwill 3)



76) MP 575 (Gladwill 4)



77-80) Twelve-Mile Creek; slopes remain stabilized

77) MP 594 (Twelve-Mile 1)



78) MP 594 (Twelve-Mile 2)



79) MP 594 (Twelve-Mile 3)



80) MP 594 (Twelve-Mile 4)



- 81-84) silt fence remaining on the ROW
- 81) MP 303; Marys River



82) MP 319; Humboldt River



83) MP 364.8; Soldier Creek



84) MP 367.2; China Creek wash



85-86) Reclaimed Vya Camp site

85) Vya 1



86) Vya 2



87-88) Midas-Tuscarora Road

87) Midas-Tuscarora Road 1



88) Midas-Tuscarora Road 2



Photo documentation: Oregon

89-107) Typical examples of the ROW across Oregon

89) MP 599



90) MP 608; Deep Creek



91) MP 609; USFS land



92) MP 610; USFS land



93) MP 621; agricultural area approaching Goose Lake



94) MP 623; Garrett Marsh



95) MP 627; in Goose Lake flood plain



96) MP 630.5; in Goose Lake flood plain



97) MP 641; entering mountainous region



98) MP 646.5



99) MP 648; USFS land



100) MP 667; channel crossing



101) MP 672; Lost River Reservoir





103) MP 674.5



104) MP 679; top of last slope



105) MP 679; down last slope



106) MP 642.5; sinkhole



107-108) bitterbrush/mountain mahogany seedling planting locations

107) MP 661.5





109-110) Malin Lateral

109) Malin Lateral 1



110) Malin Lateral 2

