The Road Inventory of National Elk Refuge Jackson, WY





Prepared By: Federal Highway Administration Central Federal Lands Highway Division August 2008



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INTRODUCTION

The Transportation Equity Act for the 21st Century (Public Law 105-178) created the Refuge Roads Program. Refuge roads are those public roads that provide access to or within a unit of the National Wildlife Refuge System and for which title and maintenance responsibility is vested in the United States Government. Funds from the Highway Trust Fund are available for refuge roads and can be used by the station to pay the cost of:

- (a) Maintenance and improvements of refuge roads.
- (b) Maintenance and improvements of:
 - (1) Adjacent vehicle parking areas
 - (2) Provision for pedestrians and bicycles and
 - (3) Construction and reconstruction of roadside rest areas that are located in or adjacent to wildlife refuges
- (c) Administrative costs associated with such maintenance and improvements.

The funds available for refuge roads are to be disbursed based on the relative needs of the various refuges in the National Wildlife Refuge System, and taking into consideration:

- (a) The comprehensive conservation plan for each refuge;
- (b) The need for access as identified through land use planning; and
- (c) The impact of land use planning on existing transportation facilities.

To determine the relative needs of the U.S. Fish and Wildlife Service, the Federal Highway Administration (FHWA) was asked to inventory all public access roads and parking lots and provide a condition assessment of each. In 2008 the inventory was expanded to include administrative (service use only) roads and parking lots. An FHWA representative meets with refuge personnel to identify route segments and assign route numbers and functional classifications (See Appendix) for each route. All roads and parking lots are mapped using Trimble GPS units and visually assessed for condition using the RSL method of evaluation developed at Utah State University (See Appendix). Culverts, Gates, Guardrails and Low Water Crossings are also mapped and inspected for any obvious defects.

An estimate is provided, in year 2008 dollars, based on the condition determined by the rating system. Estimates are based upon data and location factors from the 2008 RS Means Heavy Construction Cost Data 22nd Annual Edition. Cost estimates should be evaluated on a case-by-case basis when being used for programming purposes.

Native Surfaced roads and parking lots already inventoried will not be re-inventoried and will not appear individually in report chapters 5, 6 and 8. Mileages and areas of native surfaced roads and parking lots will still appear in all summaries in the report and will remain in the road inventory database. In addition to this report, the FHWA will furnish the condition ratings of each route and segment to the Fish and Wildlife Service in a Microsoft Access database so the data can be included in their Real Property Inventory.

Summaries

				Conditio	n Rating (Based on	RSL)*				
	Excellent		Good		Fair		Poor		Failed		TOTAL
F. C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES
I			6.21	100%							6.21
II	0.11	19.3%	0.46	80.7%							0.57
IV	0.07	26.9%			0.19	73.1%					0.26
ν	3.01	5.6%	39.09	72.5%	11.84	22.0%					53.94
Totals	3.19	5.2%	45.76	75%	12.03	19.7%					60.98

Route Miles and Percentages by Functional Class and Condition

*For a description of condition ratings for the various surface types see pages 12-8 and 12-9

Route Miles and Percentages by Surface Type and Condition

	Paved Condition Rating [Condition(RSL)]										
	Excellent (19-20)		Good (13-18)		Fair (7-12)		Poor (1-6)		Failed (0)		TOTAL
S. T.	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES
AS					0.05	100.0%					0.05
со											
Totals					0.05	100%					0.05

	Unpaved Condition Rating [Condition(RSL)]										
	Excellent (8-10)		Good (5-7)		Fair (3-4)		Poor (1-2)		Failed (0)		TOTAL
S. T.	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES
GR	3.12	9.0%	27.47	79.4%	4.00	11.6%					34.59
NA	0.07	3.3%	0.46	21.7%	1.59	75.0%					2.12
PR			17.83	73.6%	6.39	26.4%					24.22
Totals	3.19	5.2%	45.76	75.1%	11.98	19.7%					60.93

Square Footage (Parking Areas)

					Condition	Rating					A.
	Excellent		Good		Fa	Fair		Poor		led	Total
	Square		Square		Square		Square		Square		Square
S. T.	Feet	%	Feet	%	Feet	%	Feet	%	Feet	%	Feet
AS	3819	15.2%	21369	84.8%							25188
со											
GR			60501	100%							60501
NA			4585	100%							4585
PR											200000
Totals	3819	4.2%	86455	95.8%]						90274

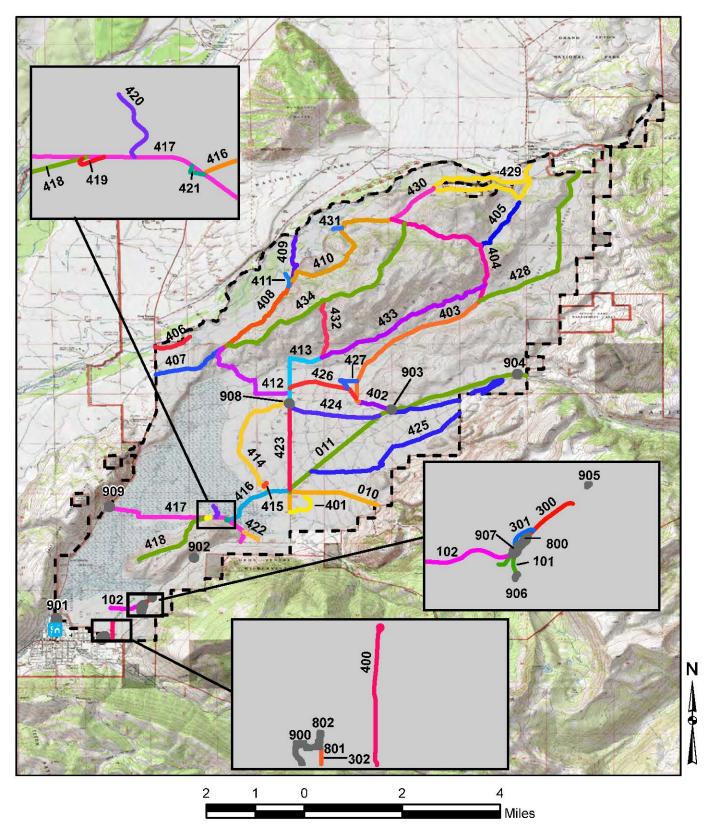
Summaries

Route Miles and Percentages by Use Type and Condition

		D	load Cond	ition Dot	ing Dubl	io/Admir	viotrotiv	a Haa				PERCENT
	Excellent		Road Condition Rat			Fair		Poor		led	TOTAL	TOTAL
USE TYPE	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES	MILES
Public (FC I-III)	0.11	1.6%	6.67	98%							6.78	11%
Admin (FC IV-V)	3.08	5.7%	39.09	72.1%	12.03	22.2%					54.20	89%
Totals	3.19	5.2%	45.76	75%	12.03	19.7%	0		4		60.98	

				Parking	onditio	n Ratin	g					PERCENT
	Excellent		Good		Fa	Fair		Poor		ed	Total	TOTAL
	Square		Square		Square		Square		Square		Square	SF
USE TYPE	Feet	%	Feet	%	Feet	%	Feet	%	Feet	%	Feet	
Public	3819	6.1%	59031	93.9%							62850	70%
Admin			27424	100%							27424	30%
Totals	3819	4.2%	86455	95.8%							90274	

NATIONAL ELK REFUGE ROUTE LOCATION MAP



ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes Yellow = Unpaved Routes

RTE #	Asset Number	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MI	UN- PAVED MI	LANES	FC
010	10026565	Curtis Canyon Road	1.77	From Refuge Road to end of route at National Forest boundary	ł.	1.77	2	1
011	10026568	Flat Creek Road	4.44	From Curtis Canyon Road (Rte 010) to end of route at National Forest boundary	ł	4.44	2	1
101	10054829	Miller House Access Road	0.11	From Miller House Pullout Parking (Rte 906) to end of route at the Miller House	-	0.11	2	2
102	10054832	West of Miller House Road	0.46	From Miller House Visitor Parking (Rte 907) to end of route	12	0.46	1	2
300	10054830	Employee and Volunteer Campground Road	0.14	From Refuge Road to end of route at Shop Parking (Rte 800)	E	0.14	2	4
301	10054830	Back of Shop Road	0.07	From Shop Parking (Rte 800) to end of loop at Shop Parking (Rte 800)	2	0.07	2	4
302	10054834	Refuge Employee/Quarters Access Road	0.05	From E Broadway NE to Employee/Staff Parking (Rte 801)	0.05	-	2	4
400	<null></null>	Wellhouse Road	0.42	From E Broadway NE to end of route at wellhouse	-	0.42	1	5
401	<null></null>	Caulkins Drive	0.60	From Curtis Canyon Road (Rte 010) to end of route at the Caulkins House	ħ,	0.60	1	5
402	10051517	Pellet Shed #11 Access Road	0.57	From National Forest Access Parking (Rte 902) to end of loop at pellet shed	4	0.57	1	5
403	10026567	Long Hollow Road	2.99	From Pellet Shed #11 Access Road (Rte 402) to end of route	t.	2.99	1	5
404	<null></null>	Northend Loop 2 Road	2.71	From Long Hollow Road (Rte 403) to Northend Loop (Rte 410)	1	2.71	1	5
405	<null></null>	Northend Loop 2 Road Spur	1.15	From Northern Loop 2 Road (Rte 404) to end of route at gate	4	1.15	1	5
406	10051523	Pierre's Pond Road	0.61	From Highway 26/89 to end of route	-k	0.61	1	5
407	<null></null>	Northgate Road	1.21	From Highway 26/89 to Pederson Road (Rte 408)	-	1.21	1	5
408	10051712	Pederson Road	1.80	From Northgate Road (Rte 407) to Northend Loop (Rte 410)	4	1.80	1	5
409	10051525	Romney Pond Access Road	0.94	From Pederson Road 20 (Rte 408) to end of route	1	0.94	1	5
410	<null></null>	Northend Loop Road	2.65	From Highlands Connect (Rte 430) to Pederson Road (Rte 408)	1	2.65	1	5
411	<null></null>	North of Pederson Water Control Road	0.27	From Pederson Road 20 (Rte 408) to end of route at water control structure		0.27	1	5
412	10051712	Northgap Road	1.88	From Northgate Road (Rte 407) to Simpson Road (Rte 413)	1	1.88	1	5
413	<null></null>	Simpson Road	1.44	From Claypit Road (Rte 432) to Peterson Road (Rte 414)	11	1.44	1	5
414	10051712	Peterson Road	2.43	From Dike Road (Rte 415) to West Crossing Road (Rte 423)	1	2.43	1	5
415	<null></null>	Dump Road	0.12	From Peterson Road (Rte 414) to end of loop at dump		0.12	1	5
416	10051711	Dike Road	1.21	From Flat Creek Road (Rte 011) to Nowlin Road (Rte 417)	1	1.21	1	5
417	10026562	Nowlin Road	2.42	From Refuge Road to Highway 26/89		2.42	2	5
418	<null></null>	Miller Butte Road	1.45	From Nowlin Road (Rte 417) to end of route	-	1.45	1	5
419	<null></null>	Feed Shed Access Road	0.09	From Nowlin Road (Rte 417) to Miller Butte Road (Rte 418)	4	0.09	1	5

ROUTE IDENTIFICATION LIST (NUMERIC)

Shading Color Key:

White = Paved Routes Yellow = Unpaved Routes

RTE #	Asset Number	ROUTE NAME	RTE MI	ROUTE DESCRIPTION	PAVED MI	UN- PAVED MI	LANES	FC
420	<null></null>	Refuge/Sleigh Ride Management Road	0.27	From Nowlin Road (Rte 417) to end of route	-	0.27	1	5
421	<null></null>	Feed Shed Access Road 2	0.06	From Nowlin Road (Rte 417) to end of loop at Nowling Road (Rte 417)	-	0.06	1	5
422	<null></null>	Carl's Cutoff Road	0.27	From Nowlin Road (Rte 417) to end of route at gate	-	0.27	1	5
423	10026564	West Crossing Road	1.75	From Flat Creek Road (Rte 011) to Peterson Road (Rte 414)	100	1.75	1	5
424	10053248	West to Flat Creek Road	1.40	From West Crossing Road (Rte 423) to Flat Ceek Road (Rte 011)	-	1.40	1	5
425	10051522	Chambers Irrigation Access Road	4.88	From Flat Ceek Road (Rte 011) to end of loop at Flat Creek Road (Rte 011)	<u>1</u> 20	4.88	1	5
426	<null></null>	McBride Road	1.15	From Long Hollow Road (Rte 403) to Simpson Road (Rte 413)	-	1.15	1	5
427	<null></null>	McBride Irrigation Road	0.46	From McBride Road (Rte 426) to Long Hollow Road (Rte 403)		0.46	1	5
428	10026567	Long Hollow East Road	3.48	From Long Hollow Road (Rte 403) to end of route at refuge boundary	-	3.48	1	5
429	<null></null>	Highlands Loop Road	3.78	From County Road to end of loop at Highlands Connect Road (Rte 430)		3.78	2	5
430	<null></null>	Highlands Connect Road	0.91	From Highlands Loop Road (Rte 429) to Northend Loop Road (Rte 410)		0.91	1	5
431	<null></null>	Bayou Overlook Road	0.14	From Northend Loop (Rte 410) to end of route	-	0.14	1	5
432	10026569	Claypit Road	1.22	From Refuge Summit Road (Rte 434) to Simpson Road (Rte 413)	-	1.22	1	5
433	10026569	Upslope Road	3.05	From Simpson Road (Rte 413) to Northern Loop 2 Road (Rte 404)		3.05	1	5
434	<null></null>	Refuge Summit Road	4.16	From Northern Loop 2 Road (Rte 404) to Pederson Road (Rte 408)	-	4.16	1	5

ROUTE IDENTIFICATION LIST (PARKING)

Shading Color Key:

Green = Unpaved Parking Lots Blue = Paved Parking Lots

RTE #	ASSET NUMBER	ROUTE NAME	RTE SQFT	ROUTE DESCRIPTION	PAVED SQFT	UN- PAVED SQFT
800	10054831	Shop Parking	11965			11965
801	10026560	Employee/Staff Parking	7745		7745	
802	10026560	Quarters Parking	7714		-	7714
900	10026594	Headquarters Parking	13624		13624	4
901	10026574	Jackson Hole Visitor Center Parking	3819		3819	-
902	10051773	National Forest Access	3048		÷.	3048
903	10051774	Flat Creek Parking #1	7106		-	7106
904	10051775	Flat Creek Parking #2	8389		-	8389
905	<null></null>	Wetlands Pullout Lot	639			639
906	10053254	Miller House Pullout Parking	1051		1- 1	1051
907	10054827	Miller House Visitor Parking	7231		-	7231
908	10053259	Hunt West Parking #2	4585		÷	4585
909	10053254	Sleigh Ride Parking	13358		L-	13358

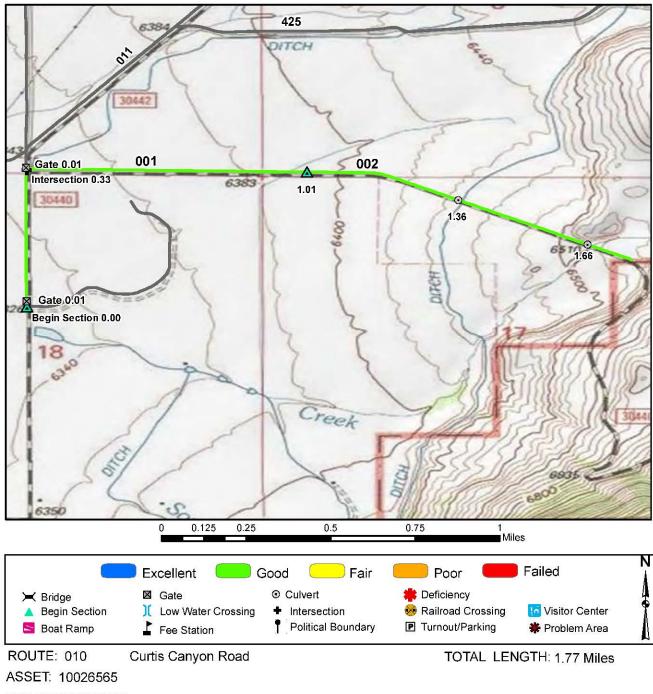
CHANGES TO THE FISH AND WILDLIFE SERVICE ROAD INVENTORY REPORT

Rou	utes added to	previous inventory	:	No routes added to previous inventory.
	Rte #	Rte Name		
1.			Rte Desc:	
			Reason for Addition:	
2.			Rte Desc:	
			Reason for Addition:	
3.			Rte Desc:	
0.			Reason for Addition:	

Rou	utes remov	ed from previous invento	ry:		No routes removed from previous inventory.
	Rte #	Rte Name			
1.			Rte Desc:		
			Reason for F	Removal:	
2.			Rte Desc:		
i Stand			Reason for F	Removal:	
3.			Rte Desc:		
			Reason for F	Removal:	

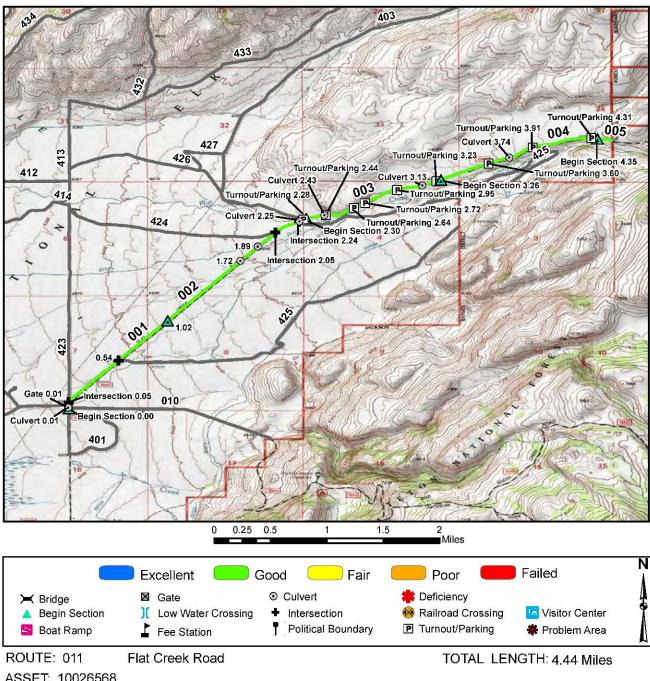
Rou	utes modifi	ed from previous invento	ory:	No routes modified from previous inventory.
	Rte #	Rte Name		-
1.			Rte Desc:	
6105			Modification:	
2.			Rte Desc:	
			Modification:	
3.			Rte Desc:	
			Modification:	

Comments:



RTE DESCRIPTION: From Refuge Road to end of route at National Forest boundary

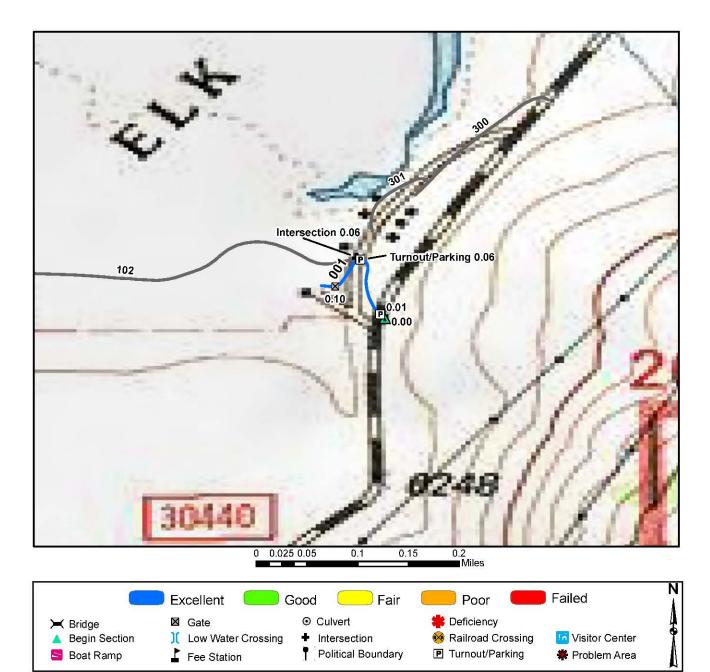
	10		93	
Section Number Section Length (miles) Inspection Date	001 1.01 8/14/2008	002 0.76 8/14/2008		
Section Information	a	I		
Surface Type	Gravel	Gravel		
Number of Lanes	2	2		
Roadway Width (feet)	22	22		
Roadway Condition Information				
Condition	Good	Good		
Remaining Service Life (years)	6	6		
Cost Estimate	\$1500	\$1200		
CRV	\$655200	\$493000		
	<i>Q000200</i>			



ASSET: 10026568

RTE DESCRIPTION: From Curtis Canyon Road (Rte 010) to end of route at National Forest boundary

Section Number Section Length (miles) Inspection Date	001 1.02 8/14/2008	002 1.28 8/14/2008	003 0.95 8/14/2008	004 1.09 8/14/2008	005 0.10 8/14/2008
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 2 16	Gravel 2 16	Gravel 1 15	Gravel 1 15	Gravel 1 15
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$1600 \$661700	Good 7 \$1900 \$830300	Good 7 \$1400 \$616300	Good 5 \$1700 \$707100	Good 7 \$200 \$64900



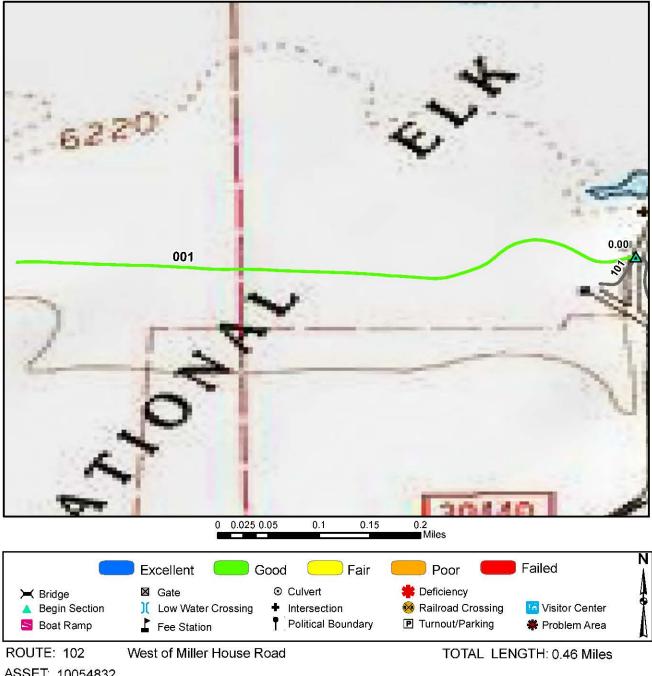
ROUTE: 101 Miller House Access Road

TOTAL LENGTH: 0.11 Miles

ASSET: 10054829

RTE DESCRIPTION: From Miller House Pullout Parking (Rte 906) to end of route at the Miller House

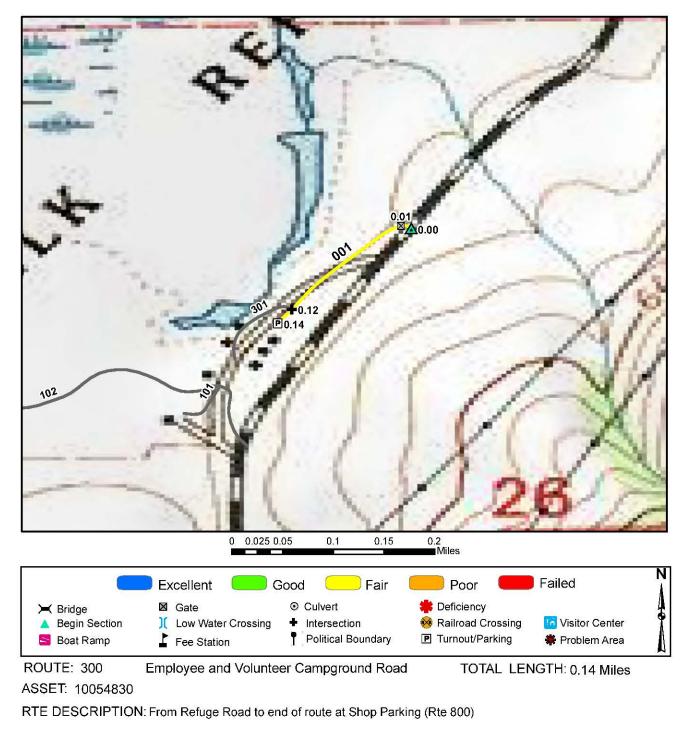
			-	à i
Section Number Section Length (miles) Inspection Date	001 0.11 8/14/2008			
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 2 16			
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 8 \$0 \$71400			



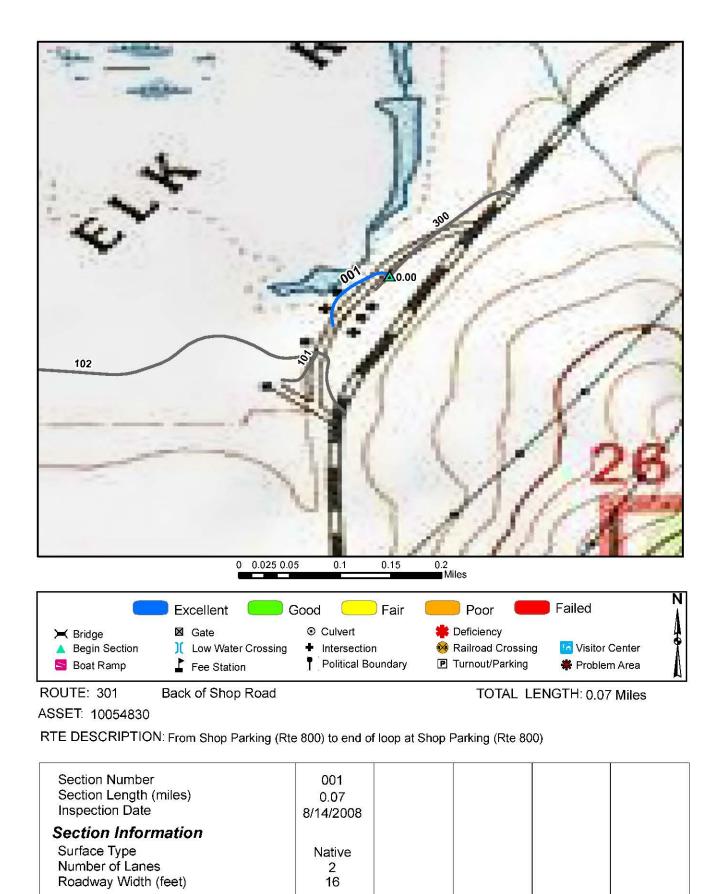
ASSET: 10054832

RTE DESCRIPTION: From Miller House Visitor Parking (Rte 907) to end of route

	40. · · · · · · · · · · · · · · · · · · ·	 	
Section Number Section Length (miles) Inspection Date	001 0.46 8/14/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Native 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 5 \$700 \$154400		

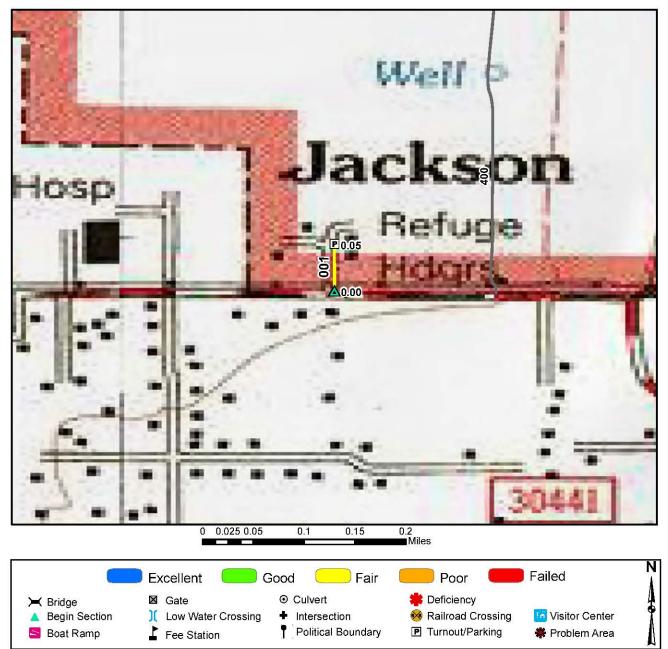


Section Number Section Length (miles) Inspection Date	001 0.14 8/14/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Native 2 16		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Fair 3 \$300 \$47000		



Roadway Condition Information Condition

Excellent Remaining Service Life (years) 8 \$0 Cost Estimate \$23500 CRV



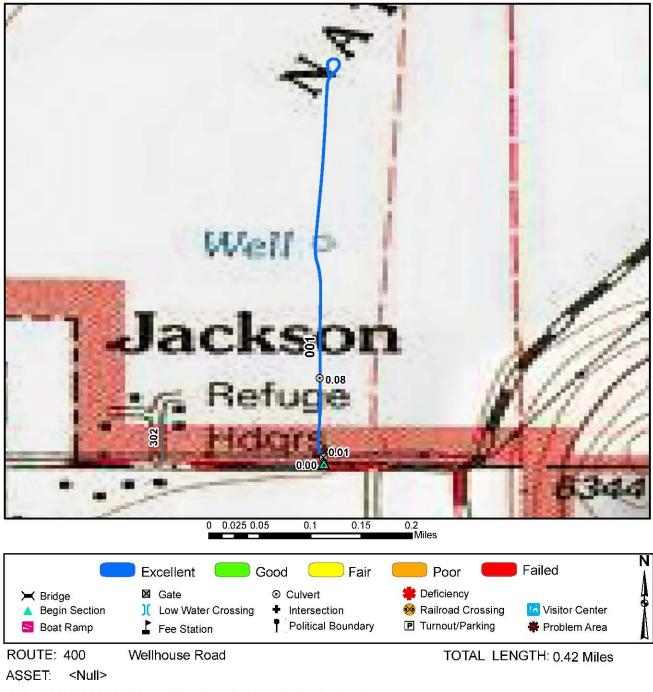
ROUTE: 302 Refuge Employee/Quarters Access Road

TOTAL LENGTH: 0.05 Miles

ASSET: 10054834

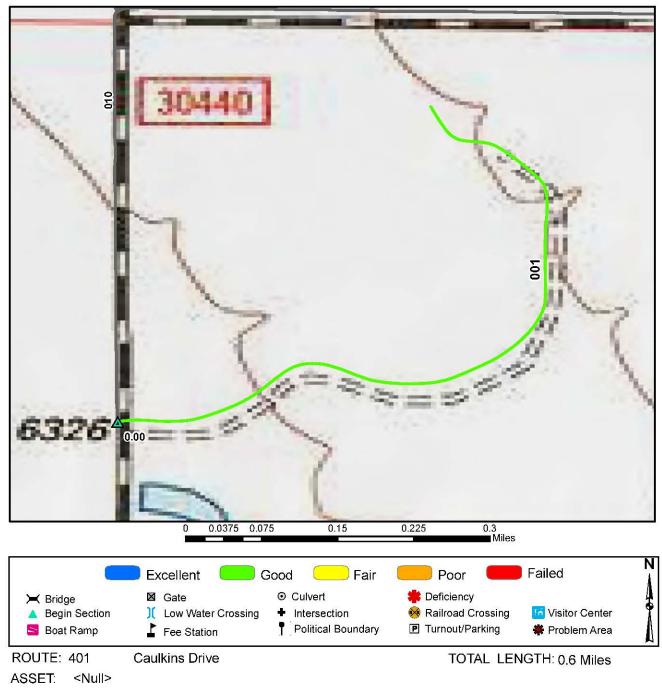
RTE DESCRIPTION: From E Broadway NE to Employee/Staff Parking (Rte 801)

Section Number Section Length (miles) Inspection Date	001 0.05 8/17/2008			
Section Information Surface Type Number of Lanes Roadway Width (feet)	Asphalt 2 20			
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Fair 12 \$5100 \$56300			



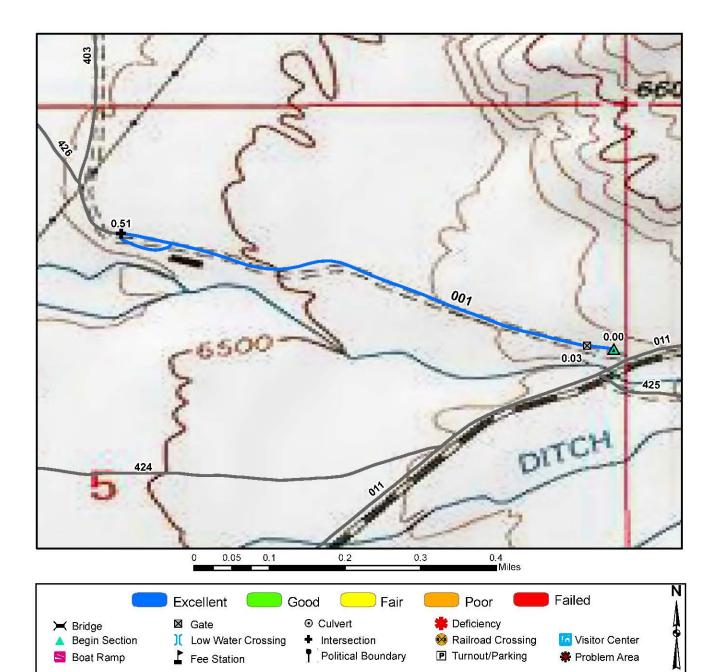
RTE DESCRIPTION: From E Broadway NE to end of route at wellhouse

Section Number Section Length (miles) Inspection Date	001 0.42 8/14/2008		
Section Information			
Surface Type	Gravel		
Number of Lanes	1		
Roadway Width (feet)	10		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	9		
Cost Estimate	\$0		
CRV	\$272500		



RTE DESCRIPTION: From Curtis Canyon Road (Rte 010) to end of route at the Caulkins House

			(1)	
Section Number Section Length (miles) Inspection Date	001 0.60 8/14/2008			
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 8			
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$900 \$389200			



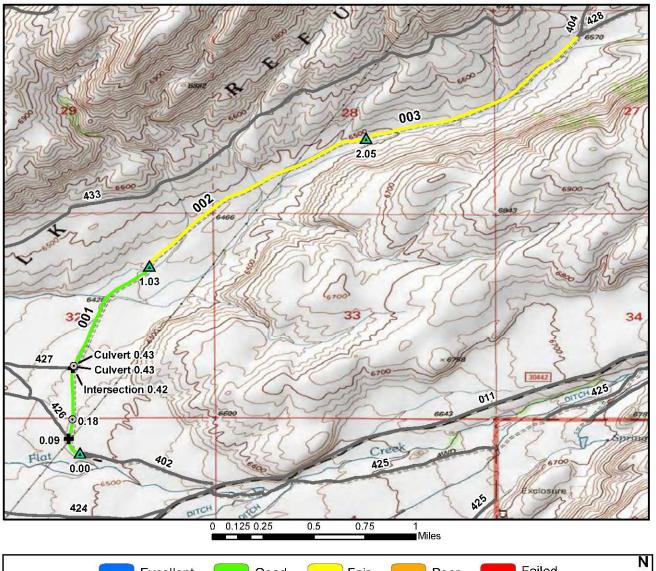
ROUTE: 402 Pellet Shed #11 Access Road

TOTAL LENGTH: 0.57 Miles

ASSET: 10051517

RTE DESCRIPTION: From National Forest Access Parking (Rte 902) to end of loop at pellet shed

Section Number Section Length (miles) Inspection Date	001 0.57 8/14/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 10		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate			
CRV	\$369800		

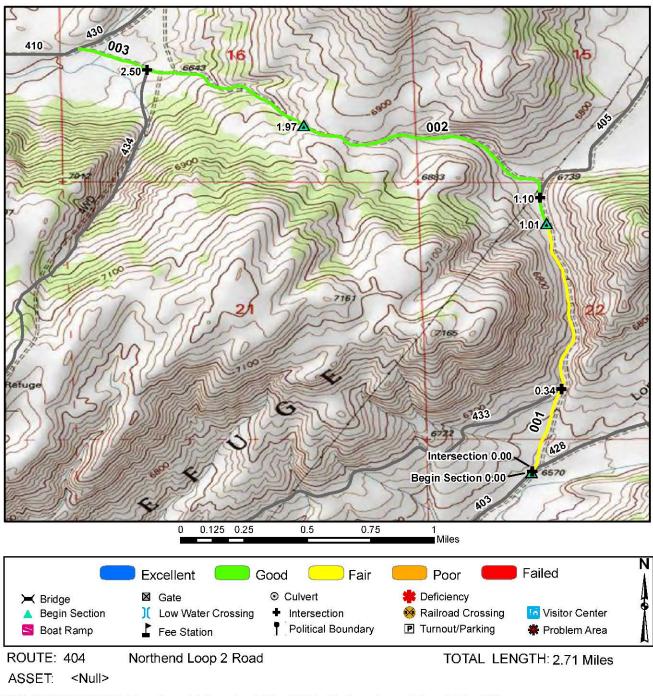


		Good Eair	Poor Poor	Failed	Ā
 Bridge Begin Section Boat Ramp 	Gate Gate Crossing Fee Station	 Culvert Intersection Political Boundary 	 Deficiency Railroad Crossing Turnout/Parking 	 In Visitor Center ₩ Problem Area 	Ĩ
ROUTE: 403	Long Hollow Road		TOTAL LEN	IGTH: 2.99 Miles	

ASSET: 10026567

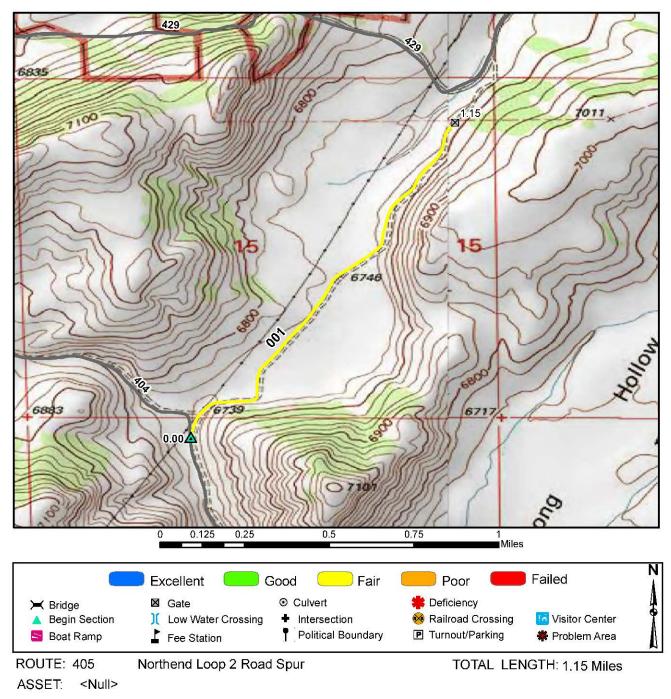
RTE DESCRIPTION: From Pellet Shed #11 Access Road (Rte 402) to end of route

	71	<u> </u>		22 C	2 · · · · · · · · · · · · · · · · · · ·
Section Number Section Length (miles) Inspection Date	001 1.03 8/14/2008	002 1.02 8/14/2008	003 0.94 8/14/2008		
Section Information					
Surface Type	Gravel	Gravel	Gravel		
Number of Lanes	1	1	1		
Roadway Width (feet)	10	10	10		
Roadway Condition Information					
Condition	Good	Fair	Fair		
Remaining Service Life (years)	5	4	4		
Cost Estimate	\$1600	\$3400	\$3200		
CRV	\$668200	\$661700	\$609800		
					1



RTE DESCRIPTION: From Long Hollow Road (Rte 403) to Northern Loop 2 Road (Rte 404)

Section Number Section Length (miles) Inspection Date	001 1.01 8/14/2008	002 0.95 8/14/2008	003 0.75 8/14/2008	
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 8	Primitive 1 8	Primitive 1 8	
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Fair 3 \$3400 \$655200	Good 5 \$400 \$0	Good 5 \$300 \$0	

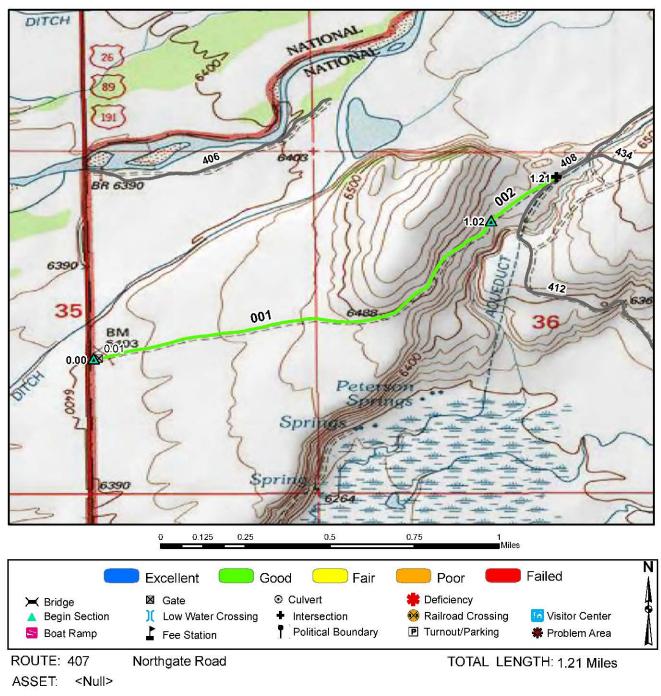


RTE DESCRIPTION: From Northern Loop 2 Road (Rte 404) to end of route at gate

	1		T .	
001 1.15 8/14/2008				
Primitive				
1				
8				
Fair				
3				
\$800				
\$0				
	1.15 8/14/2008 Primitive 1 8 Fair 3 \$800	1.15 8/14/2008 Primitive 1 8 Fair 3 \$800	1.15 8/14/2008 Primitive 1 8 Fair 3 \$800	1.15 8/14/2008 Primitive 1 8 Fair 3 \$800

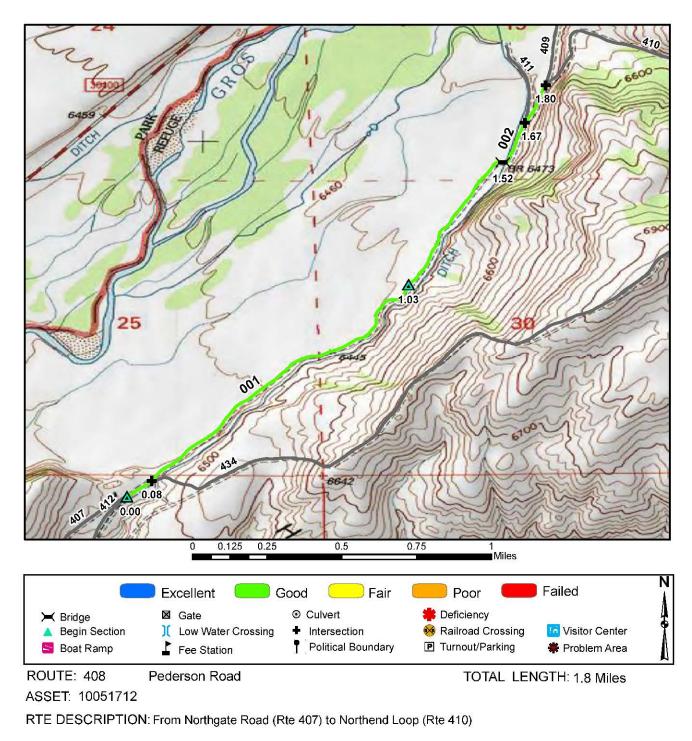
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		1	/	11111
6390	1	// /	1	
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14	0 0.05 0.1	0.2 0.3	0.4	hear Mill
			Miles	
				N N
	Excellent C	Good Coord Fair	Poor 🧲	Failed
a b graddar a con	Gate Gate	 Oulvert 	# Deficiency	Visitor Center
	Low Water Crossing	 Intersection Delitical Baundanu 	Railroad Crossing	
Soat Ramp	Fee Station	Political Boundary	Turnout/Parking	🏶 Problem Area
ROUTE: 406 Pi	erre's Pond Road		TOTAL LE	NGTH: 0.61 Miles
ASSET: 10051523				
RTE DESCRIPTION: F	rom Highway 26/89 to	end of route		
	Torring inway 20100 to .			
		224		
Section Number	(ac)	001		
Section Length (mile Inspection Date	co)	0.61 8/15/2008		
	tion	0/10/2000		
Section Informa	uon			

Section InformationSurface TypeGravelNumber of Lanes1Roadway Width (feet)8Roadway Condition InformationConditionGoodRemaining Service Life (years)7Cost Estimate\$900CRV\$395700

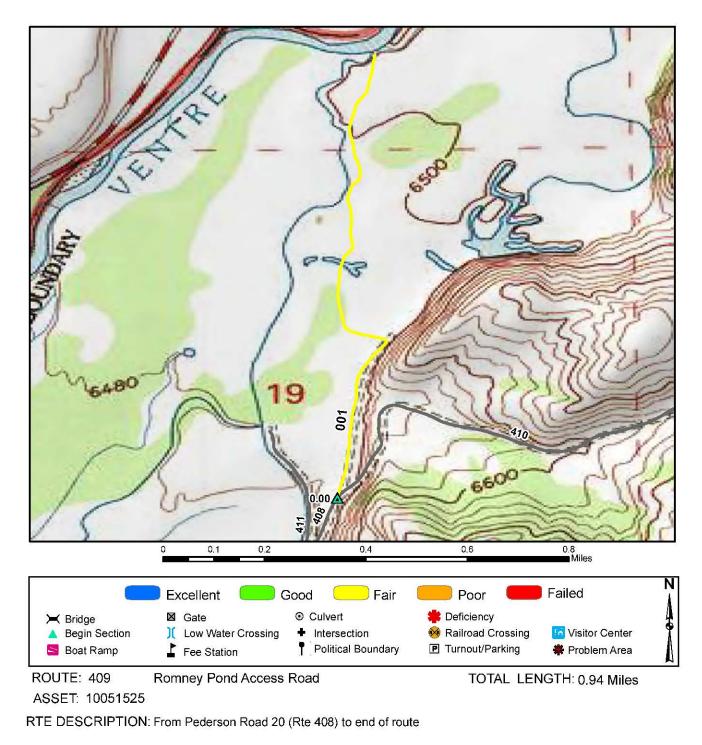


RTE DESCRIPTION: From Highway 26/89 to Pederson Road (Rte 408)

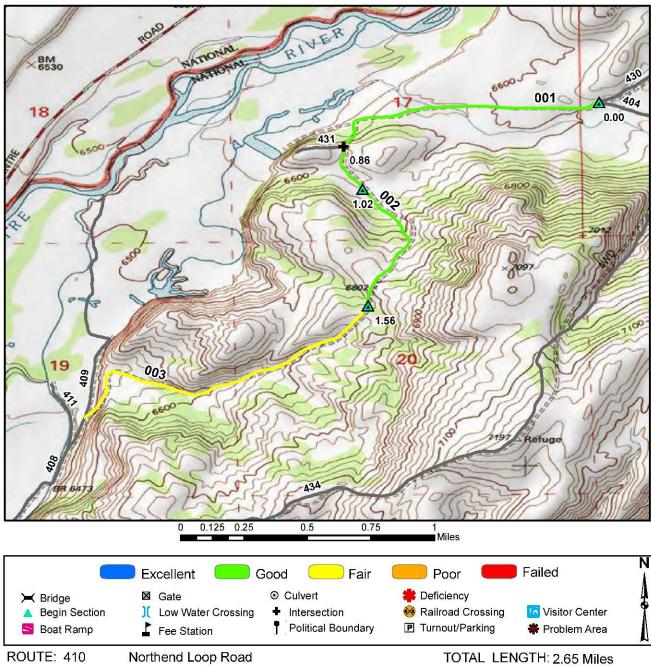
Section Number Section Length (miles) Inspection Date	001 1.02 8/15/2008	002 0.19 8/15/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 8	Gravel 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 5 \$400 \$0	Good 5 \$300 \$123300		



Section Number Section Length (miles) Inspection Date	001 1.03 8/15/2008	002 0.77 8/15/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 8	Gravel 1 8		
Roadway Condition Information				
Condition	Good	Good		
Remaining Service Life (years)	7	5		
Cost Estimate	\$1600	\$1200		
CRV	\$668200	\$499500		



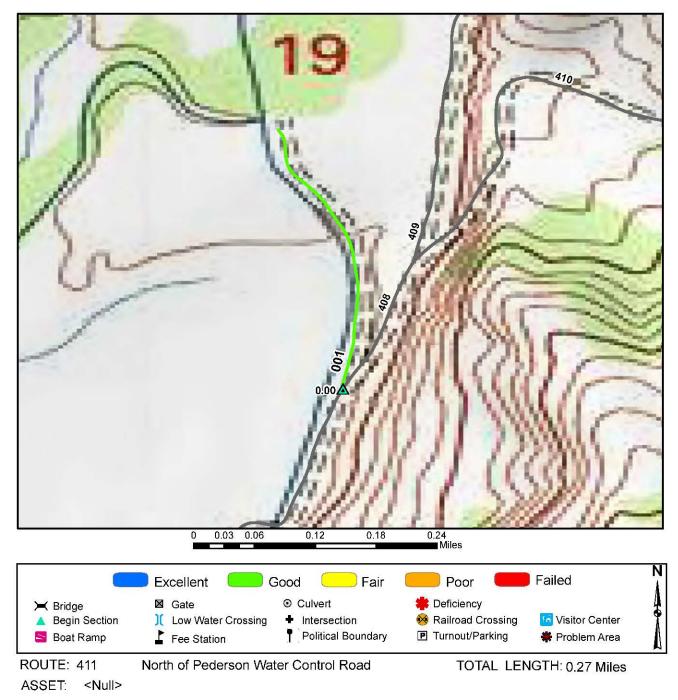
Section Number Section Length (miles) Inspection Date	001 0.94 8/15/2008		
Section Information			
Surface Type	Primitive		
Number of Lanes	1		
Roadway Width (feet)	8		
Roadway Condition Information			
Condition	Fair		
Remaining Service Life (years)	3		
Cost Estimate	\$600		
CRV	\$0		



ASSET: <Null>

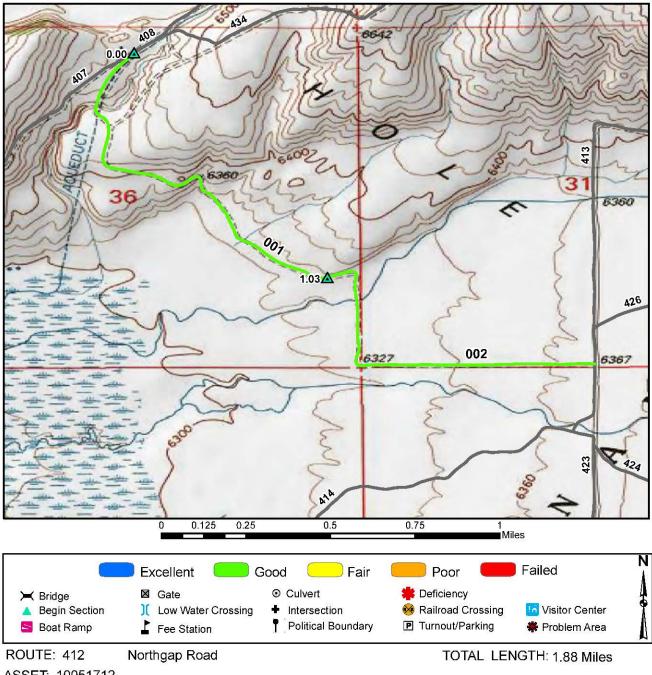
RTE DESCRIPTION: From Highlands Connect (Rte 430) to Pederson Road (Rte 408)

Section Number Section Length (miles) Inspection Date	001 1.02 8/16/2008	002 0.54 8/16/2008	003 1.09 8/16/2008	
Section Information	Deinsitiere	Orrest	Duinaitian	
Surface Type Number of Lanes	Primitive	Gravel 1	Primitive 1	
Roadway Width (feet)	8	8	8	
Roadway Condition Information				
Condition	Good	Good	Fair	
Remaining Service Life (years)	7	5	3	
Cost Estimate	\$400	\$800	\$700	
CRV	\$0	\$350300	\$0	



RTE DESCRIPTION: From Pederson Road 20 (Rte 408) to end of route at water control structure

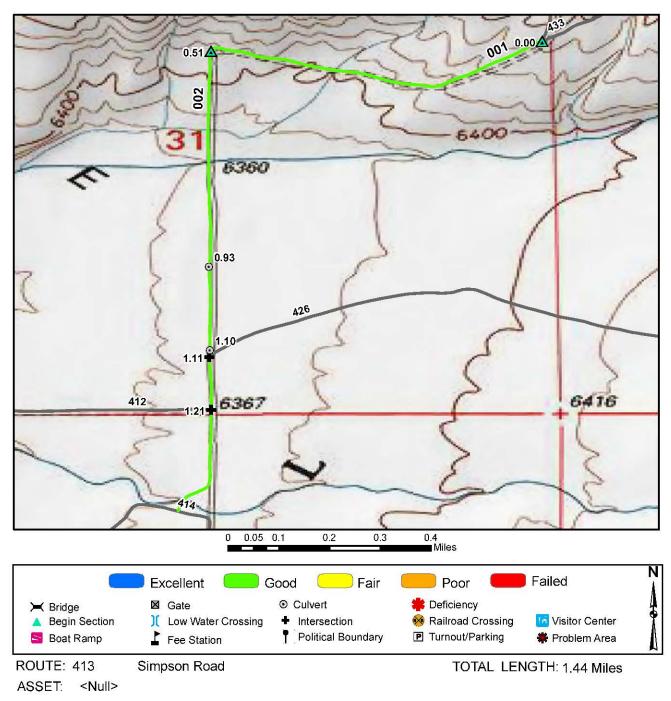
			T .	
Section Number Section Length (miles) Inspection Date	001 0.27 8/15/2008			
Section Information				
Surface Type	Primitive			
Number of Lanes	1			
Roadway Width (feet)	8			
Roadway Condition Information				
Condition	Good			
Remaining Service Life (years)	7			
Cost Estimate	\$100			
CRV	\$0			



ASSET: 10051712

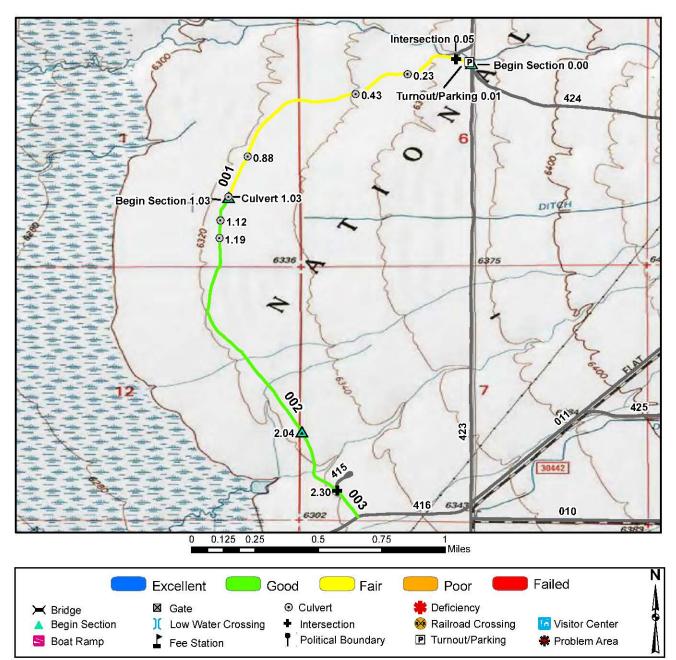
RTE DESCRIPTION: From Northgate Road (Rte 407) to Simpson Road (Rte 413)

	30. · · · · · · · · · · · · · · · · · · ·			
Section Number Section Length (miles) Inspection Date	001 1.03 8/15/2008	002 0.85 8/15/2008		
Section Information				
Surface Type	Gravel	Gravel		
Number of Lanes	1	1		
Roadway Width (feet)	8	8		
Roadway Condition Information				
Condition	Good	Good		
Remaining Service Life (years)	7	7		
Cost Estimate	\$1600	\$1300		
CRV	\$668200	\$551400		



RTE DESCRIPTION: From Claypit Road (Rte 432) to Peterson Road (Rte 414)

	30. · · · · · · · · · · · · · · · · · · ·			13
Section Number Section Length (miles) Inspection Date	001 0.51 8/15/2008	002 0.93 8/15/2008		
Section Information				
Surface Type	Primitive	Gravel		
Number of Lanes	1	1		
Roadway Width (feet)	8	8		
Roadway Condition Information				
Condition	Good	Good		
Remaining Service Life (years)	6	7		
Cost Estimate	\$200	\$1400		
CRV	\$0	\$603300		



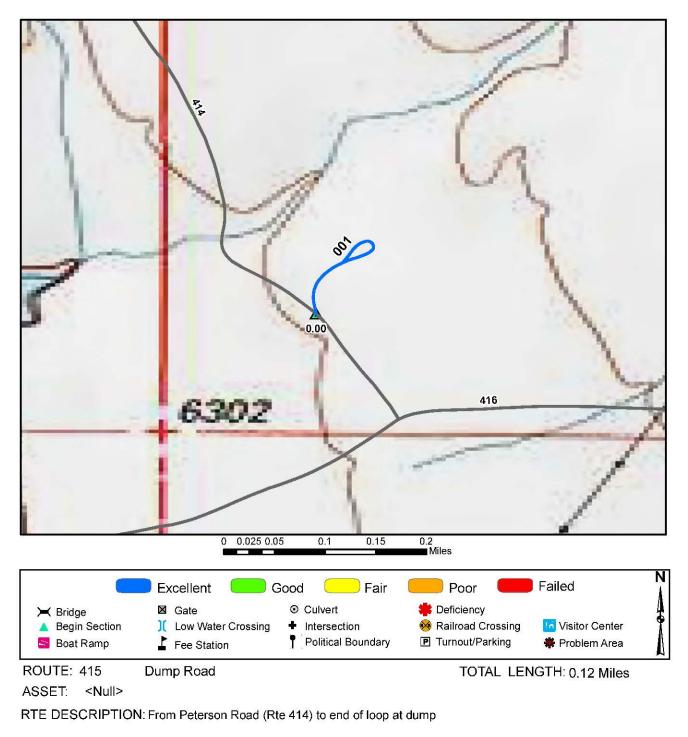
ROUTE: 414 Peterson Road

TOTAL LENGTH: 2.43 Miles

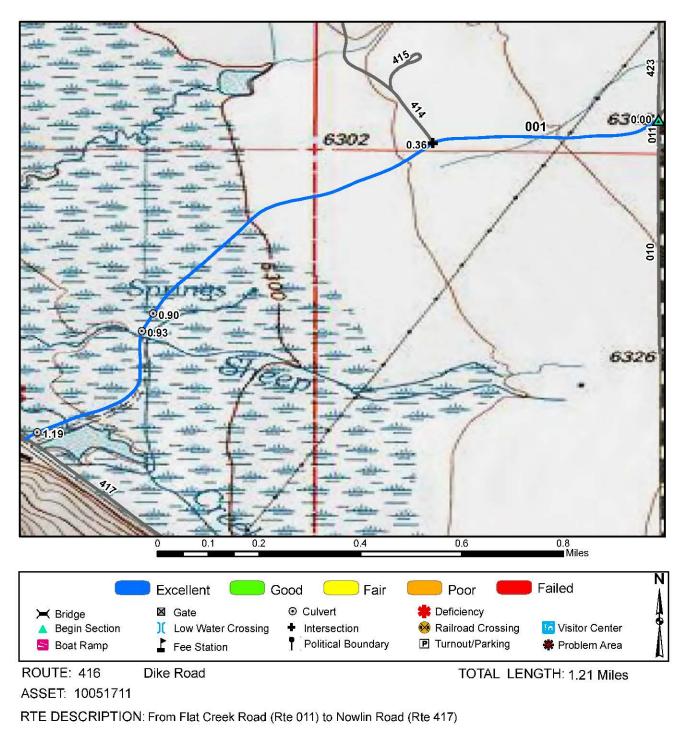
ASSET: 10051712

RTE DESCRIPTION: From Dike Road (Rte 415) to West Crossing Road (Rte 423)

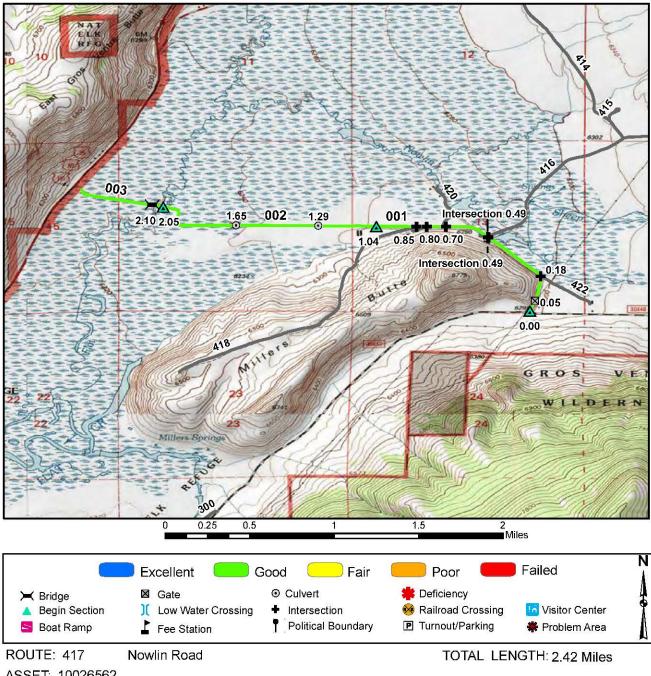
Section Number	001	002	003	
Section Length (miles)	1.03	1.01	0.39	
Inspection Date	8/15/2008	8/15/2008	8/15/2008	
Section Information Surface Type	Gravel	Gravel	Gravel	
Number of Lanes	1	1	1	
Roadway Width (feet)	8	8	8	
Roadway Condition Information				
Condition	Fair	Good	Good	
Remaining Service Life (years)	3	5	5	
Cost Estimate	\$3500	\$1500	\$600	
CRV	\$668200	\$655200	\$253000	



Section Number Section Length (miles) Inspection Date	001 0.12 8/15/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 8 \$0 \$77800		



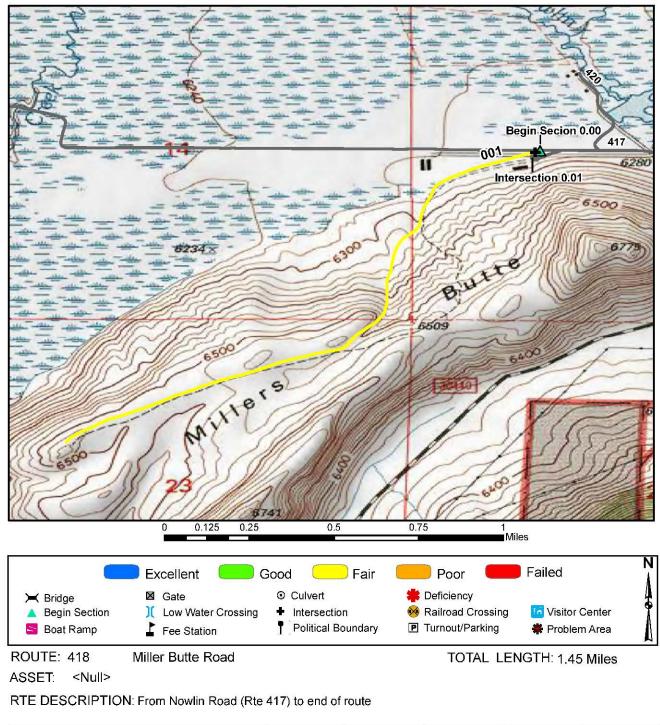
Section Number Section Length (miles) Inspection Date	001 1.21 8/15/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 8 \$0 \$784900		



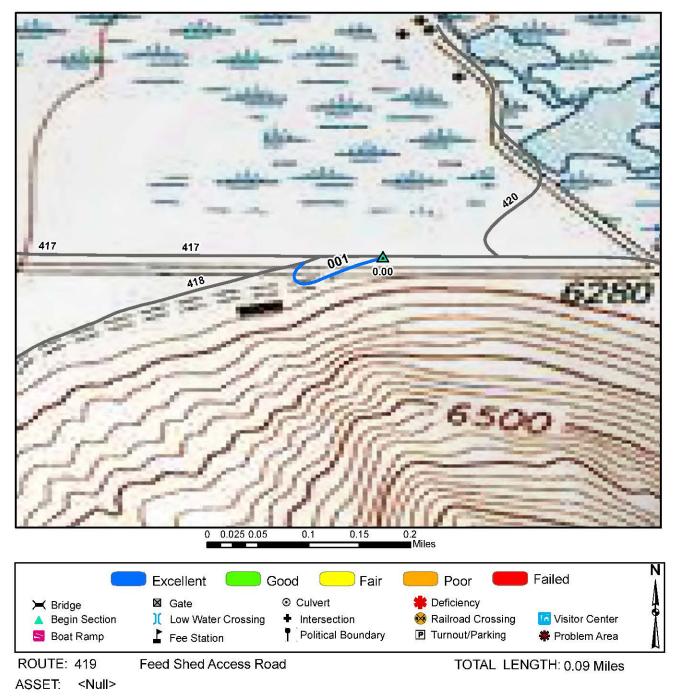
ASSET: 10026562

RTE DESCRIPTION: From Refuge Road to Highway 26/89

Section Number Section Length (miles) Inspection Date	001 1.04 8/15/2008	002 1.01 8/15/2008	003 0.37 8/15/2008	
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 2 18	Gravel 1 14	Gravel 1 14	
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$1600 \$674600	Good 7 \$1500 \$655200	Good 7 \$600 \$240000	

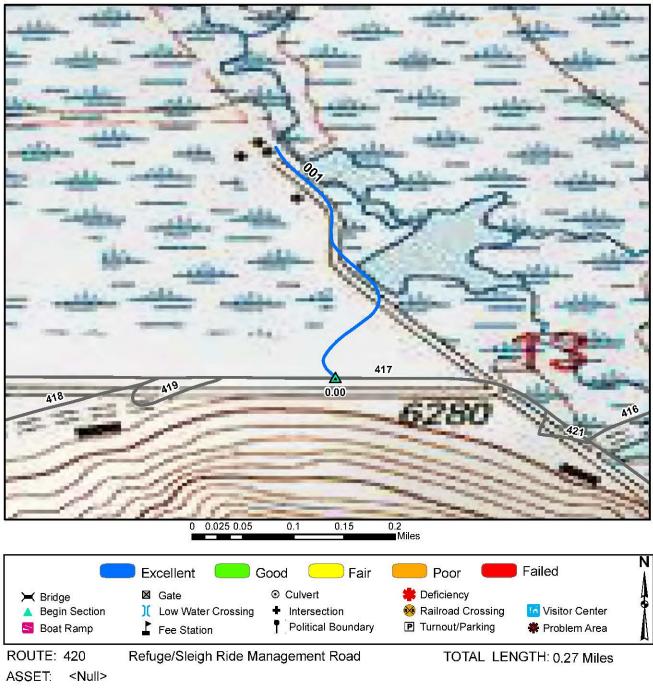


Section Number Section Length (miles) Inspection Date	001 1.45 8/15/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Native 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Fair 3 \$2900 \$486600		



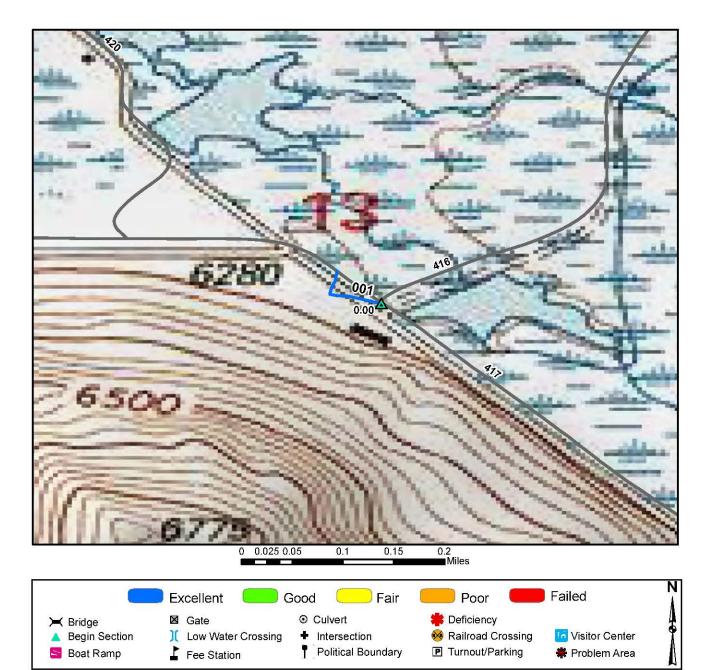
RTE DESCRIPTION: From Nowlin Road (Rte 417) to Miller Butte Road (Rte 418)

Section Number Section Length (miles) Inspection Date	001 0.09 8/15/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 10		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 8 \$0 \$58400		



RTE DESCRIPTION: From Nowlin Road (Rte 417) to end of route

	1 T			
001 0.27 8/15/2008				
Gravel				
1				
10				
Excellent				
8				
\$0				
\$175100				
	0.27 8/15/2008 Gravel 1 10 Excellent 8	0.27 8/15/2008 Gravel 1 10 Excellent 8 \$0	0.27 8/15/2008 Gravel 1 10 Excellent 8 \$0	0.27 8/15/2008 Gravel 1 10 Excellent 8 \$0



ROUTE: 421 Feed Shed Access Road 2

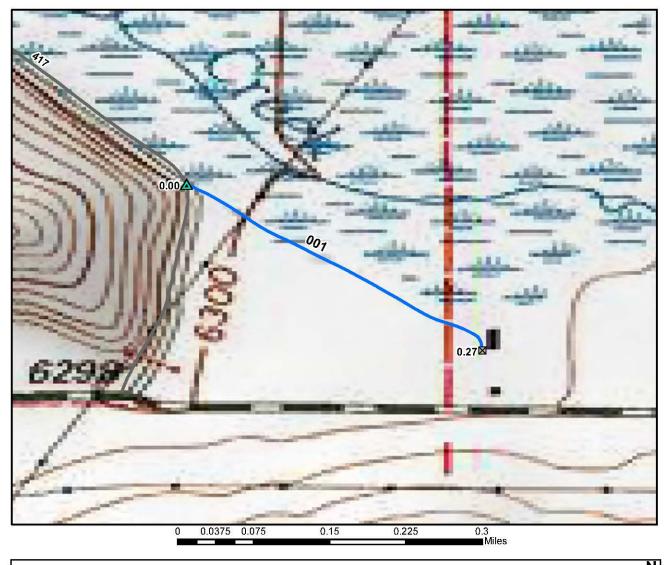
TOTAL

TOTAL LENGTH: 0.06 Miles

ASSET: <Null>

RTE DESCRIPTION: From Nowlin Road (Rte 417) to end of loop at Nowling Road (Rte 417)

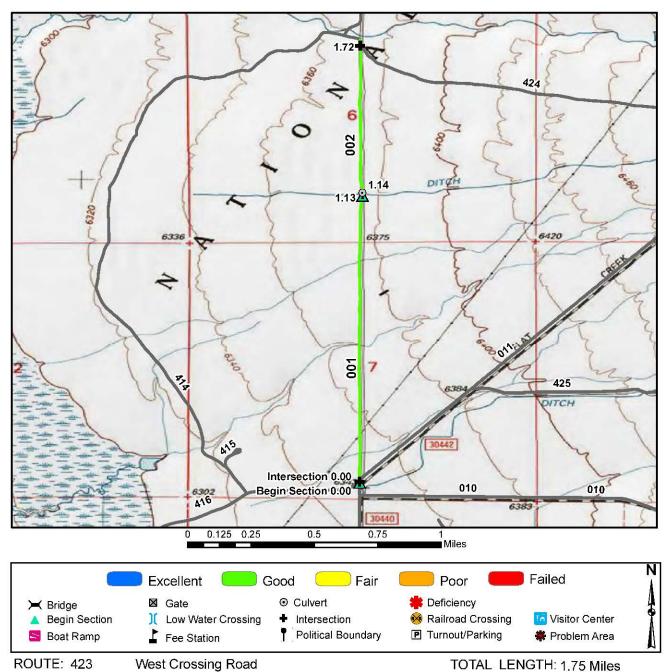
		· · · · · · · · · · · · · · · · · · ·		2
Section Number Section Length (miles) Inspection Date	001 0.06 8/15/2008			
Section Information Surface Type	Gravel			
Number of Lanes Roadway Width (feet)	1 10			
Roadway Condition Information				
Condition	Excellent			
Remaining Service Life (years) Cost Estimate CRV	8 \$0 \$38900			



	🔵 Excellent 🛛 💭 Good 📃 Fair	Poor Failed
 ➢ Bridge ▲ Begin Section Soat Ramp 	☑ Gate ⑤ Culvert ∬ Low Water Crossing ➡ Intersection ▲ Fee Station ♥ Political Boundary	 Deficiency Sealtroad Crossing Model Visitor Center Intermediate Turnout/Parking
ROUTE: 422	Carl's Cutoff Road	TOTAL LENGTH: 0.27 Miles
ASSET: <null></null>		

RTE DESCRIPTION: From Nowlin Road (Rte 417) to end of route at gate

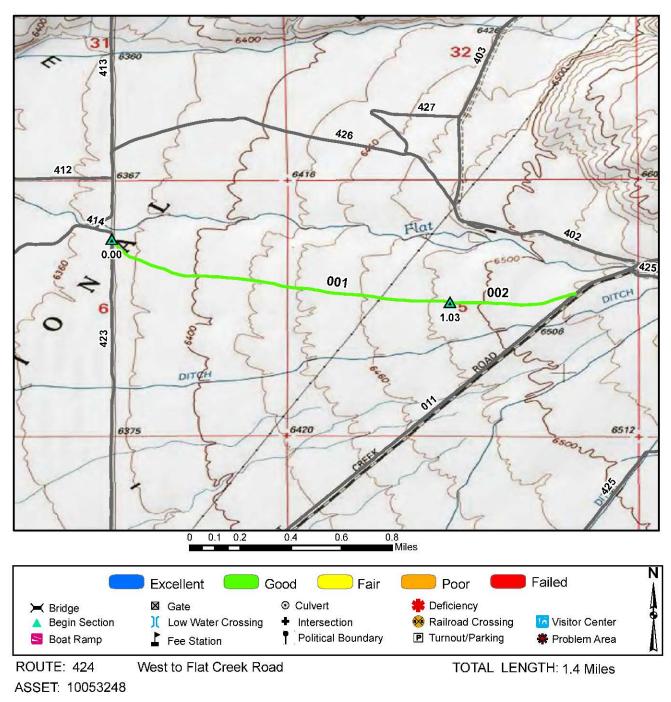
Section Number Section Length (miles) Inspection Date	001 0.27 8/15/2008			
Section Information				
Surface Type	Gravel			
Number of Lanes	1			
Roadway Width (feet)	10			
Roadway Condition Information				
Condition	Excellent			
Remaining Service Life (years)	8			
Cost Estimate	\$0			
CRV	\$175100			
			1	



ASSET: 10026564

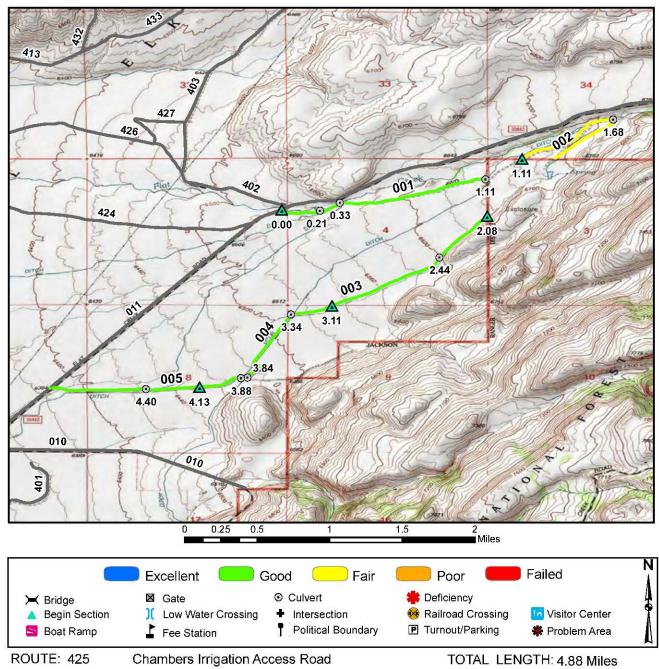
RTE DESCRIPTION: From Flat Creek Road (Rte 011) to Peterson Road (Rte 414)

	<u> </u>	-	P	20	1
Section Number Section Length (miles) Inspection Date	001 1.13 8/16/2008	002 0.62 8/16/2008			
Section Information					
Surface Type	Gravel	Gravel			
Number of Lanes	1	1			
Roadway Width (feet)	12	12			
Roadway Condition Information					
Condition	Good	Good			
Remaining Service Life (years)	7	7			
Cost Estimate	\$1700	\$900			
CRV	\$733000	\$402200			
		1			



RTE DESCRIPTION: From West Crossing Road (Rte 423) to Flat Ceek Road (Rte 011)

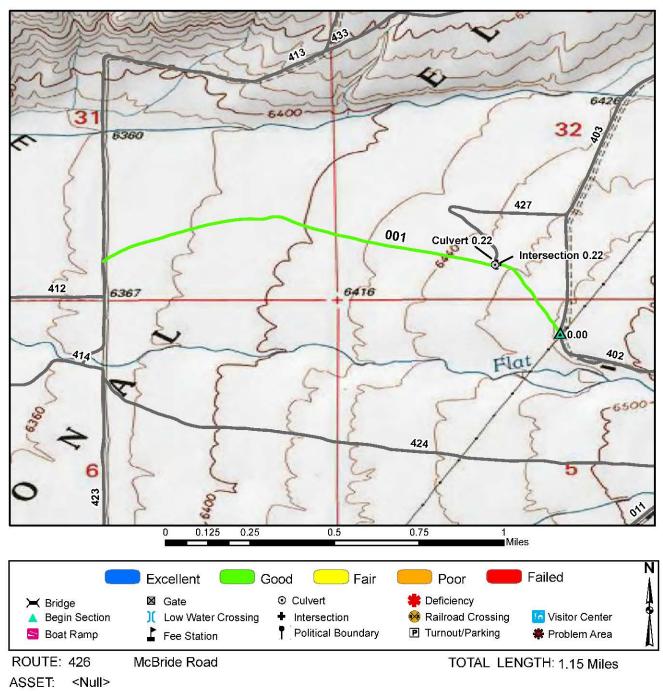
Section Number Section Length (miles) Inspection Date	001 1.03 8/16/2008	002 0.37 8/16/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 8	Gravel 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$1600 \$668200	Good 7 \$600 \$240000		



ASSET: 10051522

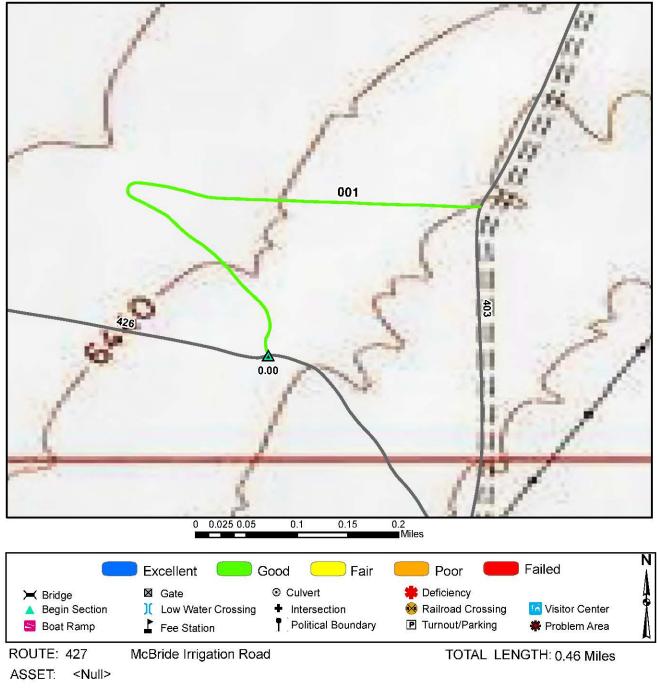
RTE DESCRIPTION: From Flat Ceek Road (Rte 011) to end of loop at Flat Creek Road (Rte 011)

Section Number Section Length (miles) Inspection Date	001 1.11 8/16/2008	002 0.97 8/16/2008	003 1.02 8/16/2008	004 1.02 8/16/2008	005 0.76 8/16/2008
Section Information Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 8	Primitive 1 8	Primitive 1 8	Gravel 1 8	Gravel 1 8
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 5 \$500 \$0	Fair 3 \$600 \$0	Good 5 \$400 \$0	Good 5 \$1600 \$661700	Good 7 \$1200 \$493000



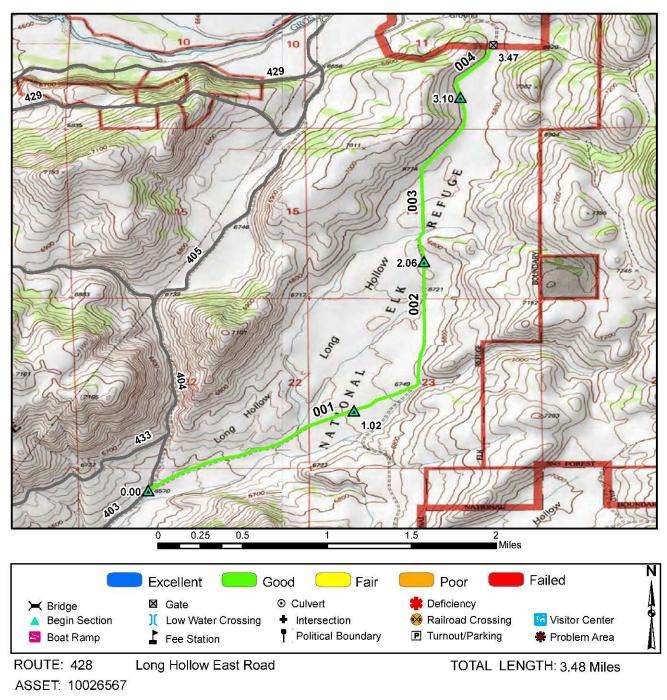
RTE DESCRIPTION: From Long Hollow Road (Rte 403) to Simpson Road (Rte 413)

Section Number Section Length (miles) Inspection Date	001 1.15 8/16/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$1700 \$746000		



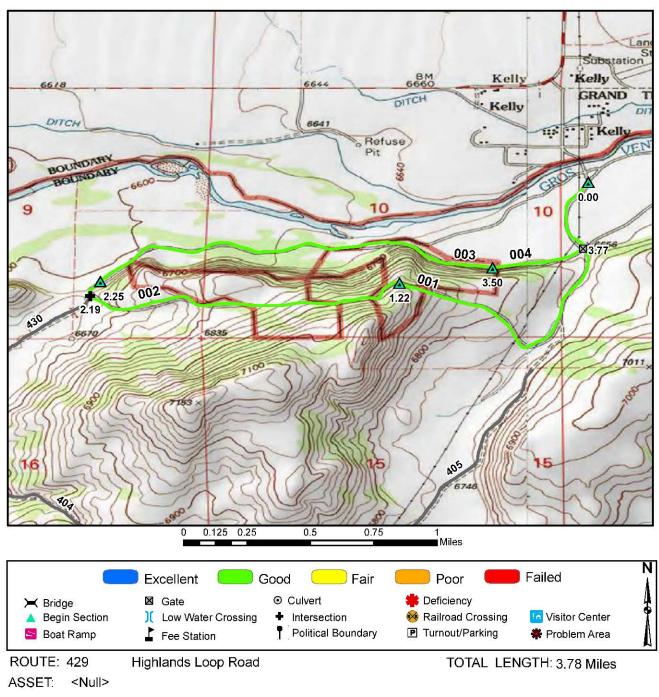
RTE DESCRIPTION: From McBride Road (Rte 426) to Long Hollow Road (Rte 403)

		1		1
Section Number Section Length (miles) Inspection Date	001 0.46 8/16/2008			
Section Information				
Surface Type	Primitive			
Number of Lanes	1			
Roadway Width (feet)	8			
Roadway Condition Information	1			
Condition	Good			
Remaining Service Life (years)	5			
Cost Estimate	\$200			
CRV	\$0			
New Address of the State of the State of Cases of Cases of Cases of Cases of Cases	\$200 \$0			



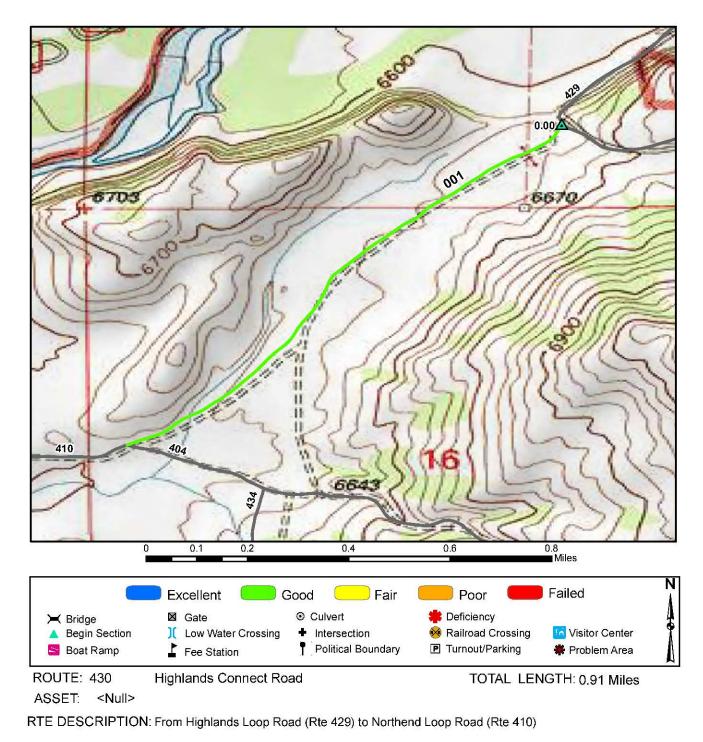
RTE DESCRIPTION: From Long Hollow Road (Rte 403) to end of route at refuge boundary

Section Number Section Length (miles) Inspection Date	001 1.02 8/16/2008	002 1.05 8/16/2008	003 1.04 8/16/2008	004 0.37 8/16/2008	
Section Information					
Surface Type	Primitive	Primitive	Primitive	Primitive	
Number of Lanes	1	1	1	1	
Roadway Width (feet)	8	8	8	8	
Roadway Condition Information					
Condition	Good	Good	Good	Good	
Remaining Service Life (years)	5	5	5	5	
Cost Estimate	\$400	\$400	\$400	\$200	
CRV	\$0	\$0	\$0	\$0	

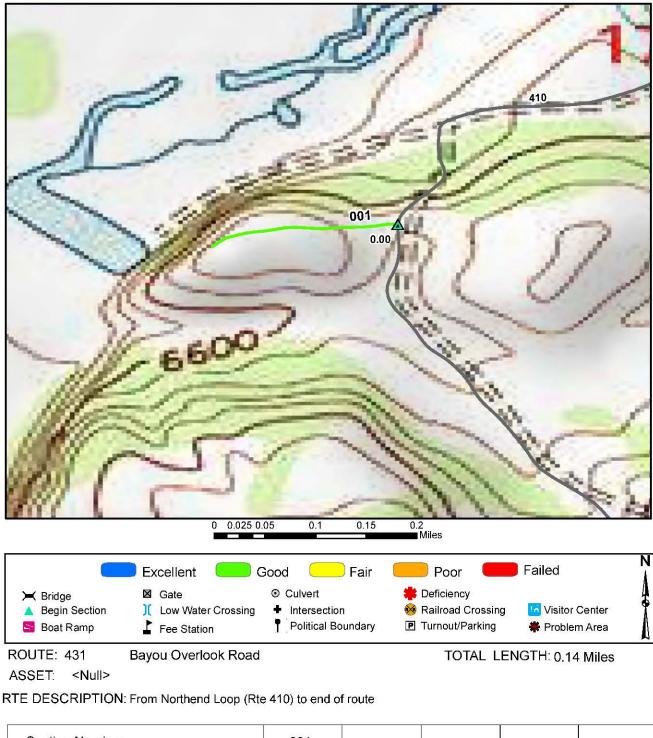


RTE DESCRIPTION: From County Road to end of loop at Highlands Connect Road (Rte 430)

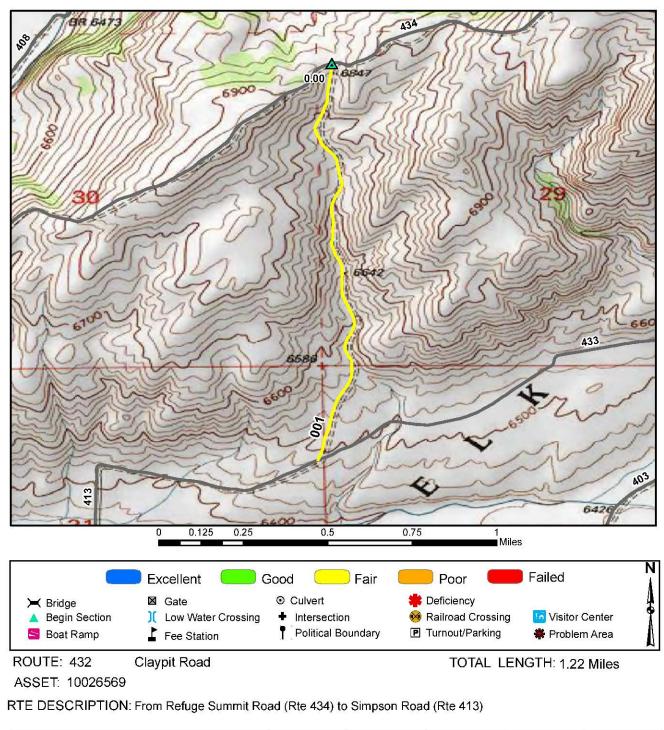
Section Number Section Length (miles) Inspection Date	001 1.22 8/16/2008	002 1.04 8/16/2008	003 1.24 8/16/2008	004 0.28 8/16/2008	
Section Information Surface Type Number of Lanes Roadway Width (feet)	Gravel 2 24	Gravel 2 16	Gravel 2 18	Gravel 2 18	
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$1900 \$791400	Good 7 \$1600 \$674600	Good 7 \$1900 \$804400	Good 7 \$400 \$181600	



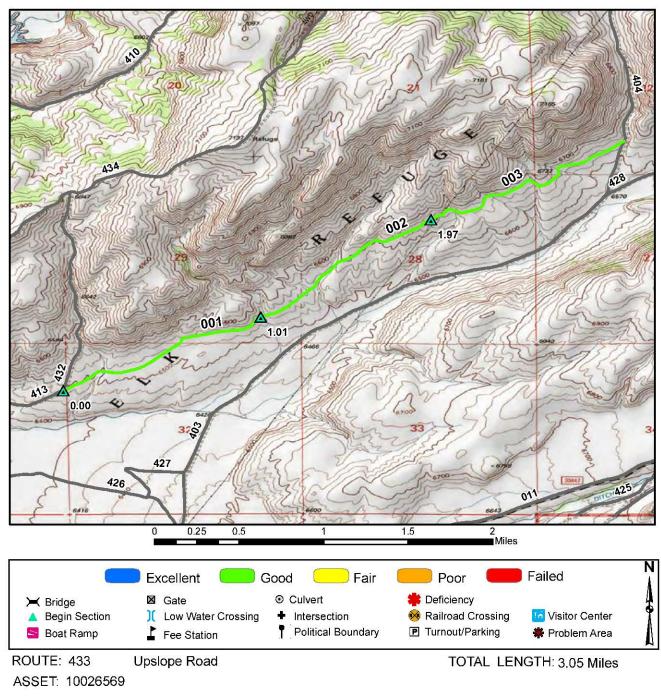
Section Number Section Length (miles) Inspection Date	001 0.91 8/16/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 8		
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 5 \$400 \$0		



Section Number Section Length (miles) Inspection Date	001 0.14 8/16/2008			
Section Information Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 8			
Roadway Condition Information	Good			
Remaining Service Life (years) Cost Estimate CRV	7 \$100 \$0			

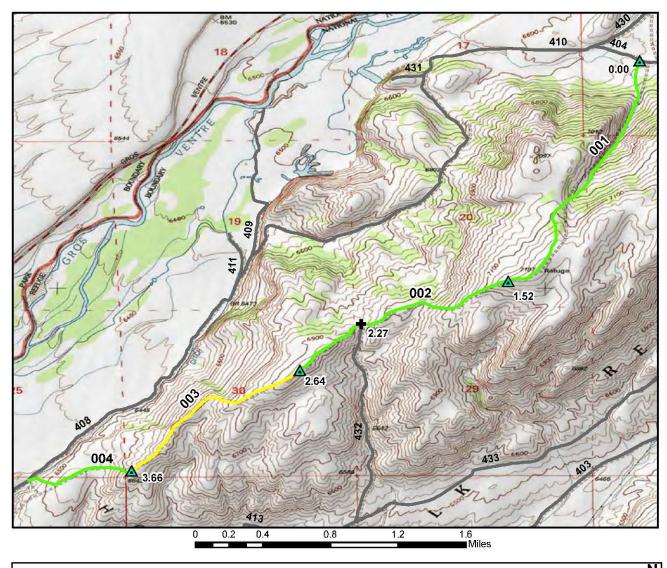


Section Number Section Length (miles) Inspection Date	001 1.22 8/16/2008		
Section Information Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 8		
Roadway Condition Information Condition	-		
Remaining Service Life (years) Cost Estimate CRV	3 \$800 \$0		



RTE DESCRIPTION: From Simpson Road (Rte 413) to Northern Loop 2 Road (Rte 404)

Section Number Section Length (miles) Inspection Date	001 1.01 8/16/2008	002 0.97 8/16/2008	003 1.07 8/16/2008	
Section Information Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 8	Primitive 1 8	Primitive 1 8	
Roadway Condition Information Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$400 \$0	Good 7 \$400 \$0	Good 5 \$400 \$0	



	Excellent 🛛 🜅 G	Good 📃 Fair	🦲 Poor 🛛 🥌	Failed	
 ➢ Bridge ▲ Begin Section Soat Ramp 	 Gate Low Water Crossing Fee Station 	 Culvert Intersection Political Boundary 	 Deficiency Railroad Crossing Turnout/Parking 	ा Visitor Center ₩ Problem Area	
ROUTE: 434	Refuge Summit Road		TOTAL LEN	IGTH: 4.16 Miles	

ASSET: <Null>

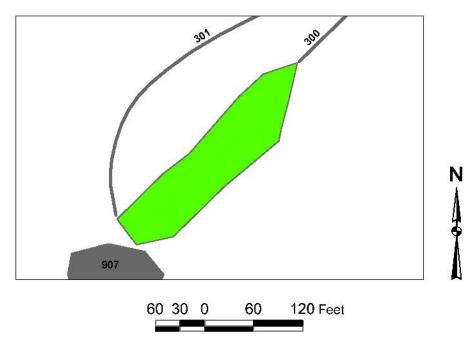
RTE DESCRIPTION: From Northern Loop 2 Road (Rte 404) to Pederson Road (Rte 408)

	7	2		13	· · · · · · · · · · · · · · · · · · ·
Section Number Section Length (miles) Inspection Date	001 1.52 8/16/2008	002 1.12 8/16/2008	003 1.02 8/16/2008	004 0.50 8/16/2008	
Section Information					
Surface Type	Primitive	Primitive	Primitive	Primitive	
Number of Lanes	1	1	1	1	
Roadway Width (feet)	8	8	8	8	
Roadway Condition Information					
Condition	Good	Good	Fair	Good	
Remaining Service Life (years)	5	5	4	7	
Cost Estimate	\$600	\$500	\$700	\$200	
CRV	\$0	\$0	\$0	\$0	
1	1	1			

Route 800: Shop Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10054831	8/14/2008	Gravel	11965	Good	\$1700

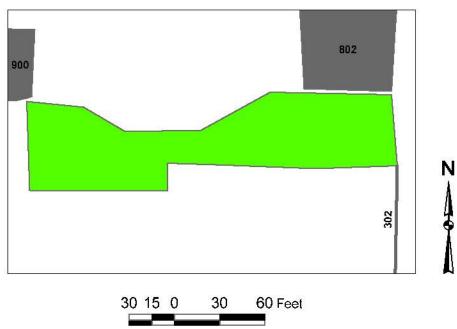




Route 801: Employee/Staff Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10026560	8/17/2008	Asphalt	7745	Good	\$1300

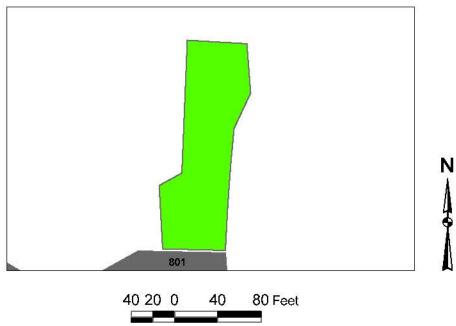




Route 802: Quarters Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10026560	8/17/2008	Gravel	7714	Good	\$1100

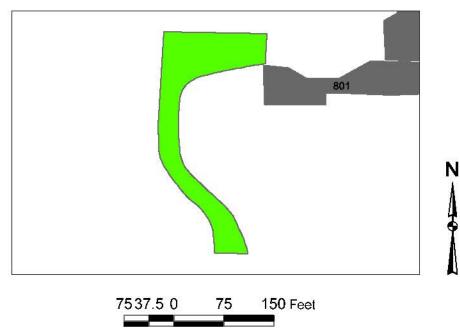




Route 900: Headquarters Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10026594	8/14/2008	Asphalt	13624	Good	\$2400

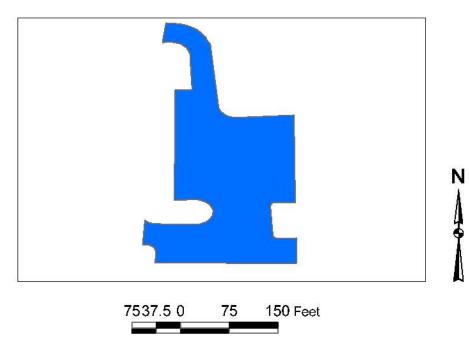




Route 901: Jackson Hole Visitor Center Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10026574	7/28/2004	Asphalt	3819	Excellent	\$0

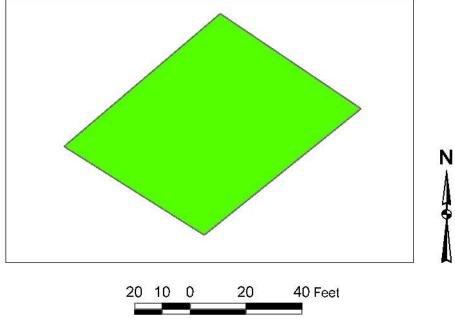




Route 902: National Forest Access

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10051773	8/14/2008	Gravel	3048	Good	\$400

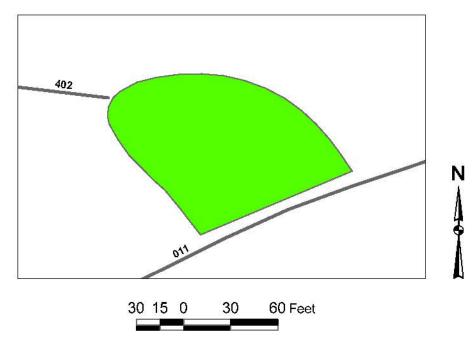




Route 903: Flat Creek Parking #1

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10051774	8/14/2008	Gravel	7106	Good	\$1000

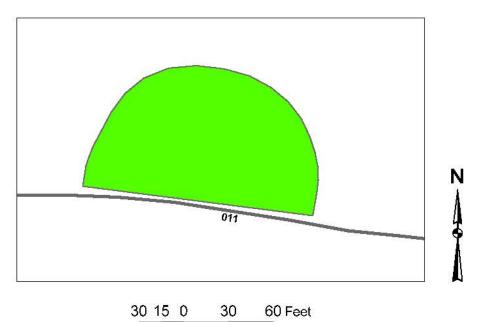




Route 904: Flat Creek Parking #2

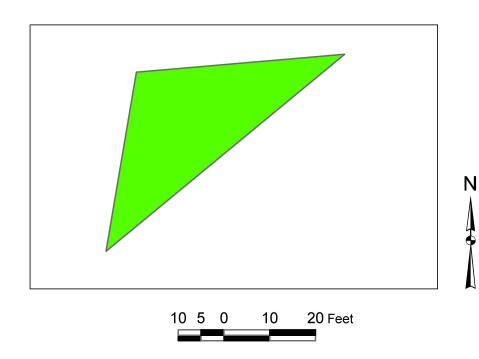
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10051775	8/14/2008	Gravel	8389	Good	\$1200





Route 905: Wetlands Pullout Lot

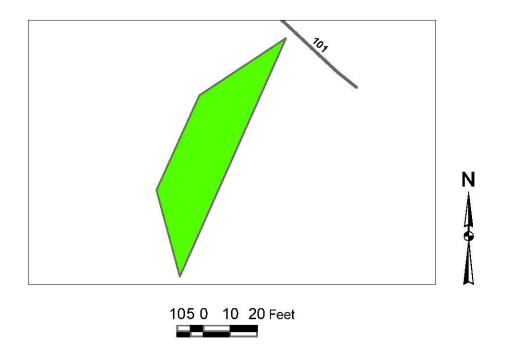
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
<null></null>	8/14/2008	Gravel	639	Good	\$100
)					



Route 906: Miller House Pullout Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10053254	8/17/2008	Gravel	1051	Good	\$100

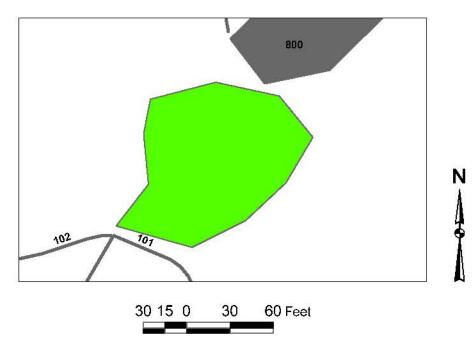
No photographs available



Route 907: Miller House Visitor Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10054827	8/14/2008	Gravel	7231	Good	\$1000

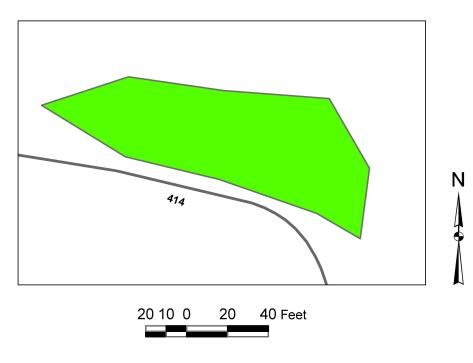




Route 908: Hunt West Parking #2

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10053259	8/15/2008	Native	4585	Good	\$600

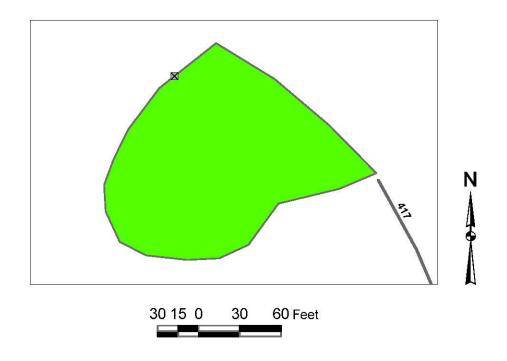




Route 909: Sleigh Ride Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10053254	8/15/2008	Gravel	13358	Good	\$1900

No photographs available



National Elk Refuge Bridge Inventory						
Rte #	Milepost	NBIS #	Sufficiency Rating	Functionally Obsolete	Structurally Deficient	
Road 5 (County road)	N/A	000061550-00119	75.5	NO	NO	
408	1.52	N/A	N/A	N/A	N/A	
417	2.1	N/A	N/A	N/A	N/A	

ROUTE NUMBER: 010 ROUTE NAME: Curtis Canyon Road



Photo # 4830 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 010 ROUTE NAME: Curtis Canyon Road

Photo # 4832 - MP 1.01 - Begin Section 002

ROUTE NUMBER: 011 ROUTE NAME: Flat Creek Road



Photo # 4837 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 011 ROUTE NAME: Flat Creek Road



Photo # 4841 - MP 1.02 - Begin Section 002



ROUTE NUMBER: 011 ROUTE NAME: Flat Creek Road

Photo # 4848 - MP 2.30 - Begin Section 003

ROUTE NUMBER: 011 ROUTE NAME: Flat Creek Road



Photo # 4855 - MP 3.26 - Begin Section 004

ROUTE NUMBER: 011 ROUTE NAME: Flat Creek Road



Photo # 4859 - MP 4.35 - Begin Section 005



ROUTE NUMBER: 101 ROUTE NAME: Miller House Access Road

Photo # 4815 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 102 ROUTE NAME: West of Miller House Road



Photo # 4820 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 300 ROUTE NAME: Employee and Volunteer Campground Road



Photo # 4821 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 301 ROUTE NAME: Back of Shop Road

Photo # 4824 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 302 ROUTE NAME: Refuge Employee/Quarters Access Road



Photo # 5012 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 400 ROUTE NAME: Wellhouse Road



Photo # 4809 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 401 ROUTE NAME: Caulkins Drive

Photo # 4829 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 402 ROUTE NAME: Pellet Shed #11 Access Road



Photo # 4860 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 403 ROUTE NAME: Long Hollow Road



Photo # 4864 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 403 ROUTE NAME: Long Hollow Road

Photo # 4869 - MP 1.03 - Begin Section 002

ROUTE NUMBER: 403 ROUTE NAME: Long Hollow Road



Photo # 4870 - MP 2.05 - Begin Section 003

ROUTE NUMBER: 404 ROUTE NAME: Northend Loop 2 Road

Photo # 4871 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 404 ROUTE NAME: Northend Loop 2 Road

Photo # 4872 - MP 1.01 - Begin Section 002

ROUTE NUMBER: 404 ROUTE NAME: Northend Loop 2 Road



Photo # 5007 - MP 1.97 - Begin Section 003

ROUTE NUMBER: 405 ROUTE NAME: Northend Loop 2 Road Spur



Photo # 4873 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 406 ROUTE NAME: Pierre's Pond Road

Photo # 4896 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 407 ROUTE NAME: Northgate Road

Photo # 4897 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 407 ROUTE NAME: Northgate Road



Photo # 4898 - MP 1.02 - Begin Section 002



ROUTE NUMBER: 408 ROUTE NAME: Pederson Road

Photo # 4900 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 408 ROUTE NAME: Pederson Road

Photo # 4901 - MP 1.03 - Begin Section 002



ROUTE NUMBER: 408 ROUTE NAME: Pederson Road

Photo # 4902 - MP 1.52 - Bridge



ROUTE NUMBER: 409 ROUTE NAME: Romney Pond Access Road

Photo # 4903 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 410 ROUTE NAME: Northend Loop Road

Photo # 4999 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS ROUTE NUMBER: 410 ROUTE NAME: Northend Loop Road

Photo # 5001 - MP 1.02 - Begin Section 002



ROUTE NUMBER: 410 ROUTE NAME: Northend Loop Road

Photo # 5002 - MP 1.56 - Begin Section 003

ROUTE NUMBER: 411 ROUTE NAME: North of Pederson Water Control Road



Photo # 4905 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 412 ROUTE NAME: Northgap Road



Photo # 4906 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 412 ROUTE NAME: Northgap Road

Photo # 4907 - MP 1.03 - Begin Section 002

ROUTE NUMBER: 413 ROUTE NAME: Simpson Road

Photo # 4908 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 413 ROUTE NAME: Simpson Road



Photo # 4909 - MP 0.51 - Begin Section 002

ROUTE NUMBER: 414 ROUTE NAME: Peterson Road

Photo # 4914 - MP 1.74 - Begin Route at Begin Section



ROUTE NUMBER: 414 ROUTE NAME: Peterson Road

Photo # 4925 - MP 1.03 - Begin Section 002

ROUTE NUMBER: 414 ROUTE NAME: Peterson Road



Photo # 4930 - MP 2.04 - Begin Section 003



ROUTE NUMBER: 415 ROUTE NAME: Dump Road

Photo # 4931 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 416 ROUTE NAME: Dike Road

Photo # 4932 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 417 ROUTE NAME: Nowlin Road



Photo # 4939 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 417 ROUTE NAME: Nowlin Road

Photo # 4941 - MP 1.04 - Begin Section 002

ROUTE NUMBER: 417 ROUTE NAME: Nowlin Road



Photo # 4946 - MP 2.05 - Begin Section 003

ROUTE NUMBER: 417 ROUTE NAME: Nowlin Road



Photo # 4947 - MP 2.10 - Bridge



ROUTE NUMBER: 418 ROUTE NAME: Miller Butte Road

Photo # 4948 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 419 ROUTE NAME: Feed Shed Access Road



Photo # 4949 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 420 ROUTE NAME: Refuge/Sleigh Ride Management Road



Photo # 4950 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 421 ROUTE NAME: Feed Shed Access Road 2

Photo # 4951 - MP 0.00 - Begin Route at Begin Section

ROOTE NOMBER, 422 ROOTE NAME. Carrs Culon Road

ROUTE NUMBER: 422 ROUTE NAME: Carl's Cutoff Road

Photo # 4952 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 423 ROUTE NAME: West Crossing Road



Photo # 4954 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 423 ROUTE NAME: West Crossing Road

Photo # 4955 - MP 1.13 - Begin Section 002

ROUTE NUMBER: 424 ROUTE NAME: West to Flat Creek Road



Photo # 4958 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS ROUTE NUMBER: 424 ROUTE NAME: West to Flat Creek Road



Photo # 4959 - MP 1.03 - Begin Section 002



ROUTE NUMBER: 425 ROUTE NAME: Chambers Irrigation Access Road

Photo # 4960 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 425 ROUTE NAME: Chambers Irrigation Access Road



Photo # 4968 - MP 1.11 - Begin Section 002

FEATURES PHOTOGRAPHS ROUTE NUMBER: 425 ROUTE NAME: Chambers Irrigation Access Road



Photo # 4971 - MP 2.08 - Begin Section 003



ROUTE NUMBER: 425 ROUTE NAME: Chambers Irrigation Access Road

Photo # 4974 - MP 3.11 - Begin Section 004

ROUTE NUMBER: 425 ROUTE NAME: Chambers Irrigation Access Road



Photo # 4981 - MP 4.13 - Begin Section 005

ROUTE NUMBER: 426 ROUTE NAME: McBride Road



Photo # 4984 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 427 ROUTE NAME: McBride Irrigation Road

Photo # 4987 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 428 ROUTE NAME: Long Hollow East Road



Photo # 4988 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 428 ROUTE NAME: Long Hollow East Road



Photo # 4989 - MP 1.02 - Begin Section 002



ROUTE NUMBER: 428 ROUTE NAME: Long Hollow East Road

Photo # 4990 - MP 2.06 - Begin Section 003

ROUTE NUMBER: 428 ROUTE NAME: Long Hollow East Road



Photo # 4991 - MP 3.10 - Begin Section 004

ROUTE NUMBER: 429 ROUTE NAME: Highlands Loop Road



Photo # 4993 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 429 ROUTE NAME: Highlands Loop Road

Photo # 4994 - MP 1.22 - Begin Section 002

ROUTE NUMBER: 429 ROUTE NAME: Highlands Loop Road



Photo # 4995 - MP 2.25 - Begin Section 003

ROUTE NUMBER: 429 ROUTE NAME: Highlands Loop Road



Photo # 4996 - MP 3.50 - Begin Section 004



ROUTE NUMBER: 430 ROUTE NAME: Highlands Connect Road

Photo # 4998 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 431 ROUTE NAME: Bayou Overlook Road



Photo # 5000 - MP 0.00 - Begin Route at Begin Section

FEATURES PHOTOGRAPHS ROUTE NUMBER: 432 ROUTE NAME: Claypit Road



Photo # 5003 - MP 0.00 - Begin Route at Begin Section



ROUTE NUMBER: 433 ROUTE NAME: Upslope Road

Photo # 5004 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 433 ROUTE NAME: Upslope Road



Photo # 5005 - MP 1.01 - Begin Section 002

FEATURES PHOTOGRAPHS ROUTE NUMBER: 433 ROUTE NAME: Upslope Road



Photo # 5006 - MP 1.97 - Begin Section 003



ROUTE NUMBER: 434 ROUTE NAME: Refuge Summit Road

Photo # 5008 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 434 ROUTE NAME: Refuge Summit Road



Photo # 5009 - MP 1.52 - Begin Section 002

FEATURES PHOTOGRAPHS ROUTE NUMBER: 434 ROUTE NAME: Refuge Summit Road



Photo # 5010 - MP 2.64 - Begin Section 003



ROUTE NUMBER: 434 ROUTE NAME: Refuge Summit Road

Photo # 5011 - MP 3.66 - Begin Section 004

Accident Summary

Number of Accidents Reported	Timespan of Accidents	Injuries	Fatalities
5	6/7/2002 - 4/6/2003	0	0

APPENDIX

FWS ROAD FUNCTIONAL CLASSIFICATION				
Class I	Principal Refuge Road (Public Roads) - Routes that constitute the main access			
	route, main auto tour route, or thoroughfare for refuge visitors. These routes are accessible by 2WD vehicles. Routes are numbered from 10 to 99.			
Class II	Connector Refuge Road (Public Roads) - Routes that provide circulation within the refuge. These routes can also provide access to areas of scenic, scientific, recreational or cultural interest, such as overlooks, campgrounds, education centers, etc. These routes are accessible by 2WD vehicles. Routes are numbered from 100 to 199.			
Class III	Special Purpose Refuge Road (Public Roads) - Roads that provide circulation within special use areas such as campgrounds or public concessionaire facilities or access to remote areas of the refuge. These routes may not be 2WD accessible. Routes are numbered from 200 to 299			
Class IV	Administrative Access Road (Administrative Roads) - Routes intended for access to administrative developments or structures such as maintenance offices, employee quarters, or utility areas. These routes are accessible by 2WD vehicles. These routes may restrict access to the general public. Routes are numbered from 300 to 399.			
Class V	Restricted Road (Administrative Roads) - Routes normally closed to the public, such as maintenance roads, service roads, patrol roads, and fire breaks. These routes may be open to the public for a short period of time for a special use, such as hunting access. These routes may not be 2WD accessible. Routes are numbered from 400 to 499.			

A refuge road system contains those routes within or giving access to a refuge or other unit of the FWS that are administered by the FWS, or by the Service in cooperation with other agencies. The assignment of a functional classification (FC) to a refuge road is not based on traffic volumes or design speed, but on the intended use or function of that route.

DESCRIPTION OF RATING SYSTEM

Rating Data is collected on four different surface types: Asphalt, Concrete, Gravel, and Native. The Utah LTAP Center's Remaining Service Life (RSL) system is used for all surface types. The RSL system is based on the Strategic Highway Research Program's (SHRP) Distress Identification Manual.

Asphalt Rating System

Data is collected on the following distresses and conditions:

- **Fatigue Cracking** Interconnected cracks forming small irregular shapes.
- **Longitudinal Cracking** Cracks running parallel with the roadway, in the direction of traffic.
- **Transverse Cracking** Cracks perpendicular to the roadway, going across the lane or lanes.
- Block Cracking Interconnected cracks forming large blocks.
- Edge Cracking Cracks running along the edge of the pavement surface.
- **Patches** Original surface repaired with new asphalt patch material.
- **Potholes** Holes or depressions in the pavement.
- **Rutting** surface depressions in the wheel paths.
- **Roughness** Evenness of pavement for serviceability.
- **Drainage** Ability of the road surface to drain water based on proper slope.

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

Fatigue, longitudinal, transverse, block, and edge cracking, along with patching and potholes are rated on a 0 - 9 scale (0 = no distress, 9 = maximum distress). The rating given is based on the extent and the severity of the distress. Rutting, roughness, and drainage are rated on a 0 - 3 scale (0 = excellent, 3 = poor). Each distress type has given Remaining Service Life (RSL) values (in years) based on the rating for that particular distress. The distress with the rating resulting in the lowest RSL value is considered to be the governing distress. That value is then assigned as the RSL of the road segment.

Concrete Rating System

Data is collected on the following distresses and conditions:

- Spalling of Joints Chipping, breaking, or cracking of slab edges
- Joint Seal Damage Any damage or condition that enables materials or water to infiltrate into the joint from the surface.
- **Corner Breaks** A portion of the slab separated by a crack that intersects the adjacent transverse and longitudinal joints, forming approximately a 45° angle to the direction.
- Broken Slabs Faulting and/or cracking localized to individual slabs.
- **Faulting** Difference in elevation across a crack or joint.
- Longitudinal Cracking Cracks in the pavement running parallel to road.

- **Transverse Cracking** Cracks in the pavement running perpendicular to the direction of traffic.
- **Patch Deterioration** Faulting, settling, or cracking of previously placed patch
- Map Cracking A series of cracks that extend only into the upper surface of the Slab

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

The rating procedure for concrete pavement is the same as that for asphalt pavement described previously. Each of the distresses described above are rated on the same 0-9 scale. The governing distress is then determined and the RSL associated with that distress is assigned to the road segment.

Gravel and Native Rating System

Data is collected on the following distresses and conditions:

- **Cross Section (Crown)** Roadway built so that the center is higher than the shoulder, to prevent water from pooling on roadway.
- **Roadside Drainage** Roadside ditches and culverts to handle water flow and prevent pooling on the roadside.
- **Corrugations (Washboarding)** Small trenches or holes developing perpendicular to the roadway.
- **Potholes** Holes or depressions in the roadway.
- **Rutting** Depressions running parallel with the roadway, in the wheelpaths.
- **Dust** Amount of dust caused by traffic.
- **Loose Aggregate (Gravel Only)** Loose gravel, typically piled up on the roadway edges or centerline.

A Condition Rating value is calculated for each homogenous pavement section, and can be up to 1 mile in length.

Rating Index Formula

The rating procedure for unpaved roads is the same as that for asphalt and concrete pavements described previously. Of the distresses described above, corrugations, potholes, rutting, and loose aggregate are rated on the same 0 - 9 scale previously mentioned. Cross section, roadside drainage, and dust are rated on the same 0 - 3 scale described for asphalt pavement. The governing distress is then determined and the RSL associated with that distress is assigned to the road segment.

Condition Descriptions by Surface Type

The following definitions are used to describe pavement condition for the various surface types. These are general guidelines for condition indications.

Asphalt

Excellent – Recently constructed or overlaid road where construction or overlay was performed correctly- No maintenance required. RSL = 19-20 years.

Good – Low extent longitudinal and transverse cracks. All cracks are 1/4" or less with little or no crack erosion. Patches are in good condition and applied correctly. Routine Maintenance recommended. RSL = 13-18 years.

Fair - Roads are in good structural condition with little or no fatigue cracking. Longitudinal, transverse, and edge cracking is at medium extent and severity. Block cracking is not extensive. Any patches are in good condition. Preventative maintenance recommended. RSL = 7-12 years.

Poor - Road beginning to show signs of structural distress. Fatigue cracking is medium to high extent and medium severity. Cracking will be severe. Surface may have severe block cracking and show. Patches are in fair to poor condition. There is moderate distortion or rutting and occasional potholes. Rehabilitation recommended. RSL = 1-6 years.

Failed - Road is severely deteriorated. Signs of structural failure appear along with severe and extensive fatigue cracking, distortion, potholes, or extensive patches in poor condition. Reconstruction recommended. RSL = 0 years.

Concrete

Excellent - New pavement. No maintenance required. RSL = 19-20 years

Good - First signs of transverse cracking, patch or repair, more extensive pop-outs, or scaling. Sealing or routine maintenance recommended. RSL = 13-18 years.

Fair – Pavement has join or crack spalling, and/or faulting, along with cracking at corners with broken pieces. Any Patches are in fair condition and faulting is at a minimum. Preventative maintenance recommended. RSL = 7-12 years.

Poor - Joints and cracks are open 1 inch, spalled, or patched. Faulting is more severe. Rehabilitation recommended. RSL = 1-6 years.

Failed - Most slabs have failed structurally, and faulting is severe. Reconstruction recommended. RSL = 0 years.11-9

The following table shows the relationship between RSL and condition.

SUBJECTIVE CONDITION RATING FOR REMAINING SERVICE LIFE								
(Asphalt and Concrete Pavements)								
	FAILED	POOR		FAIR		GOOD		EXCELLENT
RSL Years	0	1-3	4-6	7-9	10-12	13-15	16-18	19-20

Gravel and Native

Note - Native surfaces do not have a gravel layer.

Excellent - Newly constructed road that has been constructed properly with proper crown, drainage and gravel layer. Little or no distress. No maintenance recommended. RSL = 8-10 years.

Good - Crown, drainage provisions, and gravel layer are in good condition. Distress limited to traffic effects such as dust, loose aggregate, and low severity corrugations (wash boarding). RSL = 5-7 years.

Fair - Adequate drainage and crown through majority of roadway. Crown repair, ditch improvement may be necessary. Road has more severe corrugations and potholes. Preventative maintenance recommended. RSL = 3-4 years.

Poor - Travel at slow speeds is necessary. Additional gravel layer needed to carry traffic. Poor crown. Ditching is inadequate and rutting is extensive and severe. Rehabilitation recommended. RSL = 1-2 years.

Failed - Travel is difficult, and road may be closed at times. Rutting and Corrugations are very severe. Total Reconstruction of road is recommended. RSL = 0 years.

The following table shows the RSL values for gravel and native roads in terms of excellent,good, fair, poor, and failed condition.

SUBJECTIVE CONDITION RATING FOR REMAINING SERVICE LIFE (Gravel and Native Surfaces)						
	FAILED	POOR	FAIR	GOOD	EXCELLENT	
RSL Years	0	1-2	3-4	5-7	8-10	