## The Road Inventory of Fish Springs National Wildlife Refuge Dugway, UT





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



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#### INTRODUCTION

The Transportation Equity Act for the 21<sup>st</sup> 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 22<sup>nd</sup> 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** 

## Route Miles and Percentages by Functional Class and Condition

	Condition Rating (Based on RSL)*										
	Excellent		Good		Fa	Fair		or	Failed		TOTAL
F. C.	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES
1	9.06	100%									9.06
II	11.18	53.7%	5.38	25.8%	4.25	20.4%					20.81
III											
IV	6.58	42.2%	3.37	21.7%	5.63	36.2%					15.58
٧											
Totals	26.82	59.0%	8.75	19%	9.88	21.7%					45.45

<sup>\*</sup>For a description of condition ratings for the various surface types see the Appendix.

### Route Miles and Percentages by Surface Type and Condition

	Paved Condition Rating [Condition(RSL)]										
	Excellen	t (19-20)	Good (	13-18)	Fair (7-12) Poor (1-6)			Failed (0)		TOTAL	
S. T.	T. MILES %		MILES	%	MILES %		MILES	%	MILES	%	MILES
AS											
СО											
Totals											

	Unpaved Condition Rating [Condition(RSL)]										
	Excellent (8-10)		Good	Good (5-7)		Fair (3-4)		Poor (1-2)		Failed (0)	
S. T.	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES
GR	26.20	65.6%	6.59	16.5%	7.17	17.9%					39.96
NA	0.62	14.4%	1.62	37.6%	2.07	48.0%					4.30
PR			0.54	45.5%	0.65	54.5%					1.19
Totals	26.82	59.0%	8.75	19.3%	9.88	21.7%					45.45

## Square Footage (Parking Areas)

	Condition Rating											
	Excellent		Good		Fair		Poor		Failed		Total	
	Square		Square	Square		Square		Square		Square		
S. T.	Feet	%	Feet	%	Feet	%	Feet	%	Feet	%	Feet	
AS												
СО	768	100%									768	
GR	16213	19.6%	21825	26.3%	8877	10.7%	34378	41.5%	1575	1.9%	82868	
NA					945	7.4%	11808	92.6%			12753	
PR						·						
Totals	16981	17.6%	21825	22.6%	9822	10.2%	46186	47.9%	1575	1.6%	96389	

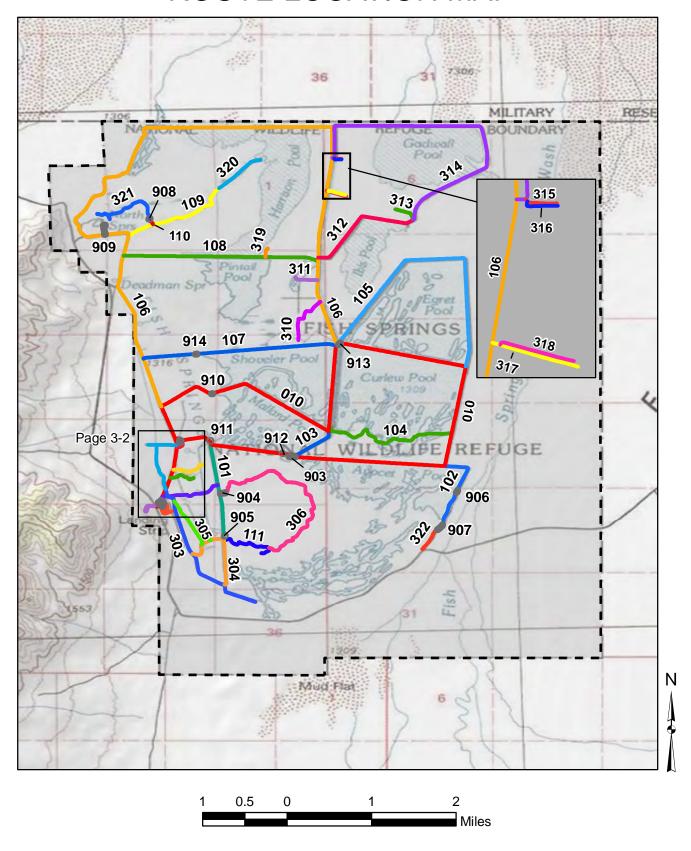
## **Summaries**

Route Miles and Percentages by Use Type and Condition

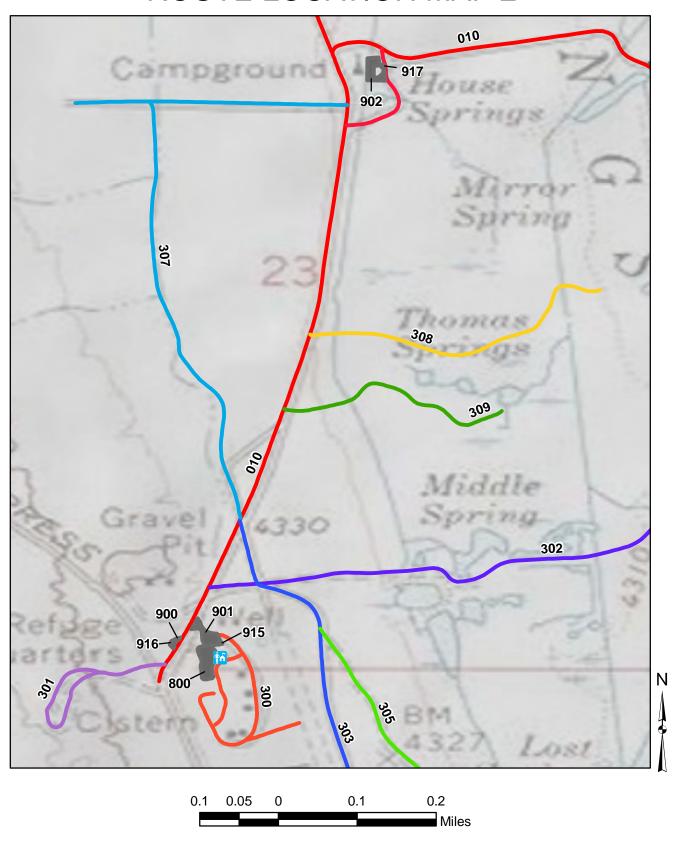
			Decil Oc	!!(!.a F	a Carre Des	l- 1! - / A -l		- 11				DEDOENT
			Road Co	naition F	Rating: Pu	blic/Adm	ninistrativ	e Use				PERCENT
	Excellent		Good		Fair		Poor		Failed		TOTAL	TOTAL
<b>USE TYPE</b>	MILES	%	MILES	%	MILES	%	MILES	%	MILES	%	MILES	MILES
Public (FC I-III)	20.25	67.8%	5.38	18%	4.25	14.2%					29.87	66%
Admin (FC IV-V)	6.58	42.2%	3.37	21.7%	5.63	36.2%					15.58	34%
Totals	26.82	59.0%	8.75	19%	9.88	21.7%					45.45	

				Park	ing Condi	tion Rati	ng					PERCENT
	Excellent		Good		Fa	ir	Po	or	Failed		Total	TOTAL
	Square		Square		Square		Square		Square		Square	SF
<b>USE TYPE</b>	Feet	%	Feet	%	Feet	%	Feet	%	Feet	%	Feet	
Public	768	1.0%	21825	27.2%	9822	12.3%	46186	57.6%	1575	2.0%	80176	83%
Admin	16213	100.0%									16213	17%
Totals	16981	17.6%	21825	22.6%	9822	10.2%	46186	47.9%	1575	1.6%	96389	

# FISH SPRINGS NATIONAL WILDLIFE REFUGE ROUTE LOCATION MAP



## FISH SPRINGS NATIONAL WILDLIFE REFUGE ROUTE LOCATION MAP 2



## 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	10034260	Auto Tour Route	9.06	From County Road to end of loop	-	9.06	1	1
100	10046011	Watchable Wildlife Area Access Road	0.13	From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)	1	0.13	1	2
101	10034260	South Spring Road	1.13	From Auto Tour Route (Rte 010) to Spring Unit Road (Rte 305)	1	1.13	1	2
102	10034344	Avocet Pool Road	1.02	From Auto Tour Route (Rte 010) to Avocet Pool Administrative Road (Rte 323)	-	1.02	1	2
103	10034260	Mallard Pool Road	0.44	From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)	-	0.44	1	2
104	<null></null>	Curlew Pool Cutoff Road	1.37	From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)	-	1.37	1	2
105	10034305	Egret Pool Road	2.97	From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)	-	2.97	1	2
106	10034271	Harrison Pool Loop	8.42	From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)	-	8.42	1	2
107	10034304	Shoveler Pool Cutoff Road	1.77	From Auto Tour Route (Rte 010) to Harrison Pool Loop (Rte 106)	-	1.77	1	2
108	10034306	Pintail Pool Cutoff Road	1.78	From Harrison Pool Loop (Rte 106) to Harrison Pool Loop (Rte 106)	-	1.78	1	2
109	10034342	Harrison Interior Road	1.09	From Harrison Pool Loop (Rte 106) to Harrison Interior Administrative Road (Rte 321)	-	1.09	1	2
110	10034342	Harrison Pool Parking Spur	0.08	From Harrison Interior Road (Rte 109) to Harrison Interior East Parking (Rte 908)	-	0.08	1	2
111	-	Special Hunting Blind Area Road	0.61	From Spring Unit Road (Rte 305) to end of route	-	0.61	1	2
300	10034391	Administrative Residential Road	0.42	From Headquarters Parking (Rte 901) to employee living quarters	-	0.42	1	4
301	10034301	Cistern Road	0.26	From Auto Tour Route (Rte 010) to end of route	-	0.26	1	4
302	10034301	Spring Unit Road #1	0.57	From Auto Tour Route (Rte 010) to South Spring Road (Rte 101)	-	0.57	1	4
303	10034301	Spring Unit Road #2	1.71	From Auto Tour Route (Rte 010) to end of route	-	1.71	1	4
304	10034301	Spring Unit Road #3	0.97	From Spring Unit Road (Rte 304) to Spring Unit Road (Rte 304)	-	0.97	1	4
305	10034301	Spring Unit Road #4	0.69	From Spring Unit Road (Rte 304) to Spring Unit Road (Rte 305)	-	0.69	1	4
306	10034342	Handicapped Blind Administrative Road	2.07	From Special Hunting Blind Area Road (Rte 111) to South Spring Road Parking #1 (Rte 904)	-	2.07	1	4
307	10034343	Boneyard Access Road	0.81	From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)	-	0.81	1	4
308	10034301	Spring Unit Road #5	0.33	From Auto Tour Route (Rte 010) to end of route	-	0.33	1	4
309	10034301	Spring Unit Road #6	0.25	From Auto Tour Route (Rte 010) to end of route	-	0.25	1	4
310	10046011	Water Control Structure Route #1		From Harrison Pool Loop (Rte 106) to end of route	-	0.58	1	4
311	10046011	Water Control Structure Route #2	0.22	From Harrison Pool Loop (Rte 106) to end of route	-	0.22	1	4
312	10034308	Ibis Administrative Road	1.16	From Harrison Pool Loop (Rte 106) to Gadwall Dike Road (Rte 315)	-	1.16	1	4
313	10046011	G7 Access Road	0.23	From Ibis Administrative Road (Rte 313) to end of route	-	0.23	1	4

## 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
314	10034307	Gadwall Dike Road	3.17	From Ibis Administrative Road (Rte 313) to Harrison Pool Loop (Rte 106)	-	3.17	1	4
315	10046011	Water Control Structure Road #1	0.07	From Gadwall Dike Road (Rte 315) to end of route		0.07	1	4
316	10046011	Water Control Structure Road #2	0.08	From Water Control Sturcture Road #1 (Rte 316) to end of route	-	0.08	1	4
317	10046011	Water Control Structure Road #3	0.19	From Harrison Pool Loop (Rte 106) to end of route	-	0.19	1	4
318	10046011	Water Control Structure Road #4	0.17	From Water Control Structure Road #3 (Rte 318) to end of route	-	0.17	1	4
319	10046011	Water Control Structure Road #5	0.11	From Pintail Pool Cutoff Road (Rte 108) to end of route	-	0.11	1	4
320	10034342	Harrison Interior Administrative Road	0.52	From Harrison Interior Road (Rte 109) to end of route	-	0.52	1	4
321	10034342	Harrison Pool Administrative Spur	0.77	From Harrison Interior East Parking (Rte 908) to end of route	-	0.77	1	4
322	10034344	Avocet Pool Administrative Road	0.26	From end of Avocet Pool Road (Rte 102) to end of route	-	0.26	1	4

## ROUTE IDENTIFICATION LIST (PARKING)

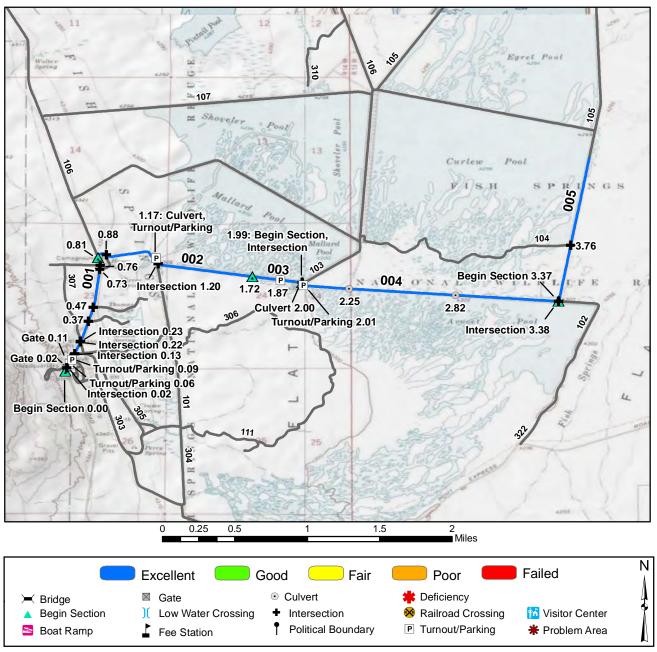
Shading Color Key:

Green = Unpaved Parking Lots
Blue = Paved Parking Lots

RTE#	ASSET NUMBER	ROUTE NAME	RTE SQFT	ROUTE DESCRIPTION	PAVED SQFT	UN- PAVED SQFT
800	10050852	Administrative Parking	16213		-	16213
900	10050852	Visitor Registration Parking	1246		-	1246
901	10050852	Headquarters Parking	9334		-	9334
902	10050853	Watchable Wildlife Area Parking	8877		-	8877
903	10050855	Auto Tour Route Parking	4811		-	4811
904	10050857	South Spring Road Parking #1	5749		-	5749
905	10050858	South Spring Road Parking #2	3479		-	3479
906	10050860	Avocet Pool Parking #1	5126		-	5126
907	10050861	Avocet Pool Parking #2	11245		-	11245
908	10050862	Harrison Interior East Parking	3605		-	3605
909	10050863	Harrison Interior West Parking	17230		-	17230
910	10050872	Mallard West Parking	1128		-	1128
911	10050872	Mallard Parking	2454		-	2454
912	10050872	Mallard South Parking	945		-	945
913	10050873	Curlew Northwest Parking	2604		-	2604
914	10050873	Shoveler Pool Parking	1575		-	1575
915	10050852	Headquarters Handicapped Parking	301		301	-
916	10050852	Vistor Registration Handicapped Parking	200		200	-
917	10050853	Watchable Wildlife Area Handicapped Parking	267		267	-

### 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 A	Addition:	
2.			Rte Desc:		
-			Reason for A	Addition:	
3.			Rte Desc:		
"			Reason for A	Addition:	
					_
Rou		ed from previous invento	ry:		No routes removed from previous inventory.
	Rte #	Rte Name			
1.			Rte Desc:		
			Reason for F	Removal:	
2.			Rte Desc:		
			Reason for F	Removal:	
3.			Rte Desc:		
			Reason for F	Removal:	
Rou	ıtes modifi	ed from previous invento	ry:		No routes modified from previous inventory.
	Rte#	Rte Name			
1.			Rte Desc:		
			Modification:		
2.			Rte Desc:		
			Modification:		
3.			Rte Desc:		
			Modification:		
Cor	nments:				

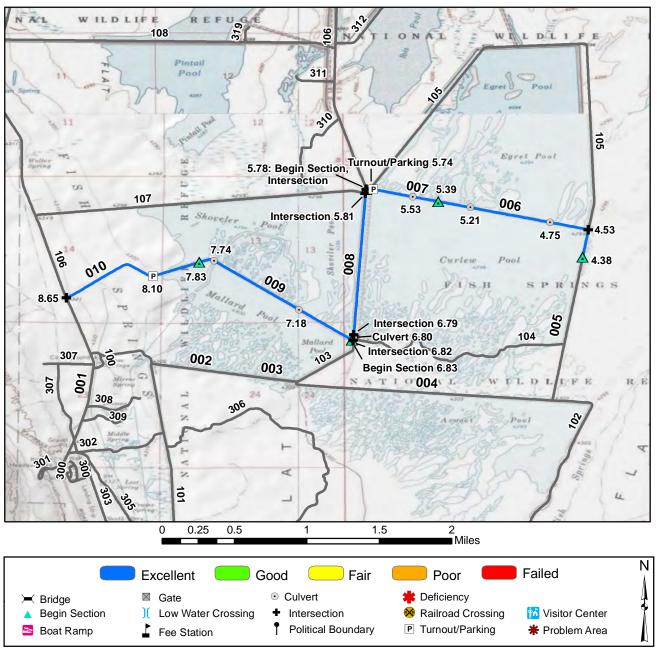


ROUTE: 010 Auto Tour Route TOTAL LENGTH: 9.06 Miles

ASSET: 10034260

RTE DESCRIPTION: From County Road to end of loop

Section Number Section Length (miles) Inspection Date	001	002	003	004	005
	0.81	0.91	0.27	1.38	1.00
	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008
Section Information					
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel
Number of Lanes	1	1	2	1	2
Roadway Width (feet)	12	12	20	12	20
Roadway Condition Information					
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent	Excellent	Excellent	Excellent	Excellent
	8	9	9	8	8
	\$0	\$0	\$0	\$0	\$0
	\$558400	\$626400	\$184900	\$950700	\$689200

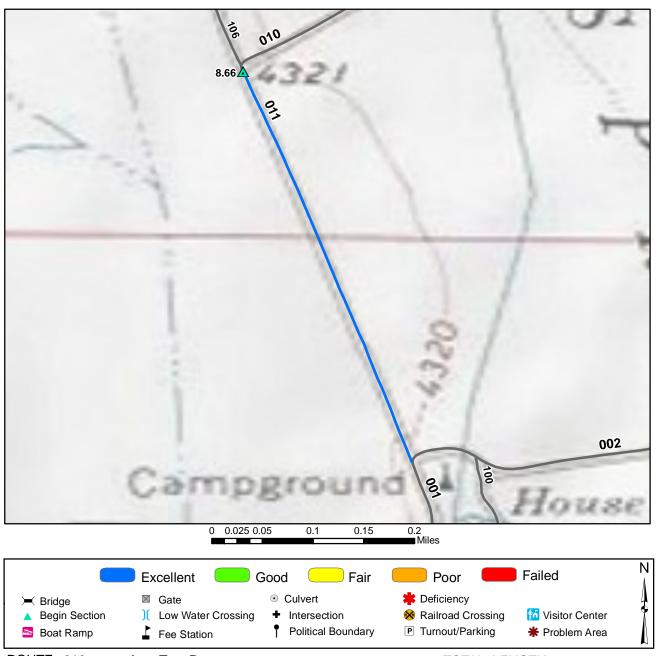


ROUTE: 010 Auto Tour Route TOTAL LENGTH: 9.06 Miles

ASSET: 10034260

RTE DESCRIPTION: From County Road to end of loop

Section Number Section Length (miles) Inspection Date	006	007	008	009	010
	1.01	0.39	1.05	1.00	0.83
	4/21/2008	4/21/2008	4/21/2008	4/21/2008	4/21/2008
Section Information					
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel
Number of Lanes	2	1	1	2	1
Roadway Width (feet)	20	12	11	20	12
Roadway Condition Information					
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent	Excellent	Excellent	Excellent	Excellent
	8	8	9	9	8
	\$0	\$0	\$0	\$0	\$0
	\$695400	\$270000	\$721200	\$687000	\$570700

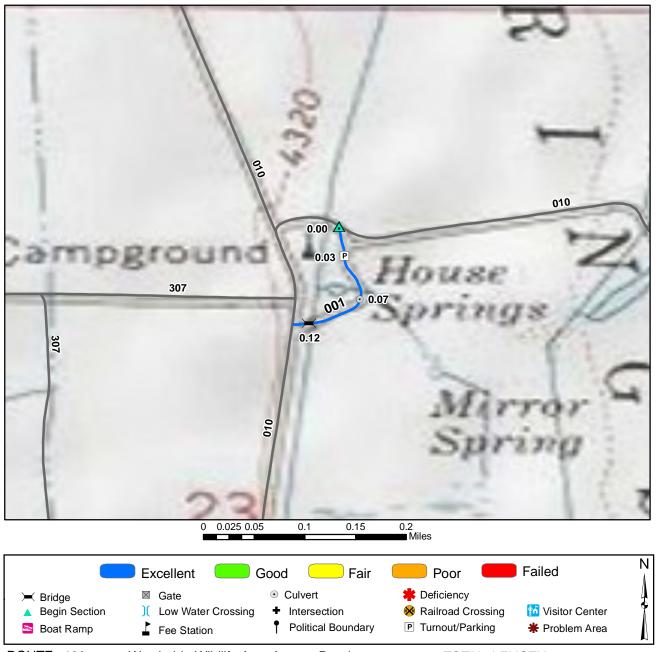


ROUTE: 010 Auto Tour Route TOTAL LENGTH: 9.06 Miles

ASSET: 10034260

RTE DESCRIPTION: From County Road to end of loop

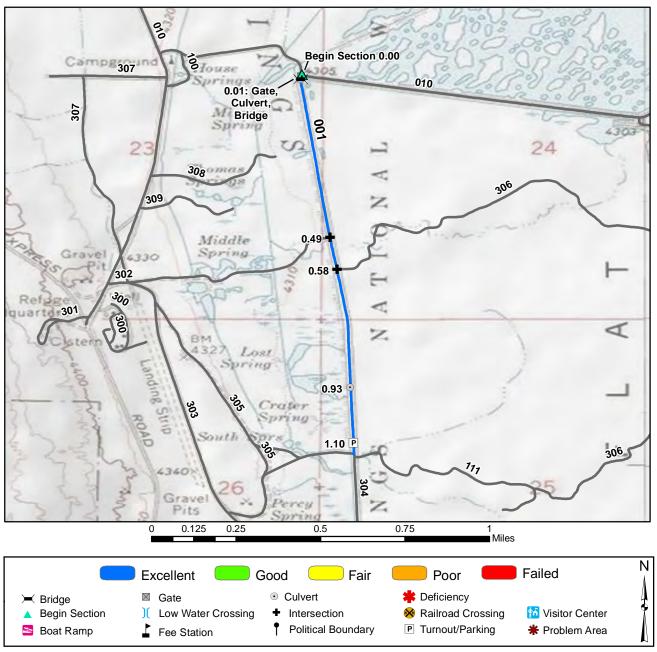
Section Number Section Length (miles) Inspection Date	011 0.41 4/21/2008		
Section Information			
Surface Type Number of Lanes	Gravel		
Roadway Width (feet)	12		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	8		
Cost Estimate CRV	\$0 \$278800		



ROUTE: 100 Watchable Wildlife Area Access Road TOTAL LENGTH: 0.13 Miles

ASSET: 10046011

Section Number Section Length (miles) Inspection Date	001 0.13 4/21/2008		
Section Information			
Surface Type	Gravel		
Number of Lanes	1		
Roadway Width (feet)	12		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	8		
Cost Estimate	\$0		
CRV	\$92800		

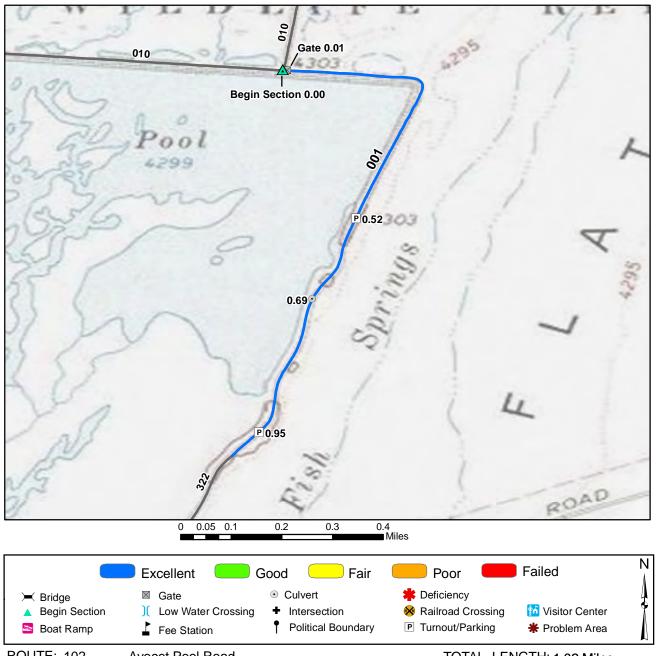


ROUTE: 101 South Spring Road TOTAL LENGTH: 1.13 Miles

ASSET: 10034260

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to Spring Unit Road (Rte 305)

Section Number Section Length (miles) Inspection Date	001 1.13 4/21/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 14		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	8		
Cost Estimate	\$0 \$778800		
CRV	φ110000		

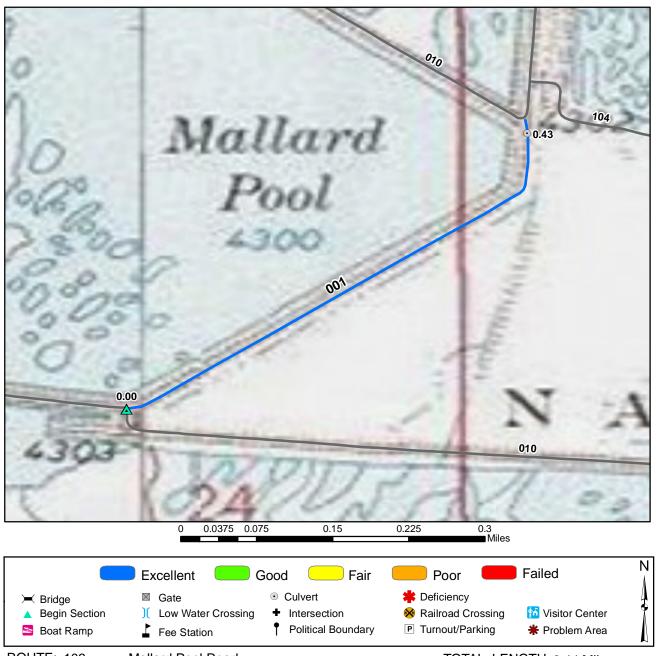


ROUTE: 102 Avocet Pool Road TOTAL LENGTH: 1.02 Miles

ASSET: 10034344

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to Avocet Pool Administrative Road (Rte 323)

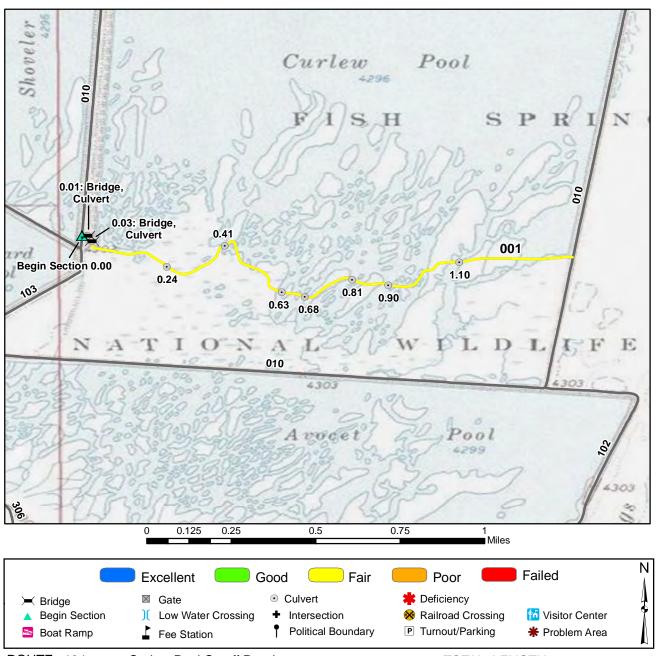
Section Number Section Length (miles) Inspection Date	001 1.02 4/23/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	9		
Cost Estimate	\$0 \$698700		
CRV	φυσο/00		



ROUTE: 103 Mallard Pool Road TOTAL LENGTH: 0.44 Miles

ASSET: 10034260

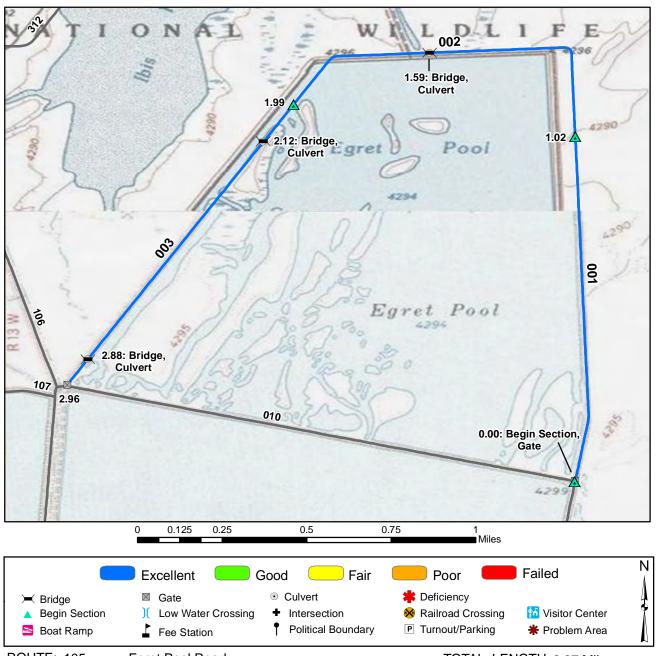
Section Number Section Length (miles) Inspection Date	001 0.44 4/23/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	8		
Cost Estimate	\$0 \$303400		
CRV	ψ505400		



ROUTE: 104 Curlew Pool Cutoff Road TOTAL LENGTH: 1.37 Miles

ASSET: <Null>

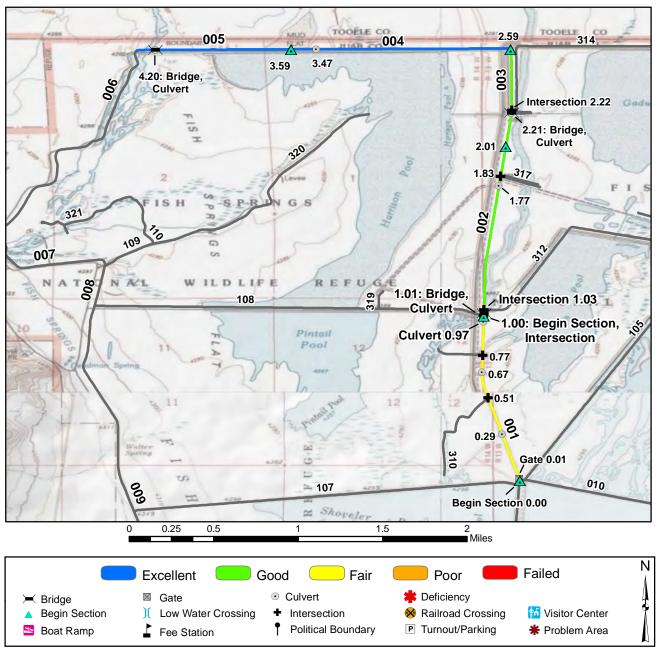
Section Number Section Length (miles) Inspection Date	001 1.37 4/23/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 10		
Roadway Condition Information			
Condition Remaining Service Life (years)	Fair 4		
Cost Estimate CRV	\$4900 \$944700		



ROUTE: 105 Egret Pool Road TOTAL LENGTH: 2.97 Miles

ASSET: 10034305

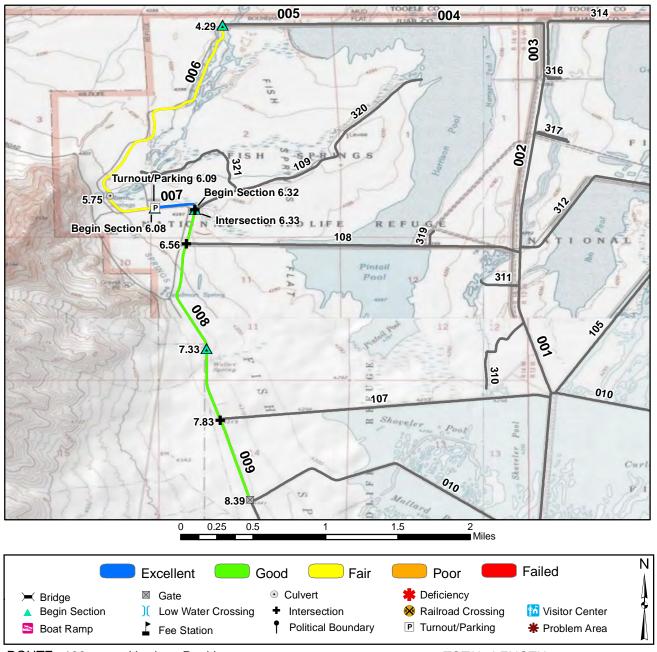
Section Number Section Length (miles) Inspection Date	001 1.02 4/22/2008	002 0.96 4/22/2008	003 0.98 4/22/2008	
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 11	Gravel 1 12	Gravel 1 11	
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 9 \$0 \$704300	Excellent 9 \$0 \$663200	Excellent 10 \$0 \$675500	



ROUTE: 106 Harrison Pool Loop TOTAL LENGTH: 8.42 Miles

ASSET: 10034271

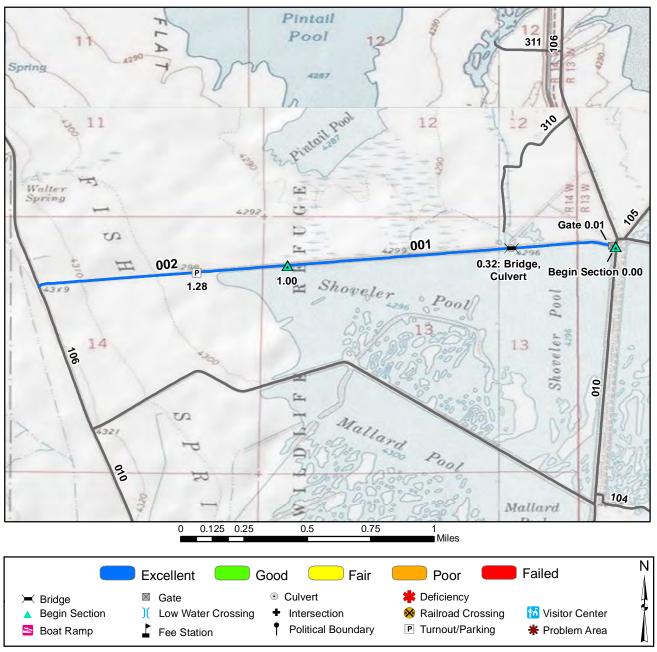
Section Number Section Length (miles) Inspection Date	001	002	003	004	005
	1.00	1.01	0.58	1.00	0.70
	4/22/2008	4/22/2008	4/22/2008	4/22/2008	4/22/2008
Section Information					
Surface Type	Gravel	Gravel	Gravel	Gravel	Gravel
Number of Lanes	1	1	1	1	1
Roadway Width (feet)	12	12	12	12	12
Roadway Condition Information					
Condition Remaining Service Life (years) Cost Estimate CRV	Fair	Good	Good	Excellent	Excellent
	4	7	7	9	9
	\$3600	\$1600	\$900	\$0	\$0
	\$687900	\$691400	\$398300	\$687900	\$483400



ROUTE: 106 Harrison Pool Loop TOTAL LENGTH: 8.42 Miles

ASSET: 10034271

Section Number Section Length (miles) Inspection Date	006 1.79 4/23/2008	007 0.24 4/23/2008	008 1.01 4/23/2008	009 1.09 4/23/2008	
Section Information					
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12	Gravel 1 12	Gravel 1 12	Gravel 1 12	
Roadway Condition Information					
Condition Remaining Service Life (years) Cost Estimate CRV	Fair 4 \$6400 \$1234000	Excellent 9 \$0 \$166000	Good 7 \$1600 \$691700	Good 7 \$1800 \$748100	

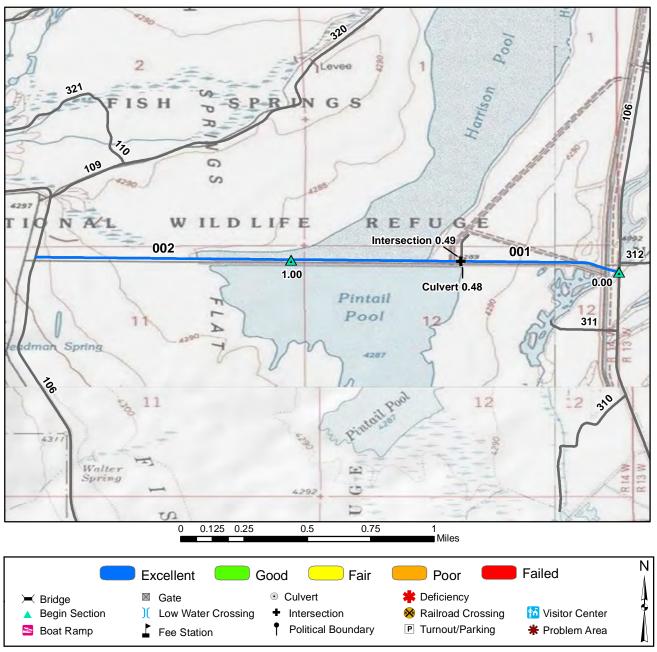


ROUTE: 107 Shoveler Pool Cutoff Road TOTAL LENGTH: 1.77 Miles

ASSET: 10034304

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to Harrison Pool Loop (Rte 106)

Section Number Section Length (miles) Inspection Date	001 1.00 4/21/2008	002 0.76 4/22/2008		
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 11	Gravel 1 11		
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 10 \$0 \$690300	Excellent 9 \$0 \$524500		

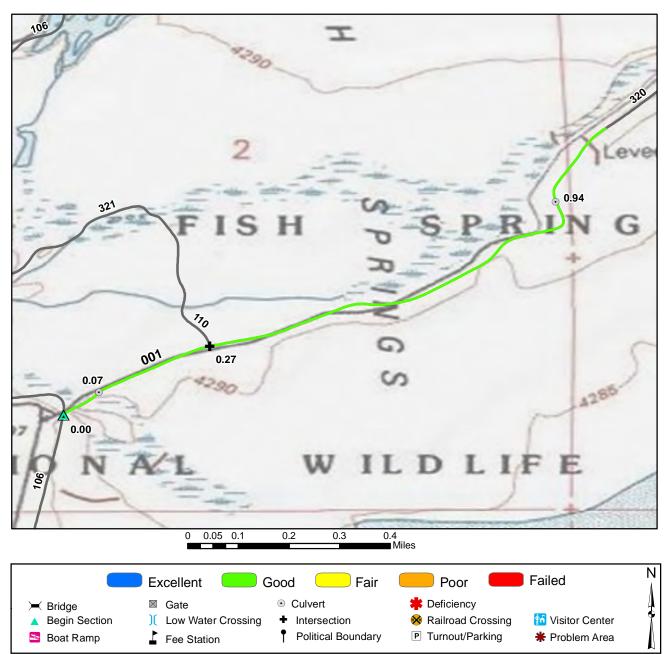


ROUTE: 108 Pintail Pool Cutoff Road TOTAL LENGTH: 1.78 Miles

ASSET: 10034306

RTE DESCRIPTION: From Harrison Pool Loop (Rte 106) to Harrison Pool Loop (Rte 106)

Section Number Section Length (miles) Inspection Date	001 1.00 4/22/2008	002 0.78 4/22/2008		
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12	Gravel 1 12		
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 9 \$0 \$689400	Excellent 8 \$0 \$533700		

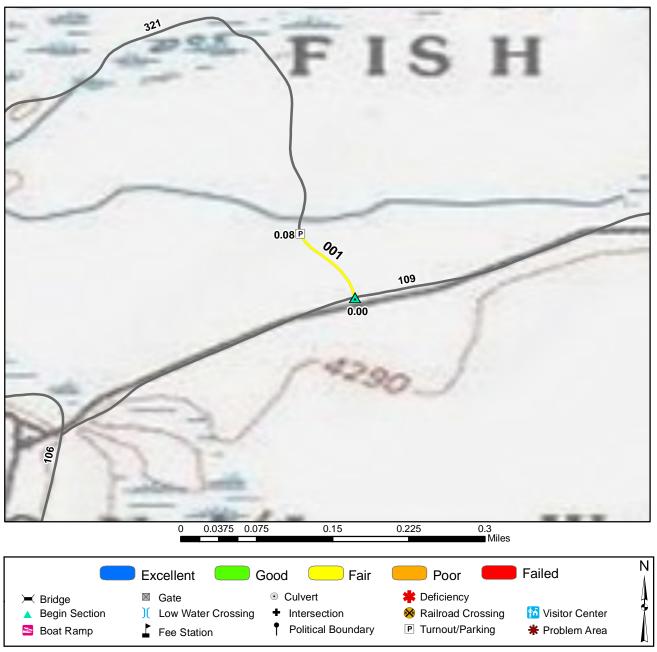


ROUTE: 109 Harrison Interior Road TOTAL LENGTH: 1.09 Miles

ASSET: 10034342

RTE DESCRIPTION: From Harrison Pool Loop (Rte 106) to Harrison Interior Administrative Road (Rte 321)

Section Number Section Length (miles) Inspection Date	001 1.09 4/22/2008		
Section Information			
Surface Type	Gravel		
Number of Lanes	1		
Roadway Width (feet)	12		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	5		
Cost Estimate	\$1800		
CRV	\$748500		

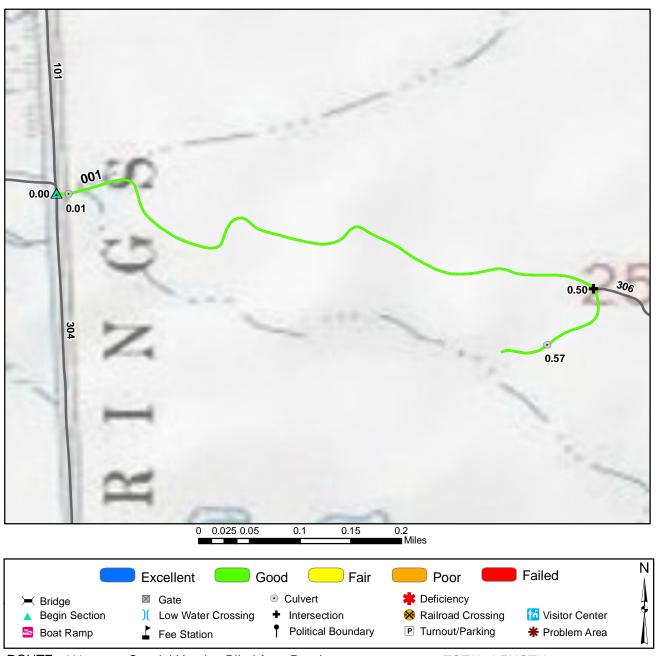


ROUTE: 110 Harrison Pool Parking Spur TOTAL LENGTH: 0.08 Miles

ASSET: 10034342

RTE DESCRIPTION: From Harrison Interior Road (Rte 109) to Harrison Interior East Parking (Rte 908)

Section Number Section Length (miles) Inspection Date	001 0.08 4/22/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12		
Roadway Condition Information			
Condition Remaining Service Life (years) Cost Estimate CRV	Fair 4 \$300 \$54100		



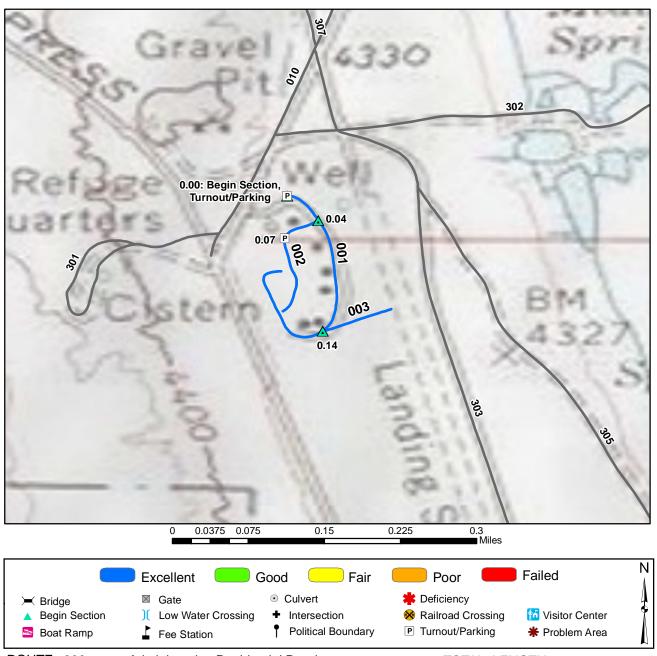
ROUTE: 111 Special Hunting Blind Area Road

TOTAL LENGTH: 0.61 Miles

ASSET:

RTE DESCRIPTION: From Spring Unit Road (Rte 305) to end of route

Section Number Section Length (miles) Inspection Date	001 0.61 4/21/2008		
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 \$1000 \$420000		

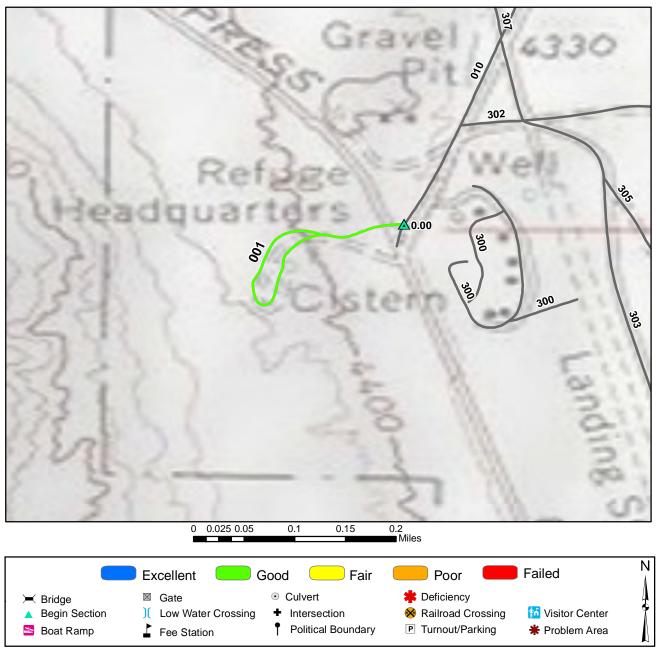


ROUTE: 300 Administrative Residential Road TOTAL LENGTH: 0.42 Miles

ASSET: 10034391

RTE DESCRIPTION: From Headquarters Parking (Rte 901) to employee living quarters

Section Number Section Length (miles) Inspection Date	001 0.25 4/22/2008	002 0.11 4/22/2008	003 0.06 4/22/2008	
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12	Gravel 1 12	Gravel 1 12	
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 9 \$0 \$172500	Excellent 9 \$0 \$74600	Excellent 9 \$0 \$38900	

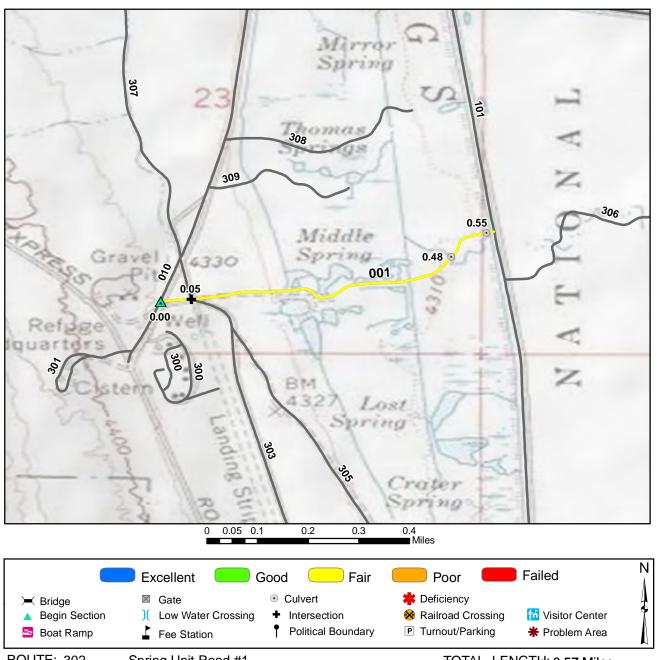


ROUTE: 301 Cistern Road TOTAL LENGTH: 0.26 Miles

ASSET: 10034301

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to end of route

Section Number Section Length (miles) Inspection Date	001 0.26 4/22/2008		
Section Information			
Surface Type	Native		
Number of Lanes	1		
Roadway Width (feet)	10		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	5		
Cost Estimate	\$500 \$93700		
CRV	Ψ33700		

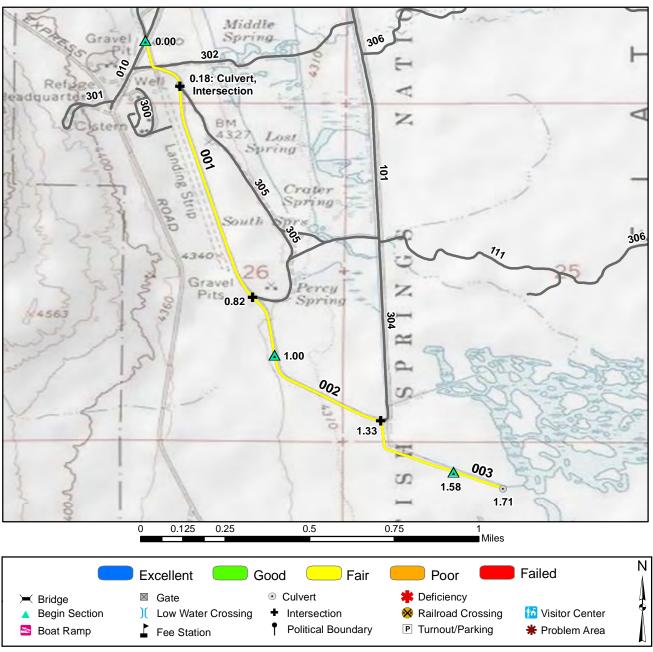


ROUTE: 302 Spring Unit Road #1 TOTAL LENGTH: 0.57 Miles

ASSET: 10034301

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to South Spring Road (Rte 101)

Section Number Section Length (miles) Inspection Date	001 0.57 4/22/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12		
Roadway Condition Information			
Condition Remaining Service Life (years) Cost Estimate CRV	Fair 4 \$2000 \$389600		

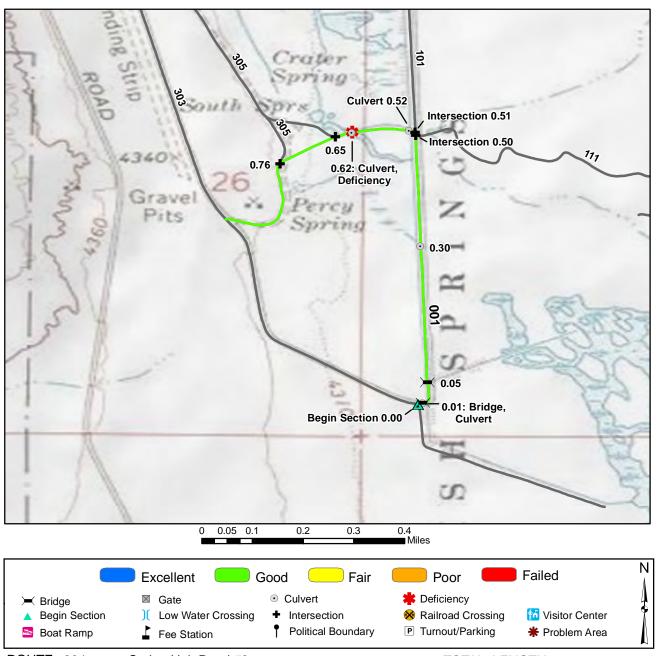


ROUTE: 303 Spring Unit Road #2 TOTAL LENGTH: 1.71 Miles

ASSET: 10034301

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to end of route

Section Number Section Length (miles) Inspection Date	001 1.00 4/22/2008	002 0.58 4/22/2008	003 0.13 4/22/2008	
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12	Gravel 1 12	Primitive 1 10	
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate	Fair 4 \$3600	Fair 4 \$2100	Fair 4 \$100	
CRV	\$689400	\$399500	\$0	

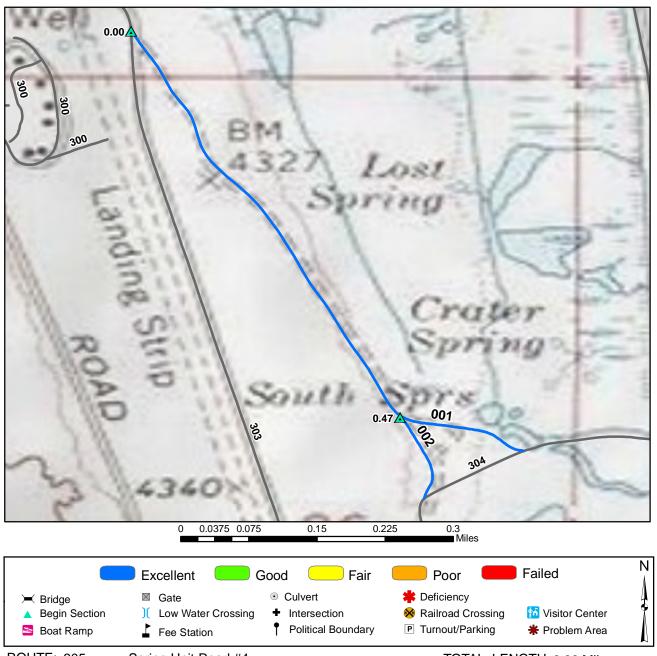


ROUTE: 304 Spring Unit Road #3 TOTAL LENGTH: 0.97 Miles

ASSET: 10034301

RTE DESCRIPTION: From Spring Unit Road (Rte 304) to Spring Unit Road (Rte 304)

Section Number Section Length (miles) Inspection Date	001 0.97 4/22/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12		
Roadway Condition Information			
Condition Remaining Service Life (years) Cost Estimate CRV	Good 7 \$1600 \$665200		

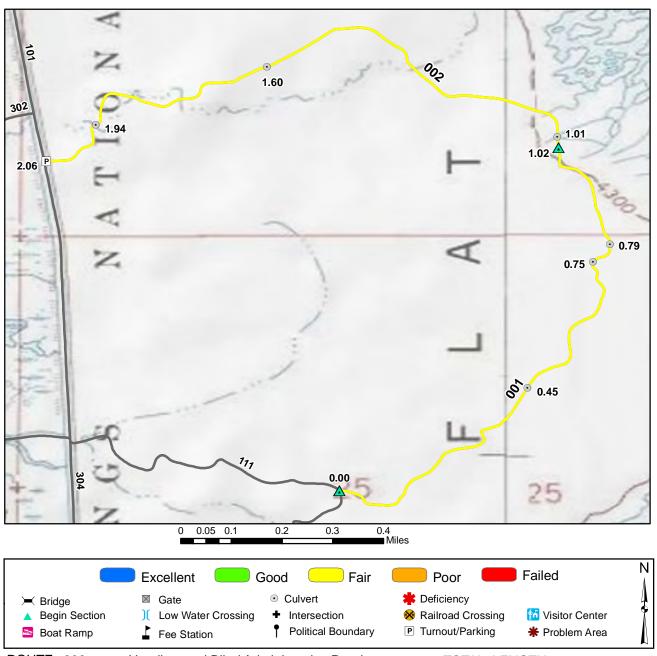


ROUTE: 305 Spring Unit Road #4 TOTAL LENGTH: 0.69 Miles

ASSET: 10034301

RTE DESCRIPTION: From Spring Unit Road (Rte 304) to Spring Unit Road (Rte 305)

Section Number Section Length (miles) Inspection Date	001 0.60 4/22/2008	002 0.10 4/22/2008		
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 10	Gravel 1 10		
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 9 \$0 \$411000	Excellent 9 \$0 \$66500		

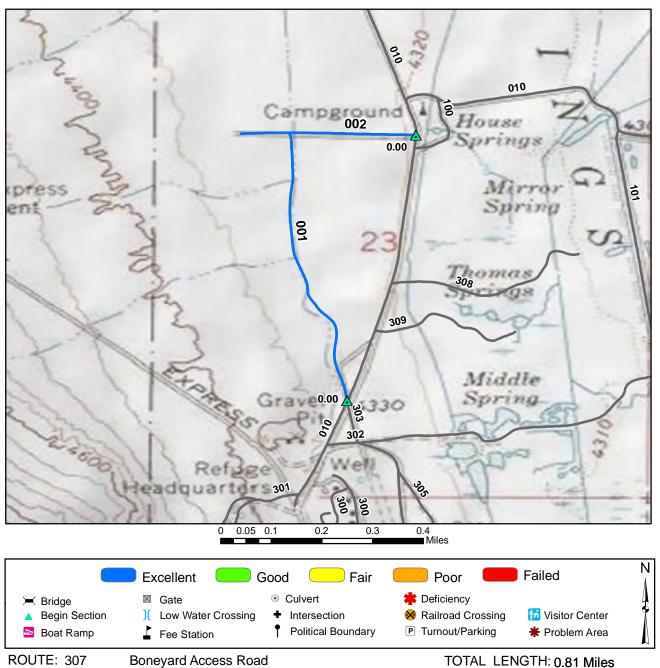


ROUTE: 306 Handicapped Blind Administrative Road TOTAL LENGTH: 2.07 Miles

ASSET: 10034342

RTE DESCRIPTION: From Special Hunting Blind Area Road (Rte 111) to South Spring Road Parking #1 (Rte 904)

Section Number Section Length (miles) Inspection Date	001 1.00 4/22/2008	002 1.06 4/22/2008		
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Native 1 10	Native 1 10		
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Fair 4 \$2200 \$357600	Fair 4 \$2300 \$377800		

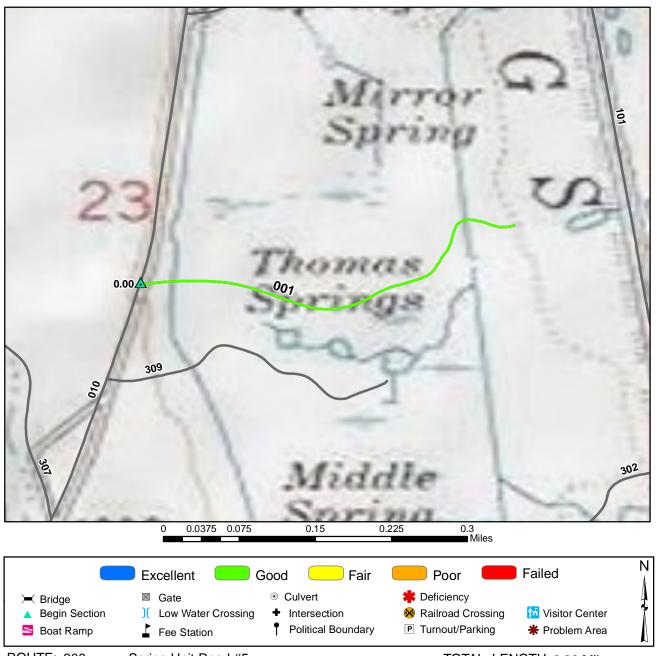


ROUTE: 307 Boneyard Access Road

ASSET: 10034343

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to Auto Tour Route (Rte 010)

Section Number Section Length (miles) Inspection Date	001 0.55 4/22/2008	002 0.27 4/22/2008		
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Native 1 10	Gravel 1 10		
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 9 \$0 \$195000	Excellent 10 \$0 \$182700		

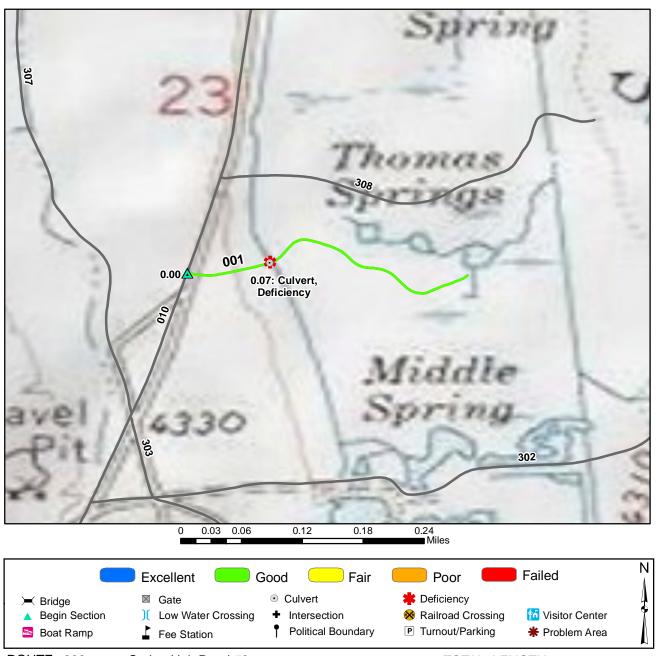


ROUTE: 308 Spring Unit Road #5 TOTAL LENGTH: 0.33 Miles

ASSET: 10034301

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to end of route

Section Number Section Length (miles) Inspection Date	001 0.33 4/22/2008		
Section Information			
Surface Type	Native		
Number of Lanes	1		
Roadway Width (feet)	8		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate	\$600		
CRV	\$118600		



ROUTE: 309 Spring Unit Road #6 TOTAL LENGTH: 0.25 Miles

ASSET: 10034301

RTE DESCRIPTION: From Auto Tour Route (Rte 010) to end of route

Section Number Section Length (miles) Inspection Date	001 0.25 4/22/2008		
Section Information			
Surface Type	Gravel		
Number of Lanes	1		
Roadway Width (feet)	8		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate	\$400		
CRV	\$170200		

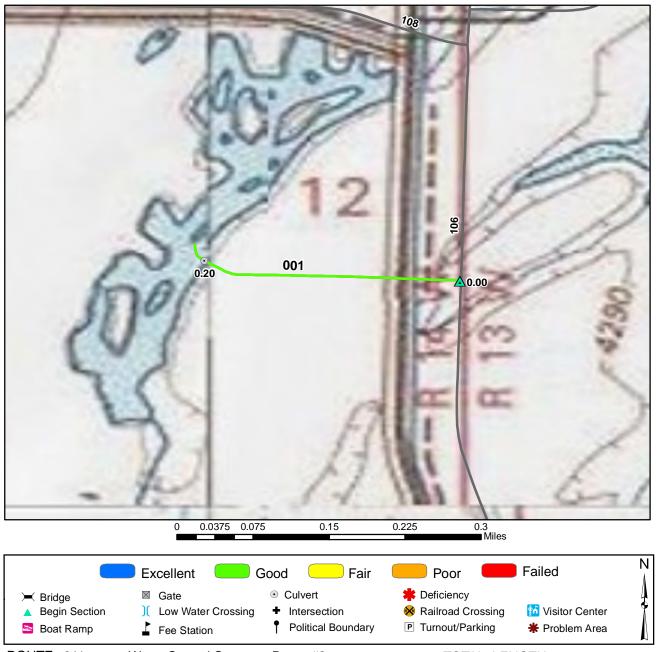


ROUTE: 310 Water Control Structure Route #1 TOTAL LENGTH: 0.58 Miles

ASSET: 10046011

RTE DESCRIPTION: From Harrison Pool Loop (Rte 106) to end of route

Section Number Section Length (miles) Inspection Date	001 0.58 4/22/2008		
Section Information			
Surface Type	Native		
Number of Lanes	1		
Roadway Width (feet)	10		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate	\$1000		
CRV	\$206000		

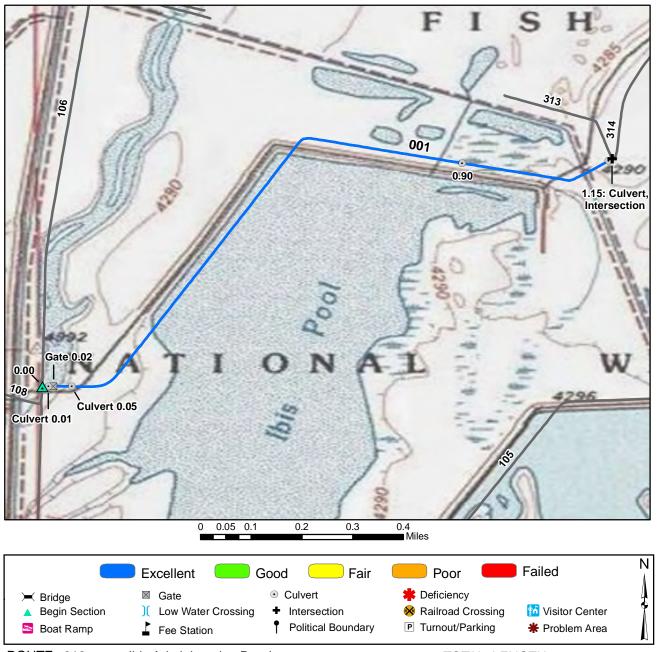


ROUTE: 311 Water Control Structure Route #2 TOTAL LENGTH: 0.22 Miles

ASSET: 10046011

RTE DESCRIPTION: From Harrison Pool Loop (Rte 106) to end of route

Section Number Section Length (miles) Inspection Date	001 0.22 4/22/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Native 1 10		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate	\$400		
CRV	\$77200		

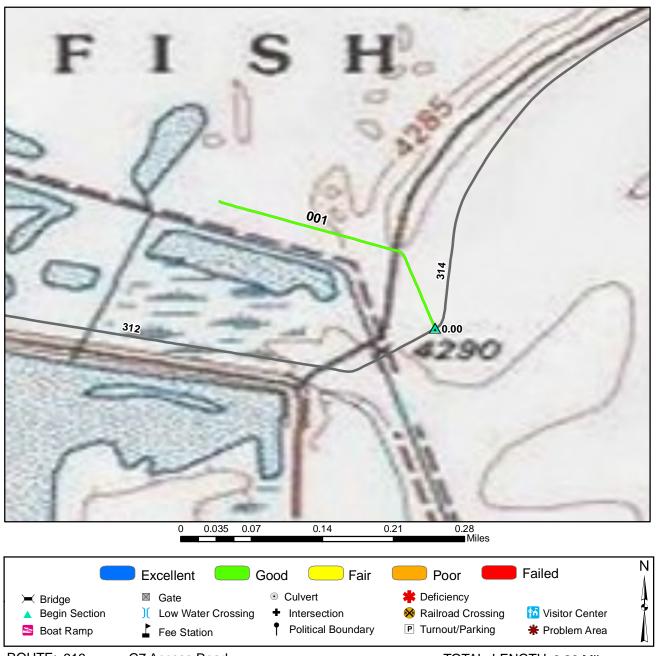


ROUTE: 312 Ibis Administrative Road TOTAL LENGTH: 1.16 Miles

ASSET: 10034308

RTE DESCRIPTION: From Harrison Pool Loop (Rte 106) to Gadwall Dike Road (Rte 315)

Section Number Section Length (miles) Inspection Date	001 1.16 4/22/2008		
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	\$795700		

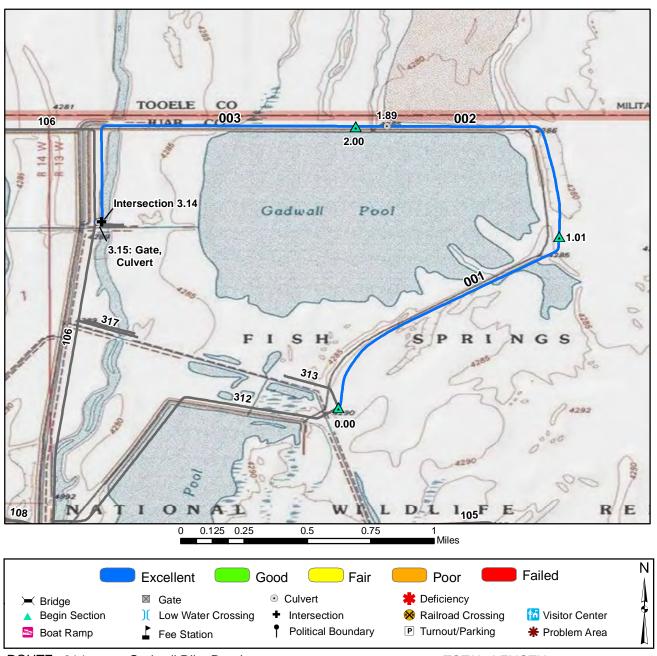


ROUTE: 313 G7 Access Road TOTAL LENGTH: 0.23 Miles

ASSET: 10046011

RTE DESCRIPTION: From Ibis Administrative Road (Rte 313) to end of route

Section Number Section Length (miles) Inspection Date	001 0.23 4/22/2008		
Section Information			
Surface Type	Native		
Number of Lanes	1		
Roadway Width (feet)	10		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate	\$400		
CRV	\$80100		

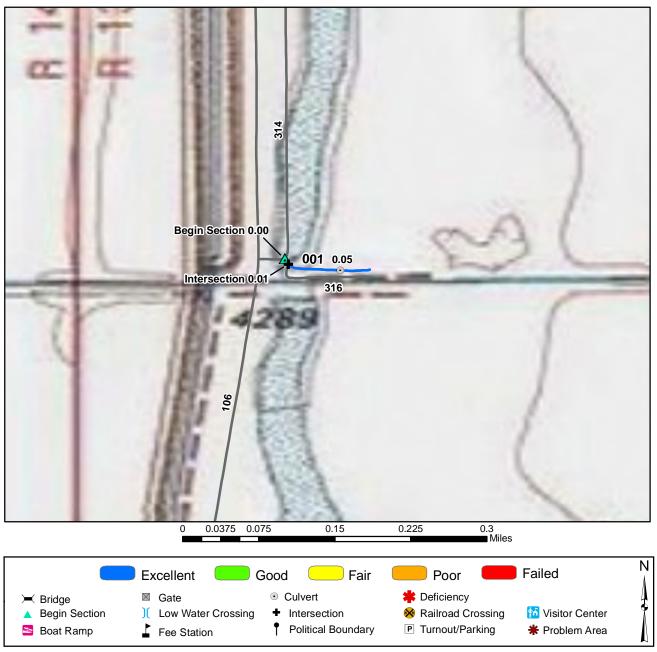


ROUTE: 314 Gadwall Dike Road TOTAL LENGTH: 3.17 Miles

ASSET: 10034307

RTE DESCRIPTION: From Ibis Administrative Road (Rte 313) to Harrison Pool Loop (Rte 106)

Section Number Section Length (miles) Inspection Date	001 1.01 4/22/2008	002 0.99 4/22/2008	003 1.16 4/22/2008	
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 12	Gravel 1 12	Gravel 1 12	
Roadway Condition Information				
Condition Remaining Service Life (years) Cost Estimate CRV	Excellent 8 \$0 \$694500	Excellent 8 \$0 \$682100	Excellent 8 \$0 \$801000	

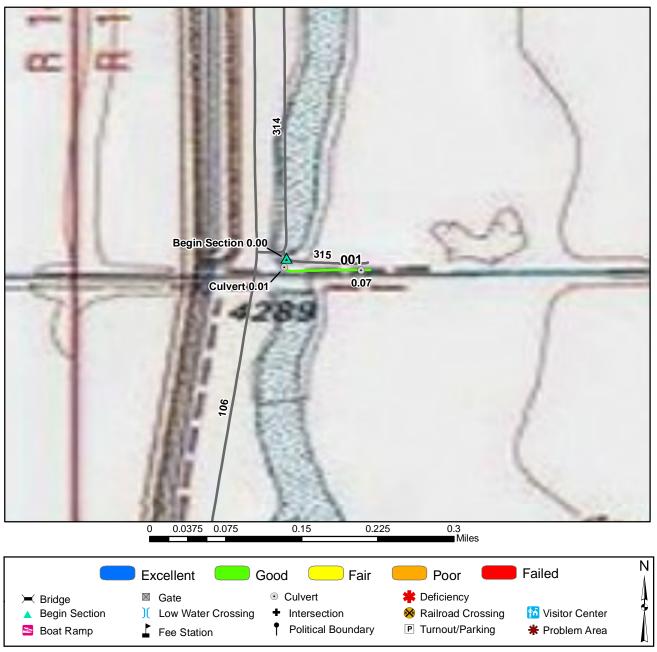


ROUTE: 315 Water Control Structure Road #1 TOTAL LENGTH: 0.07 Miles

ASSET: 10046011

RTE DESCRIPTION: From Gadwall Dike Road (Rte 315) to end of route

Section Number Section Length (miles) Inspection Date	001 0.07 4/22/2008		
Section Information			
Surface Type	Native		
Number of Lanes	1		
Roadway Width (feet)	10		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	8		
Cost Estimate	\$0		
CRV	\$24900		

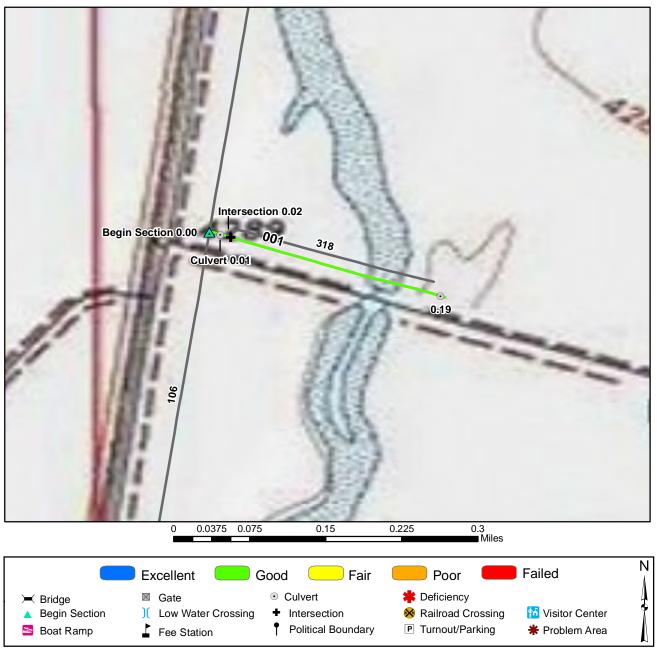


ROUTE: 316 Water Control Structure Road #2 TOTAL LENGTH: 0.08 Miles

ASSET: 10046011

RTE DESCRIPTION: From Water Control Sturcture Road #1 (Rte 316) to end of route

Section Number Section Length (miles) Inspection Date	001 0.08 4/22/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 10		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate	\$0 \$0		
CRV	ΨΟ		

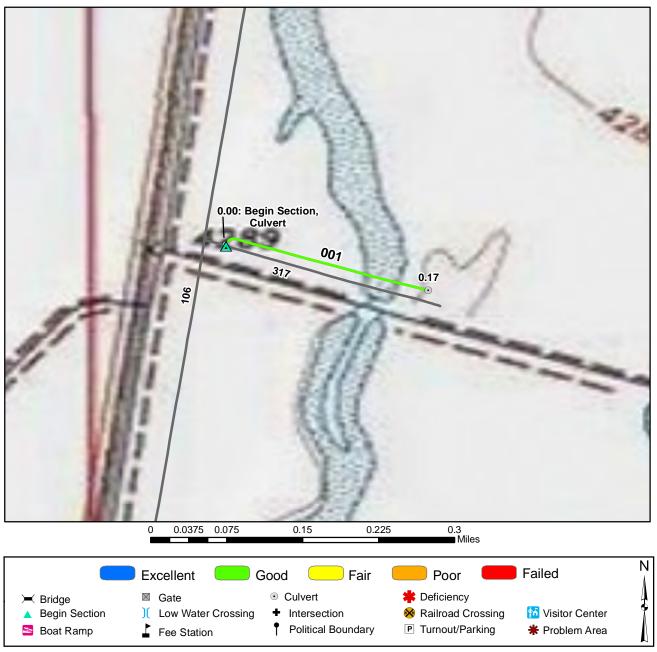


ROUTE: 317 Water Control Structure Road #3 TOTAL LENGTH: 0.19 Miles

ASSET: 10046011

RTE DESCRIPTION: From Harrison Pool Loop (Rte 106) to end of route

Section Number Section Length (miles) Inspection Date	001 0.19 4/22/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Primitive 1 10		
Roadway Condition Information			
Condition	Good		
Remaining Service Life (years)	7		
Cost Estimate CRV	\$100 \$0		

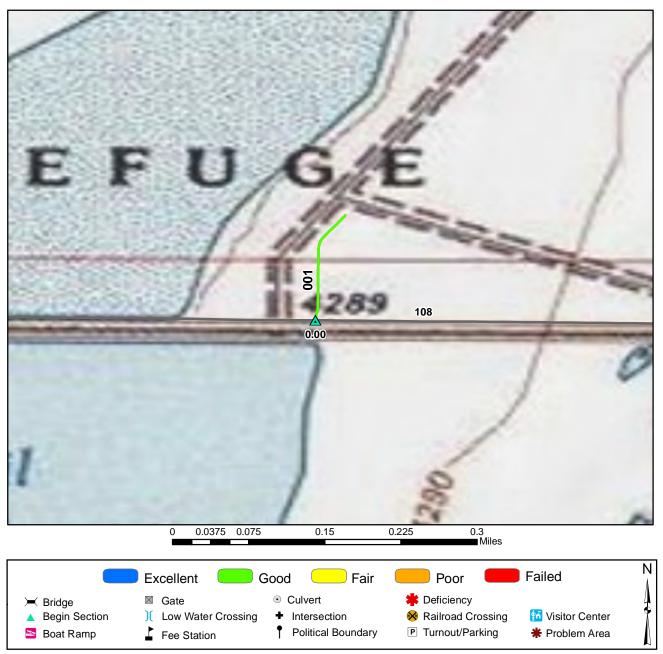


ROUTE: 318 Water Control Structure Road #4 TOTAL LENGTH: 0.17 Miles

ASSET: 10046011

RTE DESCRIPTION: From Water Control Structure Road #3 (Rte 318) to end of route

Section Number Section Length (miles) Inspection Date	001 0.17 4/22/2008		
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 7 \$100 \$0		

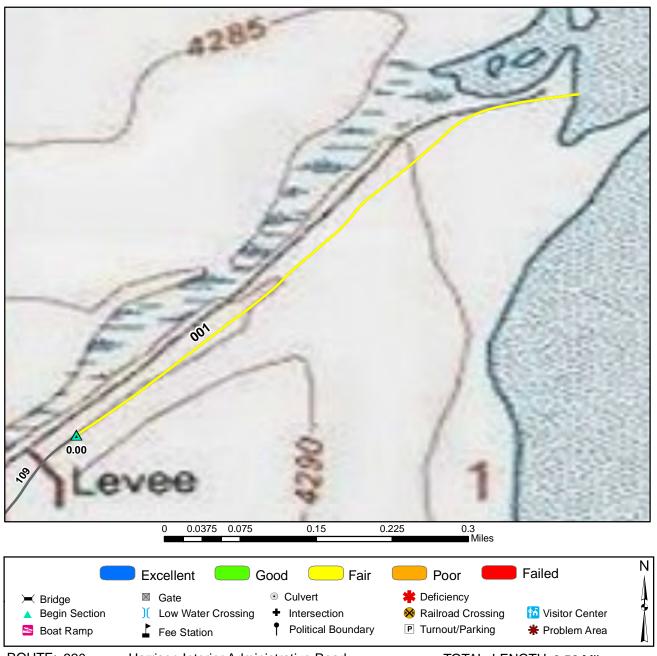


ROUTE: 319 Water Control Structure Road #5 TOTAL LENGTH: 0.11 Miles

ASSET: 10046011

RTE DESCRIPTION: From Pintail Pool Cutoff Road (Rte 108) to end of route

Section Number Section Length (miles) Inspection Date	001 0.11 4/22/2008		
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	\$0		
CRV	\$0		

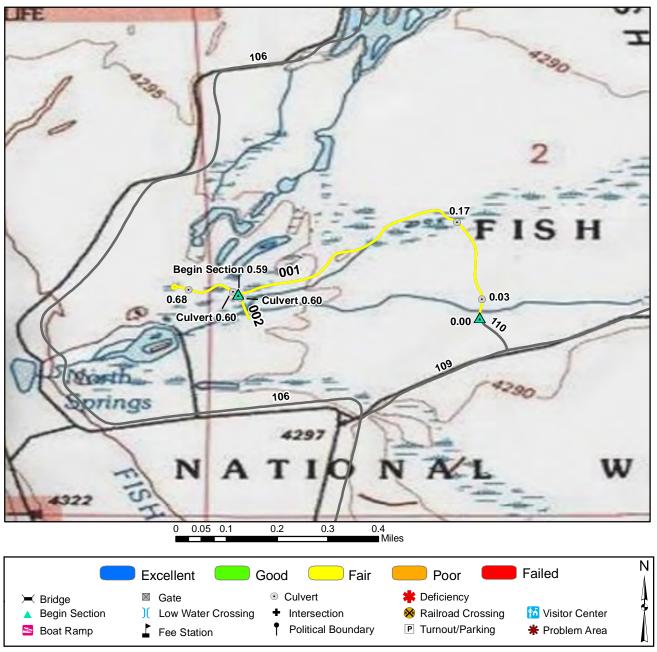


ROUTE: 320 Harrison Interior Administrative Road TOTAL LENGTH: 0.52 Miles

ASSET: 10034342

RTE DESCRIPTION: From Harrison Interior Road (Rte 109) to end of route

Section Number Section Length (miles) Inspection Date	001 0.52 4/22/2008		
Section Information			
Surface Type	Primitive		
Number of Lanes	1		
Roadway Width (feet)	10		
Roadway Condition Information			
Condition	Fair		
Remaining Service Life (years)	4		
Cost Estimate	\$400		
CRV	\$0		

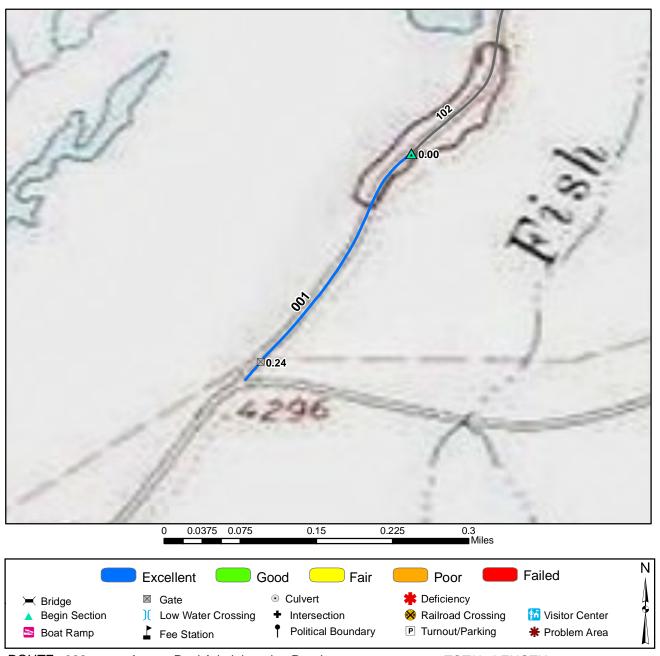


ROUTE: 321 Harrison Pool Administrative Spur TOTAL LENGTH: 0.77 Miles

ASSET: 10034342

RTE DESCRIPTION: From Harrison Interior East Parking (Rte 908) to end of route

Section Number Section Length (miles) Inspection Date	001 0.72 4/22/2008	002 0.05 4/22/2008		
Section Information				
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 10	Gravel 1 10		
Roadway Condition Information				
Condition	Fair	Fair		
Remaining Service Life (years) Cost Estimate	\$2600	\$200		
CRV	\$493800	\$35300		



ROUTE: 322 Avocet Pool Administrative Road TOTAL LENGTH: 0.26 Miles

ASSET: 10034344

RTE DESCRIPTION: From end of Avocet Pool Road (Rte 102) to end of route

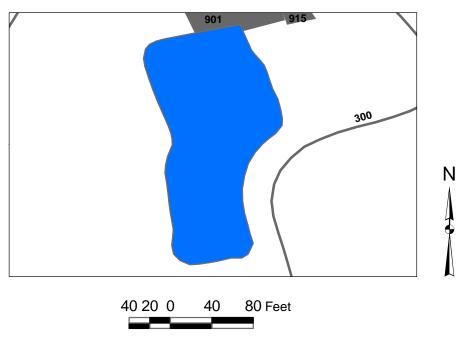
Section Number Section Length (miles) Inspection Date	001 0.26 4/23/2008		
Section Information			
Surface Type Number of Lanes Roadway Width (feet)	Gravel 1 10		
Roadway Condition Information			
Condition	Excellent		
Remaining Service Life (years)	9		
Cost Estimate	\$0 \$177700		
CRV	ψ177700		

### **Route 800: Administrative Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050852	4/22/2008	Gravel	16213	Excellent	\$0





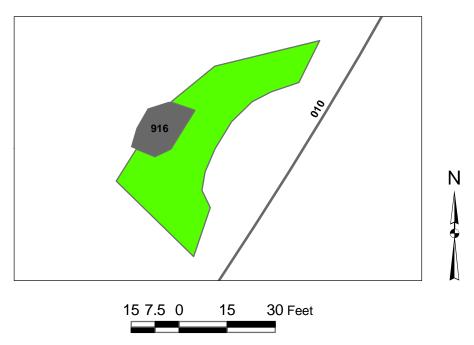


# **Route 900: Visitor Registration Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050852	4/21/2008	Gravel	1246	Good	\$200

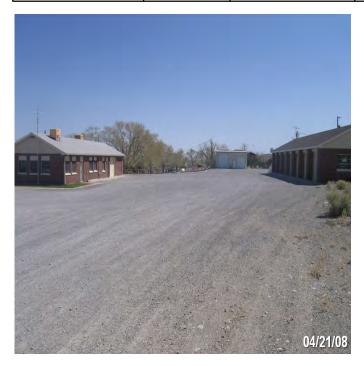




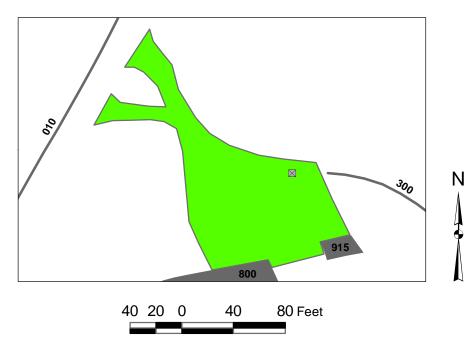


# **Route 901: Headquarters Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050852	4/21/2008	Gravel	9334	Good	\$1400





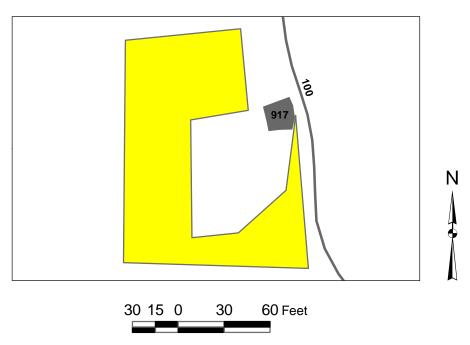


### Route 902: Watchable Wildlife Area Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050853	4/21/2008	Gravel	8877	Fair	\$2300





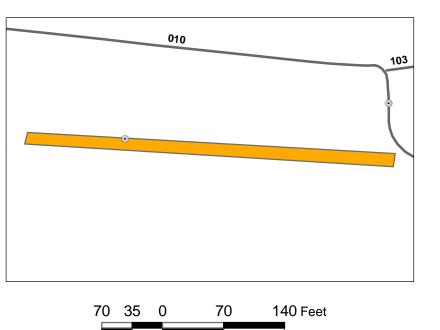


### **Route 903: Auto Tour Route Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050855	4/21/2008	Gravel	4811	Poor	\$5300





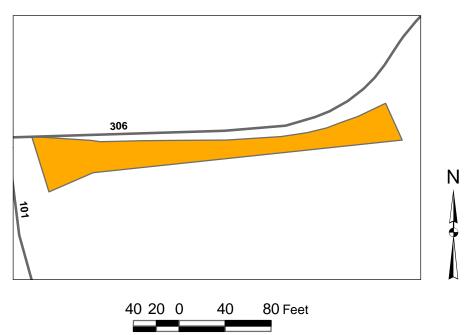


# **Route 904: South Spring Road Parking #1**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050857	4/21/2008	Native	5749	Poor	\$4700





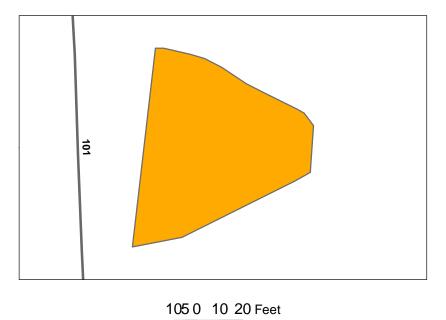


# **Route 905: South Spring Road Parking #2**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050858	4/21/2008	Gravel	3479	Poor	\$3800





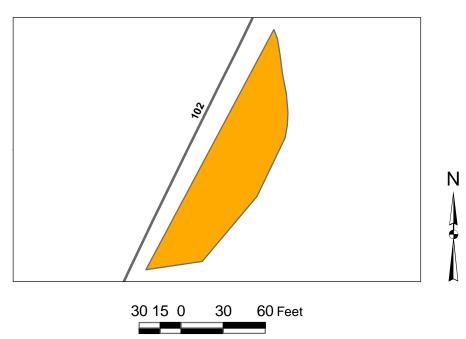


## **Route 906: Avocet Pool Parking #1**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050860	4/23/2008	Gravel	5126	Poor	\$5600

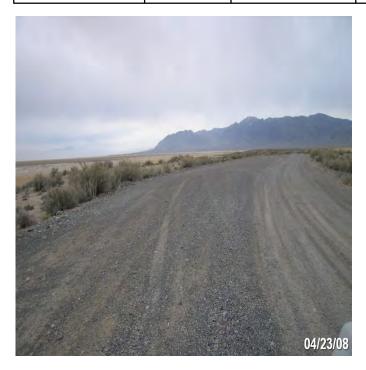




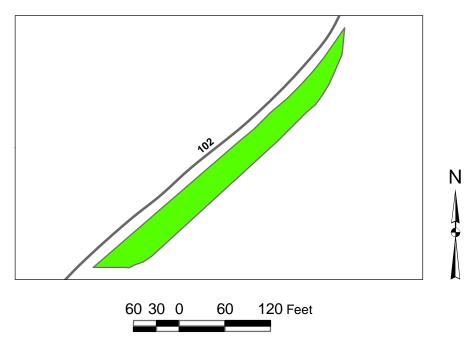


## **Route 907: Avocet Pool Parking #2**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050861	4/23/2008	Gravel	11245	Good	\$1700





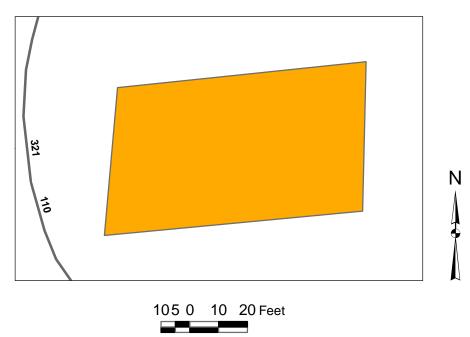


### **Route 908: Harrison Interior East Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050862	4/22/2008	Native	3605	Poor	\$2900





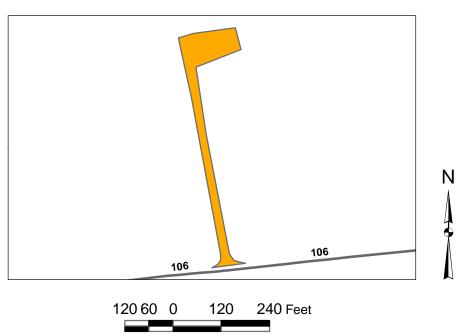


### **Route 909: Harrison Interior West Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050863	4/23/2008	Gravel	17230	Poor	\$19000

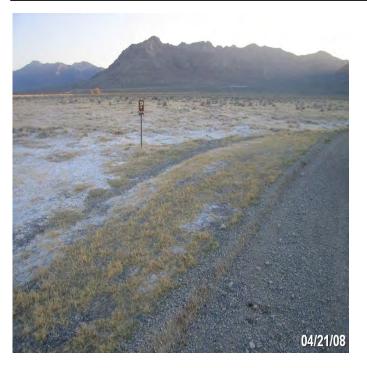




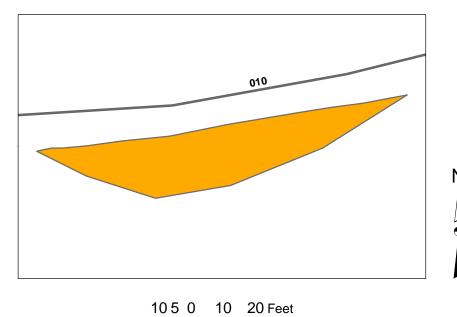


# **Route 910: Mallard West Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050872	4/21/2008	Gravel	1128	Poor	\$1200



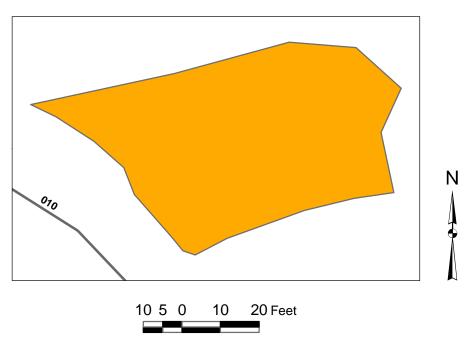




**Route 911: Mallard Parking** 

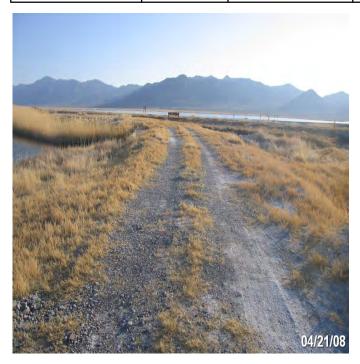
Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050872	4/21/2008	Native	2454	Poor	\$2000



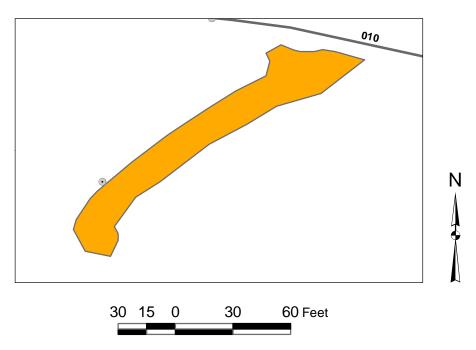


**Route 913: Curlew Northwest Parking** 

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050873	4/21/2008	Gravel	2604	Poor	\$2900





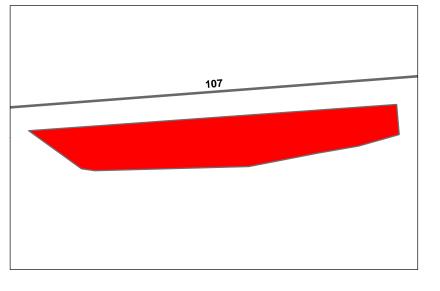


## **Route 914: Shoveler Pool Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050873	4/22/2008	Gravel	1575	Failed	\$5300



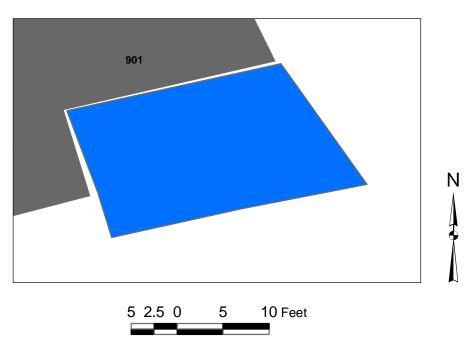




## **Route 915: Headquarters Handicapped Parking**

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050852	4/21/2008	Concrete	301	Excellent	\$0

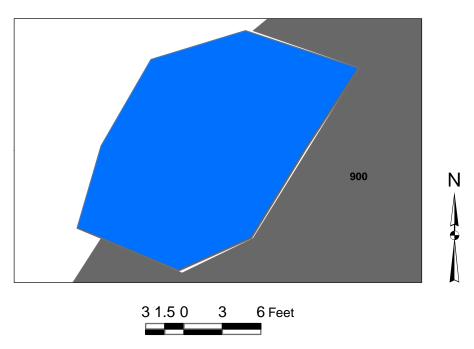




**Route 916: Vistor Registration Handicapped Parking** 

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050852	4/21/2008	Concrete	200	Excellent	\$0

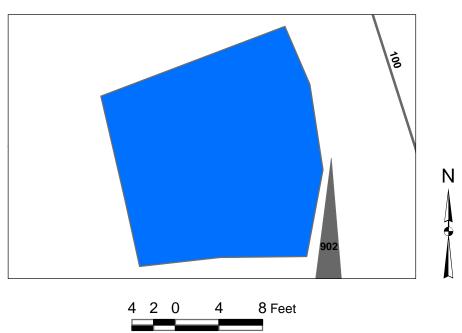




## Route 917: Watchable Wildlife Area Handicapped Parking

Asset Number	Date Visited	Surface Type	Area (sq ft)	Condition	Cost to Improve
10050853	4/21/2008	Concrete	267	Excellent	\$0





	Fish Springs NWR Bridge Inventory						
Rte #	Milepost	NBIS#	Sufficiency Rating	Functionally Obsolete	Structurally Deficient		
100	0.12	N/A	N/A	N/A	N/A		
101	0.01	N/A	N/A	N/A	N/A		
104	0.01	N/A	N/A	N/A	N/A		
104	0.03	N/A	N/A	N/A	N/A		
105	2.88	N/A	N/A	N/A	N/A		
105	2.12	N/A	N/A	N/A	N/A		
105	1.59	N/A	N/A	N/A	N/A		
106	1.01	N/A	N/A	N/A	N/A		
106	2.21	N/A	N/A	N/A	N/A		
106	4.20	N/A	N/A	N/A	N/A		
107	0.32	N/A	N/A	N/A	N/A		
304	0.01	N/A	N/A	N/A	N/A		
304	0.05	N/A	N/A	N/A	N/A		

#### FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3719 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3722 - MP 0.81 - Begin Section 002

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3731 - MP 1.72 - Begin Section 003

#### FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3734 - MP 1.99 - Begin Section 004

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3748 - MP 3.37 - Begin Section 005

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3764 - MP 5.78 - Begin Section 008

#### FEATURES PHOTOGRAPHS

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3771 - MP 6.83 - Begin Section 009

ROUTE NUMBER: 010 ROUTE NAME: Auto Tour Route



Photo # 3779 - MP 8.66 - Begin Section 011

ROUTE NUMBER: 100 ROUTE NAME: Watchable Wildlife Area Access Road



Photo # 3845 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 100 ROUTE NAME: Watchable Wildlife Area Access Road



Photo # 3847 - MP 0.12 - Bridge

ROUTE NUMBER: 101 ROUTE NAME: South Spring Road



Photo # 3844 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 101 ROUTE NAME: South Spring Road



Photo # 3843 - MP 0.01 - Bridge

ROUTE NUMBER: 102 ROUTE NAME: Avocet Pool Road



Photo # 4006 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 103 ROUTE NAME: Mallard Pool Road



Photo # 3981 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 104 ROUTE NAME: Curlew Pool Cutoff Road



Photo # 3985 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 104 ROUTE NAME: Curlew Pool Cutoff Road



Photo # 3985 - MP 0.01 - Bridge

ROUTE NUMBER: 104 ROUTE NAME: Curlew Pool Cutoff Road



Photo # 3988 - MP 0.03 - Bridge

ROUTE NUMBER: 105 ROUTE NAME: Egret Pool Road



Photo # 3874 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 105 ROUTE NAME: Egret Pool Road



Photo # 3873 - MP 1.02 - Begin Section 002

ROUTE NUMBER: 105 ROUTE NAME: Egret Pool Road



Photo # 3870 - MP 1.59 - Bridge

ROUTE NUMBER: 105 ROUTE NAME: Egret Pool Road



Photo # 3869 - MP 1.99 - Begin Section 003

ROUTE NUMBER: 105 ROUTE NAME: Egret Pool Road



Photo # 3866 - MP 2.12 - Bridge

ROUTE NUMBER: 105 ROUTE NAME: Egret Pool Road



Photo # 3863 - MP 2.88 - Bridge



Photo # 3946 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3953 - MP 1.00 - Begin Section 002

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3956 - MP 1.01 - Bridge



Photo # 3959 - MP 2.01 - Begin Section 003

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3960 - MP 2.21 - Bridge

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3963 - MP 2.59 - Begin Section 004



Photo # 3967 - MP 3.59 - Begin Section 005

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3968 - MP 4.20 - Bridge

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3972 - MP 4.29 - Begin Section 006



Photo # 3977 - MP 6.08 - Begin Section 007

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3978 - MP 6.32 - Begin Section 008

ROUTE NUMBER: 106 ROUTE NAME: Harrison Pool Loop



Photo # 3979 - MP 7.33 - Begin Section 009

ROUTE NUMBER: 107 ROUTE NAME: Shoveler Pool Cutoff Road



Photo # 3858 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 107 ROUTE NAME: Shoveler Pool Cutoff Road



Photo # 3860 - MP 0.32 - Bridge

ROUTE NUMBER: 107 ROUTE NAME: Shoveler Pool Cutoff Road



Photo # 3857 - MP 1.00 - Begin Section 002

ROUTE NUMBER: 108 ROUTE NAME: Pintail Pool Cutoff Road



Photo # 3919 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 108 ROUTE NAME: Pintail Pool Cutoff Road



Photo # 3923 - MP 1.00 - Begin Section 002

ROUTE NUMBER: 109 ROUTE NAME: Harrison Interior Road



Photo # 3924 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 110 ROUTE NAME: Harrison Pool Parking Spur



Photo # 3930 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 111 ROUTE NAME: Special Hunting Blind Area Road



Photo # 3812 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 300 ROUTE NAME: Administrative Residential Road



Photo # 3782 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 300 ROUTE NAME: Administrative Residential Road



Photo # 3783 - MP 0.04 - Begin Section 002

ROUTE NUMBER: 300 ROUTE NAME: Administrative Residential Road



Photo # 3784 - MP 0.14 - Begin Section 003

ROUTE NUMBER: 301 ROUTE NAME: Cistern Road



Photo # 3785 - MP 0.00 - Begin Route at Begin Section



Photo # 3786 - MP 0.57 - Begin Route at Begin Section

ROUTE NUMBER: 303 ROUTE NAME: Spring Unit Road #2



Photo # 3791 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 303 ROUTE NAME: Spring Unit Road #2



Photo # 3792 - MP 1.00 - Begin Section 002

ROUTE NUMBER: 303 ROUTE NAME: Spring Unit Road #2



Photo # 3793 - MP 1.58 - Begin Section 003

ROUTE NUMBER: 304 ROUTE NAME: Spring Unit Road #3



Photo # 3796 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 304 ROUTE NAME: Spring Unit Road #3



Photo # 3796 - MP 0.01 - Bridge

ROUTE NUMBER: 304 ROUTE NAME: Spring Unit Road #3



Photo # 3799 - MP 0.05 - Bridge

ROUTE NUMBER: 304 ROUTE NAME: Spring Unit Road #3



Photo # 3806 - MP 0.62 - Culvert Deficiency



Photo # 3807 - MP 0.62 - Culvert Deficiency



Photo # 3810 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 305 ROUTE NAME: Spring Unit Road #4



Photo # 3811 - MP 0.47 - Begin Section 002

ROUTE NUMBER: 306 ROUTE NAME: Handicapped Blind Administrative Road



Photo # 3817 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 306 ROUTE NAME: Handicapped Blind Administrative Road



Photo # 3826 - MP 1.01 - Begin Section 002

ROUTE NUMBER: 307 ROUTE NAME: Boneyard Access Road



Photo # 3849 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 307 ROUTE NAME: Boneyard Access Road



Photo # 3850 - MP 0.55 - Begin Section 002

ROUTE NUMBER: 308 ROUTE NAME: Spring Unit Road #5



Photo # 3851 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 309 ROUTE NAME: Spring Unit Road #6



Photo # 3852 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 309 ROUTE NAME: Spring Unit Road #6



Photo # 3853 - MP 0.07 - Culvert Deficiency

ROUTE NUMBER: 309 ROUTE NAME: Spring Unit Road #6



Photo # 3854 - MP 0.07 - Culvert Deficiency

ROUTE NUMBER: 310 ROUTE NAME: Water Control Structure Route #1



Photo # 3875 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 311 ROUTE NAME: Water Control Structure Route #2



Photo # 3880 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 312 ROUTE NAME: Ibis Administrative Road



Photo # 3883 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 313 ROUTE NAME: G7 Access Road



Photo # 3890 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 314 ROUTE NAME: Gadwall Dike Road



Photo # 3893 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 314 ROUTE NAME: Gadwall Dike Road



Photo # 3894 - MP 1.01 - Begin Section 002

ROUTE NUMBER: 314 ROUTE NAME: Gadwall Dike Road



Photo # 3897 - MP 2.00 - Begin Section 003

ROUTE NUMBER: 315 ROUTE NAME: Water Control Structure Road #1



Photo # 3901 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 316 ROUTE NAME: Water Control Structure Road #2



Photo # 3904 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 317 ROUTE NAME: Water Control Structure Road #3



Photo # 3909 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 318 ROUTE NAME: Water Control Structure Road #4



Photo # 3914 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 319 ROUTE NAME: Water Control Structure Road #5



Photo # 3922 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 320 ROUTE NAME: Harrison Interior Administrative Road



Photo # 3929 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 321 ROUTE NAME: Harrison Pool Administrative Spur



Photo # 3933 - MP 0.00 - Begin Route at Begin Section

ROUTE NUMBER: 321 ROUTE NAME: Harrison Pool Administrative Spur



Photo # 3942 - MP 0.59 - Begin Section 002

ROUTE NUMBER: 322 ROUTE NAME: Avocet Pool Administrative Road



Photo # 4013 - MP 0.00 - Begin Route at Begin Section

#### **Accident Summary**

Number of Accidents Reported	Timespan of Accidents	Injuries	Fatalities
0	No Accidents Reported	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.

 ${f Good}$  – 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		FA	FAIR GO		OD	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	