

The Trail Inventory of Boyer Chute NWR Ft. Calhoun, NE



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Federal Highway Administration
Central Federal Lands Highway Division
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NOTE TO USERS OR READERS

In this report, the reader may find a mix of dates associated with the condition assessment and photographs. Chapter 4 shows an updated condition assessment for each trail documented in this report. However there may be dates on the condition assessment pages that range from 2006 and 2007 to 2012. This occurred because the GPS dates of the trails originally rated in Cycle 1 were not updated when the cycle 3 assessment was done to in

2012. That GPS date is the basis for the Rating date in the report. Any new trail or section of trail that was collected and rated in Cycle 3 will have a rating date of 2012. While the rating dates may show a pre 2012 date, each trail was walked and its condition was assessed in 2012 during the Cycle 3 field season.

In Chapter 6 the reader may notice photographs with dates ranging from 2006 and 2007 to 2012. This occurs because the existing photographs from Cycle 1 were used if no significant or noticeable changes were seen in that location at the time of the Cycle 3 site visit.

The reader may also notice some of the feature photographs are used more than once. The practice of the same photograph being used for more than one feature was allowed during this cycle's data collection.

Boyer Chute NWR

Trail and Trail Feature Summaries

Trail Miles and Percentages by Surface Type and Condition

Trail Surface Type	Excellent		Fair		Very Poor		Total
	Miles	%	Miles	%	Miles	%	Miles
Gravel	0.04	4%	0.63	61%	0.36	35%	1.03
Concrete	0.00	0%	0.54	100%	0.00	0%	0.54
Total	0.04	3%	1.17	75%	0.36	23%	1.57

Trail Miles and Percentages by Trail Classification and Condition

Trail Classification	Excellent		Fair		Very Poor		Total
	Miles	%	Miles	%	Miles	%	Miles
TC4	0.04	4%	0.63	61%	0.36	35%	1.03
TC5	0.00	0%	0.54	100%	0.00	0%	0.54
Total	0.04	3%	1.17	75%	0.36	23%	1.57

*Admin Roads are included in the inventory but are not rated for condition.

Trail Features

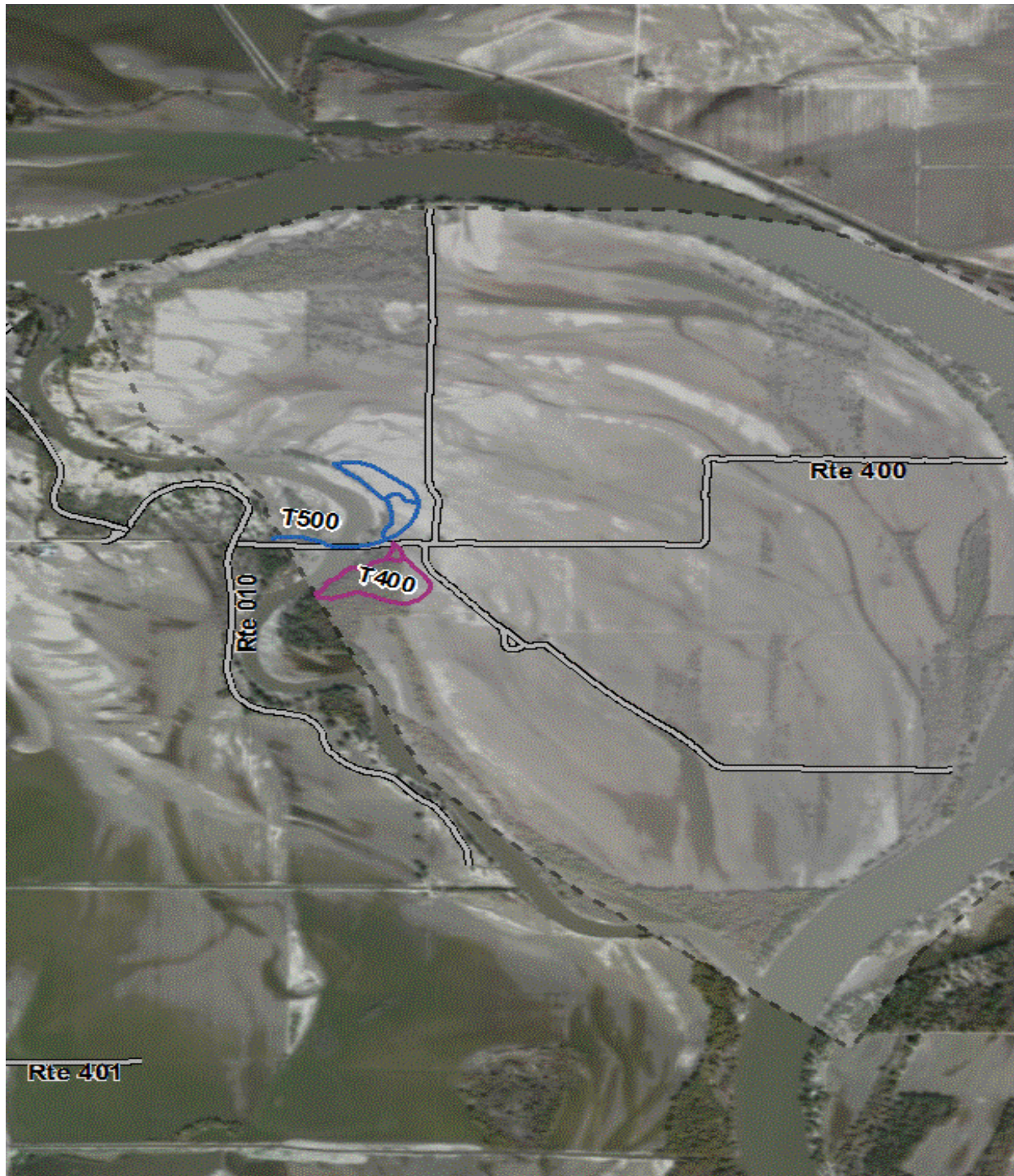
Trail Number	Feature Type	Quantity	Grouped Feature	Milepost	Photo
T300	Sign	2	No	0.00	BOYE_C3_041 2
T400	Trailhead	1	No	0.00	BOYE_C3_041 4
T400	Sign	1	No	0.03	BOYE_C3_041 5
T400	Lookout/Ob Deck	1	No	0.05	
T400	Bench	1	No	0.16	
T400	Bench	1	No	0.27	
T400	Bench	1	No	0.31	
T400	Bench	1	No	0.41	
T400	Bench	1	No	0.45	
T400	Bench	1	No	0.50	
T400	Begin Section	1	No	0.58	BOYE_C3_041 7
T500	Trailhead	1	No	0.00	BOYE_C3_042 0
T500	Sign	2	No	0.00	BOYE_C3_042 1
T500	Sign	1	No	0.01	BOYE_C3_042 2
T500	Bridge -sf	0	No	0.16	BOYE_C3_040 1
T500	Sign	1	No	0.20	BOYE_C3_040 2
T500	Other	1	No	0.23	
T500	Bench	1	No	0.29	
T500	Bench	1	No	0.35	
T500	Sign	1	No	0.35	BOYE_C3_040 4
T500	Begin Section	1	No	0.35	BOYE_C3_040 5
T500	Bench	1	No	0.39	
T500	Bench	1	No	0.40	
T500	Bench	1	No	0.44	
T500	Bench	1	No	0.45	
T500	Bench	1	No	0.49	
T500	Bench	1	No	0.50	
T500	Sign	2	No	0.54	BOYE_C3_040 3
T500	Sign	2	Yes	0.57	BOYE_C3_040 7
T500	Bench	1	No	0.67	

sf - square feet

lf - linear feet

cf - cubic feet

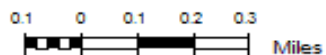
Boyer Chute NWR Trail Location Map



Station Boundary



HQ/VC



Trails ID

Station Name: Boyer Chute NWR

Org Code: 33515

Trail Number	Trail Name	Surface Type	SAMMS	Trail Mileage	Trail Description (Begin and End point of trail)
T400	Oriole Trail	Gravel	10032909	0.67	From Meadowlark Trail (T500) to end of loop
T500	Meadowlark Trail	Concrete	10032910	0.54	From Main Parking Area (Rte 900) to end of loop
T500	Meadowlark Trail	Gravel	10032910	0.36	From Main Parking Area (Rte 900) to end of loop

CHANGES TO THE FISH AND WILDLIFE SERVICE TRAIL INVENTORY REPORT

Boyer Chute NWR

Trails added to previous inventory:

Trail #	Trail Name	Reason for Addition
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Trails removed from previous inventory:

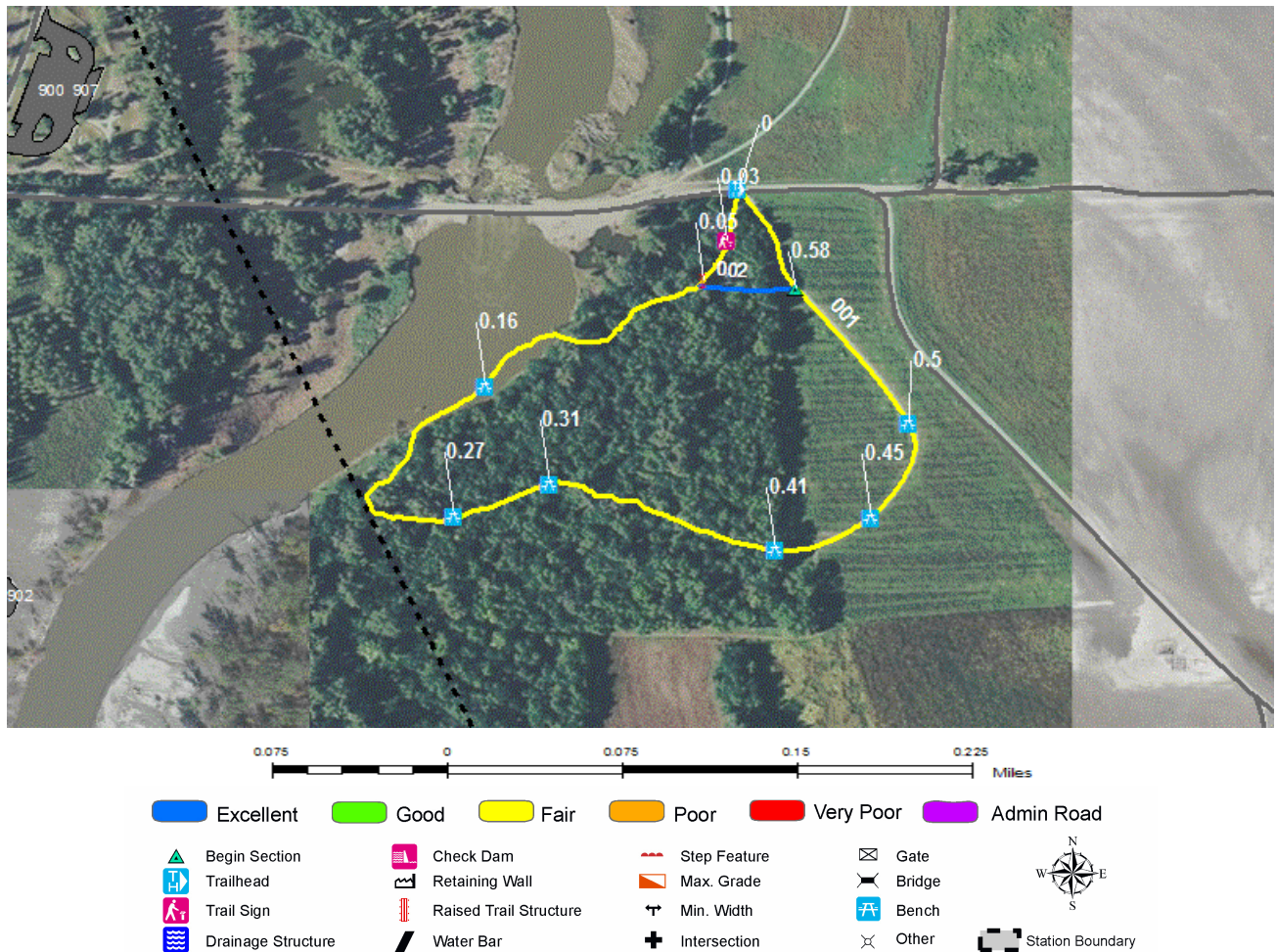
Trail #	Trail Name	Reason for Removal
T402	Headwaters Trail	Removed from inventory
T300	Island Loop Trail	Removed from inventory
T401	Confluence Trail	Removed from inventory

Trails modified from previous inventory:

Trail #	Trail Name	Type of Modification	Description of Modification
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Comments:

TRAIL CONDITION



Trail Name: Oriole Trail
Trail Number: T400

Refuge Name: Boyer Chute NWR
Region: 3

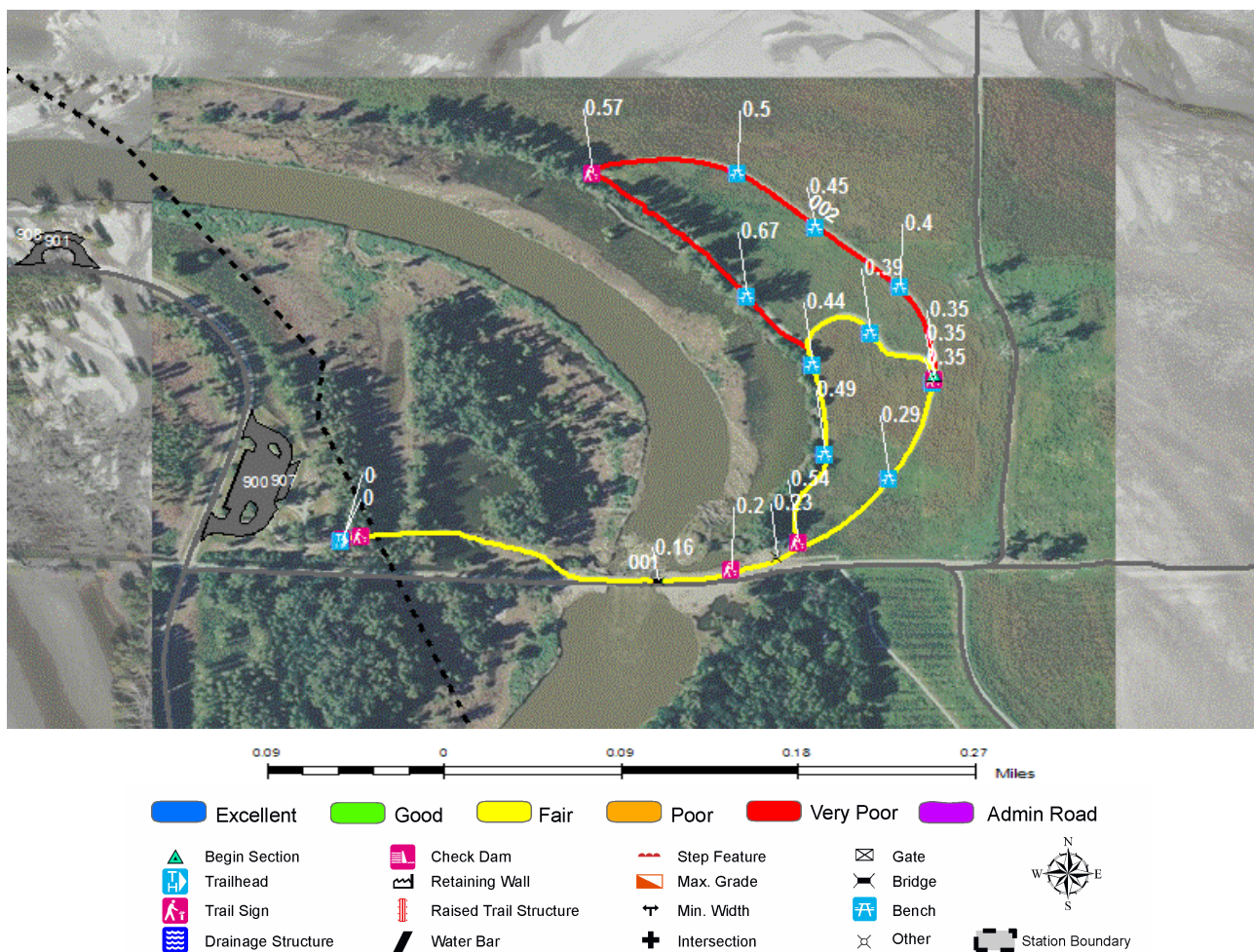
Total Length: 0.69 Miles

Section Number	001	002
Section Length (miles)	0.63	0.04
SAMMS Number	10032909	10032909
Rating Date	09/13/2006	09/13/2006
Trail Section Information		
Trail Class	TC4	TC4
Surface Type	Gravel	Gravel
Surface Firmness	Hard	Hard
Width (inches)	96	120
Average Grade (%)	1.9	1.9
Average X-slope (%)	1.20	1.20
Trail Condition Information		
Deferred Maintenance	\$10,061	
CRV	\$122,653	\$8,663
FCI	0.08	0.00
Condition	Fair	Excellent

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
\$10,061	\$131,317	0.08	Fair

TRAIL CONDITION



Trail Name: Meadowlark Trail
Trail Number: T500

Refuge Name: Boyer Chute NWR
Region: 3

Total Length: 0.90 Miles

Section Number	001	002
Section Length (miles)	0.54	0.36
SAMMS Number	10032910	10032910
Rating Date	09/12/2006	09/13/2006
Trail Section Information		
Trail Class	TC5	TC4
Surface Type	Concrete	Gravel
Surface Firmness	Paved	Hard
Width (inches)	96	108
Average Grade (%)	1.7	1.7
Average X-slope (%)	1.40	1.40
Trail Condition Information		
Deferred Maintenance	\$9,025	\$16,435
CRV	\$145,582	\$75,443
FCI	0.06	0.22
Condition	Fair	Very Poor

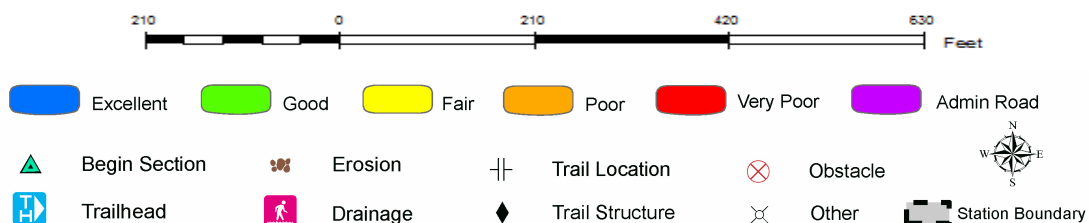
Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
\$25,460	\$221,025	0.12	Poor

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TRAIL DEFICIENCY



Trail Name: Oriole Trail

Refuge Name: Boyer Chute NWR

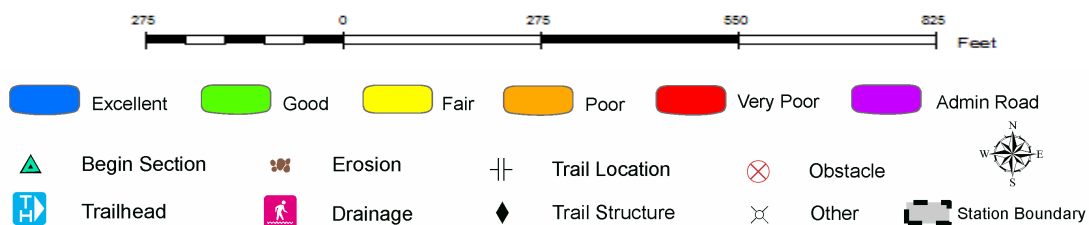
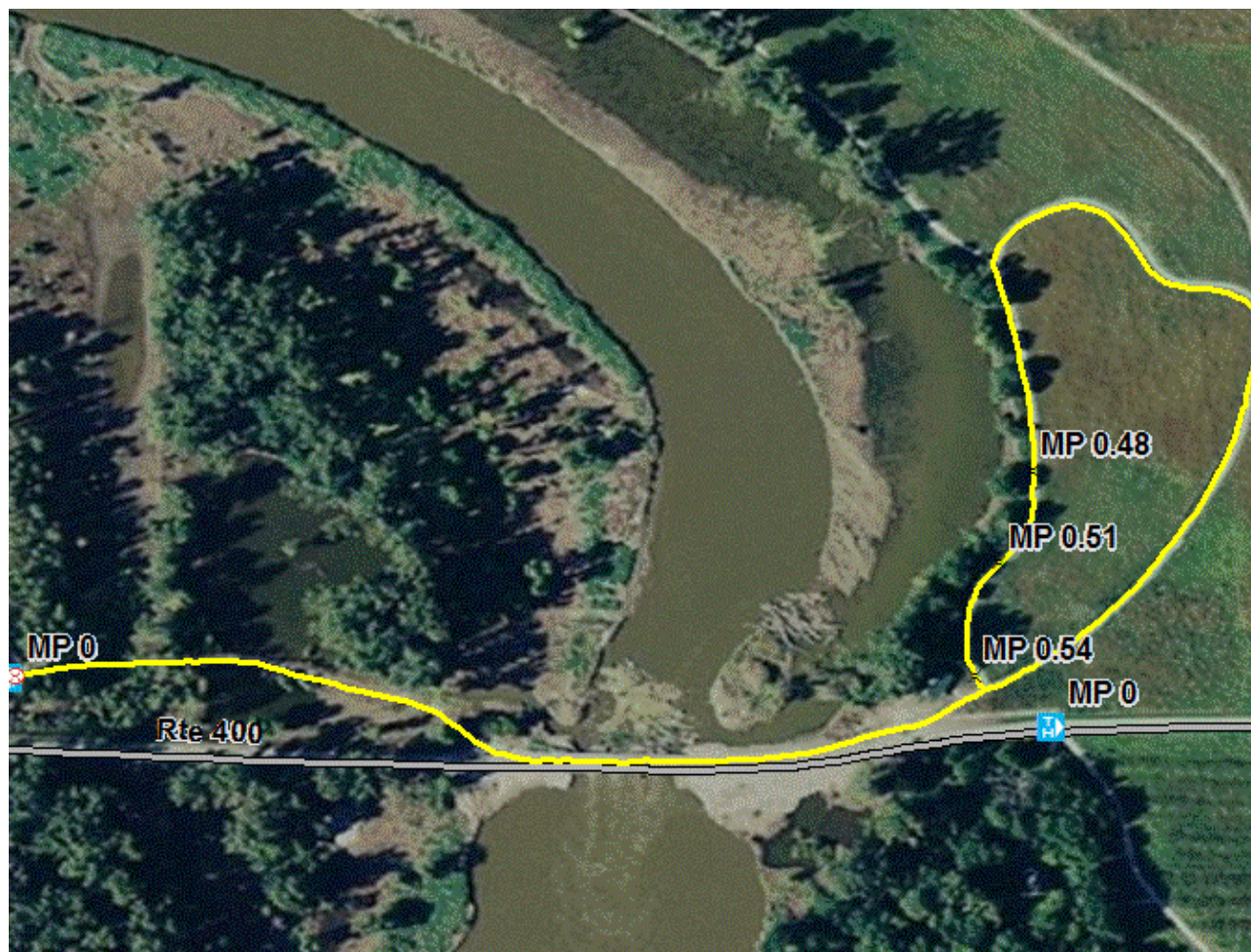
Trail Number: T400

Region: 3

Total Length: 0.69 Miles

Mile Post	0.06	0.20	0.46
Section Number	001	001	001
Photo Number	BOYE_C3_0416	BOYE_C3_0419	BOYE_C3_0418
Deficiency	Other	Erosion	Other
Action	Repair	Build/Add	Repair
Item	Tread -sf	Trail: New -lf	Tread -sf
Quantity	1,100	640	1,100
Deferred Maintenance	\$2,488	\$5,084	\$2,488

TRAIL DEFICIENCY



Trail Name: Meadowlark Trail

Refuge Name: Boyer Chute NWR

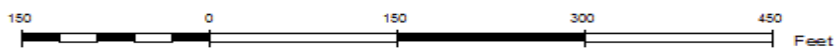
Trail Number: T500

Region: 3

Total Length: 0.90 Miles

Mile Post	0.00	0.48	0.51	0.54
Section Number	001	001	001	001
Photo Number	BOYE_C3_0423	BOYE_C3_0409	BOYE_C3_0410	BOYE_C3_0411
Deficiency	Obstacle	Other	Other	Other
Action	Repair	Repair	Repair	Repair
Item	Tread -sf	Tread -sf	Tread -sf	Tread -sf
Quantity	2,100	280	150	245
Deferred Maintenance	\$6,747	\$935	\$520	\$823

TRAIL DEFICIENCY



Trail Name: Meadowlark Trail

Refuge Name: Boyer Chute NWR

Trail Number: T500

Region: 3

Total Length: 0.90 Miles

Mile Post	0.39	0.71
Section Number	002	002
Photo Number	BOYE_C3_0406	BOYE_C3_0408
Deficiency	Other	Other
Action	Repair	Repair
Item	Tread -sf	Tread -sf
Quantity	350	7,000
Deferred Maintenance	\$820	\$15,615

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T300

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0412 - MP 0.00 - Sign

TRAIL NUMBER: T400

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0414 - MP 0.00 - Trailhead

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0415 - MP 0.03 - Sign

TRAIL NUMBER: T400

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0417 - MP 0.58 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0420 - MP 0.00 - Trailhead

TRAIL NUMBER: T500

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0421 - MP 0.00 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500
STATION: Boyer Chute NWR
DATE: 07/26/2012



Photo # BOYE_C3_0422 - MP 0.01 - Sign

TRAIL NUMBER: T500
STATION: Boyer Chute NWR
DATE: 07/26/2012



Photo # BOYE_C3_0401 - MP 0.16 - Bridge -sf

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500
STATION: Boyer Chute NWR
DATE: 07/26/2012



Photo # BOYE_C3_0402 - MP 0.20 - Sign

TRAIL NUMBER: T500
STATION: Boyer Chute NWR
DATE: 07/26/2012



Photo # BOYE_C3_0404 - MP 0.35 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500
STATION: Boyer Chute NWR
DATE: 07/26/2012



Photo # BOYE_C3_0403 - MP 0.54 - Sign

TRAIL NUMBER: T500
STATION: Boyer Chute NWR
DATE: 07/26/2012



Photo # BOYE_C3_0405 - MP 0.35 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500

STATION: Boyer Chute NWR

DATE: 07/26/2012



Photo # BOYE_C3_0407 - MP 0.57 - Sign

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The reader may also notice some photographs are used more than once. The practice of the same photograph being used for more than one feature was allowed during this cycle's data collection.

Glossary of Terms and Abbreviations

Acc Info	Accessibility information available at trailhead.
Action	Action required to correct deficiency.
Admin Road	Administration Road. Admin Roads signed and advertised as trails are included in the trail inventory but a condition assessment is NOT done.
Alt SAMMS	SAMMS number of Alternate Facility Type.
Alt Type	Alternate Facility Type. Trail lies on a feature such as a levee, dam, administrative road or bridge, which has a separate SAMMS number.
AvgGrade	The average grade of the trail (%). The average of five measurements for trails less than two miles and ten measurements for trails equal to or greater than 2 miles.
AvgSlope	The average cross-slope of the trail (%). The average of five measurements for trails less than two miles and ten measurements for trails equal to or greater than 2 miles.
Check Dam	A small dam constructed across a drainage ditch, swale, or channel to lower the speed of concentrated flows.
Condition	Subjective rating of trail based on Facility Condition Index (FCI): FCI \leq .01 = Excellent FCI .02 - .05 = Good FCI .06 - .10 = Fair FCI .11 - .20 = Poor FCI $>$.20 = Failed
Crib Wall	Retaining wall.
Current Replacement Value (CRV)	The value of an asset determined by the estimated cost of replacing it.
Def type	Deficiency Type: Trail Structure, Drainage, Erosion, Obstacle, Trail Location, Other.
Deferred Maintenance (DM)	Maintenance that was not performed when scheduled.

Elem ID	Unique identifier for each trail section: Org Code-Trail Number-Section Number.
Facility Condition Index (FCI)	DM/CRV
Grouped Features	Grouped features include non-unique signs (mileposts, interpretive signs, species identification, etc.), water bars, check dams, steps, drain and drainage dips. For any given grouped feature, a GPS point and photo are taken for the first occurrence only and the total number of features in the group are entered into the “quantity” field of the data dictionary.
Info Type	Type of accessibility information available at trailhead: brochure, sign or other.
Item	Item on which the “Action” (see above) will be performed.
Manage_Use	Managed use of the trail: HIKE, BIKE, NSPC (non-specified), PACK, POR (portage), SNOWSHOE, XSKI (cross-country ski), OTHER.
MP	Distance of a trail feature or deficiency from the Trailhead.
Puncheon	Log footbridge used in area of poor drainage.
Raised Trail Structure	Boardwalk, Turnpike, Puncheon.
T Class	Trail Class: I-V (see Appendix ? for trail class descriptions).
Tr Desig	Trail Designation: Standard (Std), National Historic Trail (NHT), National Recreation Trail (NRT), National Scenic Trail (NST).
Turnpike	Trail tread elevated with dirt, rock or other aggregate from parallel side ditches and held in place by logs.