

The Trail Inventory of Flint Hills NWR Hartford, KS



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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.

Flint Hills NWR

Trail and Trail Feature Summaries

Trail Miles and Percentages by Surface Type and Condition

Trail Surface Type	Excellent		Total
	Miles	%	Miles
Native	0.09	100%	0.09
Gravel	1.28	100%	1.28
Asphalt	0.12	100%	0.12
Concrete	0.14	100%	0.14
Boardwalk	0.02	100%	0.02
Total	1.65	100%	1.65

Trail Miles and Percentages by Trail Classification and Condition

Trail Classification	Excellent		Total
	Miles	%	Miles
TC4	1.49	100%	1.49
TC5	0.16	100%	0.16
Total	1.65	100%	1.65

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

Trail Features

Trail Number	Feature Type	Quantity	Grouped Feature	Milepost	Photo
T400	Sign	1	No	0.00	FLHI_C3_0561
T400	Trailhead	1	No	0.00	FLHI_C3_1393
T400	Sign	6	No	0.00	FLHI_C3_0557
T400	Sign	1	No	0.01	FLHI_C3_0560
T400	Lookout/Ob Deck	1	No	0.04	
T400	Drainage Ditch -lf	120	No	0.14	
T400	Max Grade- %	11	No	0.15	
T400	Culvert -lf	10	No	0.17	
T400	Begin Section	1	No	0.18	
T400	Begin Section	1	No	0.24	
T400	Other	50	No	0.26	
T400	Culvert -lf	8	No	0.26	
T400	Step: Log -each	1	No	0.26	
T400	Step: Log -each	2	No	0.28	
T400	Step: Log -each	1	No	0.30	
T400	Step: Log -each	1	No	0.31	
T400	Culvert -lf	50	No	0.31	
T400	Begin Section	1	No	0.31	FLHI_C3_0559
T400	Culvert -lf	50	No	0.31	
T400	Step: Log -each	5	No	0.31	
T400	Drainage Ditch -lf	60	No	0.31	
T400	Bench	1	No	0.31	
T400	Culvert -lf	50	No	0.32	
T400	Culvert -lf	50	No	0.32	
T400	Culvert -lf	6	No	0.35	
T400	Step: Log -each	7	No	0.37	
T400	Step: Log -each	1	No	0.38	
T400	Drainage Ditch -lf	70	No	0.40	
T400	Culvert -lf	50	No	0.40	
T400	Step: Log -each	2	No	0.40	
T400	Bridge -sf	35	No	0.41	FLHI_C3_1401
T400	Bridge -sf	70	No	0.43	FLHI_C3_1402
T400	Culvert -lf	8	No	0.44	
T400	Drainage Ditch -lf	60	No	0.44	
T400	Step: Log -each	2	No	0.45	
T400	Max Grade- %	17	No	0.47	
T400	Drainage Ditch -lf	55	No	0.47	
T400	Culvert -lf	8	No	0.47	

T400	Bench	1	No	0.48	
T400	Step: Log -each	9	No	0.48	
T400	Drainage Ditch -lf	48	No	0.50	
T400	Step: Log -each	4	No	0.50	
T400	Culvert -lf	5	No	0.52	
T400	Culvert -lf	8	No	0.53	
T400	Step: Log -each	5	No	0.55	
T400	Culvert -lf	5	No	0.55	
T400	Step: Log -each	3	No	0.56	
T400	Bridge -sf	88	No	0.57	FLHI_C3_1403
T400	Bench	1	No	0.59	
T400	Begin Section	1	No	0.59	FLHI_C3_1404
T400	Drainage Ditch -lf	60	No	0.59	
T400	Culvert -lf	8	No	0.59	
T400	Culvert -lf	5	No	0.60	
T400	Sign	2	No	0.61	FLHI_C3_0558
T401	Sign	7	No	0.00	FLHI_C3_0550
T401	Trailhead	1	No	0.00	FLHI_C3_1409
T401	Culvert -lf	6	No	0.05	
T401	Bench	4	No	0.11	
T401	Culvert -lf	6	No	0.12	
T401	Culvert -lf	6	No	0.12	
T401	Culvert -lf	6	No	0.12	
T401	Other	20	No	0.14	
T401	Bridge -sf	180	No	0.16	FLHI_C3_1411
T401	Culvert -lf	4	No	0.22	
T401	Bench	5	No	0.24	
T401	Sign	4	No	0.32	FLHI_C3_0552
T401	Begin Section	1	No	0.32	FLHI_C3_1413
T401	Begin Section	1	No	0.32	FLHI_C3_1412
T401	Max Grade- %	32	No	0.34	
T401	Sign	1	No	0.35	FLHI_C3_1412
T401	Step: Log -each	8	No	0.35	
T401	Bridge -sf	300	No	0.36	FLHI_C3_1415
T401	Sign	3	No	0.42	FLHI_C3_0553
T401	Begin Section	1	No	0.42	FLHI_C3_1416
T401	Sign	8	No	0.56	FLHI_C3_0554
T401	Sign	3	No	0.60	FLHI_C3_0555
T401	Begin Section	1	No	0.60	FLHI_C3_1418
T401	Step: Log -each	4	No	0.65	
T401	Drainage Ditch -lf	55	No	0.65	
T401	Water Bar:Wood -each	4	No	0.66	
T500	Trailhead	1	No	0.00	FLHI_C3_1405

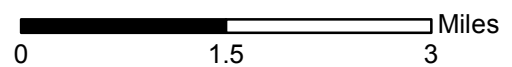
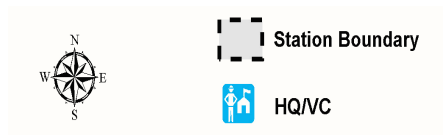
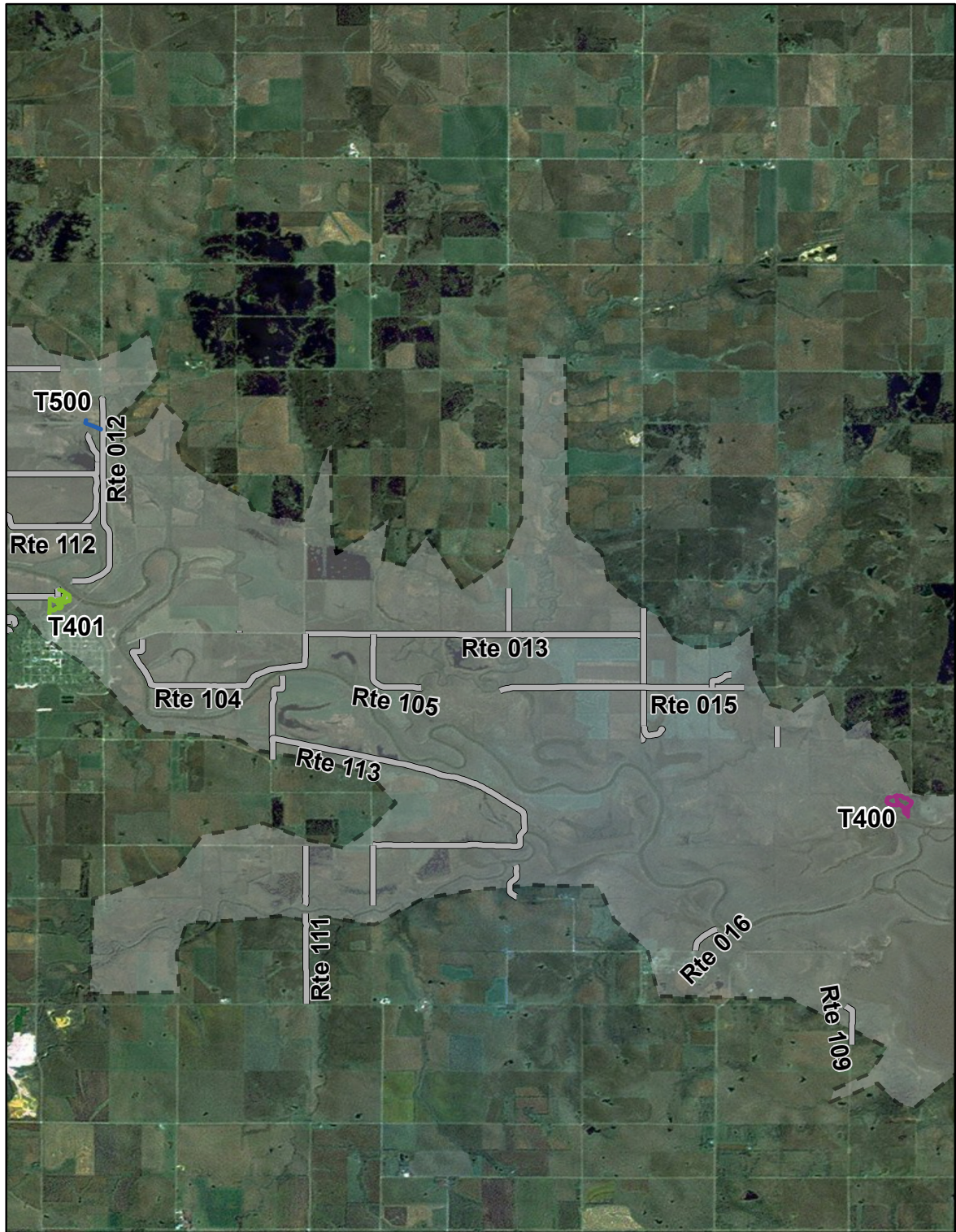
T500	Sign	6	No	0.01	FLHI_C3_0556
T500	Sign	1	No	0.01	FLHI_C3_1406
T500	Bench	3	No	0.06	
T500	Bench	2	No	0.13	
T500	Begin Section	1	No	0.14	FLHI_C3_1408

sf - square feet

lf - linear feet

cf - cubic feet

Flint Hills NWR Trail Location Map



Trails ID

Station Name: Flint Hills NWR

Org Code: 64580

Trail Number	Trail Name	Surface Type	SAMMS	Trail Mileage	Trail Description (Begin and End point of trail)
T400	Dove Roost Trail	Gravel	10032138	0.64	From Dove Roost Trail Parking (Rte 915) to end of loop at Dove Roost Trail Parking (Rte 915)
T400	Dove Roost Trail	Native	10032138	0.09	From Dove Roost Trail Parking (Rte 915) to end of loop at Dove Roost Trail Parking (Rte 915)
T401	Townsite Trail	Asphalt	10032158	0.12	From HQ Trailhead Road Parking (Rte 921) to east of HQ Trailhead Spur (Rte 103)
T401	Townsite Trail	Gravel	10032158	0.64	From HQ Trailhead Road Parking (Rte 921) to east of HQ Trailhead Spur (Rte 103)
T500	Burgess Marsh Trail	Boardwalk	10032175	0.02	From Burgess Marsh Parking B (Rte 905) to end of pier
T500	Burgess Marsh Trail	Concrete	10032175	0.14	From Burgess Marsh Parking B (Rte 905) to end of pier

CHANGES TO THE FISH AND WILDLIFE SERVICE TRAIL INVENTORY REPORT

Flint Hills NWR

Trails added to previous inventory:

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

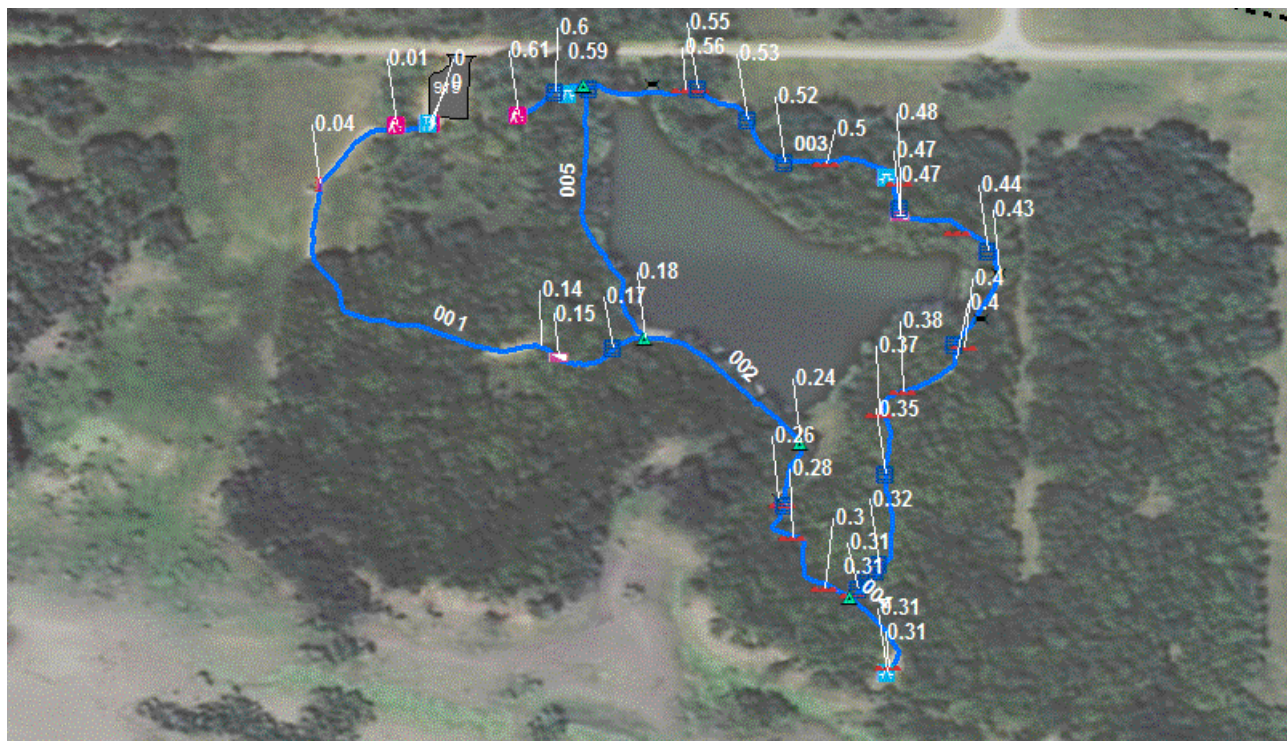
Trail #	Trail Name	Reason for Removal
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Trails modified from previous inventory:

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

TRAIL CONDITION



Trail Name: Dove Roost Trail
Trail Number: T400

Refuge Name: Flint Hills NWR
Region: 6

Total Length: 0.73 Miles

Section Number	001	002	003	004	005
Section Length (miles)	0.18	0.06	0.37	0.03	0.09
SAMMS Number	10032138	10032138	10032138	10032138	10032138
Rating Date	04/24/2007	04/24/2007	04/24/2007	04/24/2007	04/24/2007
Trail Section Information					
Trail Class	TC4	TC4	TC4	TC4	TC4
Surface Type	Gravel	Gravel	Gravel	Gravel	Native
Surface Firmness	Hard	Hard	Hard	Hard	Firm
Width (inches)	84	84	84	84	48
Average Grade (%)	4.6	4.6	4.6	4.6	4.6
Average X-slope (%)	1.80	1.80	1.80	1.80	1.80
Trail Condition Information					
Deferred Maintenance					
CRV	\$3,688	\$1,224	\$7,742	\$620	\$1,745
FCI	0.00	0.00	0.00	0.00	0.00
Condition	Excellent	Excellent	Excellent	Excellent	Excellent

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
	\$15,020	0.00	Excellent

TRAIL CONDITION



Trail Name: Townsite Trail
Trail Number: T401

Refuge Name: Flint Hills NWR
Region: 6

Total Length: 0.76 Miles

Section Number	001	002	003	004	005
Section Length (miles)	0.32	0.03	0.12	0.24	0.05
SAMMS Number	10032158	10032158	10032158	10032158	10032158
Rating Date	04/24/2007	04/24/2007	04/24/2007	04/24/2007	04/24/2007
Trail Section Information					
Trail Class	TC4	TC4	TC4	TC4	TC4
Surface Type	Gravel	Gravel	Asphalt	Gravel	Gravel
Surface Firmness	Hard	Firm	Paved	Hard	Hard
Width (inches)	60	60	60	60	60
Average Grade (%)	2.3	2.3	2.3	2.3	2.3
Average X-slope (%)	2.50	2.50	2.50	2.50	2.50
Trail Condition Information					
Deferred Maintenance					
CRV	\$6,713	\$974	\$2,610	\$5,123	\$1,145
FCI	0.00	0.00	0.00	0.00	0.00
Condition	Excellent	Excellent	Excellent	Excellent	Excellent

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
	\$16,564	0.00	Excellent

TRAIL CONDITION



Trail Name: Burgess Marsh Trail
Trail Number: T500

Refuge Name: Flint Hills NWR
Region: 6

Total Length: 0.16 Miles

Section Number	001	002
Section Length (miles)	0.14	0.02
SAMMS Number	10032175	10032175
Rating Date	04/24/2007	04/24/2007
Trail Section Information		
Trail Class	TC5	TC5
Surface Type	Concrete	Boardwalk
Surface Firmness	Paved	Hard
Width (inches)	60	64
Average Grade (%)	1.4	1.4
Average X-slope (%)	3.10	3.10
Trail Condition Information		
Deferred Maintenance		
CRV	\$4,073	\$2,383
FCI	0.00	0.00
Condition	Excellent	Excellent

Trail Condition TOTALS

Deferred Maintenance	CRV	FCI	Condition
	\$6,456	0.00	Excellent

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TRAIL DEFICIENCY

No Deficiencies

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0557 - MP 0.00 - Sign

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 09/06/2012



Photo # FLHI_C3_0561 - MP 0.00 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1393 - MP 0.00 - Trailhead

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0560 - MP 0.01 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1401 - MP 0.41 - Bridge -sf

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1402 - MP 0.43 - Bridge -sf

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 04/24/2007

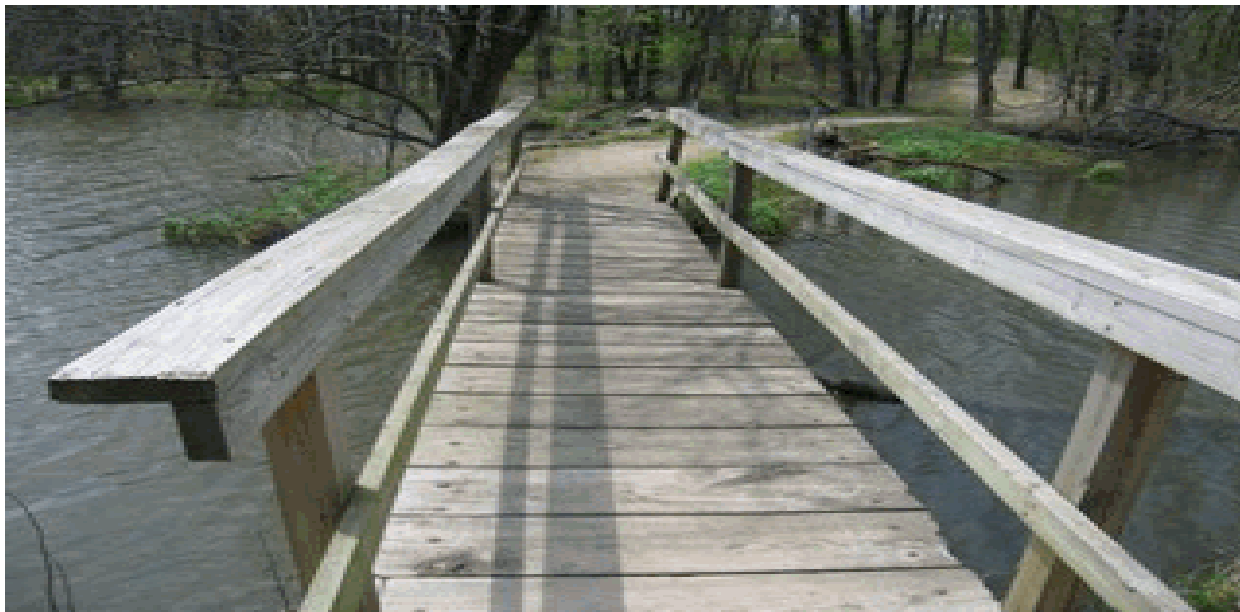


Photo # FLHI_C3_1403 - MP 0.57 - Bridge -sf

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0558 - MP 0.61 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_0559 - MP 0.31 - Begin Section

TRAIL NUMBER: T400
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1404 - MP 0.59 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0550 - MP 0.00 - Sign

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1409 - MP 0.00 - Trailhead

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1411 - MP 0.16 - Bridge -sf

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0552 - MP 0.32 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1413 - MP 0.32 - Begin Section

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1412 - MP 0.35 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1412 - MP 0.32 - Begin Section

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1415 - MP 0.36 - Bridge -sf

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0553 - MP 0.42 - Sign

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1416 - MP 0.42 - Begin Section

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0554 - MP 0.56 - Sign

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0555 - MP 0.60 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T401
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1418 - MP 0.60 - Begin Section

TRAIL NUMBER: T500
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1405 - MP 0.00 - Trailhead

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500
STATION: Flint Hills NWR
DATE: 07/27/2012



Photo # FLHI_C3_0556 - MP 0.01 - Sign

TRAIL NUMBER: T500
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1406 - MP 0.01 - Sign

PHOTOGRAPHIC SHEET

TRAIL NUMBER: T500
STATION: Flint Hills NWR
DATE: 04/24/2007



Photo # FLHI_C3_1408 - MP 0.14 - Begin Section

A NOTE TO USERS OR READERS

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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.