

## Appendix D.



USFWS

*Construction at Patuxent Research Refuge*

## **Refuge Operation Needs System and Service Asset Maintenance Management System Projects**



## Refuge Operation Needs and Service Asset Maintenance Management Systems

Patuxent Research Refuge (refuge) budget requests contained in the Refuge Operating Needs System (RONS) and Service Asset Maintenance Management System (SAMMS) databases include a wide variety of new projects and maintenance needs. The RONS and SAMMS lists are regularly updated to include priority projects. Contact the refuge for the most current RONS and SAMMS lists.

**Table D-1. Current Projects in RONS Database for Patuxent Research Refuge**

Station Priority Rank	Project Description	Estimated One-time Cost	Recurring Base Cost	Total First Year Need	FTE†	Alternatives
1	Maintenance worker (grounds)	-	\$82,967	\$82,967	1.0	B
2	Provide resource, facility, and visitor protection (law enforcement)	-	\$150,000	\$150,000	1.0	B
3	Enhance visitor services program in the area	-	\$128,072	\$128,072	1.0	B
4	Develop range design to restore 2,000 acres of refuge habitat	\$100,000	-	\$100,000	-	B
5	Maintenance worker (buildings)	-	\$82,967	\$82,967	1.0	B
6	Park ranger (interpretation)	-	\$105,858	\$105,858	1.0	B
7	Conduct forest health assessment and provide enhanced forest management (forester)	-	\$153,506	\$153,506	1.0	C
8	Provide enhanced habitat management (biologist)	-	\$105,858	\$105,858	1.0	B
9	Develop two cultural and historical interactive touch-screen kiosks	-	\$80,000	\$80,000	-	B
10	Global climate change and its effects on forested habitats	\$250,000	\$10,000	\$260,000	-	B
11	Control invasive plant species along the floodplain	\$70,000	\$22,000	\$130,815	1.0	B
12	Conduct a watershed assessment of the Patuxent Research Refuge	\$200,000	-	\$200,000	-	B
13	Restore riparian habitat	\$200,000	-	\$200,000	-	B
14	Phragmites control through floating islands at NWVC tertiary treatment ponds	\$150,000	-	\$150,000	-	C
15	Restore 60 acres of crop lands and a lysimeter test site	\$250,000	-	\$250,000	-	C
<b>Totals</b>		<b>\$1,220,000</b>	<b>\$921,228</b>	<b>\$2,180,043</b>	<b>8.0</b>	

†FTE = Full-time equivalent (i.e., full-time staff position)

**Table D-2. Current Projects in SAMMS Database for Patuxent Research Refuge**

<b>Project Number</b>	<b>Project Description</b>	<b>Cost</b>
01111639	Rehabilitate Quarters 2	\$148,000
2007732191	Replace Wells in Endangered Species Area	\$232,498
01111037	Rehabilitate Captive Propagation Laboratory	\$176,000
01112836	Rehabilitate Gabrielson for Fire/ Life Safety	\$522,000
01111029	Replace Gabrielson Single Pane Windows	\$522,000
2007732185	Replace Utility Lines on Well #5	\$0
01113329	Remove and Replace Quarters 162	\$568,000
2007732204	Rehabilitate Crane Pen Storm Drain	\$381,364
98109897	Rehabilitate Central Tract Gravel	\$522,000
99104968	Rehabilitate Loblolly Pine Road	\$43,000
01111687	Replace Culvert at Mill Race Road by "M" Pond	\$47,000
2007732007	Remove and Replace Fishing Pier/Boardwalk, Cash Lake	\$181,250
01110813	Remove Military Storage Buildings	\$12,600
2005225288	FY09 CE Rehab Bald Eagle Road (Rte. 014)	\$0
2007732041	Replace Culverts on Roque Harbor at North Tract	\$157,500
01111034	Rehabilitate Service Garage	\$148,000
01111641	Replace Heating, Ventilation and Air Conditioning at Gabrielson Lab	\$71,000
2007729501	Remove and Replace Quarters 161	\$379,000
2007720146	Rehabilitate Route 197 Fencing and Culverts PX DM (parent)	\$845,000
01111644	Remove Vegetation Under Powerline at Central Tract	\$130,000
2007732182	Rehabilitate Water Filtration System by Replacing Pump	\$0
04134325	Rehabilitate Visitor Center by Replacing Roof - Phase 2	\$61,531
99104957	Replace Refuge Boundary Fences, Signs and Path	\$516,000
2008857576	Replace Water Control Structure on Bluegill	\$81,800
2007731581	Rehabilitate Merriam HVAC System Phase II	\$0
01113323	Rehabilitate Quarters 65	\$342,000
01112857	Rehabilitate Gabrielson Building Egress for Life Safety	\$264,000
01112937	Replace Carpeting in Gabrielson	\$167,000
01111624	Rehabilitate Vet Hospital	\$52,000
01113328	Rehabilitate Quarters 161	\$123,000
2007732013	Replace Spillway and Culvert on Hance Pond I	\$98,500
04134354	Rehabilitate Visitor Center by Conducting Condition Assessment	\$37,000
2007732038	Rehabilitate Water Control Structure on Blue Heron Pond at North Tract	\$18,900
2007732005	Remove and Replace Charlie Gate Culverts at North Tract	\$141,750
03130645	Rehabilitate Cash Lake Dam	\$26,000
2007731203	Remove Quarters 50 (Apartment #1,2,3,4)	\$0
01111629	Rehabilitate Merriam Garage	\$214,000
2008859866	Rehabilitate Service Building Garage Roof	\$0
98121508	Replace Telegraph Road Culvert and Central Tract Gravel Road - Phase II	\$522,000
2011205862	Rehabilitate Visitor Center Ventilation and Air Conditioning Phase IV - Contract	\$331,000
01110816	Remove Military Fallout Shelter	\$9,500

Appendix D. Refuge Operation Needs and Service Asset Maintenance Management Systems

<b>Project Number</b>	<b>Project Description</b>	<b>Cost</b>
2007732019	Rehabilitate Dike on Wood Duck Ponds	\$179,580
97104967	Rehabilitate Snowden Spillway Bridge	\$29,000
99104944	Replace Snowden Gate Valve	\$33,000
2007732024	Replace Dike, Earth, Uhler 2 at Central Tract	\$394,000
01113325	Rehabilitate Quarters 80	\$167,000
01111623	Rehabilitate Captive Propagation Shop	\$263,000
2007732193	Replace Endangered Species Reservoir, CT	\$578,736
01113327	Remove and Replace Quarters 160	\$255,000
2007731592	Rehabilitate Boat Garage	\$21,000
01111788	Replace Knowles II Water Control Structures	\$116,554
2005199799	Rehabilitate Route 197 Fencing and Culverts	\$745,000
2012218582	Replace Culvert/Headwalls at Duvall Bridge Road Gate (d)	\$37,600
01111684	Replace Culvert/Headwalls at Duvall Bridge Road Gate	\$399,300
2005221075	Rehab Bald Eagle Drive (Rte. 014)	\$0
01110812	Remove Military Utilities - Waterline, Telephone Poles and Fences	\$418,000
2007732009	Rehabilitate Floating Walkways	\$32,745
04134293	Rehabilitate Merriam - Facility's Roof, Plumbing Electrical and Windows	\$704,000
2007731584	Rehabilitate Merriam ADA Restroom	\$142,000
2007731586	Repair and Rehabilitate Quarters 49	\$279,000
03126575	Replace Quarters 50 with a Duplex - Phase II	\$614,000
01113319	Repair and Rehabilitate Quarters 51	\$240,000
2007732200	Replace Pumping Station, by Replacing Pump	\$225,807
01112967	Rehabilitate Gabrielson Exterior Drainage and Utilities	\$80,000
02120078	Repair Storage Building 165	\$243,000
01111797	Replace Concrete Culverts along Loblolly Pine Road	\$47,000
2007726671	Rehabilitate Cash Lake Dam	\$66,000
04134302	Rehabilitate Merriam HVAC System	\$749,000
04134316	Rehabilitate Merriam for OSHA and ADA	\$671,000
01111643	Rehabilitate Quarters 48	\$144,000
01112932	Rehabilitate Gabrielson for ADA Access	\$211,000
01111627	Rehabilitate Coburn Annex	\$306,000
2007732011	Rehabilitate Dike on Hobbs Pond Impoundment E.S. Area	\$63,040
2011205860	Rehabilitate Visitor Center Ventilation and Air Conditioning Phase III	\$591,460
2005225290	FY09 CE Rehab Visitor Contact Station Parking Lot (Rte. 908)	\$0
2007732017	Rehabilitate Dike on New Marsh at North Tract	\$179,580
2007729509	Remove and Replace Quarters 64	\$354,000
01112899	Rehabilitate Electrical System at Gabrielson	\$457,000
2005199823	Replace Water Control Structure at Knowles III	\$77,000
04134327	Rehabilitate Visitor Center by Replacing Flat Roof	\$1,485,731
2005221077	Rehab VCS Parking Lot (Rte. 908)	\$0
2007726670	Rehabilitate Lake Allen Spillway	\$20,000
<b>Total:</b>		<b>\$19,711,326</b>

