

## 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†
1	Maintenance worker (grounds)	-	\$82,967	\$82,967	1.0
2	Provide resource, facility, and visitor protection (law enforcement)	-	\$150,000	\$150,000	1.0
3	Enhance visitor services program in the area	-	\$128,072	\$128,072	1.0
4	Develop range design to restore 2,000 acres of refuge habitat	\$100,000	-	\$100,000	-
5	Maintenance worker (buildings)	-	\$82,967	\$82,967	1.0
6	Park ranger (interpretation)	-	\$105,858	\$105,858	1.0
7	Conduct forest health assessment and provide enhanced forest management (forester)	-	\$153,506	\$153,506	1.0
8	Provide enhanced habitat management (biologist)	-	\$105,858	\$105,858	1.0
9	Develop two cultural and historical interactive touch-screen kiosks	-	\$80,000	\$80,000	-
10	Global climate change and its effects on forested habitats	\$250,000	\$10,000	\$260,000	-
11	Control invasive plant species along the floodplain	\$70,000	\$22,000	\$130,815	1.0
12	Conduct a watershed assessment of the Patuxent Research Refuge	\$200,000	-	\$200,000	-
13	Restore riparian habitat	\$200,000	-	\$200,000	-
<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 #</b>	<b>Description</b>	<b>Cost</b>
01111639	Remove and Replace Quarters 2	\$500,000
01113586	Stabilize Historic Snowden hall	\$1,631,400
01118043	Nelson Lab HVAC replacement (geothermal system)	\$671,000
2006508071	Nelson Lab Communications Electric & Plumbing Repairs	\$281,000
2012213807	Nelson lab Interior Finishes	\$397,900
2013226786	Nelson Lab Finish 2nd floor	\$179,100
2013226787	Exterior Drainage and ADA Access Upgrades	\$165,400
01118069	Demolish Henshaw Lab	\$150,000
04134293	Rehabilitate Merriam Laboratory P1 Structural repairs & building Envelope	\$1,200,000
04134302	Rehabilitate Merriam Laboratory P2 HVAC Geothermal	\$1,300,000
04134316	Rehabilitate Merriam Laboratory P3 Interior Partitions, HVAC & Plumbing	\$1,100,000
2007731584	Rehabilitate Merriam Laboratory P4 Electrical and communications (child)	\$1,000,000
2013227455	Rehabilitate Merriam Laboratory P5 Interior Finishes & HVAC Commissioning	\$950,000
01111643	Rehabilitate Quarters 48	\$144,000
2007731586	Rehabilitate Quarters 49 Windows	\$94,000
2007731203	Renovate Quarters 50 (Apartment #1,2,3,4)	\$400,000
01113319	Remove and Replace Quarters 51	\$500,000
01111034	Rehabilitate Service Garage 52	\$169,100
2013227730	Rehabilitate Service Garage 53	\$53,300
2007729509	Remove and Replace Quarters 64	\$500,000
01113323	Remove and Replace Quarters 65	\$500,000
01111629	Rehabilitate Merriam Garage	\$105,900
01113325	Rehabilitate Quarters 80	\$167,000
2008859866	Rehab Service Garage #89	\$92,400
2010133230	Remove and Replace Salt Shed	\$164,000
2006508018	Rehabilitate Service Building	\$2,357,800
02120075	Demolish Building 158	\$110,000
01113327	Demolish Quarters 160	\$90,000
01113328	Demolish Quarters 161	\$90,000
01113329	Demolish Quarters 162	\$90,000
02120078	Replace Building 165	\$150,000
2013227006	Demolish Building 165	\$100,000
02120079	Demolish Building 167	\$100,000
2013227007	Demolish Building 171/Well #9	\$20,000

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

<b>Project #</b>	<b>Description</b>	<b>Cost</b>
2007732011	Rehabilitate Dike on Hobbs Pond Impoundment E.S. Area	\$53,000
2007732013	Replace Spillway and Culvert on Hance Pond I	\$11,000
01111788	Replace Knowles II Water Control Structures	\$68,000
2005199823	Replace Water Control Structure at Knowles III	\$51,000
2007720147	Rehabilitate Route 197 ES Fencing	\$845,000
2005199799	Rehabilitate Route 197 Fencing	\$868,000
98109897	Rehabilitate Central Tract Paved Roads	\$522,000
2012218582	Replace Millrace Culvert and Headwalls (design)	\$37,600
01111684	Replace Millrace Culvert and Headwalls	\$399,300
01111687	Replace Culvert at Mill Race Road by "M" Pond	\$47,000
2013227048	Demolish South Tract Sewer System #615	\$25,000
02121357	Replace HVAC system at North Tract Visitor Contact Station	\$30,500
04134325	Replace Visitor Center Roof - Design	\$61,531
04134327	Rehabilitate Visitor Center by Replacing Flat Roof	\$1,485,731
2013227050	Install Solar Energy System at Visitor Center	\$25,000
01110813	Remove Military Storage Buildings	\$12,600
2013227690	Convert North Tract Electric Distribution to BGE Standards	\$450,000
2007732130	Rehabilitate D/E Road Route 432	\$100,000
99104957	Replace North Tract Refuge Boundary Fences, Signs and Path	\$516,000
2013227687	Replace Viewing Tower at North Tract Wildlife Viewing Area	\$250,000
01110812	Remove Military Utilities - Waterline, Telephone Poles, and Fences	\$418,000
2007732009	Rehabilitate Floating Walkways	\$32,745
2007732168	Rehabilitate Powder Mill Road #836	\$553,100
2007732041	Replace Culverts on Rogue Harbor at North Tract	\$157,500
99104944	Install Agri-drain Water Control Station on Snowden Pond	\$50,000
2008857576	Remove Water Control Structure on Bluegill	\$8,000
04133340	Construct Admin Building for Migratory Bird (child)	\$10,338,000
	Replace Roof Coburn Area Service Garage	\$25,000
	Rehabilitate Ranges 2-8	\$9,000,000
<b>Total</b>		<b>\$41,963,907</b>