

**Appendix F:
RONS & MMS
&
Projects That Will Require Additional Funding**

Appendix F contains three tables. The first table presents an estimate of additional funding and staffing that would be required to implement the Comprehensive Conservation Plan (CCP). The second table lists the current "Refuge Operations Needs System" (RONS) proposed projects, and the third is the current list of "Service Asset Maintenance Management System" (SAMMS) proposed projects.

The second and third tables are outdated and need to be updated to agree with the first table, once this plan is approved. In the meantime, they are present only for reference.

The Refuge Operations Needs System (RONS) lists refuge projects over \$20,000. The Service Asset Maintenance Management System (SAMMS) identifies maintenance needs on refuges, as well as proposed construction projects. Funding is allocated through the Service's Northeast Regional Office and is based on Congressional appropriation to the Service.

Table H-1 Definitions:

Project: Name of the Project

Staff: Staff that would be hired to implement this and other projects.

One-Time Cost: estimated costs incurred one time during the project – typically higher than recurring costs, due to construction, equipment purchase, or other start-up expenses. This includes the startup cost of new staff. Each new staff person is under only one project, but many of the listed projects will depend on their presence. This does not include salary, as that is not a one-time cost. No cost is listed for relocation expenses which vary from \$500 to \$50,000. Land acquisition costs are not estimated, as the market has been highly volatile.

Construction costs are derived from the "Northeast Region Construction and Rehabilitation Cost Estimating Guide of February 1999". Nineteen percent is added to bring the estimate up to 2006 dollars, and Engineering overhead and contingency is 30% where applicable.

Recurring Cost: estimated average annual cost for subsequent years; includes recurring salary, supplies, and maintenance costs. Salary cost for each added staff member is listed under only one project, even though they will enable the undertaking of other projects.

Project Duration: estimated length of time for each project. Since this CCP will be revised in 15 years, the maximum length of time will be 15 years, even though many projects will continue past 15 years.

Figure F-1

Projects that will require significant funding and/or additional staff

Projects that will Require Significant Funding or Additional Staff				
Project	Staff	One-Time Startup Cost x 1,000	Recurring Cost x 1,000	Duration (years)
Treat 6,000 acres of inaccessible Forest Stands with Herbicides	GS-11 Forester (converted from existing Fire funded GS-9 forester)	80	153	15
	GS-7 Forestry Tech			
Improve RCW habitat on 10,000 ac by hardwood removal and prescribed burning	GS-4 Forestry Tech (fire seasonal)	40	72	15
	GS-6 Forestry Tech (fire seasonal)			

Restore 220 Ac of Remnant Marsh	WG-6 Tractor Operator	10	67	15
Develop GIS Model for surface flooding	GS-11 Wildlife Biologist GS-7 Biological Technician	280	114	5
Reintroduce RCW's and monitor		0	7	15
Monitor Black Bear Population		500	0	5
Acquire Remaining Properties within Acq. Boundary		Depends on land values	N/A	15
Resolve Boundary Disputes and Post Boundary	GS-11 Supervisory Assistant Refuge Manger (converted from existing GS-9 Facility Manager)	40	111	15
Purchase Land at Jericho Lane for EE Site		Depends on land values	N/A	5
Purchase and Replenish Field Study Equipment	GS-11 Environmental Education Specialist	190	85	15
Host Annual Events		50	15	15
Develop New Kiosks		150	5	15
Pave Major Vehicle Access Points		2,913		1
Purchase and Operate Tram	WG-8 Maintenance Worker	190	50	15
Construct Accessible Observation Tower at Lake Drummond		250		1
Develop Feeder Ditch Trail System		2,800	20	15
Expand Volunteer Program	GS-9 Volunteer Coordinator	50	72	15
Convert existing refuge HQ to Contractor Operation		700	5	15
Establish HQ and visitor Center in Chesapeake	GS-12 Visitor Services Manager GS-11 Visitor Services Specialist GS-4 Visitor Services Technician GS-9 Park Ranger (Law Enforcement) GS-9 Administrative Officer	7,619	363	15
Establish a Visitor Contact Station in Sunbury, NC	GS-7 Visitor Services Specialist	190	71 plus lease?	15

Complete Road Improvements for Corapeake Auto Tour Route		1,000	10	15
Total	17	17,052	1,220	

Figure F-2

Existing* Maintenance Management System (MMS) Projects, now incorporated as Workorders in the Service Asset Maintenance Management System (SAMMS)

*This project list will be adjusted to reflect the CCP once it is approved.

Project # (SAMMS WO)	Project Name	Cost Estimate (\$1,000)
98104077	Replace old 1979 Caterpillar bulldozer (FY 2008)	183
99110301	Construct Education/Heritage Tourism Center-Chesapeake, VA and Pasquotank Co. NC	10,666
98104067	Replace 1976 International Truck and Portable Bridge	159
00123794	Construct Trails and Canoe Landing, Phase III	152
99110302	Construct Retrofit to Existing Refuge HQ for Concessionaire Operations	2,610
01113015	Replace Terrain King Boomaxe and John Deere Deck mower	31
02120865	Replace Tiltbed Truck	84
05138381	Construct Underground Railroad Interpretive Panels and Kiosk	80
99110639	Construct Facility for Administration and Visitor Contact in Sunbury, NC	2,088
01112993	Replace Dodge Caravan (2007)	31
89104088	Replace Four Concrete Culverts and Regravel Road/Parking Lot (Washington Ditch, FY 2009)	184
99104081	Repair Leaking Jericho North Water Control Structure (FY 2009)	77
01113013	Replace Feller-Buncher Shears (FY 2007)	31
97104085	Rehabilitate Big Entry Bridge and Portsmouth Ditch Road (FY 2012)	350
02120876	Replace FMO's 2000 Dodge Dakota (FY 2008)	31
01112987	Replace 1998 Dodge Dakota 4x4 (FY 2009)	26
02120872	Replace 2000 Chevy Blazer (FY 2009)	31
89104078	Replace East and Williamson Culverts (FY 2012)	48
02120883	Replace Eager Beaver Trailer	42
98104087	Repair 6 Miles of Access Roads	522
01113006	Replace JD 4055 Farm Tractor (FY 2008)	64
01112970	Replace Ford Dump Truck (FY 2010)	79
01113003	Replace JD 6410 Farm Tractor (2015)	53
01113002	Replace John Deere Excavator (FY 2015)	180
01113007	Replace JD 7610 Farm Tractor (FY 2015)	79

99104084	Replace Weyerhaeuser North Water Control Structure	176
99104069	Replace Jericho/Middle Water Control Structure	236
99104082	Replace Williamson Water Control Structure and Rehabilitate Road	120
01113008	Replace Hale Pump (FY 2010)	31
00109889	Rehabilitate County Line Ditch Road (4 miles)	1,357
01113010	Replace Full Track Personnel Carrier (Cost can't be right)	264
01113020	Replace Rhino Deck Mower (FY 2008)	9
01113023	Replace Humpback Trailer Pump (FY 2010)	10
01113025	Replace 1998 Slip-on Pump (2010)	16
02120877	Replace Tracked Personnel Carrier	63
02120878	Replace ATV	8
98104075	Replace Unreliable 1981 GMC Dump Truck (2006)	143
99110300	Construct Replacement of Lake Drummond East Ditch (2013)	833
96104068	Rehabilitate Corapeake/Myrtle Bridge (2006)	30
01113014	Replace Road Grader (FY 2010)	95
2006502446	Repair Portsmouth/Rosemary Diversion Water Control Structure	43
2006502467	Rehabilitate Roads: Lynn Ditch Road (4 miles)	160
2006502472	Rehabilitate Roads: Middle Ditch Road (2.75 miles)	110
2006502475	Rehabilitate Roads: Hudnell Ditch Road and New Ditch Road (5 miles)	200
2006502479	Rehabilitate Camp Ditch Road (2.5 miles)	100
2006502487	Rehabilitate East Ditch Road to Camp Ditch	6
2006502496	Replace Gate at Washington Ditch	10
2006502522	Replace Existing Boardwalk Trail to Meet Accessibility Standards	250
2006502525	Replace Pier and Boat Launch at Washington Ditch and Lake Drummond	40
2006502527	Replace Culvert at Camp and East (in Camp)	15
2006502528	Rehabilitate Headquarters Office	35
Total		22,241

Figure F-3

Refuge Operating Needs System				
Project	Staffing (FTE's)	Cost: Year 1 (not just one-time cost) (1000's)	Cost: Annually Recurring (1000's)	Project Duration (years – max is 15)
Determine Refuge Capacity for Black Bear Population	0	113	100	5
Develop Hydrologic Model to Manage Rare Forest Habitat Types	0	157	0	1
Develop and Distribute Refuge Brochures	0	23	6	15
Provide Attractive, Safe Access and Services to Refuge Visitors	3	300	175	15

Restore Rare Forest Habitat Types	1	147	82	15
Improve Visitor Facilities at the Lake Drummond Reservation	1	188	59	15
Improve Efficiency of Refuge Operations	1	192	113	15
Facility in Sunbury, NC	0	150	50	15
Develop Hydrologic Model to Manage Unique Forest Habitat Types	1	177	79	15
Partnership Operation of Visitor Center in Chesapeake, VA	1	292	172	15
	8	1,739	836	

