

## Appendix H

### Refuge Operating Needs System (RONS) Project List

**Terms used in this appendix:**

**Startup cost:** The project's estimated expenses for the first year (in year 2000 dollars X 1000)

**Recurring cost:** The project's estimated expenses for the second and following years (in year 2000 dollars X 1000)

**15-year Total Cost:** Estimated expenses for all projects over the 15-year duration of this CCP

**Staff (FTEs):** Full Time staffing Equivalent (one FTE is one person working full time for one year; seasonal staff are calculated as 0.5 FTE.)

**Average FTE:** The average additional FTEs required over the 15-year duration of this CCP, taking into to consideration that some projects have shorter durations (less than 15 years)

**Table H-1.** *Funding and staffing required for RONS projects for Forsythe Refuge.*

	Startup Costs (\$000)	Recurring Costs (\$000)	15-year Total Cost (\$000)	Average FTE
<b>Edwin B. Forsythe Total</b>	<b>\$14,479</b>	<b>\$3,668</b>	<b>\$54,184</b>	<b>34.5</b>

**Table H-2.** *RONS projects for Forsythe Refuge.*

Start Year	Project Title: E.B. Forsythe NWR	Startup Cost (\$000)	Recurring Cost (\$000)	15-year Total Cost (\$000)	Staffing (FTEs)	Duration (years)
2001	Grassland Restoration and Management	84.7	6.1	169.5	0.3	15
2001	Restoration/Management of Early Succession Habitats	21.3	3.3	67.6	0.3	15
2001	Saltmarsh Restoration	1,222.0	1,222.0	18,330.6	1	15
2001	Upland Forest Restoration and Management	60.7	60.7	911.2	0.5	15
2001	Invasive Species Control	23.6	23.6	354.0	0.5	15
2001	Waterfowl Monitoring and Management	59.0	52.0	787.0	1	15
2001	Invasive/Native Plant Species Survey	114.0	94.0	208.0	1	2

Start Year	Project Title: E.B. Forsythe NWR	Startup Cost (\$000)	Recurring Cost (\$000)	15-year Total Cost (\$000)	Staffing (FTEs)	Duration (years)
2001	Develop Vegetation/Habitat Map	128.0	106.0	552.0	1	5
2001	Develop Wildlife/Refuge Database and Archive	132.0	126.0	1,896.0	1	15
2001	Conduct Technical Outreach on Land Protection/Management	114.0	104.0	1,570.0	1	15
2001	Post & Patrol Newly Acquired Refuge Lands and Hunting Areas	107	82.0	1255.0	2	15
2001	Establish Holgate Boat Taxi Concessionaire	30	36.0	534.0	1.2	15
2001	Survey & Post Boundary of Holgate Wilderness Area	189	70.0	1169.0	2	15
2001	Assess Impact of Mosquito Control on Wildlife	50.0	30.0	470.0	0.5	15
2001	Conduct Endangered Species Survey, Restoration, & Management	100.0	70.0	1,080.0	1	15
2001	Expand Deer Management Zone 58	20.0	20.0	300.0	0.5	15
2001	Enhance & Maintain New Observation Platform at Barnegat Impoundment	20.0	2.5	55.0	0.1	15
2001	Develop Outreach and Public Education Program	65.7	55.7	845.5	1	15
2001	Open Fishing Area along Parkertown Road	15.0	3.7	66.8	0.1	15
2001	Develop <i>Brigantine Wilderness Area</i>	8.9	3.7	42.2	0.1	10
2001	Develop Holgate Wilderness Area brochure	8.9	3.7	42.2	0.1	10
2001	Reformat and print <i>Forsythe Bird List</i>	8.6	5.4	84.2	0.1	15
2001	Reformat and print <i>Forsythe Wildlife Drive</i>	8.6	5.4	84.2	0.1	15
2001	Reprint General <i>Forsythe NWR</i> Brochure	8.8	6.4	98.4	0.1	15
2002	Study on Barrier Island Ecology & Impact of Public Use	70.0	50.0	270.0	0	5
2002	Construct Univ. Accessible Observation Platform at Experimental Pool	30.0	7.5	127.5	0.1	14
2002	Develop <i>People's Impacts on Wildlife</i>	6.4	3.2	25.6	0.1	7
2003	Small Vertebrate Survey (Mammals, Reptiles, Amphibians)	108.0	91.0	472.0	1	5

Start Year	Project Title: E.B. Forsythe NWR	Startup Cost (\$000)	Recurring Cost (\$000)	15-year Total Cost (\$000)	Staffing (FTEs)	Duration (years)
2003	Construct Observation Boardwalk at Holgate	25	6.3	100.6	0.1	13
2003	Study Impact of Development on Water Quality/Quantity and Wetlands	70.0	50.0	670.0	1	13
2003	Construct Univ. Accessible Saltwater Fishing Pier, Mullica R.	38.0	9.5	152.0	0.2	13
2003	Construct New Office with Visitor Contact Facility at Barnegat	250.0	62.5	1,000.0	1.5	13
2003	Construct Trail and Kiosk at Four-Mile Branch Bog	35.0	8.8	140.0	0.2	13
2004	Nesting Bird Survey	95.0	89.0	451.0	1	5
2004	Complete second half of the DeCamp Trail	30.0	7.5	112.5	0.2	12
2004	Conduct nature tours & on-site support on the Wildlife Drive	30.0	26.0	316.0	0.7	12
2004	Conduct nature tours & on-site support at Holgate Wilderness	30.0	26.0	316.0	0.7	12
2005	Fish & Aquatic Invertebrate Survey	149.0	127.0	657.0	3	5
2005	Develop Holgate Observation Platform with Long Beach Township	10	2.5	35.0	0.1	11
2005	Construct Seasonal Observation Deck at Bonnet Island	25.0	6.2	87.0	0.1	11
2005	Develop Outdoor Classroom Sites	20.0	5.0	70.0	0.1	11
2005	Develop and Implement Teacher Training Workshops	22.2	8.0	102.2	0.3	11
2005	Purchase and Develop Wildlife Learning Materials for Children	23.1	7.0	93.1	0.2	11
2005	Construct New Office and Visitor Center at Brigantine (Construction Funds)	10,000.0	500.0	15,000.0	2	11
2006	Monitor Public Use Activity and Impact	50.0	30.0	320.0	0.5	10
2006	Develop Forsythe video	30.0		30.0		1
2007	Study Pre-Colonial Ecology of Southeast Jersey Landscape	70.0	50.0	270.0	0	5
2007	Implement changes in Migratory Game Bird Hunting	20.0	20.0	180.0	0.5	9
2007	Develop Universally Accessible Deer Hunt Sites in DMZ 56	5.0	0.2	7.0		9

Start Year	Project Title: E.B. Forsythe NWR	Startup Cost (\$000)	Recurring Cost (\$000)	15-year Total Cost (\$000)	Staffing (FTEs)	Duration (years)
2007	Conduct nature tours & on-site support at Reedy Creek	30.0	26.0	238.0	0.7	9
2007	Help teachers develop class wildlife and habitat projects	15.0	15.0	135.0	0.5	9
2007	Construct Office and Visitor Center at Reedy Creek	250.0	62.5	750.0	1	9
2008	Habitat Use by Migrating/Wintering Birds of Prey Study	149.0	127.0	657.0	1	5
2008	Refurbish existing Fire Lane Trails (done Start-up)	10.0	2.5	27.5	0.1	8
2008	Refurbish Primitive Trail at Murry Grove	25.0	6.2	68.8	0.1	8
2008	Develop Parking for Canoers/Kayakers on Westecunk Creek	17.5	4.4	48.3	0.1	8
2008	Develop <i>Forsythe Refuge Visitor Opportunities</i>	6.4	3.0	18.4	0.1	5
2008	Produce <i>Canoers/Kayakers Guide to Forsythe NWR</i>	10.0	3.0	13.0	0.1	2
2009	Construct Universally accessible Freshwater Fishing Site	36.0	9.0	90.0	0.2	7
2010	Refurbish Primitive Trail at Cedar Run Bog	40.0	10.0	90.0	0.2	6
2012	Develop Parking for Canoers/Kayakers on Cedar Run Creek	17.5	4.4	30.7	0.1	4
2012	Develop <i>Forsythe Amphibians and Reptiles</i>	6.4	3.0	9.4	0.1	2
2014	Refurbish Primitive Trail at Collinstown Road	25.0	6.2	31.2	0.1	2
2014	Develop <i>Forsythe Mammals</i>	6.4	3.0	9.4	0.1	2
	<b>Forsythe Subtotal</b>	<b>\$14,479</b>	<b>\$3,668</b>	<b>\$54,184</b>	<b>34.5</b>	