

Appendix E



USFWS

Water tower in the former Weapons Storage Area

Refuge Operation Needs System (RONS) & Service Asset Maintenance Management System (SAMMS) Projects

Refuge Operation Needs System & Service Asset Maintenance Management System

Great Bay National Wildlife Refuge’s (Great Bay Refuge, the refuge) budget requests contained in the Refuge Operating Needs System (RONS) and Service Asset and 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 E.1. Current Projects in the RONS Database for Great Bay Refuge

Station Priority Rank	Project Description	Estimated One-time cost	Recurring Base Cost	Total First Year Need	FTE†	Alternatives
1	Complete and implement Comprehensive Conservation Plan	–	\$128,986	\$128,986	1.0	Common to All
2	Provide assistance to area partnerships to manage over 10,000 acres	\$32,500	\$14,500	\$47,000	–	Common to All
3	Use prescribed fires to manage and maintain habitat for federally listed and State-listed species	\$25,000	\$7,500	\$32,500	–	A & B
4	Maintain and manage refuge facilities and equipment for managing natural resources and providing visitor services	–	\$72,371	\$72,371	1.0	Common to All
5	Monitor and manage refuge habitat to provide biological diversity and environmental health	–	\$128,986	\$128,986	1.0	Common to All
6	Provide and enhance recreational and educational opportunities to residents and visitors about the refuge, conservation, and area environmental issues	–	\$106,614	\$106,614	1.0	Common to All
7	Manage and restore 400 acres of early successional, marine, and freshwater habitats for rare, threatened, and endangered species, anadromous fish and other aquatic species	\$38,500	\$29,500	\$116,423	–	A
8	Provide and enhance priority public use opportunities and engage youth	\$40,000	\$23,000	\$99,317	–	Common to All
9	Monitor biological diversity and management actions on 1,100 acres to evaluate achievement of biological goals and objectives as outlined in approved management plans	\$35,000	\$25,000	\$60,000	–	A
Totals		\$171,000	\$536,457	\$792,197	4.0	

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

Table E.2. Projects Proposed for the RONS Database for Great Bay Refuge under Alternative B

Station Priority Rank*	Project Description	Estimated One-time cost	Recurring Base Cost	Total First Year Need
1	Restore and manage 20 acres of former Weapons Storage Area as predator-free habitat for New England Cottontail rabbit and declining bird species dependent on shrub habitat	\$150,000	\$45,000	\$180,000
2	Remove Lower Peverly Dike and Control Structure, restore 1,000 feet of free-flowing stream, and monitor environmental conditions and habitat pre- and post-restoration	\$200,000	\$20,000	\$220,000
3	Research, monitor, and manage six bat species and associated habitats and convert former military bunkers into hibernacula	\$40,000	\$30,000	\$70,000
4	Monitor water quality and sediments within the Peverly Brook Drainage on the refuge to track contamination levels from the former Pease Air Force Base and current uses adjacent to the refuge	\$75,000	\$35,000	\$110,000
5	Partner with New Hampshire Fish and Game to restore and manage pine barrens habitat for the federally endangered Karner blue butterfly, and to increase the population through a captive rearing program	\$60,000	\$15,000	\$75,000
6	Establish monitoring sites with partners to track habitat changes due to sea level rise and climate change using Sediment Elevation Tables (SET) in salt marshes and phenological changes in other habitats following standard protocols used by multiple agencies	\$50,000	\$25,000	\$75,000
7	Eradicate, control, and monitor multiple invasive plant species within the refuge to improve habitat conditions for listed, candidate, and declining species that are present or could be restored	\$30,000	\$45,000	\$75,000
8	Research, monitor, and restore aquatic habitats and resources with emphasis on eelgrass, oysters, and horseshoe crabs within 400 acres of marine and estuarine habitats. Work with Great Bay area partners to support and coordinate actions using standard practices and techniques.	\$250,000	\$50,000	\$50,000
Totals		\$855,000	\$265,000	\$855,000

**Ranking based only on these proposed RONS projects for alternative B. Actual ranking may differ when updating existing RONS projects and eliminating projects unique to either alternatives A and/or C.*

Table E.3. Projects Proposed for the RONS Database for Great Bay Refuge under Alternative C

Station Priority Rank*	Project Description	Estimated One-time cost	Recurring Base Cost	Total First Year Need
1	Remove Upper Peverly dike and water control structure, and restore approximately 1,500 feet of free-flowing stream, and monitor environmental conditions and habitat pre- and post-restoration	\$250,000	\$50,000	\$300,000
2	Remove Stubbs Pond dike, water control structure, fish ladder, and restore approximately 0.5 miles of stream habitat and associated salt marsh and riverine habitat. Monitor environmental conditions and habitat pre- and post- restoration.	\$1,500,000	\$75,000	\$1,575,000
Totals		\$1,750,000	\$125,000	\$1,875,000

*Ranking based only on those proposed RONS Projects for alternative C. Actual ranking may differ when updating existing RONS projects and eliminating projects unique to either alternatives A and/or B.

Table E.4. Current Projects in the SAMMS Database for Great Bay Refuge

Project Number	Project Description	Estimated Cost
01110818	Rehabilitate at the Weapons Storage Area	\$195,000
01110820	Remove communication building #420	\$32,000
01110826	Remove military water storage tank	\$96,000
03126013	Rehabilitate water supply building	\$39,000
03126354	Replace and remove building #436	\$114,000
03126355	Remove building #437	\$183,600
03126356	Remove and replace building #465	\$11,000
03126357	Remove and replace building #466 with solar	\$503,900
03126358	Remove building #468	\$168,100
04133936	Remove cabin at 150 Fabyan Point Road	\$14,200
04133945	Remove old stone house at Fabyan Point	\$55,700
05038515	Remove cabin at 154 Fabyan Point Road	\$21,300
05038517	Remove cabin at 158 Fabyan Point Road	\$16,300
05038520	Remove cabin at 162 Fabyan Point Road	\$16,300
05138522	Remove cabin at 166 Fabyan Point Road	\$21,300
05138532	Remove house at 138 Fabyan Point Road	\$43,800
05138593	Remove storage shed formerly used as hanger	\$10,000
2005207406	Rehabilitate service road	\$515,000
2005207464	Remove and replace deteriorated building	\$168,100
2005256059	Remove caretaker residence	\$26,000
2005256102	Rehabilitate Karner Blue Easement trailhead contact point	\$47,000
2005256237	Replace fencing at Karner Blue Butterfly	\$327,000
2006506630	Replace electronic gate controller and gate	\$33,000
2008865067	Replace service road culverts to Stubbs Pond	\$30,000
2008865068	Replace Upper Peverly Pond water control structure	\$197,000
2008865094	Removing Lower Peverly Dam by breaching Dam	\$500,000
2008869147	Rehabilitate service and access road	\$750,000
2008869148	Rehabilitate entrance road	\$365,800
2008869149	Rehabilitate public parking lot	\$103,900
2008869151	Replace Loomis well pump	\$30,000
2008869182	Remove rescue team facility	\$36,000
2008869184	Remove electrical substation #480	\$28,000
2008869185	Remove electrical substation #481	\$28,000
2008869187	Remove electrical substation #482	\$28,000
2008869189	Remove electrical substation #483	\$28,000
2008869191	Remove electrical substation #484	\$28,000

Refuge Operation Needs System & Service Asset Maintenance Management System

Project Number	Project Description	Estimated Cost
2008869193	Remove electrical substation #485	\$28,000
2008869195	Remove electrical substation #486	\$28,000
2008869197	Remove electrical substation #487	\$28,000
2008869200	Remove electrical substation #488	\$28,000
2010137228	Rehabilitating Margeson Estate Main House	\$100,000
2010129650	Repair and Rehabilitate Stubbs Pond Dam	\$36,650
2010129771	Repair Stubbs Pond Fish Ladder	\$6,000
2010129772	Repair Stubbs Pond WCS	\$10,000
2010131080	Repair Upper Peverly Dam	\$23,125
2011178789	Repairs to refuge residence	\$10,000
2011178791	Repair and replace sections Peverly Trail	\$10,000
01110822	Remove Military Storage Igloo	\$36,000
01110823	Remove Military Storage Igloo	\$36,000
2008869156	Remove Military Storage Igloo	\$36,000
2008869158	Remove Military Storage Igloo	\$36,000
2008869160	Remove Military Storage Igloo	\$36,000
2008869162	Remove Military Storage Igloo	\$36,000
2008869164	Remove Military Storage Igloo	\$36,000
2008869166	Remove Military Storage Igloo	\$36,000
2008869168	Remove Military Storage Igloo	\$36,000
2008869170	Remove Military Storage Igloo	\$36,000
2008869172	Remove Military Storage Igloo	\$36,000
2008869174	Remove Military Storage Igloo	\$36,000
2008869176	Remove Military Storage Igloo	\$36,000
2008869178	Remove Military Storage Igloo	\$36,000
2008869180	Remove Military Storage Igloo	\$36,000
Total Costs		\$5,658,075

Table E.5. Proposed Projects for the SAMMS Database for Great Bay Refuge under Alternative B

Project Description	Estimated Cost
Create an RV Site with two hookups for seasonal volunteers	\$15,000
Remove Margeson Estate	\$75,000
Construct medium-size Office and Visitor Contact Station	\$3,500,000
Construct maintenance/storage facility	\$1,000,000
Construct ferry Way Trail Overlook	\$5,000
Remove the WSA Water Control Structure	\$5,000
Replace the fence surrounding the former WSA	\$200,000
Create new access road to the south end of the WSA	\$30,000
Replace refuge signs	\$25,000
Replace Peverly Pond blind	\$15,000
Construct information kiosk at Karner Blue Easement	\$10,000
Install photovoltaic panels for existing modular office	\$40,000
Install photovoltaic panels for existing modular residence	\$25,000
Total Costs	\$4,945,000

Table E.6. Proposed Projects for the SAMMS Database for Great Bay Refuge under Alternative C

Project Description	Estimated Cost
Remove former Weapons Storage Area fencing	\$100,000
Remove former Weapons Storage Area roads	\$200,000
Construct the Woodman Point Trail	\$75,000
Construct the Fabyan Point Trail parking area	\$50,000
Construct the Fabyan Point Trail	\$50,000
Construct the Fabyan Point Observation Platform	\$15,000
Total Costs	\$475,000