

**Management Plan**

**For**

**Weston Woods & Waters**

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**Weston Woods & Waters  
Is a Project of  
The Somerset Woods Trustees**

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**APPENDICES****Appendix A:** Timber Resources

1. Comparison of Weston HFC Forestry Timber Inventories and Appraisals of 2013 and 2017
2. Weston HFC Forestry Timber Inventory and Appraisal Summary, 2017
3. Weston HFC Forestry Timber Inventory and Appraisal Data, 2017
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**Appendix B:** Gravel Valuation. Jan. 2016**Appendix C:** Legal Documents:

1. Quit Claim deed with Covenant from Weston Homestead Farm Corp. (WHFC) (276 acres w/ 1+ mile of frontage). Nov. 20, 2019, Somerset Registry of Deeds Book 5495, Page 350.
2. Easement Deed (30 feet wide) from Thomas Weston (1/3rd mile frontage) July 19, 2018, Book 5306, Page 221.
3. Warranty Deed from John Warren Noyes Trust (35 acres w/ 1+ mile of frontage) Jan. 24, 2019, Book 5375, Page 003.
4. Survey: John Warren Noyes. February 19, 1991; Somerset Plan File Index #2019-003
5. Survey: Subdivision Plan showing Lot #2 - Weston Woods & Waters. Map 5, Lot 9. Dec. 8, 2015  
Somerset Plan File Index #2016-010
6. Town of Madison Tax Map 5

## **I. Geographic Information And History**

**Site Name:** Weston Woods & Waters

**Township/County:** Madison/Somerset

**Total Site Size:** 308 acres

**Type of Ownership:** Fee ownership by Somerset Woods Trustees of 308 acres, combined with a 30 foot wide recreational easement along about one-third mile of the Kennebec River. (See Figure 1). Approximately 276 acres of fee ownership are east or northeast of Weston Avenue and 32 acres of fee ownership are west of Weston Ave

## **II. Introduction**

### **A. Purpose of Management plan**

Conservation of the recreational easement and the 32 acres of riverside land west of Weston Avenue was made possible by gifts from Thomas B. Weston and John Warren Noyes, respectively, both being descendants of Deacon Benjamin Weston, the original settler. Purchase of the 276 acres from the Weston Homestead Farm Corporation was funded by a U.S. Department of Agriculture Forest Service Community Forest Project Grant combined with local contributions. The purpose of this management plan is to ensure the property is managed and maintained in perpetuity for public recreation, education, and the protection of the many natural resources found there.

### **B. Long-Term Stewardship and Responsibilities**

The Trustees of the Somerset Woods Trustees are responsible for the conservation and management of this property into perpetuity.

### **C. Management Plan Review**

The management plan will be reviewed at a minimum once every five years. At that time or at any intervening time, the plan may be revised or supplemented with additional information and management recommendations.

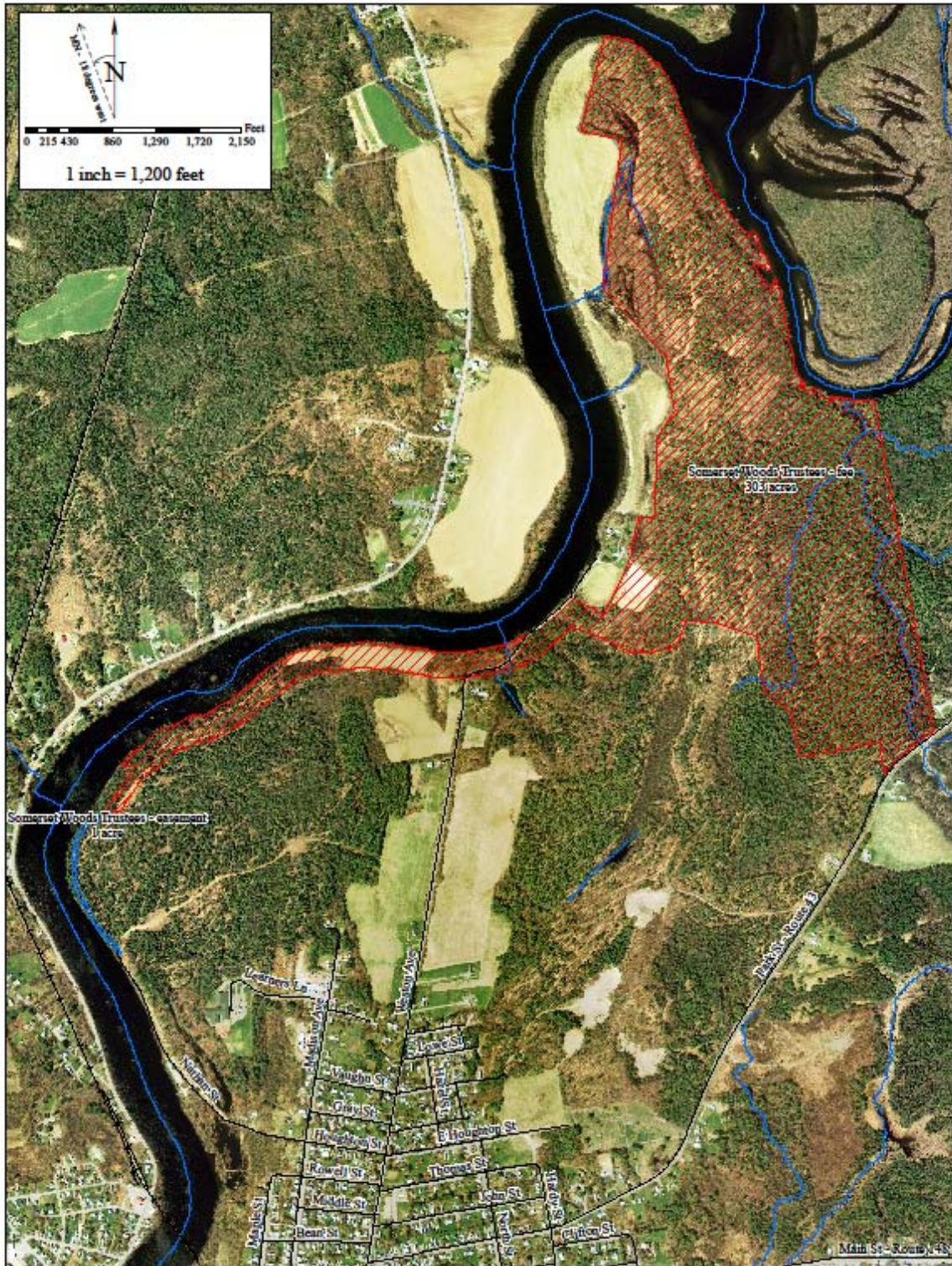
## **III. Property Description**

### **A. Location and Setting**

Weston Woods & Waters (WW&W) is located in the village of Madison, in a rural setting, at the north end of Weston Avenue, with access along the Kennebec River as well as from Route 43.. The property includes 308 acres of land on the west and east sides of Weston Avenue with access from downtown Madison provided via recreational easements along the Kennebec River (Figure 1) The 30 foot wide recreational easement connects the fee ownership with other lands owned by Eagle Creek (a local hydro operator) which are subject to a FERC recreational set-aside. This enables public access from downtown Madison all the way along about two miles of Kennebec River frontage to the larger WW&W forest lands.

Except for one mile of Kennebec River frontage on the northeast and a few hundred feet of Route 43 on the southeast (Figure 2), the largest parcel of the property, comprising 276 acres, is bounded by private property. The 32 acre river trail west of Weston Ave. begins near the boat landing on Nathan Street and runs along the River to a point on Weston Ave immediately across from a trailhead into the larger parcel (Figure 2). With the exception of agricultural fields on the northwest side of the

major peninsula, the abutting lands are primarily wooded, Only three private residences abut the property.



**Figure 1.** Map of entire 308 acre Weston Woods & Waters project (red); recreational easement (blue) down to Eagle Creek boat landing property (FERC recreational set aside).





**Figure 2.** Map of Weston Woods & Waters – Weston Homestead Farm Corp. property boundary lines, 2019, as acquired with the assistance of the USDA CFP.

## **B. Directions and Access**

From the intersection of Weston Avenue and Main Street in Madison, travel about 1.5 miles north on Weston Avenue, and park along the road frontage. Access to the woods trails begins just before the pavement ends.

To access the property from the boat landing on Nathan Street via the trail, travel up Weston Avenue 0.35 miles, turn west onto Houghton Street, cross Madison Avenue, and continue west onto Nathan Street. Parking is available. The trail begins at the north end of the parking lot and continues to the trail head on the west side of Weston Avenue at its upper end.

To access from downtown Madison, park along Main St. and access the river trail via the abandoned train tracks between Franklin Somerset Federal Credit Union and High Tide Low-Tide Fish Market. The trail along the river from downtown provides access to WW&W via a recreational set-aside required as part of a hydro-electric licensing by the Federal Energy Regulatory Commission (FERC) over land then-owned by Madison Paper Industries, now owned by Eagle Creek.

At present, there is no developed trail or parking for access to the property from Route 43 northeast of the village.

Signs identify trail access points on Weston Avenue and on the river trail.

## **C. History and Land Use of Property**

### **1. Pre-contact History**

The Somerset Woods Trustees acknowledges that many, if not all, of its lands are situated in the homeland of the Wabanaki people. We express our respect to the indigenous communities who have lived on these ancestral lands for almost 15,000 years, and to future generations. With this acknowledgement, we recognize the legacies of settler colonialism and we signal an ongoing commitment to building relationships with the Wabanaki.

In the millennia prior to European settlement, the land was home to a significant Native American population. Archeological evidence from Skowhegan to Moosehead Lake demonstrates the Kennebec River was a major travel corridor supporting agriculture and fishing (Maine State Planning Office 1993). The spring alewife run drew the Natives to this area (which they referred to as Narantsouak) where they established a village and waited for the alewife run in the spring to plant crops, using the fish as fertilizer.

While it isn't specifically known that Native Americans occupied the intervale lands within the Weston Woods & Waters project area, it is highly likely they did. Forty-nine archeological sites show Native Americans occupied the intervale lands all along the Skowhegan-to-Madison segment of the Kennebec River for growing corn, beans, and squash beginning at least 8000 years ago (Maine State Planning Office 1993). Natives maintained a village site for some thousands of years at a site located on the west side of the Kennebec at the strategically important junction of the Kennebec and Sandy Rivers only a few miles downriver from downtown Madison (Prins 1987, Cowie 1995, Smith 2017). This village, dated from the Ceramic and Contact Periods, was first discovered by Champlain in 1630 (Prins 1987; Maine State

Planning Office 1993). Extensive excavations uncovered the remains of fossil post holes from a long house, hearths, and pits with burned corn, beans, and squash. (Cowie 1995). Father Rasle later moved the village to the east (French) side of the Kennebec where he established his Mission (1690-1725). This area of the Kennebec and the Sandy, with their abundantly rich, deep soils, is generally regarded as the furthest north that Natives were able to cultivate corn. They apparently cultivated over a thousand acres in this area making it a primary breadbasket for Natives throughout drainages in this part of the northeast.

## **2. Acquisition History**

Deacon Benjamin Weston settled land here in Plantation No. One (now Madison) in 1786, acquiring it from the Commonwealth of Massachusetts. Family lore has it that the Weston lands expanded from Deacon Ben's initial settler's lot to encompass the entire peninsula, as well as an adjoining island (Weston Island), to include 400 to 500 acres. He purchased Lot #23, consisting of 100 acres, from Stephen Walker in 1801 and part of Weston Island, formerly known as McKenny Island, in 1811.

SWT purchased the main peninsula property from the Weston Homestead Farm Corporation (WHFC) on September 12, 2019. In anticipation of acquiring the Weston homestead farm, SWT acquired the 30 foot recreational right-of-way along the Kennebec River running north from the Eagle Creek Boat Landing property from Thomas Weston on July 19, 2018. The John Warren Noyes property, consisting of a 250 foot wide strip of land running over a mile along the shore of the Kennebec River from Tom Weston's property to the Weston Homestead, was added on January 24, 2019,

The significance of the Weston family to this project must also recognize that the 250 foot wide strip of land running for over a mile along the Kennebec on the west side of Weston Avenue (red-cross-hatching west of Weston Ave in Figure 1) comes from a farm owned by B.P.J. Weston, a grandson of Deacon Ben. B.P.J. was a founder of the paper mill in Madison which began operation in 1891 at the location of the recently closed former Madison Paper mill. This strip of land was donated by B.P.J.'s great-grandson John Warren Noyes.

Indeed the 30 foot-wide recreational easement which runs for a third of a mile along the River (blue line running just south of the above in Figure 1) comes from a farm which was owned by Theodore Weston, another grandson of Deacon Ben and B.P.J.'s partner in B.P.J.'s various industrial developments around the paper mill area. It was donated by Tom Weston, Theodore's great-grandson, another descendant of Deacon Ben.

## **3. Land Use**

The Weston lands were maintained largely intact and have been maintained as an actively managed farm and sustainable woodlot beginning with Weston's acquisition in 1786. Most of these lands thereafter stayed in the ownership of the Weston family engaged in agricultural production throughout the 225 years until their recent sale - first, the agricultural lands were sold to a local farmer subject to an agricultural conservation easement; second, the 1817 Weston homestead house (listed as it is on the Federal Register) was sold to a private buyer; and finally, sale of the woodlands to the Somerset Woods Trustees. By the 1870's, agricultural production included hay, grain, cattle, sheep, and dairy, with the sale of cordwood and lumber providing additional income. The Weston Homestead Farm Corporation not only continued these

management goals, but also ensured the parcel remained open to the public for traditional recreational purposes of hunting and hiking and later snowmobiling (on marked trails only).

#### **4. Man-made/Cultural Features**

There is a long slough (wetland) running at least a third of a mile between the agricultural fields and the woodlands. A causeway was built across the slough at the upper end of the peninsula in the early years to facilitate seasonal transport of hay from Weston Island to the Weston farm. To retrieve hay from the Island, the family traveled up the agricultural fields to the north end of the peninsula, across the causeway, through a notch in the ridge, down the east side of the peninsula to a ford across the river (later a ferry when the hydro dam was installed in the late 19<sup>th</sup> C), to the Island. Once loaded, the arduous and treacherous route was reversed.

Logging and farming access roads developed by the Weston family are used primarily as access for hunting and maintenance. A snowmobile trail also transects the property. Two hiking trails were cleared in the fall of 2019, three culverts were installed for erosion control, and a walking bridge was built across Walker's Ditch.

There are several unused test wells drilled by Poland Springs (Nestle) in the 1990's. Although the water was potable, testing proved the water did not meet their chemical criteria for bottled-water production.

Historic points of interest include the foundation of a house built by Stephen Walker on Settler's Lot #23 which was later sold with 100 acres to Deacon Benjamin Weston in 1801. This home was the birthplace as late as 1919 of various family members. The house was later sold and in 1926 was moved into Madison village by a Wallace Weston where it remains today. There is also the Benjamin Weston (son of Deacon Benjamin) family monument on the peninsula which marks the location of his family cemetery. The remains were later moved to the Forest Hills Cemetery in the village. Also, the remnants of a pier used for the ferry to Weston Island are still visible. The ferry was used by the Westons to facilitate haying on the island and is transport back to the homestead. These points of interest will be identified on trail maps and placards detailing the history will be installed.

#### **5. Historic or Archaeological Sites**

There are no identified state or national historic or archeological sites on the property. However, some land forms have site potential for historic Native American use and occupation. The Benedict Arnold expedition did camp on some islands in the Kennebec and the possibility exists Weston Island may have been one such site. Deacon Ben's father, Joseph Weston, the first settler in Skowhegan, assisted Arnold in his efforts to surmount the water falls there and there is some likelihood they were aware of these lands even then in the fall of 1775.

A reconnaissance archeological survey of the shoreland zone from the Weston Dam in Skowhegan to Gray Island in Solon was conducted in the late 1980s as a requirement for relicensing Weston Dam (Maine State Planning Office 1993). Findings were apparently not significant. The river has changed considerably since the dam was originally built and pit digging may have been insufficient to detect deeply buried sites. An extensive professional archeological survey was never conducted in this river segment and the Kennebec River



Management Plan concluded that such an archeological survey was “badly needed along with a survey of fossil river shore landforms”.

The privately owned Weston Homestead House, built in 1817 and listed in the National Register of Historic Places, is located on property adjacent to WW&W. The home has continually been maintained. The present owner has engaged in some restoration of it. The owner has made the house available for tours on a periodic basis, especially when there are public activities at the WW&W property.

#### **Existing Easements or Other Restrictions**

Restrictions appurtenant to the WW&W lands are Shoreland Zoning which applies to areas within 250 feet of the normal high water line of the Kennebec River, areas within 250 feet of the upland edge of a freshwater wetland (such as the slough), and areas within 75 feet of the high-water line of Big Brook and its tributaries. A snowmobile trail transects the southwest corner of WW&W and is maintained by the local Abnaki snowmobile club. This trail is used on a permissive use basis only. It is intended to continue the permissive use perpetually.

#### **IV. Adjacent Land Uses**

There are three single family homes which abut the property, as well as the historic 1817 Weston homestead, agricultural fields, and woods.

The interval fields parcel north of the Weston Homestead and bordered on the west by the Kennebec River is owned by Piper/Hamilton Farms, a dairy operation located in Embden, Maine. Managed under an agricultural conservation easement held by The Maine Farmland Trust, this land is used for agricultural purposes, mainly for growing and harvesting field silage corn. Weston Island and Flint Island are owned by Eagle Creek Renewable Energy and managed as an area of statewide ecological significance pursuant to a conservation easement held by the Bureau of Public Lands.

#### **V. Natural Resources**

##### **A. Aquatic Resources**

The Kennebec River is an important wildlife habitat and recreational resource for the area. Although no significant river segments have been identified for the Kennebec River, the river segment from the Williams Dam upriver in Solon to the Route 201-A bridge in Anson-Madison is designated as a Class A river. The river supports both a cold and warm water fishery that includes populations of landlocked salmon, brown trout, smallmouth bass, and pickerel. This section of the river is identified as wild brook trout habitat and Atlantic salmon critical habitat. The sector bordering WW&W lies at the southern end of what is considered to be “one of the most valuable wildlife areas in the river corridor.” (Maine State Planning Office 1993).

A large aquifer underlies the property, and a large wetland and vernal pool are located between the cornfield and woods (the slough). Another vernal pool is located at the northern end near and just west of the notch (Figures 4 and 5). This pool is especially significant as having been created by the construction of the causeway mentioned above. In the spring of 2019, the discovery of numerous fairy shrimp highlighted the importance of the pool.

Big Brook transects the property south to north with its terminus at the Kennebec River. Three ephemeral, unnamed tributaries, originating in forest seeps, flow into the stream.



**Figure 4.** Vernal pool in the slough, looking south (May, 2019).



**Figure 5.** Vernal pool in the slough, looking south (May, 2019).



**Figure 6. Significant Vernal Pool north of the causeway, looking north (May 9, 2019)**

## **B. Baseline Description of Biological Resources**

### **1. Biological Species and Communities**

#### **Wildlife**

WW&W hosts a variety of wildlife including deer, fishers, turkey, squirrels, chipmunks, beaver, salamanders, turtles, wood frogs, and birds including turkeys, eagles, woodcocks, warblers, etc.

#### **Forest**

The WW&W property was at one time extensively cleared for agricultural uses, but in recent decades has grown into and principally been utilized as a woodlot, managed with an emphasis towards long-term value growth. In its current state the forestland is dominated by mature timber of diverse composition and often with high quality stem form. The Weston family contracted for two separate timber inventories of the property in recent history, one in 2013 and another in 2017, both of which speak of well-stocked valuable forestland, but which differed substantially in timber volume and value.

The 2013 inventory placed average stocking at 25 cords/acre, of which roughly 40% met sawtimber specification and an average standing stumpage value of just under \$1,000 per acre. The 2017 inventory found stocking to be nearly 40 cords/acre, with 45% meeting sawtimber specification and an average standing stumpage value of well over \$2,000 per acre. It isn't apparent what would cause this much variation, which appears to represent more than simply five years' worth of timber growth and market fluctuations, but the data is useful, perhaps best considered as reasonable brackets for the low and high end of standing timber volume and stumpage value.



TIMBER APPRAISAL - DIRIGO TIMBERLANDS						TIMBER APPRAISAL - ED WITT SR.						
WESTON HOMESTEAD CORPORATION WOODLOT						WESTON HOMESTEAD CORPORATION WOODLOT						
MADISON, MAINE						MADISON, MAINE						
271.7 TOTAL ACRES - 271.7 APPRAISED ACRES						275.79 TOTAL ACRES - 250 APPRAISED ACRES*						
MAY 2013						JULY 2017						
DIRIGO'S PROJECTED						WITT'S PROJECTED**						
%	%	TOTAL	PER UNIT	UNIT OF	CRUISE		CRUISE	UNIT OF	PER UNIT	TOTAL	%	%
OF	OF	STUMPAGE	STUMPAGE	MEASURE	VOLUME		VOLUME	MEASURE	VALUE	VALUE	VOLUME	STUMPAGE
10.0%	19.8%	\$26,118.08	\$19.60	Cords	1333	HARDWOOD PULP (white wood)	1849	Cords	\$15.00	\$27,735.00	19.2%	5.2%
2.3%	4.5%	\$5,922.00	\$19.60	Cords	302	RED OAK PULPWOOD	1029	Cords	\$14.30	\$14,714.70	10.7%	2.7%
7.7%	24.0%	\$20,230.00	\$12.50	Cords	1618	PINE PULPWOOD	1155	Cords	\$4.30	\$4,966.50	12.0%	0.9%
2.5%	5.9%	\$6,432.00	\$16.20	Cords	397	HEMLOCK PULPWOOD	783	Cords	\$12.00	\$9,396.00	8.1%	1.7%
2.0%	3.2%	\$5,258.00	\$24.75	Cords	212	SPRUCE-FIR PULPWOOD	278	Cords	\$8.40	\$2,335.20	2.9%	0.4%
1.7%	2.4%	\$4,554.00	\$28.60	Cords	159	ASPEN PULPWOOD	25	Cords	\$21.60	\$540.00	0.3%	0.1%
0.9%	2.1%	\$2,288.00	\$16.00	Cords	143	CEDAR	81	Cords	\$0.00	\$0.00	0.8%	0.0%
55.9%	29.1%	\$146,318.00	\$149.00	MBF	982	WHITE PINE SAWLOGS	1424	MBF	\$175.00	\$249,120.20	29.5%	46.3%
								MBF	\$25.00	\$1,750.73	1.5%	0.3%
								MBF	\$35.00	\$3,539.34	2.1%	0.7%
1.1%	0.5%	\$2,805.00	\$165.00	MBF	17	SPRUCE-FIR SAWLOGS	14	MBF	\$165.00	\$2,371.38	0.3%	0.4%
7.6%	2.9%	\$19,899.00	\$201.00	MBF	99	RED OAK SAWLOGS	274	MBF	\$350.00	\$95,763.15	5.7%	17.8%
0.0%	0.0%	\$0.00	\$0.00	MBF	0	RED OAK VENEER LOGS	133	MBF	\$800.00	\$106,100.80	2.7%	19.7%
0.0%	0.0%	\$0.00	\$0.00	MBF	0	RED OAK PALLET LOGS	64	MBF	\$60.00	\$3,815.70	1.3%	0.7%
1.9%	0.8%	\$4,860.00	\$180.00	MBF	27	SUGAR MAPLE SAWLOGS	32	MBF	\$200.00	\$6,415.60	0.7%	1.2%
2.7%	1.7%	\$7,134.00	\$123.00	MBF	58	RED (SOFT) MAPLE SAWLOGS	27	MBF	\$150.00	\$4,102.35	0.6%	0.8%
0.2%	0.1%	\$459.00	\$153.00	MBF	3	WHITE ASH SAWLOGS	5	MBF	\$150.00	\$725.25	0.1%	0.1%
2.0%	1.3%	\$5,280.00	\$120.00	MBF	44	WHITE & YELLOW BIRCH LOGS	29	MBF	\$100.00	\$2,892.00	0.6%	0.5%
0.2%	0.1%	\$400.00	\$100.00	MBF	4	HARDWOOD PALLET LOGS	54	MBF	\$40.00	\$2,156.56	1.1%	0.4%
100.0%	100.0%	\$261,532.08		Cords	6743	TOTAL VOLUME AND VALUE	9652	Cords		\$538,440.46	100.0%	100.0%

**Table 1.** Timber appraisal comparisons of May 2013 and July 2017.

A 2005 forest management plan by Dirigo Timberlands was the most comprehensive and prescriptive guiding document written in recent years, and attempted to put the property on a regular harvest schedule, implementing a system of thinnings as well as – and more commonly – more industrial shelterwood treatments. This plan likely prompted a 2006 harvest conducted by Dirigo that removed 1,000 cords of wood. In line with the schedule laid out in the management plan, Dirigo conducted a subsequent smaller harvest in 2011 removing another 340 cords from the center of the woodlot. The October 2017 windstorm blew down a significant volume of valuable pine in the old south fields along Route 43, and two separate loggers, Heath McKenna and Milan Gammon, were contracted to salvage blowdown from there as well as around the Homestead. Ed Witt wrote a new plan for the property in 2018 when the buildings and cornfields were split from the property and sold; the woodlot no longer qualified for taxation under agricultural status and was moved into the Tree Growth tax program. The plan provided little guidance for active management; its primary value seemed to be in meeting the legal requirement for the Tree Growth tax law program.

There is guaranteed legal access to the property for forest management purposes from both Weston Avenue and Route 43; however, neither access point is without its flaws. Current access via Weston Avenue involves logging trucks driving up to the Weston Homestead and using a legal easement over the cornfield access road along the eastern edge of the field to



reach the woodlot. An alternative trucking route was designed to bypass the homestead and the Nancy Drew house to the east along the high. The Weston Family Corporation had Jordan Lumber of Kingfield provide an estimate for its cost (~\$30,000) but never constructed it. A legal right-of-way guarantees the cornfield access, thus, no action is needed, but it may be worth considering the pros and cons with the objectives of the new ownership in mind.

Access from Route 43 has traditionally been accomplished via Tom Weston's log landing on abutting property just south and west of the WW&W property. WW&W property contains almost 500 feet of frontage on Route 43, however there is no cleared and leveled area established for yarding to truck from. Traditionally, permission to use Tom Weston's access has been granted on a case-by-case basis.

Boundary lines are variably well-marked, but the property was surveyed in 2016 by Sackett and Brake. They set iron survey pins in unmarked corners and determined that the Weston Homestead woodlot property contained 275.79 acres.

## **2. Endangered, Threatened and Rare Species, and Species of Special Concern**

Populations of wood turtle (special concern) have been documented just north of the property on the Kennebec River at Savage Island and the Brook Floater (threatened) at Anson. The WW shoreline of the Kennebec River may provide appropriate habitat for these species (MNAP 2019).

In the spring of 2019, a biologist and wetland specialist at the University of Maine at Orono identified both vernal pools as significant due to large populations of fairy shrimp. A written determination of significance for the vernal pools has not yet been obtained from the Maine Department of Environmental Protection.

No rare, threatened, or endangered plant species have been identified on WW&W property; however, a silver maple floodplain forest, upper floodplain hardwood forest, bottlebrush grass, wild garlic, and wild leek have been documented on Weston Island (MNAP 2019).

## **C. Soils & Geology**

Soils on the Weston Woods & Waters property fall into three major divisions based upon origin, drainage characteristics, and terrain features: (1) western areas of the property and the five or more acres of interval lands west of Weston Ave. underlain with rich alluvial interval soils, (2) the central ridge formed with glacial outwash sand and gravel, and (3) the eastern end largely composed of fine marine or lacustrine sediments, frequently gullied by deep stream-cut ravines. Other than the acres west of Weston Ave., little of the property falls within the first category as most of that land is the cornfields now owned and operated by Piper Farms in Embden, but the particularities of the soils underlying the central ridge and the gullied terrain along Big Brook will be treated below.

The ridge is composed of:

- Soil type – Adams Loamy Sands

- Formation - glacial outwash deposit, the northern end of an esker that continues far to south of property, terminating roughly at Forest Hill Cemetery on Route 43.
- Drainage – excessively drained
- Productivity – droughty, modest productivity
- Limitations – soils could withstand recreational/equipment pressures during any season
- Gravel resource – 3-3.6 million yards valued at around \$1.7 million
- Interesting geomorphic features: the Devil’s tannery kettle holes

Level ground and gullied terrain east of the central ridge is composed of:

- Soil type/Drainage – Buxton silt loams (moderately well drained, good productivity), Suffield silt loams (well drained, modest productivity). Both soils have lots of fines and, therefore, are highly erodible
- Formation – lacustrine/marine deposits
- Seasonal changes in the water table – High seasonal water table in Buxton soils leads to equipment limitations during spring and fall or after heavy or extended rain. Some seasonal recreational limitations and armoring stretches of trails may be required. Care should be taken to ensure ravine slopes remain vegetated to minimize erosion.

#### **D. Hydrology and Topography**

The entire property drains to the Kennebec River, either directly or through Big Brook and its tributary streams.

Property is shown within an area considered by State of Maine as a significant sand and gravel aquifer with moderate to good potential ground water yield, generally greater than 10 gallons per minute (50 gallons per minute is considered excellent).

### **VI. Management Vision & Goals**

The general management vision of the Somerset Woods Trustees as to any of its lands, wherever located, is to protect the significant natural and cultural resources and manage them in a sustainable way for public benefit. The overall social, ecological, and environmental objectives for the Weston Woods & Waters project are public recreation, wildlife habitat conservation, and timber management as it may support the other objectives.

A. Initial Management of WW & W has consisted of:

- Outreach to Madison municipal officials, local trail enthusiasts at the municipal and school levels, athletic directors and XC running team coaches to alert and inform them of the opportunities to be found.

- Establishment of a Weston Woods & Waters Group Facebook page which can be found at <https://www.facebook.com/groups/1161006357415674/>

The FB Group page is used for organizing activities, work sessions, recreational activities, posting pictures, etc. and is widely used. There are currently 230 members, and a typical post will be seen by well over 100 people.

- Starting in October, an advisory group was put together of people interested in the project including Weston family members, local and regional recreational trail enthusiasts, Weston history

enthusiasts and others. This group has met on an occasional basis, with communication through email and the Facebook page. Five members of the advisory group, including a forester, a biologist, a teacher and a long-time local recreational user of the woodlot have been involved in compiling and writing this Management Plan.

- A strong cadre of very capable volunteers have made themselves available to clear and establish as of early January, 2020, about 10 km of cleared, marked and identified multi-use trail, along with installation of culverts, construction of a walking bridge, and construction and erection of appropriate major signage.

- A draft of this Plan was posted to the Facebook page, as well as being emailed to the advisory group, recreation leaders, and the Town Manager, who has been involved with the project since its inception.

## B. Recreation (social)

WW&W will feature maintained trails for hiking, cross-country skiing, snowshoeing, and snowmobiling. Public access to the Kennebec River on the property will afford opportunity for kayaking, canoeing, picnicking, running, skiing, snowshoeing, horseback riding and fishing. Once the trails are enhanced they will be published on the website with the appropriate uses.

Motorized vehicles will not be permitted except for management purposes and the use of the snowmobile trail spur that connects the towns of Madison and Anson to the International Snowmobile Trail System (ITS 87). The local Abnaki Snowmobile Club will maintain the trail. This trail is the *only* means by which snowmobiles from outside Madison village are able to connect with downtown Madison, thereby safely crossing the Kennebec River using the railroad trestle.

## C. Education

SWT's mission in land conservation includes public education and the Weston Forest provides a great opportunity to host educational programs, not only in forestry, but also in history, mycology, field biology, geology, ecology, botany and wild foraging. The accessibility of Weston Forest will provide opportunities for forest stewardship educational programs. SWT's trails will open up opportunities for local school groups to participate in environmental studies as well as use the property for outdoor leadership and extracurricular activities.

With periodic harvesting, Weston Forest will be available to the community and to foresters on a regional basis as a demonstration forest for talks conducted by professional foresters and other experts. The expertise of the Maine Forest Service, the Somerset County Soil and Water Conservation District (SCSWCD), and the Maine Woodland Owners will be sought for developing and/or hosting educational programs. The SCSWCD conducts programs on a much smaller and less varied demonstration forest in Skowhegan. The Weston Forest will enhance that effort while also acting as a model for programming activities.

## D. Wildlife (ecological)

The various wildlife habitats on the WW&W property vary from riverine, riparian, and grassland/open field to woodlands and non-forested wetlands, and include a wide range of forest types. The objective is to maintain the biodiversity of species and habitat when possible, given the

opportunities of this property and its relationship to the local landscape. A representative of Maine Audubon came and did a presentation on forestry and birds in the fall of 2019. More such presentations are planned.

#### E. Timber (economic)

The SWT timber objective is to maintain a cover of forest trees in a variety of species and age groups, producing a sustainable supply of high quality, high value timber. Timber will be grown and harvested primarily to benefit other listed values. Edges and openings are valuable to wildlife as are mature stands. All stages of canopy level support different species and our public enjoyment of them. As part of timber management, care will be taken to maintain the health and vigor of stands and manage for species of value for wildlife, recreation and education.

#### ***To reach these goals, SWT will:***

- ☐ Maintain the quality of the existing natural resources.
- ☐ Maintain and expand Best Management Practices that limit soil erosion, protect local water quality, and protect identified species of concern;
- ☐ Provide regulated, passive recreational opportunities;
- ☐ Protect, maintain, and exhibit existing cultural (aesthetic) resources; and
- ☐ Facilitate educational opportunities relating to natural resources, natural resource management, and conservation.

#### **A. Permitted Uses:**

1. Passive Recreation (hiking/walking, snowshoeing, cross-country skiing)
2. Hunting & fishing will generally be allowed in the project area but are not specifically funded as a part of this long-term management plan.
3. Snowmobiling on designated trails only.

#### **B. Prohibited Uses:**

1. Off-road/motorized vehicles except for maintenance
2. Camping or overnight use
3. Fires
4. Cutting or removal of vegetation except for maintenance and as prescribed as part of the forest management plan

#### **C. Public Use Guidelines:**

1. Carry in, carry out
2. Day-use only



3. Keep dogs on leash at all times
4. Respect abutting private property
5. Avoid disturbing plants and wildlife

#### **D. Summary of Restored or Enhanced Resources**

1. **Threats (existing or potential): Identify areas that may be of management concern or items that may compromise biological integrity over time.**

##### **Motorized Vehicle Use**

Motorized vehicle use is prohibited except for use on the marked snowmobile trails. The Abnaki Snowmobile Club has indicated willingness to groom the entire river side trail for a small fee. Other than this, and occasional use of motorized vehicles to assist with maintenance (e.g., bush hogging and ATV use to haul tools and equipment), no other motorized use will be allowed.

2. **Waste Disposal**

Trash receptacles are not provided and the current policy is carry-in, carry-out. Regular monitoring will be required to ensure areas remain free of litter and dumping.

3. **Invasive Species, Pests and Pathogens**

Invasive species including Japanese knotweed are present. The local Somerset County Soil and Water Cons. District has offered to conduct an invasive species survey and develop a plan to address the issue.

The white pine stands are invested with needle cast which is common throughout the state.

4. **Vandalism and Encroachment**

Vandalism will be addressed as the need arises.

## **VII. Management Actions**

### **A. Natural Resources**

1. Management of wetlands, streams and other natural resources

**Objectives:** Monitor, conserve and maintain the site's natural resources. Limit any impacts to resources from human use, vehicular travel, invasive species or other adverse impacts.

- *Action:* At least one annual, observational walk-through will be conducted to qualitatively monitor any changes on property. Observations may include: quality of trail and boundary markings, general topographic conditions, hydrology, general vegetation cover and composition, invasive species, and erosion. Observations will be noted, evaluated, and mapped during a site examination. Notes to be made will include observations of species encountered, water quality, general extent of wetlands and

streams, and any occurrences of erosion, structure or boundary trail marking failure, or invasive or non-native species establishment.

- *Action:* Establish reference sites for photographs and prepare a site map showing the reference sites for the file. Reference photographs will be taken of the overall site at least every five years from the beginning of the long-term management plan, with selected reference photos taken on the ground more frequently, frequency and locations to be determined.

NOTE: Special attention should be paid to any area adjacent to or draining into the property from off-site lands. Streams and wetlands should be observed near bank boundaries to observe if increased sediment deposition has occurred.

## 2. Ecological Monitoring for Threatened/Endangered/Rare/Special Concern Species

**Objectives:** Monitor population status and trends. Manage vernal pools to maintain habitat for fairy shrimp and blue-spotted salamander. Identify other threatened, endangered and rare species as part of an inventory

- *Action:* Enlist the Maine Natural Areas Program, the Maine Dep't of Inland Fisheries and Wildlife, and the US Fish and Wildlife Service to conduct surveys of the property and the associated river habitat.
- *Action:* Visually observe for changes to occupied habitat, such as changed hydrology or vegetation composition. Record any observed changes.

## 3. Invasive Species, Pests and Pathogens

**Objectives:** Monitor and maintain control over invasive species, pests and pathogens that diminish native natural resources on project lands. An Invasive Species Control Plan (ISCP) shall be developed for each species in consultation with the appropriate agencies, as needed and appended to this management plan.

- *Action:* Mapping of presence of invasive species, pests and pathogens presence shall occur during the first two years of site management, to establish a baseline. Mapping shall be accomplished through use of available technologies, such as GIS, GPS, and aerial photography. The local Soil and water Conservation Dist. Has offered to do such a survey this coming year.
- *Action:* Each year's annual, observational walk-through will include a qualitative assessment (e.g., visual estimate of cover) of invasive species and actions taken, in accordance with an Invasive Species Control Plan. Enlisting the assistance of trained, volunteer citizen scientists to conduct walk-throughs and record data is a consideration.
- *Action:* Actions shall be taken to control invasive species in accordance with the Invasive Species Control Plan (to be developed following the inventory).

#### 4. Forest and Field Vegetation Management

**Objectives:** Adaptively manage vegetation based on site conditions and data acquired through monitoring to maintain biological values. Analyze effects of any authorized forestry, agricultural or field maintenance activities on the wetland, streams, and buffers on the site.

- *Action:* Develop new forest management plan.
- *Action:* Decide upon plan of action for timber management access for the property. Especially as to the access from the south (Route 43) Consider creating a separate parking lot and woodyard, but also investigate possible permanent use of Tom Weston's woodyard through acquisition of legal right by purchase of it, or easement. As to timber management access elsewhere on the property, consider that sections of the recreational trails are located on major skidding and truck bypass routes.
- *Action:* There are three fields- a 5 acre field which was part of the Homestead purchase east of Weston Ave, a roughly 10 acre field along the River west of Weston Ave., and a small quarter acre glade just north of the Tom Weston easement property (See Figure 1). It is proposed to maintain current grassland habitat by cutting out small trees invading those fields and openings using brush saws and keep them open through periodic mowing (bush hogging) in a systematic way to support local agricultural opportunities and to enhance and sustain pollinator and grassland bird habitat.
- *Action:* Consider planting high bush blueberries and engage local beekeepers to establish beehives.
- *Action:* Particularly as to the fields and other openings, promote, support and participate in archeological work and plant identifications which assist in determining prior use, especially including pre-contact usage by Natives.

#### **B. Infrastructure and Facilities, Security and Public Access**

##### 1. Parking, Signage, and Property Boundaries

**Objective:** Monitor and maintain condition of parking areas, signage, and property boundaries to prevent casual trespass, allow necessary access, and facilitate management.

- *Action:* Re-blaze and paint all boundary lines during 2020.
- *Action:* During each site visit, record condition of parking areas, signs, crossings, and property boundaries. Record location and type of any maintenance issues with actions to be taken for resolution, if applicable.
- *Action:* Maintain signs, crossings and property boundary markers as necessary. Repair or replace as necessary, and as funding allows.

- *Action:* Explore development of parking area on north end of Weston Avenue for trailhead access.
- *Action:* Explore purchase and development of a parcel of land from Tom Weston down off Rt 43 for use as a parking area, and woodyard.

## 2. Roads, Trails and Structures

**Objectives:** Create/maintain trails to allow public access as necessary. Any construction or maintenance of trails shall be conducted in such a manner as to avoid any disturbance to wetland habitat, vernal pools, and buffers or habitat for sensitive species. Monitor and maintain condition of roads, trails and structures to facilitate management, public use, and prevent adverse impacts to wetlands, streams and other resources.

- *Action:* During each site visit, record condition of roads, trails and structures. Record location and type of any maintenance issues, with actions to be taken for resolution.
- *Action:* Maintain roads, trails and structures as necessary. Replace as necessary, and as funding allows.

## 3. Trash and Trespass

**Objectives:** Monitor sources of trash and trespass. Collect and remove trash, repair vandalized structures, and rectify trespass impacts. Specifically address any ATV issues, existing or potential.

- *Action:* During each site visit, record occurrences of trash and/or trespass. Record location and type of any trespass issues, with actions to be taken to avoid, minimize, or rectify trash and/or trespass impacts.
- *Action:* At least once yearly collect and remove as much trash as possible and repair and rectify vandalism and trespass impacts.
  - *Action* Take appropriate action to prevent and address issues of vandalism, trespass, or ATV violations including but not limited to:
    - Posting of signs
    - Outreach to violators
    - Placement of boulders, gates or other obstructions to prevent access
    - Contacting local law enforcement

## VIII. Funding and Task Prioritization

### A. Funding

The Somerset Woods Trustees will oversee implementation of the management plan, monitoring activities, and long-term stewardship of the property. With assistance from stewardship volunteers, the SWT will maintain and monitor the property in perpetuity.

Table 1 summarizes the anticipated start-up/development costs for the site. Table 2 summarizes the anticipated annual costs for long-term management for the project. After initial start-up



costs, annual costs associated with the long-term maintenance of the property are estimated to be \$3,730 per year.

## B. Task Prioritization and Cost Estimates:

**Table 1: Schedule of Start-up Activities**

Goal	Action	Priority	Target Date	Completed By	MNRCP Cost	Other Cost	Notes
Natural Resources	Establish baseline for monitoring	2	Summer 2020	Steward & volunteers	\$200		
Natural Resources	Invasive species baseline	1	Summer/Fall 2020	Steward & volunteers	\$200	SCSWCD	
Infrastructure	Boundary Line Marking	1	Summer 2020	Steward	\$200		
Infrastructure	Install Boulders/ Barricades	1	Summer 2020	Contractor	\$500		
Infrastructure	Brushing out 15 ft trail, gravel and culverts	1	Fall 2019	Contractor		\$5,300	Gravel and equipment costs
Infrastructure	Trail Planning & Development	1	Spring-Fall 2020	Steward & volunteers		\$500	Do Baseline work and identify trail opportunities
Infrastructure	Signs & Installation	2	Fall 2019	Steward & volunteers	\$500		Permanent Signs

**Total Start-up Costs: \$7,400**

**Table 2 Estimated Annual Costs**

Cost Item	Cost per year*	Notes
Staff Time	\$2,000	
Trail Maintenance	\$500	
Property Taxes	zero	
Boulder/Road Barricade Maintenance	\$400	
Sign Maintenance/replacement	\$100	
Trash Removal	zero	
Brochures, Information	\$200	
Monitoring	\$500	
Boundary Marking (every 5 years)	\$100	5 year cost
Management Plan Update (every 5 years)	\$50	5 year cost

**Total Annual Costs: \$3,730**

## **VIII. Literature Cited**

Cowie, Ellen, Ph.D. 1995. Unpublished archaeological research: Tracy Farm site, Starks.

Maine State Planning Office. Kennebec River Management Plan. 1003. State Planning Office. Paper 78. [http://digitalMaine.com..spo\\_docs/78](http://digitalMaine.com..spo_docs/78) (Accessed 1.20.2020).

Prins, Harald Ph.D., *Norridgewock: Translocation on the New England-Acadian Frontier*, Man in the Northeast, Number 33, Spring, 1987.

Smith, Ashley E. Ph.D., 2017. Unpublished doctoral dissertation.

## **X. Appendices**

### **Appendix A: Timber Resources**

1. Comparison of Weston Homestead Farm Corporation Forestry Timber Inventories and Appraisals of 2013 and 2017
2. Weston HFC Forestry Timber Inventory and Appraisal Summary, 2017
3. Weston Homestead Farm Corporation Forestry Timber Inventory and Appraisal Data, 2017
4. Weston Homestead Farm Corporation Forestry Timber Inventory and Appraisal, 2013
5. Weston Homestead Farm Corporation Forest Management Plan, 2005

### **Appendix B: Gravel Valuation. Jan. 2016**

### **Appendix C: Legal Documents:**

1. Quit Claim deed with Covenant from Weston Homestead Farm Corp. (276 acres w/ 1+ mile of frontage). Nov. 20, 2019, Book 5495, Page 350.
2. Easement Deed (30 feet wide) from Thomas Weston (1/3rd mile frontage) July 19, 2018, Book 5306, Page 221.
3. Warranty Deed from Noyes Trust (35 acres w/ 1+ mile of frontage) Jan. 24, 2019, Book 5375, Page 003.
4. Survey. John Warren Noyes. February 19, 1991
5. Survey. Weston Woods & Waters. Map 5, Lot 9. Dec. 8, 2015
6. Town of Madison Tax Map 5