

# Glendale Falls Management Plan

## 2009



©

## Glendale Falls Basic Management Plan

Location: Middlefield, MA

Acreage: 60 acres (1964)

Completed by: Vincent Antil, Julie Richburg, Will Garrison, Jim Caffrey.

Date: FOC approved, May 18, 2009

Supporting Materials: Trustees Property Guide, and website.

### I. Introduction

- a. Glendale Falls is a 60-acre property located both sides of Clark Wright Road in Middlefield. Its primary feature is the falls of Glendale Brook, one of the longest waterfall runs in Massachusetts. Glendale Brook falls over steep rock ledges, descending about 150 feet over a length of about 800 feet.

While the majority of the property is on the south side of Clark Wright Road, the falls, which is the primary visitor use area, is located on the smaller section to the north of the road. From the parking lot most visitors access the falls by following a trail which descends parallel to the east of falls. Periodically openings provide access to ledges and the falls. During low water (Summer and Autumn) much of the ledges are dry rock and provide space for picnicking and sun bathing. During high water (Spring) water roars over the ledges. There is a pool at the bottom of the falls, which is used as a swimming hole.

Most of the property is heavily wooded with forests of hemlock, birch and maple. The surrounding region is also heavily forested. Located over an hour away from Springfield, Pittsfield or Northampton, Glendale Falls is a unique natural feature located in one of the least developed parts of the state.

- b. Acquisition history: Glendale Falls was purchased by The Trustees in 1960. No additions or boundary changes have happened since that time.
- c. Donor's wishes or other clear guiding principles: None are known.

### II. Summary of Preliminary Management Goal:

Glendale Falls should be managed as a C-type property.

C-type management properties are characterized by low visitation, and modest resource significance and management complexity. Typically, these properties are an important local resource, but will not likely engage a broad range of visitors and volunteers.

### III. Legal and Management Considerations

- Hunting is allowed on the property in season.
- Glendale Brook is a designated part of the Westfield River National Wild and Scenic River.
- Underground utility easement (AT&T, Bk 1448, pg 287 9/10/1964)

### IV. Property Description:

#### A. Historic and Cultural Resources

**Significant Historic Features:** The reservation was once part of the eighteenth-century Glendale Farm, which operated a mill at the falls. The mill's foundation can be found in the woods on the northwest side of the falls.

As far as we know, the property does not contain any Native-American sites.

**Threats to Historic Features:** While the mill foundation is currently sound, encroaching vegetation may pose a threat.

**Opportunities:**

- More information on the property history is needed. Some research and site visit by Cultural Resource Specialist is desired.
- Expand interpretive write-up for kiosk and brochure.

#### B. Natural Resources

**Significant Natural Features:** The reservation is forested with a mixed hemlock hardwood forest. Hemlock dominates on the slopes on both sides of the falls, while more hardwoods dominate the remainder of the property. South of Clark Wright Road, there is a small hill with a mix of hemlock (alive and dead) and a dense re-growth of young birch and hemlock. South and east from this hill is a slope of rough boulder talus with northern hardwoods. An underground utility line runs through the southern half of the property, creating a linear open area. About half of the property lies on granite bedrock including the small hill and the falls. The more southern and eastern portions of the property have metamorphic pelitic bedrock, including the talus and rock outcrops to the east.

Glendale Falls Reservation is contiguous with a section of the Fox Den Wildlife Management Area, resulting in over 1,000 acres of protected open space. An additional 2,000 acres of the WMA are within the immediate watershed. This provides for habitat for wide-ranging animals such as bears and bobcats, both of which have been seen on the reservation.

Threats to Natural Features: Hemlock woolly adelgid was found on the reservation in 2008. It is also on an abutter's property and we are working with them on a possible control program. Generally, the property is free from invasive species (at least to the extent that it has been explored to date). There is a small patch of Japanese knotweed along the logging road and that was likely brought in on fill used to repair storm/beaver damage. This small population was treated by hand cutting and pulling in 2008, but will need to be followed up. In addition, Japanese knotweed occurs at a few locations along Clark Wright Road. Erosion of the slopes next to the falls, caused by foot traffic and lack of defined trail, is damaging these fragile slopes. Roots are being exposed and sediment is being washed down slope.

Opportunities:

- Additional inventory is needed for plants and breeding birds, especially south of Clark Wright Road
- Improve trail along brook to prevent erosion.
- Work with neighbors on an approach to control HWA. Costs of treatment should be borne by neighbor.
- Control invasive plant species, especially knotweed along Clark Wright Road.
- Expand interpretive write-up for kiosk and brochure.

C. Scenic Resources

Significant Scenic Features: The falls itself is the primary scenic resource. A view does exist through the opening in the tree cover created by the falls. This view is of a completely wooded hillside to the east, across the Middle Branch of the Westfield River in Worthington. This hillside is largely protected by the Fox Den WMA.

Threats to Scenic Features: None

Opportunities: None

D. Structural Resources

| Structure        | Size   | Current Use | Current Condition                         |
|------------------|--------|-------------|---|
| Dirt Parking Lot | 7 cars | Parking     | Fair (erosion issues, drainage from road) |

Threats to Structural Resources: Erosion at parking lot. Bulletin board is subject to vandalism. Litter occurs in parking lot.

Opportunities:

- Drainage issue at parking lot needs further investigation and action.

## Visitor Services and Engagement

Current Volunteer Engagement: The Westfield River Wild and Scenic Stream Team is an active partner. A volunteer trail steward for the property may emerge from this group.

Opportunities: Continued cooperation with the Stream Team.

Visitor Engagement: Because of its small size and distance from population, interpretive programs have not been held at this property.

Opportunities: Expand write up on kiosk and website with more information. Investigate if there is enough material for further interpretation.

| <b>Service:</b>                                      | <b>Does it Exist?</b> | <b>Specific Description: age, condition, actively updated?</b>          |
|--|-----------------------|---|
| 1. Approach signs that lead visitors to the property | N                     | Need to be re-established.  |
| 2. Entrance and trailhead signs.                     | Y                     |   |
| 3. Kiosk or Bulletin Board meets standards.          | N                     | New Bulletin Board needed   |
| 4. Up-to-date Map on bulletin board and website.     | N                     | Trail map exists. Waiting for bulletin board and E&O publications.      |
| 5. Trails are clearly marked                         | N                     | Trail improvements needed.  |
| 6. Adequate parking area.                            | Y                     | Parking space adequate. Re-grading or drainage improvements are needed. |
| 7. Interpretive Program.                             | N                     | Property may not lend itself to programming. To be investigated.        |

## V. Current Resources Available for Management

### a. Staff and Volunteers

- Glendale Falls is part of the Windsor Management Unit which covers 7 properties and over 4,000 acres.
- There are 4 full-time staff and 2 seasonal employees within the management unit
- Management HQ is at Notchview, 15 miles away.
- Approximately 2% of staff can be allocated to Glendale Falls.
- There is currently one volunteer trail steward at Glendale Falls.
- The location of the property may limit other volunteer interest.

### b. Equipment

The Windsor Unit has: 2 pickup trucks, 1 dumptruck, 2 tractors w/ bucket-loader, 1 bulldozer. The unit has no chipper.

### c. Operating budget

Full FY10 operating budget for the unit \$ 205,000 (includes staff).

Budgeted expenses for Glendale Falls are \$ 100.

### d. Other (partners, etc.)

The Westfield River Wild and Scenic Stream Team is an active partner. We expect that they will lead and provide labor for the trail re-construction project.

VI. Recommended One-time Actions

| Rec# | Type | Resource Protection Action  | Description/<br>Rationale   | Phase | Rank | 1 <sup>st</sup> staff | 2 <sup>nd</sup> staff | Phase 1<br>Staff<br>hours | Phase 2<br>Staff<br>hours | Phase 3<br>Staff<br>hours | Total<br>Plan<br>Staff<br>Needs | Vol.<br>Op? | Total<br>Phase 1<br>Costs | Total<br>Phase 2<br>Costs | Total<br>Phase 3<br>Costs | Total<br>Plan<br>Costs<br>all<br>Phases | Budget<br>Source | Operatin<br>g | Supple<br>mental | Capital | Targett<br>ed<br>Fundin<br>g<br>Source | Notes | Status  |    |
|------|------|---|---|-------|------|-----------------------|-----------------------|---------------------------|---------------------------|---------------------------|---------------------------------|-------------|---------------------------|---------------------------|---------------------------|---|------------------|---------------|------------------|---------|--|-------|---|----|
| 1    | GM   | Place approach signs in town of Middlefield.  | Approach signs located along roads will help visitors find our property.  | 1     | N    | S                     |                       | 4                         |                           |                           | 4                               |             | \$500                     | \$0                       | \$0                       | \$500                                   | O                | \$500         |                  |         |  |       | These signs were lost (snowplows?) and need replacing.  | NS |
| 2    | GM   | New bulletin board / Kiosk needed.  | Current bulletin board was placed by DCR, is old and does not meet Trustees standards.  | 1     | C    | S                     |                       | 40                        |                           |                           | 40                              |             | \$1,500                   | \$0                       | \$0                       | \$1,500                                 | O                | \$1,500       |                  |         |  |       | E&O will provide graphics. Trail map is already complete. Kiosk must be built.  | NS |
| 3    | GM   | Build trail along falls. Existing conditions need improvement                           | Current trail is a broad path of erosion and rock. Extensive hardscaping and design will be needed to prevent erosion and keep visitors on trail. | 1     | C    | S                     |                       | 100                       |                           |                           | 100                             |             | \$600                     | \$0                       | \$0                       | \$600                                   | O                | \$600         |                  |         |  |       | This project will not proceed without the Wild and Scenic Stream Team taking the lead, and providing volunteer labor. | NS |
| 4    | NR   | Control and monitoring of invasive species (knotweed) on south side of Clark Wright Rd. | Small area of infestation. Opportunity to keep it in check before spreading.  | 1     | C    | EC                    |                       | 4                         |                           |                           | 4                               |             | \$0                       | \$0                       | \$0                       | \$0                                     | O                |               |                  |         |  |       |   | NS |
| 5    | GM   | Improvements to parking lot drainage.   | Storm water washing off road, through our parking area. Erosion is taking place. Area needs regrading and maybe some drainage structures.         | 2     | N    | S                     |                       |                           | 16                        |                           | 16                              |             | \$0                       | \$100                     | \$0                       | \$100                                   | O                | \$100         |                  |         |  |       | Extent of the problem must be evaluated. Some work will need to be done in the future.                                | NS |

|   |    |   |   |   |   |    |         |         |         |     |  |         |       |     |         |   |         |  |  |   |    |
|---|----|---|---|---|---|----|---------|---------|---------|-----|--|---------|-------|-----|---------|---|---------|--|--|---|----|
| 6 | NR | Develop a program for control of Hemlock Woolly Adelgid. Continue working with neighboring land owner on this approach. | Treatment of HWA is being considered here for soil stability and genetic reserves.      | 1 | C | EC | unknown | unknown | unknown |     |  | \$0     | \$0   | \$0 | \$0     | O |         |  |  | Julie has been working with the neighboring land owner to develop a control program. Pursuit of treatment is contingent on costs being borne by neighbor. | IP |
| 7 | NR | Natural Resource Inventory needed for plants and breeding birds.  | Little is known, especially on the part of the property south of Clark Wright Road.     | 1 | N | EC |         |         |         |     |  | \$0     | \$0   | \$0 | \$0     | O |         |  |  |   | NS |
| 8 | CR | Further investigation of Cultral Resources  | Site Visit by HR staff. More information from town library, and historical society      | 1 | D | HR | 8       |         |         | 8   |  |         |       |     |         |   |         |  |  | There may be an opportunity for more site interpretation, at least in the bulletin board and brochure.  | NS |
| 9 | GM | Expand interpretive write-up for kiosk, brochure and website.   | Reference geology of falls. Historical use of falls. Wild and Scenic River designation. | 1 | D | HR | 8       |         |         | 8   |  | \$0     | \$0   | \$0 | \$0     | O |         |  |  | Final text will be incorporated into materials by E&O staff.  | NS |
|   |    | <b>TOTAL</b>  |   |   |   |    | 156     | 16      |         | 180 |  | \$2,600 | \$100 |     | \$2,700 |   | \$2,700 |  |  |   |    |

**Key:**

Type: GM – General Management, NR – Natural Resource Management, VM - Visitor Management  
Phase: 1 – 2009 through 2011, 2 – 2012 through 2014, 3 – 2015 through 2017  
Rank: N – Needed, D - Desired  
Staff: DSR – Director of Structural Resources, EC – Ecologist, HR – Historic Resources, E&O – Ed. & Outreach Publications  
Budget Source: N – Not Applicable, O – Operating  
Status: IP – In Progress, NS – Not Started

VII. Routine Management Program

| Line # | Task  | Action Type | Acceptable Performance Level(APL) | Acceptable Frequency | Less than annual | Season     | Who? | Volunteer Opp? | Total hours needed to reach APL | Add'l funds needed to reach APL | Notes   |
|--------|---|-------------|-----------------------------------|----------------------|------------------|------------|------|----------------|---------------------------------|---------------------------------|---|
| 1      | Property Visit  | GM          | Adequate                          | Monthly              | no               | S, Su, F   | S    | yes            | 10                              | \$80                            | Inspect signs, stock kiosk, pick-up trash, check trail conditions. Monitor knotweed issue on south side of road.        |
| 2      | Storm Clean up  | NR          | Adequate                          | Every 2 years        | yes              | S          | S    | yes            | 8                               | \$80                            | Usually needed after difficult winter. Volunteer possible if power tools not necessary. (Needed hours highly variable). |
| 3      | Invasive Control                                      | NR          | Strong                            | Biannual             | no               | June, July | EC   | yes            | 16                              | \$0                             | Knotweed infestation is at a low level, and concentrated in one area. This is an opportunity to get rid of it.          |
| 4      | Update kiosk information materials                    | GM          | Adequate                          | Monthly              | no               | year round | S    | yes            | 6                               | \$40                            |   |
| 5      | Inspect boundaries.                                   | NR          | Adequate                          | Every 5 years        | yes              | W, S       | S    | yes            | 12                              | \$0                             | May not possible due to staffing. Trained volunteers may be necessary.  |
| 6      | Meet with WRWSAC (Wild and Scenic Advisory Committee) | GM          | Adequate                          | Monthly              | no               | All Year   | S    | no             | 50                              | \$0                             | Glendale Brook is designated as part of Westfield River National Wild and Scenic River                                  |
|        |   |             |                                   |                      |                  |            |      | <b>L</b>       | 102                             | \$200                           |   |

**Key:**

Action Type: GM – General Property Management, NR – Natural Resources Management  
Who?: EC – Ecologist, S - Superintendent  
Performance Level: Adequate - The task is currently completed at a level that does not hinder resource protection or the visitor experience.  
Strong - The task is completed in a manner/at a frequency that represents the ideal.

VIII. Conclusions

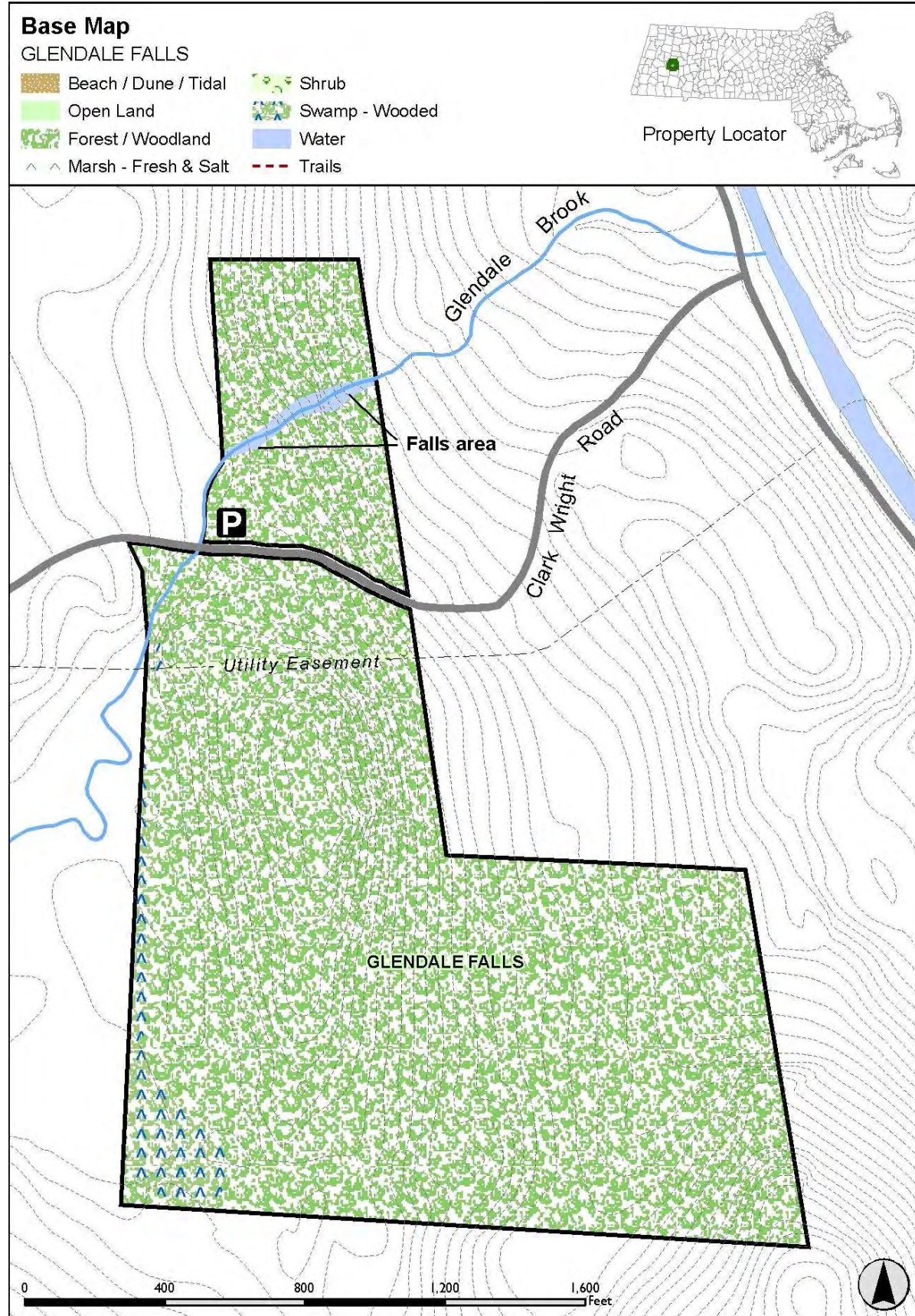
Improvements to eroding trail are necessary to maintain an acceptable level of stewardship. The Westfield River Wild and Scenic River Stream Team has been identified as a partner in accomplishing these trail improvements. Work may also be necessary to improve drainage in the parking lot.

The effects of Hemlock Woolly Adelgid on the property's hemlock stands will also need to be addressed.

IX. Monitoring and Review

Property plan should be reviewed annually by staff to ensure progress is being made to complete the recommendations. Future plan revisions may require additional research and field work.

APPENDIX A. Base Map



APPENDIX B: Natural Heritage & Endangered Species Program (NHESP) Resources Map



# APPENDIX C: Open Space Context Map

