



## **Open Space and Natural Area Enhancement Plan**

**Approved By City Council January 19, 2016**

The following programs, projects, and tasks, compiled from the four plans listed below, together comprise the elements of the Open Space and Natural Area Enhancement Plan.

1. Red Rocks Park 2014 Management Plan
2. Wheeler Nature Park Management Plan (2015)
3. Underwood Property Vision Statement (2015)
4. South Burlington Parks Access Improvements Study (2014) [actions specific to Wheeler, Red Rocks, and Underwood properties]

### **1. Red Rocks Park 2014 Management Plan**

The Red Rocks 2014 Management Plan divides its management directives into four categories:

- *Seasonal maintenance*: regular and ongoing maintenance needs
- *Best management practices*: general guidelines for addressing the management concern
- *Short-term management actions*: priority actions or projects for the next year
- *Long-term management actions*: priority actions or projects requiring a longer time frame

This Open Space and Natural Area Enhancement Plan includes each of the items listed as “short term management actions” and “long term management actions”.

### **INVASIVE PLANT MANAGEMENT**

#### ***Management Plan for Widespread Woody Species (Type A)***

- Begin targeted removal of all woody invasives from small focus areas (requires trained staff, chainsaw use)
  - Main south-facing lookout designated as a first priority focus area
  - Other areas along the interior of the loop trails (designated “natural areas”) can be targeted next
- Close off focus areas to public, indicating “restoration area” and explaining why
- Replant these areas with native shade-tolerant shrubs and understory species
- Maintain designated “natural areas” as invasive-free
- Target removal of buckthorn and honeysuckle:
  - Release the seedlings of mast trees (oak, hickory, beech) that are important for wildlife
  - Remove larger seed-bearing female buckthorn trees
- All cut woody stumps must be wrapped in a few layers of burlap or thick plastic to prevent re-growth by stump sprouting

- Continue monitoring for new occurrences and move quickly to prevent establishment and spread

***Management Plan for Isolated Occurrences and Early Detections (Type B)***

- Hold work days to remove isolated populations the less widespread herbaceous invasive species
  - Volunteer and/or Park staff involvement during the early summer
  - Organize training sessions/workshops for regular users and park neighbors
- Mount an “early detection rapid response” to these plants, aiming to remove the populations in their entirety before they can spread aggressively throughout the park
  - Oriental bittersweet sits on this threshold now and could be targeted by repeated hand cuttings throughout the spring and summer:
    - Hand-pull entire plants, including all roots and runners
    - For larger plants, cut climbing or trailing vines close to root collar and repeat every 2 weeks.

**TRAILS**

***Short-Term Management Actions – 1 year***

- Repair major areas of erosion (Map 3).
- Make modifications to official trail network as outlined in Table 2; reassess yearly
- Prioritize restoration and ad hoc trail closure in the limestone bluff cedar-pine natural community (the cliff-jumping area)
  - Consider designating one or two official access points to these highly-trafficked areas
  - Post signage and install barriers to discourage use of all other side trails
  - Rather than making this the first restoration area closed off to the public, use this designation in another nearby area first, to make park users accustomed to the idea of trail closures and restoration areas
- Designate other restoration areas where natural resource conservation and wildlife use is a priority; in other areas, off-trail exploration for environmental education use would be permitted.
- Establish photographic reference points where seasonal photographs can be taken to document any changes in trail condition, good or bad.

***Long-Term Management Actions – 3+ years***

- Monitor trail closures to measure success of different techniques
- Complete major trail repairs, installation of new waterbars
  - Possibility of VYCC partnership
- Find solutions to concentrate public access to cliff-jumping areas and minimize creation of further side trails along the cliff ledges

**SIGNAGE, WAYFINDING & PARK INFORMATION**

***Short-Term Management Actions – 1 year***

- Install trail markers on the “main” trail that leads from the park entrance to the turnabout overlook at the far western point of the park, following the lakeside trail. “In” and “out” directions on this trail will provide simple wayfinding to the main overlook points in the park and identify the quickest exit from the park.
- Install posts with simple directional signs at key park intersections (see Map 6, above).

- Provide access to a digital park map via QR code at the park entrance.
- Install or establish a park bulletin board at the main entrance.

***Long-Term Management Actions – 3+ years***

- Install additional park interpretive panels and include an inset directional map in each

**FOREST HEALTH & WILDLIFE MANAGEMENT**

***Short-Term Management Actions- 1 year***

- Establish a monitoring program for signs of non-native insect pests including Emerald Ash Borer, Asian Longhorned Beetle, and Hemlock Woolly Adelgid.
- Conduct breeding bird surveys in early spring and mammal surveys in winter to determine wildlife occurrences and designate protected areas as needed

**RECREATION & EDUCATION OPPORTUNITIES**

***Short-Term Management Actions***

- Enhance the aesthetics of the park entry
- Restore scenic views from main overlooks across Lake Champlain and through the picnic grove, with the following considerations:
  - The old-growth cedars of the limestone bluff community should be left as-is.
  - Trees should be pruned rather than removed to open views; exposed soil would be an easy target for colonization by invasive species (which could impact native vegetation and very quickly impede the views again).
  - South Burlington’s Development Review Board regulates all land within 150 feet of the lakeshore. Land is to be left in an “undisturbed, naturally vegetated condition” unless otherwise approved.
  - Park users should be notified before any such work takes place, especially in such a public location.

***Long-Term Management Actions***

- 1) Create infrastructure that could facilitate use of the park as an outdoor classroom.
- 2) Improve opportunities for park users to access the water through boat rentals and use.
- 3) Investigate the possibility of public moorings.
- 4) Create more shaded sitting areas on/near the beach.
- 5) Extend the open season of the beach house for visitors looking to access the beach with bathrooms and change rooms.
- 6) Consider improvements to beach infrastructure such as a boat launch or pier and a beach pavilion.

**BEACH MANAGEMENT**

***Long-term Management Actions***

- Consider extending the open season of the beach and access to the beach house
- Improve shaded seating areas and aesthetics at the beach with plantings

**PARKING & TRAFFIC MANAGEMENT**

***Short-Term Management Actions***

- Encourage biking, walking, and public transit to Red Rocks
  - Consider connections to bike and walking paths
  - Increase bicycle parking

**Long-Term Management Actions**

- 1) Assess alternatives, then re-design the parking system with the goal of minimizing the park area devoted to vehicle parking as well as minimizing visual, neighborhood, and ecological impacts
- 2) Restore and/or repurpose retired parking areas

**2. Wheeler Nature Park Management Plan (2015)**

The Wheeler Nature Plan Management Plan includes a section that details actions to be undertaken:

- *Appendix A - Park Management Schedule. This Schedule includes the following sections:*
  - Seasonal Maintenance
  - Short-term Management Actions – 1 year
  - Long Term Management Actions – 3+ years
  - Outreach
  - The Homestead

This Open Space and Natural Area Enhancement Plan includes each of the items listed as “short term management actions” and “long term management actions” within Appendix A.

**APPENDIX A – PARK MANAGEMENT SCHEDULE**

***Short-term Management Actions – 1 year***

*Trails*

- Remove obstructions on trails
- Install or repair puncheons and bridges to remediate trail widening and encroachment
- Deter the use of unauthorized trails by discontinuing weed whacking
- Provide effective use of trails by blazing trees, adding signage, and updating maps, guides and other informational materials

*Natural Resources and Habitats*

- Monitor wildlife
- Brush hog grasslands and shrublands to maintain wildlife habitat
- Remove and control Non-Native Invasive Species, especially along trails
- Prune shrubby vegetation and tree branches and release mast trees to reduce encroachment
- Test stream hydrology

***Long Term Management Actions – 3+ years***

- Identify and monitor Non-Native Invasive Species
- Investigate possible uses of Wheeler Nature Park as a “working landscape”
- Add to trail network
- Maintain watershed area

### **3. Underwood Property Vision Framework (2015)**

The Underwood Property Vision Framework includes three sections under “Next Steps”

- *Short Term Strategies*
- *Medium Term Strategies*
- *Long Term Strategies*

This Open Space and Natural Area Enhancement Plan includes each of the items listed as “short term strategies,” “medium term strategies”, and “long term strategies.”

#### ***Short Term Strategies***

- Ensure short term uses do not compromise future opportunities on the site
- Conduct natural resource inventories to better understand habitat considerations and where restoration would be most beneficial
- Delineate restoration areas and restrict access to these areas
- Complete mapping of the site (drainage, wetland delineation, etc.)
- Maintain property and prevent natural succession where needed
- Create mowed paths around primary circulation routes and enhance Recreation Path connection when possible
- Clean up trails in the woods
- Allow short term agricultural uses towards Spear Street
- Define access points into the property and introduce designated parking areas early
- Build informational kiosk about the future of the parcel to get users interested and keep momentum going
- Introduce buffering vegetation so as things evolve they can do their job

#### ***Medium Term Strategies***

- Complete Master Plan
- Complete restoration projects
- Build first multi-purpose fields to introduce active use of the parcel
- Build strider park and pump track once the bike path connection is implemented
- Build restroom facility
- Build one brook crossing
- Build wildplay/natural playground
- Formalize Nordic skiing connection
- Build Phase 1 Parking and vehicle circulation

#### ***Long Term Strategies***

- Build barn/event space
- Expand initial parking areas
- Build second brook crossing
- Build second multi-purpose field
- Build treehouse
- Extend formalized pathways as elements come online

#### **4. South Burlington Parks Access Improvements Study (2014)**

The South Burlington Parks Access Improvements Study provides recommendations for action at seven (7) City parks and natural areas.

This Open Space and Natural Area Enhancement Plan includes only the items listed as proposed improvements at Red Rocks Park and Wheeler Nature Park:

##### ***Red Rocks Park***

- Parking Signs including posts
- 30' Accessible Path
- Accessible Toilets & Grab Bars
- Possible fence reconfiguration to allow for accessible parking near boathouse

##### ***The Homestead at Wheeler Nature Park***

- 20' Accessible path
- Accessible Picnic Tables
- Complete Pedestrian trail from Cheeseactory Rd. to Scott Property and associated amenities.