

Adeline Nature Area

Location: 910 Adeline Lane

Size: 1.2 Acres

Description

The Adeline Nature Area is located at the south end of the Adeline Lane cul-de-sac on Sweeney Lake; it is accessible from Adeline Lane. Although a relatively small nature area, Adeline offers a number of amenities including an inscribed stone boulder entry sign, stone benches, a single hard surface trail leading to a composite decking boardwalk and overlook seating area with kayak/canoe access to Sweeney Lake.

The south side of the nature area abuts the railroad, which is a barrier to entering the park from any other locations. The railroad through the city provides a corridor for wildlife passage, and Adeline Nature Area is served by this connection. The rail is an impediment to access, however, and separates the nature area from Schaper Park, and the amenities located there. The remainder of the park abuts private property or Sweeney Lake.

From a natural resource perspective, the park is dominated by woods. Although lower quality species dominate, the woods are appropriate, and provide a habitat along the lake for a wide variety of urban wildlife and songbirds.

Forest and Woodlands

Adeline Nature Area is densely wooded, with a mixture of hardwood species including box elder, green ash, and cottonwood. Overall, the woods are relatively mature, but have been disturbed, which is reflected in a dominance of lower quality species. Soils within the park include areas of cut and fill, which encourages the establishment of these lesser quality species. A shrub layer is present, but is dominated by common buckthorn.

Aquatic Resources

Sweeney Lake is located within the park, and is the resource highlight. The portion of Sweeney Lake within the nature area is shallow, seasonally vegetated with floating leaved vegetation, and prone to algal blooms. Schaper Pond is located on the south side of the railroad, and discharges into Sweeney Lake near the Adeline Nature Area.

Wetlands

Hardwood swamp wetland is present along Sweeney Lake. This wetland is dominated by box elder trees and some reed canary grass where sufficient light is present. The wetland is located on a small terrace along the lake, and hydrology is provided by a high water table, although some seepage wetland is also present, and was likely historically more prevalent.

Prairie and Grassland

Adeline Nature Area has no significant areas of prairie or grassland.

Invasive Species

The dominance of disturbed woods provide ideal conditions for common buckthorn to thrive. Common buckthorn is a dominant species throughout the park. Density of buckthorn has increased since 2003.

Within the fringe of Sweeny Lake, reed canary grass and purple loosestrife are present, but density has not been quantified due to the small portion within the Nature Area and connectivity to Sweeney Lake.

Description	%Cover2003	% Cover 2013	% Change
Common Buckthorn	40	65	+25

Site Recommendations

Natural Resources

Manage buckthorn (high priority)

Buckthorn is prevalent throughout the park, and is mixed ages. Buckthorn removal is a priority, although diligence is required, as there are significant buckthorn populations adjacent to the nature area, and given the small size, effective removal would be difficult for extended periods of time before buckthorn would again encroach.

Enhance the quality of the woods (medium priority)

An opportunity to selectively remove some of the less desirable box elder trees, and replant with a mixture of oak, maple, and basswood trees would provide a shift towards a more desirable, and historically present community. This phase approach could be done over an extended period of time, so that the change was gradual, and did not affect the aesthetics of the lake.

Amenities

Improve visual access (high priority)

Improve vantage point to observe Sweeney Lake by removing tree limbs and brush near boardwalk overlook.

Upgrade entry sign (high)

Adeline Nature Area currently has a boulder entry sign similar to the ones that are located within the General Mills Nature Preserve. Many of the other nature areas either have no sign or one of several different styles used by the City. The boulder sign should be reviewed as a potential design type as the City develops a recommended "Sign and Site Amenity Design Guidelines for Golden Valley Nature Areas and Open Spaces."

Install interpretive sign (medium)

There are opportunities to educate the user on a number of topics including wildlife habitat, water quality protection of Sweeney Lake and buckthorn removal and native woodland restoration.

Upgrade bench (medium)

Several styles of benches are found within the nature area. Flat-topped pieces of architectural cut stone, found on site, have been used as benches at the entrance and along the trail. While these are unique to Adeline and could continue to be used, placing a bench near the entry and on the overlook consistent with an approved bench style for nature areas would provide visual continuity within the nature area system and also strengthen user distinction that Adeline is a Nature Area.

Improve physical access (low priority)

Currently, Adeline Nature Area is accessed by one location. Consistent with the City's Comprehensive Plan, long term plans should consider connecting the nature area to the Schaper Park complex located on the south side of the railroad tracks. This would also provide access to the Luce Line Regional Trail. In addition, the City should review the accessibility of the trail and provide landing areas, if necessary, consistent with ADA guidelines.

Install trash/recyclable receptacle (low)

The trash receptacle is one of the first amenities viewed upon entering the nature area. As such, it should not only provide maintenance functionality and efficiency but should also be attractive and reflect the image of the Adeline Nature Area.

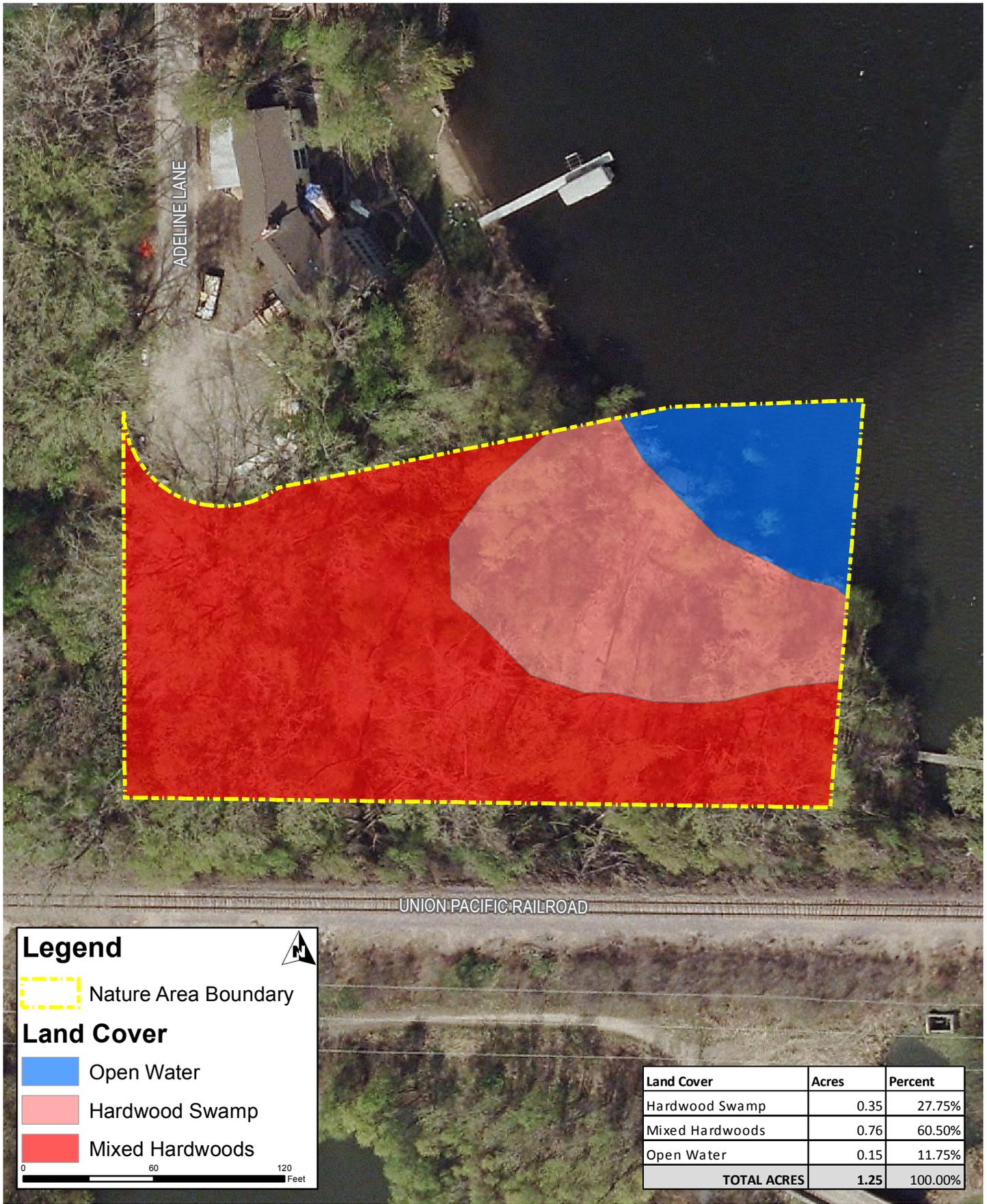
Table 5.2 Adeline Nature Area Improvement Priorities

Priority	Management Type	Description	Action	Qty	Unit	Unit Cost	Cost Opinion
High	Upland woods and hardwood swamp	Low quality hardwoods	Remove/control Buckthorn	1	Acre	\$4,000	\$4,000
Medium	Upland woods and hardwood swamp	Forest health, diversity	Remove undesirable trees, establish native woodland communities	1	Acre	\$5,000	\$5,000
High	Amenity	Entry sign design continuity throughout nature area system	Install entry signs	1	Each	\$5,000	\$5,000
Medium	Amenity	Bench design continuity throughout nature area system	Install new benches at entry and on deck overlook	3	Each	\$1,500	\$4,500
Medium	Amenity/Visual Access	Sweeney Lake View	Remove view obstructing tree	1	LS	\$1,000	\$1,000

			limbs and shrubs				
Low	Amenity	Natural resources education; interpretive sign continuity throughout nature area system	Install interpretive sign	1	Each	*\$3,000	\$3,000
Low	Amenity	Trash/recyclable receptacle design continuity throughout nature area system	Install waste/ recycle trash receptacle at entry	1	Each	\$2,000	\$2,000
Low	Amenity/Trail Access	Access to Schaper Park	Install tunnel under the Union Pacific railroad tracks	1	LS		*\$500,000
Low	Amenity		Install post and cable barrier		LS		

*Does not include design fees











Adeline Nature Area - Photographs



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