



Wasatch Hollow Open Space Restoration, Use, & Management Plan







Concept A Map

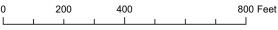
1 Potential Access Location **Emigration Creek**

Proposed Footpaths

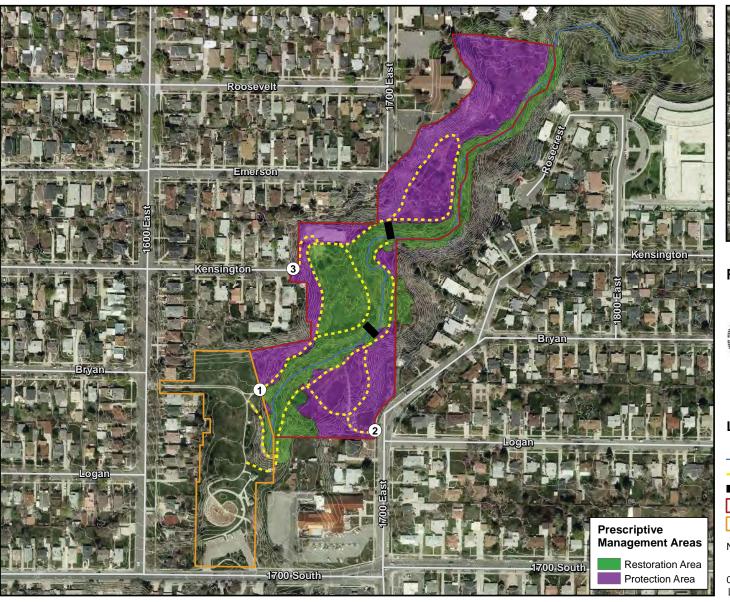
Wasatch Hollow Open Space Boundary

Wasatch Hollow Park Boundary

NOTE: Contours are at 3' intervals



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Wasatch Hollow Open Space Restoration, Use, & Management Plan

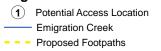






Concept B Map

Legend



Proposed Bridge

Wasatch Hollow Open Space Boundary

Wasatch Hollow Park Boundary

NOTE: Contours are at 3' intervals

200 400 800 Feet

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Wasatch Hollow Open Space Restoration, Use, & Management Plan







Concept C Map

Legend

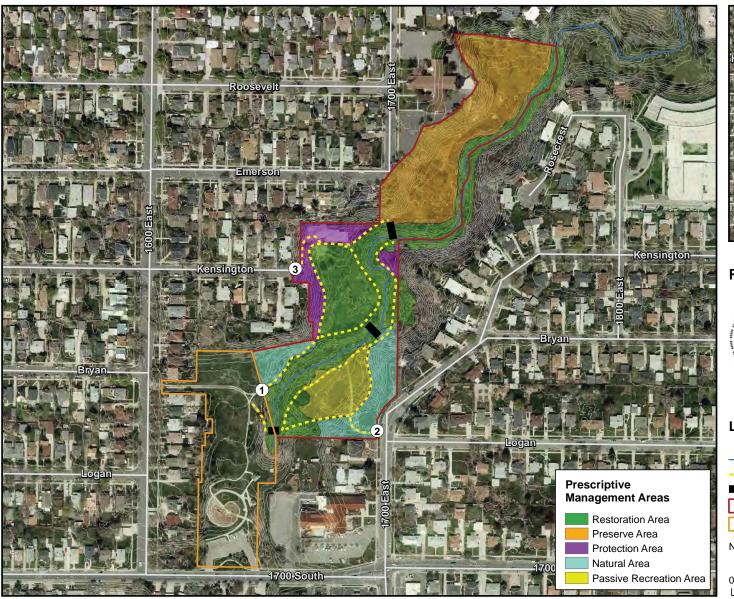


Wasatch Hollow Open Space Boundary
Wasatch Hollow Park Boundary

NOTE: Contours are at 3' intervals

200 400 800 Feet







Wasatch Hollow Open Space Restoration, Use, & Management Plan



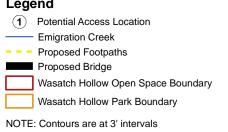




800 Feet

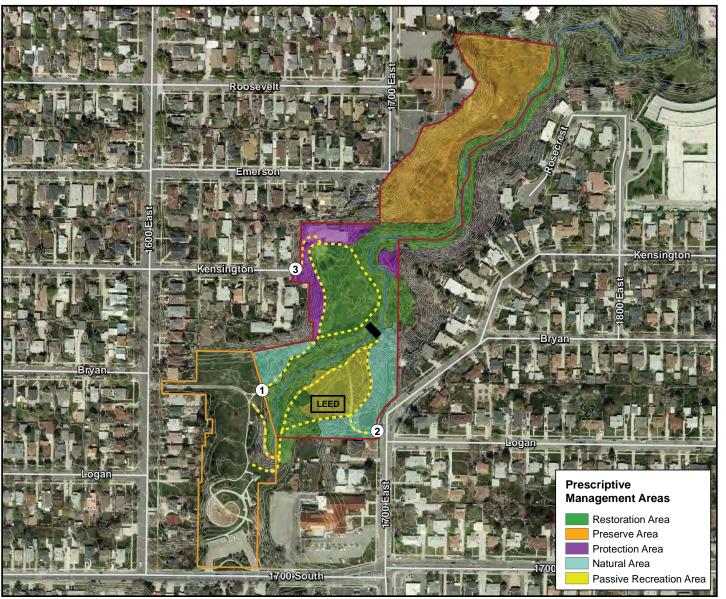
Concept D Map

Legend





200





Wasatch Hollow Open Space Restoration, Use, & Management Plan

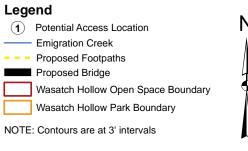






800 Feet

Concept E Map



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200

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OUTLINE OF POTENTIAL CONCEPTS BASED ON S.D.M. REPORT, SITE VISIT, AND PUBLIC WORKSHOP 6 May 2010

Management Strategies That Are Common To All Concepts

- Improve Water Quality, Provide Habitat for Wildlife, and Restore & Protect Native Vegetation:
 - establish conservation easements,
 - o promote "leave no trace" ethic,
 - o address culverts and drains to creek, address runoff and sedimentation (e.g., prevent bank erosion),
 - o reestablish de-silting meadows,
 - o focus on species most likely to thrive,
 - o restrict and prevent disruptive uses (e.g., limit pollution from lights/noise, paintball/air soft, dumping of refuse, tree cutting for "fort" building, campfires, camping or squatting),
 - o control and eliminate invasive species,
 - restore natural forest processes.
- Protect Open Space Property, Protect Private Property and Regular Monitoring of Violations:
 - o reduce risks from liability (e.g., non-permitted activities),
 - o prevent trespassing, protect private property values (e.g., protect aesthetic values, limit noise, allow only natural open space compatible activities),
 - o prevent annexation of private property,
 - o prevent encroachment of private property onto WHOS (e.g., no dumping of refuse,),
 - o provide adequate enforcement (e.g., personnel, penalties for violations).
- Provide Public Access, Provide Educational Access, and Provide Access for Research:
 - o close WHOS to public after dark,
 - o increase historical awareness,
 - open space as an "open classroom" (e.g., seating for reflection and wildlife viewing, single loop footpath, only for passive activities, limit lights and noise, exploration by all age groups, partner with schools/colleges),
 - o Inclusion of historical, cultural, and educational interpretative elements (signage and art).
 - create awareness of detrimental behavior,
 - o monitor conditions over time (e.g., citizen science, graduate theses).
- Enhance Public Safety and Reduce Risks from Liability:
 - o curtail illegal activity (e.g., drugs, squatting),
 - o provide adequate enforcement (e.g., regular walkthroughs, more patrols),
 - o reduce risk of injury in WHOS (e.g., remove rope swing),
 - o reduce risks to private landowners (e.g., establish clear boundaries, discourage trespassing and encourage property owners to participate in privet property protection).
- Promote Community Stewardship/Co-Management and Improve Relationship Between City/Stakeholders:
 - o involve neighboring property owners, local community, youth organizations, visitors, educational institutions, neighboring churches, and easement holders (e.g., promote installation of native plants on private land, regular wildlife counts, regular clean-up days, research opportunities, regular walkthroughs, community docent and interpreters, manage in perpetuity)
 - o improve communication, foster transparent decision making, and facilitate decision making partnerships with easement holders, across city offices, between city and community, between community residents, and with experts and other stakeholders (e.g., Community Council newsletters, website, regular meetings, acquire expertise in decision making, information sheet at entrance, hire a WHOS docent).

Management Strategies That May Vary Between Concepts

- Improve Water Quality, Provide Habitat for Wildlife, and Restore & Protect Native Vegetation:
 - o address septic field at acquisition site
 - o reconnect Wasatch Hollow Spring
 - o allow creek to meander
 - o limit public access (e.g., natural barriers vs. fences, limit access by dogs, minimize number of paths, curtail encroachment, create "low impact" area)
- Protect Open Space Property, Protect Private Property and Regular Monitoring of Violations:
 - establish buffer zones between WHOS and private property (e.g., purchase land from neighbors)
 - o establish clear boundary lines (e.g., improve signage, implement natural barriers)
- Provide Public Access, Provide Educational Access, and Provide Access for Research:
 - o limit access in northern portion (e.g., research and education only, no footpath)
 - o wider access in southern portion (e.g., limited/no access by dogs)
 - o open space as an "open classroom" (e.g., interpretive art, markers, signs, create an education center)
- Enhance Public Safety and Reduce Risks from Liability:
 - o curtail illegal activity (e.g., drugs, squatting)
 - o provide adequate enforcement (e.g., volunteer or staff for education and enforcement, enhance public access, consider CPTED in certain areas)
 - o remove abandoned house
 - o reduce risk of injury in WHOS (e.g., dogs on leash or restricted, reduce fire risk)
 - o reduce risks to private landowners (e.g., establish buffer zones between OS and private property)
- Promote Community Stewardship/Co-Management and Improve Relationship Between City/Stakeholders:
 - o none

Design Performance Measures That Are Relevant for Evaluation of Concepts

- Improve Water Quality, Provide Habitat for Wildlife, and Restore & Protect Native Vegetation:
 - extent of restoration activities and resultant benefits
 - o BMPs for water quality, wildlife and habitat protection
- Protect Open Space Property, Protect Private Property and Regular Monitoring of Violations:
 - o number and placement of access points and footpaths
 - o size of buffer between private property and open space area
 - o number and placement of natural barriers at property boundaries
- Provide Public Access, Provide Educational Access, and Provide Access for Research:
 - o number and location of access points and footpaths
 - Inclusion of historical, cultural, and educational signage
- Enhance Public Safety and Reduce Risks from Liability:
 - o fire risk assessment
 - o BMPs for enforcement
 - BMPs for limiting trespassing
- Promote Community Stewardship/Co-Management and Improve Relationship Between City/Stakeholders:
 - o Implement shared management plan between City, Salt Lake County, Utah Open Lands, and community

Prescriptive Management Area Designations

Prescriptive Management Areas help to define and establish a range of land use and management prescriptions that can be applied to suit the unique resource and user needs for a particular zone within the Wasatch Hollow Open Space properties. Designated use areas, footpaths, and barriers help to clearly define appropriate uses to improve public safety, minimize maintenance, and protect sensitive resources. Each concept is mapped according to the following zones where applicable.

Footpaths:

- o Applies only to the use on the footpath
- Self directed activities like hiking and dog-walking as directed by footpath signs
- Moderately maintained and monitored to promote safety and reduce user conflicts
- o Lands adjacent to the trail are managed to the standard of their prescriptive management area

Passive Recreation Area:

- o Promotes and supports a moderate level of use in a managed setting
- o Self directed activities, such as reading, painting, learning, or informal leisure activities
- Moderately maintained and manicured
- o Facilities may include education center, outdoor classroom, or interpretive elements
- o Dogs allowed on-leash only

Natural Area:

- o Promotes and supports a moderate level of use in a natural setting
- Self directed activities, like hiking or orienteering, on designated footpaths
- Moderately maintained to minimize resource degradation (e.g., weed and erosion controls, native plantings)
- Dogs allowed on-leash only

Protection Area:

- o Promotes and supports a light level of use in a natural setting
- Self directed activities focused on the protected resources, such as hiking, education, interpretation, and wildlife watching on designated footpaths
- o Maintained to enhance natural systems (e.g., protecting sensitive habitats, restoring natural hydrology, restoring upland habitat, and adapting to natural changes over time)
- Dogs are prohibited

Restoration Area:

- o Discourages or restricts access and use from natural areas under restoration
- Actively restored, maintained, and monitored to improve degraded natural resources or cultural features
- o Involves removal of fill or spoils, streambank grading, floodplain restoration, and habitat restoration
- o Dogs are prohibited

Preserve Area:

- Restricts and discourages access and use in sensitive resource area
- Suitable for occasional use for stewardship or education
- Moderately maintained and monitored to conserve unique, high-quality natural resources or cultural features (e.g., restoring natural hydrology, restoring upland habitat, and adapting to natural changes over time)
- o Dogs are prohibited

Concept A: Preservation Emphasis

• Concept A: North Area

- o prohibit all public access and manage similar to a research natural area (i.e., access for scientific research and education only)
- o establish property boundary to prohibit access and encroachments from adjacent properties
- o include locked gate at south boundary
- o implement aggressive invasive species eradication efforts (e.g., removal of all non-native tree species)
- o acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement aggressive riparian and upland habitat restoration efforts (e.g., remove floodplain encroachments, provide floodplain for stream meandering, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o close and re-vegetate social footpaths

Concept A: Central Area

- o prohibit dogs and limit public access to single "loop" footpath west of stream
- o establish property boundary to prohibit encroachments from adjacent properties
- include gate at south boundary
- o implement aggressive invasive species eradication efforts (e.g., removal of all non-native tree species)
- acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement aggressive riparian and upland habitat restoration efforts (e.g., remove all floodplain fill, provide floodplain for stream meandering, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o re-establish Wasatch Hollow Spring
- o install restoration fence along both sides of stream to discourage access
- o obliterate existing house and all associated improvements and re-grade to natural contours
- o install interpretive signs focusing on habitat restoration and nature education

Concept A: South Area

- o prohibit dogs and limit public access to single "loop" footpath east of stream
- establish property boundary to prohibit encroachments from adjacent properties
- o implement aggressive invasive species eradication efforts (e.g., removal of all non-native tree species)
- o acquire property east of stream and Wasatch Hollow Park boundary from willing sellers
- o implement aggressive riparian and upland habitat restoration efforts (e.g., remove all floodplain fill and dredging spoils, provide floodplain for stream meandering, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o install restoration fence along both sides of stream to discourage access
- o close and re-vegetate duplicate footpaths
- o install interpretive signs focusing on habitat restoration and nature education

Concept A Designated Access Locations

- (1) Wasatch Hollow Park North Access Point
- (2) 1700 East Street / Logan Street Access Point

Concept B: Restoration Emphasis

Concept B: North Area

- o prohibit dogs and limit public access to single "loop" footpath west of stream and 200+ feet from north boundary with bridge across stream to Central Area
- o define north, east, and west property boundaries to prohibit encroachments and discourage trespassing
- o include gate at south boundary
- o acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement phased invasive species eradication efforts (e.g., removal of 20% of non-native tree and shrub species annually and annual treatment of non-native herbaceous species)
- o implement aggressive riparian and upland habitat restoration efforts (e.g., remove floodplain encroachments, provide floodplain for stream meandering, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- define outside of footpath loop to discourage access to sensitive areas and adjacent properties
- o install interpretive signs focusing on habitat restoration and nature education

• Concept B: Central Area

- o prohibit dogs and limit public access to single "loop" footpath and bridge across stream to South Area
- o define east and west property boundaries to prohibit encroachments and discourage trespassing
- o implement phased invasive species eradication efforts
- o acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement riparian and upland habitat restoration efforts (e.g., remove some floodplain fill, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o re-establish Wasatch Hollow Spring if feasible
- o install restoration fence along both sides of stream to discourage access
- o raze existing house and associated infrastructure, but maintain pedestrian/maintenance access
- install interpretive signs focusing on history, habitat restoration, and nature education
- establish outdoor classroom for educational uses

• Concept B: South Area

- o prohibit dogs and limit public access to single "loop" footpath with bridge across stream to Central Area
- o define north, south, and east property boundary to prohibit encroachments and discourage trespassing
- o implement phased invasive species eradication efforts
- o acquire property east of stream and Wasatch Hollow Park boundary from willing sellers
- o implement riparian and upland habitat restoration efforts (e.g., remove all dredging spoils, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o install restoration fence along both sides of stream to discourage access
- o close and re-vegetate duplicate footpaths
- o install interpretive elements and/or signs focusing on history of Emigration Creek, habitat restoration, and nature education.

Concept B Designated Access Locations

- (1) Wasatch Hollow Park North Access Point
- (2) 1700 East Street / Logan Street Access Point
- (3) Kensington Street Access Point

Concept C: Public Access Emphasis

• Concept C: North Area

- o allow dogs on-leash only and limit public access to designated footpaths west of stream with bridge across stream connecting to Central Area and 100+ feet from north boundary
- o define property boundaries where necessary to prohibit encroachments and to discourage trespassing
- o include gate at south boundary
- o implement annual invasive species eradication efforts (e.g., removal/treatment of non-native species)
- o implement riparian and upland habitat restoration efforts (e.g., re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o install restoration fence where necessary to discourage access to sensitive areas and adjacent properties
- o install interpretive signs focusing on history of Emigration Creek, pioneer culture, habitat restoration, and nature education

• Concept C: Central Area

- o allow dogs on-leash only and limit public access to designated footpaths and bridge across stream connecting to South Area
- o define property boundaries where necessary to prohibit encroachments and discourage trespassing
- o implement annual invasive species eradication efforts (e.g., removal/treatment of non-native species)
- o implement riparian and upland habitat restoration efforts (e.g., re-grade slopes along stream where appropriate and re-vegetate all disturbed areas with native species)
- o install appropriate boundary (e.g., restoration fence) where necessary to discourage access to sensitive areas and adjacent properties
- raze existing house but maintain vehicular access for educational purposes
- o allow for development of LEED certified "one-room" educational facility and outdoor classrooms
- o install interpretive elements and/or signs focusing on history of Emigration Creek, pioneer culture, habitat restoration, and nature and art education.

Concept C: South Area

- o allow dogs on-leash only and limit public access to designated footpaths with bridges across stream connecting to Wasatch Hollow Park and Central Area
- o define property boundaries where necessary to prohibit encroachments and discourage trespassing
- o implement annual invasive species eradication efforts (e.g., removal/treatment of non-native species)
- o implement riparian and upland habitat restoration efforts (e.g., remove all dredging spoils, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o install restoration fence where necessary to discourage access to sensitive areas and adjacent properties
- o close and re-vegetate existing duplicate footpaths
- o install interpretive signs focusing on history of Emigration Creek, pioneer culture, habitat restoration, and nature education.

Concept C Designated Access Locations

- (1) Wasatch Hollow Park North Access Point
- (2) 1700 East Street / Logan Street Access Point
- (3) Kensington Street Access Point
- (4) Emerson Street Access Point

Concept D: Conservation Emphasis

Concept D: North Area

- o prohibit all public access and manage similar to a research natural area (i.e., access for scientific research and education only)
- o establish property boundary to prohibit access and encroachments from adjacent properties
- o include locked gate at south boundary
- o implement aggressive invasive species eradication efforts (e.g., removal of all non-native tree species)
- o acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement aggressive riparian and upland habitat restoration efforts (e.g., remove floodplain encroachments, provide floodplain for stream meandering, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o close and re-vegetate social footpaths

Concept D: Central Area

- o prohibit dogs and limit public access to single "loop" footpath and bridge across stream to South Area
- o define east and west property boundaries to prohibit encroachments and discourage trespassing
- implement phased invasive species eradication efforts
- acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement riparian and upland habitat restoration efforts (e.g., remove some floodplain fill, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o re-establish Wasatch Hollow Spring if feasible
- o install restoration fence along both sides of stream to discourage access
- o raze existing house and associated infrastructure, but maintain pedestrian/maintenance access
- o install interpretive signs focusing on history, habitat restoration, and nature education
- o establish outdoor classroom for educational uses

• Concept D: South Area

- allow dogs on-leash only and limit public access to designated footpaths with bridges across stream connecting to Wasatch Hollow Park and Central Area
- o define property boundaries where necessary to prohibit encroachments and discourage trespassing
- o implement annual invasive species eradication efforts (e.g., removal/treatment of non-native species)
- o implement riparian and upland habitat restoration efforts (e.g., remove all dredging spoils, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o install restoration fence where necessary to discourage access to sensitive areas and adjacent properties
- o close and re-vegetate existing duplicate footpaths
- o install interpretive signs focusing on history of Emigration Creek, pioneer culture, habitat restoration, and nature education.

Concept D Designated Access Locations

- (1) Wasatch Hollow Park North Access Point
- (2) 1700 East Street / Logan Street Access Point
- (3) Kensington Street Access Point

Concept E: Education Emphasis

Concept E: North Area

- o prohibit all public access and manage similar to a research natural area (i.e., access for scientific research and education only)
- o establish property boundary to prohibit access and encroachments from adjacent properties
- o include locked gate at south boundary
- o implement aggressive invasive species eradication efforts (e.g., removal of all non-native tree species)
- o acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement aggressive riparian and upland habitat restoration efforts (e.g., remove floodplain encroachments, provide floodplain for stream meandering, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o close and re-vegetate social footpaths

Concept E: Central Area

- o prohibit dogs and limit public access to single "loop" footpath and bridge across stream to South Area
- o define east and west property boundaries to prohibit encroachments and discourage trespassing
- implement phased invasive species eradication efforts
- acquire property east of stream and property boundary to "toe of steep slope" from willing sellers
- o implement riparian and upland habitat restoration efforts (e.g., remove some floodplain fill, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- o re-establish Wasatch Hollow Spring if feasible
- o install restoration fence along both sides of stream to discourage access
- o raze existing house and associated infrastructure, but maintain pedestrian/maintenance access
- install interpretive signs focusing on history, habitat restoration, and nature education
- establish outdoor classroom for educational uses

• Concept E: South Area

- allow dogs on-leash only and limit public access to single "loop" footpath with bridge across stream connecting to Central Area
- o define north, south, and east property boundary to prohibit encroachments and discourage trespassing
- o implement phased invasive species eradication efforts
- o acquire property east of stream and Wasatch Hollow Park boundary from willing sellers
- o implement riparian and upland habitat restoration efforts (e.g., remove all dredging spoils, re-grade slopes along stream where appropriate, re-vegetate all disturbed areas with native species)
- install restoration fence along both sides of stream to discourage access
- o close and re-vegetate existing duplicate footpaths
- o allow for development of LEED certified "one-room" educational facility and outdoor classrooms
- o install interpretive signs focusing on history of Emigration Creek, pioneer culture, habitat restoration, and nature education

Concept E Designated Access Locations

- (1) Wasatch Hollow Park North Access Point
- (2) 1700 East Street / Logan Street Access Point
- (3) Kensington Street Access Point

Summary of Preliminary Concepts Matrix for the Wasatch Hollow Open Space Use, Restoration, and Management Plan.

DESIGN PERFORMANCE MEASURES		CONCEPT A			CONCEPT B			CONCEPT C			CONCEPT D			CONCEPT E		
		North Area	Central Area	South Area	North Area	Central Area	South Area	North Area	Central Area	South Area	North Area	Central Area	South Area	North Area	Central Area	South Area
	Public Access	Prohibited	Limited	Limited	Limited	Limited	Limited	Limited	Extensive	Extensive	Prohibited	Limited	Extensive	Prohibited	Limited	Limited
	Footpaths	None	Single Loop	Single Loop	Single Loop	Single Loop	Single Loop	Network	Network	Network	None	Single Loop	Network	None	Single Loop	Single Loop
	Footbridge	None	None	None	One	One	One	One	One	Two	None	One	Two	None	One	None
ACCESS	Boundary Fencing	Extensive	Extensive	Extensive	North, East, and West	East and West	North, South, and East	Where Necessary	Where Necessary	Where Necessary	Extensive	East and West	Where Necessary	Extensive	East and West	North, South, and East
	Restoration Fencing	None	Both Sides of Stream	Both Sides of Stream	Outside of Footpath	Both Sides of Stream	Both Sides of Stream	Where Necessary	Where Necessary	Where Necessary	None	Both Sides of Stream	Where Necessary	None	Both Sides of Stream	Both Sides of Stream
	Access by Dogs	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited	On-leash	On-leash	On-leash	Prohibited	Prohibited	On-leash	Prohibited	Prohibited	On-leash
	Property Acquisition	East of Stream	East of Stream	East of Park	East of Stream	East of Stream	East of Park	None	None	None	East of Stream	East of Stream	None	East of Stream	East of Stream	East of Park
	Invasive Species Control	Aggressive	Aggressive	Aggressive	Phased	Phased	Phased	Annual	Annual	Annual	Aggressive	Phased	Annual	Aggressive	Phased	Phased
	Removal of Fill	100%	100%	100%	Where Appropriate	Where Appropriate	Where Appropriate	N/A	N/A	N/A	100%	Where Appropriate	N/A	100%	Where Appropriate	Where Appropriate
RESTORATION	Streambank Grading	Yes	Yes	Yes	Yes	Where Appropriate	Where Appropriate	Where Appropriate	Where Appropriate	Where Appropriate	Yes	Where Appropriate	Where Appropriate	Yes	Where Appropriate	Where Appropriate
RESTOF	Restore Floodplain	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	Yes	Yes	N/A	Yes	Yes	Yes
	Remove Encroachments	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Yes	N/A	N/A
	Habitat Restoration	Aggressive	Aggressive	Aggressive	Aggressive	Moderate	Moderate	Moderate	Moderate	Moderate	Aggressive	Moderate	Moderate	Aggressive	Moderate	Moderate
	Existing House	N/A	100% Removal	N/A	N/A	Raze	N/A	N/A	Raze	N/A	N/A	Raze	N/A	N/A	Raze	N/A
EDUCATION	LEED Education Center Outdoor Classroom	N/A	None	N/A	N/A	None	N/A	N/A	Yes	N/A	N/A	None	N/A	N/A	None	Yes
	Outdoor Classroom	Research Only	None	None	None	Yes	None	None	Yes	None	Research Only	Yes	Yes	Research Only	Yes	Yes
	Interpretive Elements	None	Minimal	Minimal	Minimal	Moderate	Moderate	Extensive	Extensive	Extensive	None	Moderate	Extensive	None	Moderate	Extensive