

SALT LAKE CITY HISTORIC LANDSCAPES REPORT

Executive Summary

Bonneville Shoreline Trail

SLCHLR NO. 28

Bonneville Shoreline Trail is a theoretical 280-mile long route that traces the western foothills of the Wasatch Mountain Range along the eastern shoreline of the ancient Lake Bonneville. The trail extends as far north as the Idaho border and as far south as Nephi, Utah. The extent of the trail through Salt Lake City is 17.5 miles long from the southern boundary of North Salt Lake to Parley's Canyon.

Bonneville Shoreline Trail is not considered historic in and of itself, although it is significant for its relationship to Lake Bonneville, an ancient lake that existed during the last glacial period and covered much of Utah, Nevada and other western states. The trail is built along the Bonneville Bench, which was the highest of several shorelines that delineated Lake Bonneville. The Salt Lake City segment of the Bonneville Shoreline Trail was established in 1999 along the western foothills of the Wasatch Mountain range. The trail passes through a variety of urban developed areas including several single-family residential homes, institutional and private establishments as well as relatively natural foothills and canyon corridors.

The existence of Lake Bonneville dates to the Pleistocene period, the last glacial period. Unlike the existing Great Basin Desert landscape that currently exists, the area was considerably wetter during this era and included Lake Bonneville, which was fed by direct precipitation, rivers and streams and runoff from the glaciers at the tops of the Wasatch Range. The lake slowly rose to new levels, eventually overflowing at the lowest point in the basin at Red Rock Pass in Idaho at 5,090 feet elevation. The lake continued to overflow at this point until the mountain saddle rock layer eroded away exposing a soft gravel layer which soon gave way to a massive historical flood, known as the Bonneville Flood, which roared through Snake River Canyon etching a 350-foot ravine as it continued its way to the Columbia River and the Pacific Ocean. The lake likewise dropped 350 feet and remained at this level until it dropped 550 feet more through evaporation and runoff, carving out canyons and ravines into the Wasatch bench as it left, eventually settling to the current level of the Great Salt Lake today.

The conception for a Bonneville Shoreline Trail began in 1990 as a result of public concern regarding the loss of a recreational walking, jogging and biking trails, and inappropriate use of the shoreline and associated foothills by motor vehicles. In 1991, the Bonneville Shoreline Trail Committee was officially formed. By 1994, Utah, Salt Lake, Davis and Weber Counties all agreed with the Bonneville Shoreline Trail Committee that a single, continuous, uniform trail should extend along the bench of Lake Bonneville. By 1999, the 17.5-mile long extent of the Bonneville Shoreline Trail through Salt Lake City from was officially completed. Twenty-two trailhead access points are identified along Salt Lake City's trail segment, each with a slightly different purpose.

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Location: Bonneville Shoreline Trail is a theoretical 280-mile long route that traces the western foothills of the Wasatch Mountain Range, the eastern shoreline of the ancient Lake Bonneville, as far north as the Idaho border and as far south as Nephi, Utah. The extent of the trail through Salt Lake City is 17.5 miles¹ long from the southern boundary of North Salt Lake to Parley's Canyon (see fig. 1) (Bonneville Shoreline Trail; Parks).

Latitude: 40° 49' 11.28" N, 111° 54' 12.26" W (northern limit of the trail, Google Earth)
Latitude: 40° 42' 27.58" N, 111° 47' 45.12" W (southern limit of the trail, Google Earth)

Significance: Bonneville Shoreline Trail is not considered historic in and of itself, although it is significant for its relationship to Lake Bonneville, an ancient lake that existed during the last glacial period and covered much of Utah, Nevada and other western states. The trail is built along the Bonneville Bench, which was the highest of several shorelines that delineated Lake Bonneville.

Description: The Salt Lake City segment of the Bonneville Shoreline Trail was established in 1999 (Bonneville Shoreline Trail). The 17.5-mile long trail is located along the western foothills of the Wasatch Mountain range within the city limits, tracing a route roughly north to south. The trail passes through a variety of urban developed areas including several single-family residential homes, institutional and private establishments as well as relatively natural foothills and canyon corridors.

As illustrated in the accompanying site map and described below, twenty-two trailhead access points are identified along Salt Lake City's trail segment (see fig. 2):

A – Sandhurst Drive Trailhead

Sandhurst Drive Trailhead is the northern-most trailhead within Salt Lake City limits located in a residential neighborhood on Sandhurst Drive slightly northeast of the intersection of Twickenham Drive and Sandhurst Drive. Access is available only to residents within the gated community of Dorchester Pointe (see fig. 3)

B – Capitol Street Trailhead

Capitol Street Trailhead is located on Capitol Street, east of the Utah State Capitol. Angled-parking is provided along Capitol Street from 300 North to 500 North. There are four trailhead accesses. Three of the four (located near the southern end of the trailhead) primarily connect users to Memory Grove, a City-owned park, and to the Freedom Trail or Canyon Road (120 East). Freedom Trail eventually terminates at Bonneville Boulevard (see D - Freedom Trailhead for detail below). Canyon Road terminates slightly southwest of the City Creek Canyon Trailheads (see E – Canyon Road Trailhead

¹ Salt Lake City Parks website states the Bonneville Shoreline Trail is 13.5 miles through Salt Lake City. The official Bonneville Shoreline Trail website reports two different lengths: 13.5 miles (Region: Salt Lake City to Parley's Canyon) and 15 miles under the "History" section in 1999. Note that portions of the Region: Farmington to Salt Lake includes lengths of the trail that are within Salt Lake City limits. Based off of fig. 1 the trail measures approximately 17.5 miles (Bonneville Shoreline Trail; Parks).

for detail below). The fourth trailhead access is a connecting route to Bonneville Boulevard, located at the intersection of 500 North and Capitol Boulevard. It is primarily used by bicyclists enroute to City Creek Canyon or the Bonneville Shoreline Trail. All four trailheads eventually connect to the Bonneville Shoreline (see figs. 4-7).

C – Bonneville Boulevard Trailhead

Bonneville Boulevard Trailhead is located on Bonneville Boulevard, approximately 0.21 miles north of the intersection of B Street (Bonneville Boulevard) and 11th Avenue. A small parking lot including a pavilion, drinking fountain, benches, bike racks and portable restroom are provided. Further access to the Bonneville Shoreline Trail is provided by traversing Bonneville Boulevard north bound. Pedestrian and bicycle routes share the south bound automobile lane (see figs. 8-13).

D – Freedom Trailhead

Freedom Trailhead is located on Bonneville Boulevard, approximately 0.34 miles north of the intersection of B Street (Bonneville Boulevard) and 11th Avenue. Access is marked by a doggie bag station, a foot traffic-only sign and trash receptacle. Further access to the Bonneville Shoreline Trail is provided by traversing Bonneville Boulevard northward bound. Pedestrian and bicycle routes share the southbound automobile lane (see figs. 14-15).

E – Canyon Road Trailhead

Canyon Road Trailhead is located at the intersection of Canyon Road and Bonneville Boulevard. The road is gated prohibiting automobile access. Further access to the Bonneville Shoreline Trail is provided by traversing Bonneville Boulevard northward bound. Pedestrian and bicycles share the southward bound automobile lane (see figs. 16-17).

F – City Creek Canyon Trailhead

The City Creek Canyon Trailhead is located on Bonneville Boulevard, approximately 0.63 miles north of the intersection of B Street (Bonneville Boulevard) and 11th Avenue. There is both north and southbound trailhead access. The northbound access, located to the northwest near the intersection of Bonneville Boulevard and City Creek Canyon Road, is marked by a doggie bag station mounted to an official Bonneville Shoreline Trail marker and a City Creek Canyon informational sign which read as follows, respectively (see figs. 18-24):

“Bonneville Shoreline Trail. City Creek Section.” (Bonneville, City sign)

“City Creek Canyon. The Wasatch Front Watershed. Welcome to City Creek Nature Preserve. The watershed area above the water treatment plant, located 3 miles up the canyon, is part of Salt Lake City’s ‘Protected Watershed’ which provides the Valley with high quality drinking water. Leashed pets are allowed below the water treatment plant. Careless recreation and pollution of the water supply resulted in the closure of the Canyon from 1952 to 1966.

Recreate responsibly... Use restrooms. Pick up your trash. Control and clean up after your pets.

The Wasatch Mountains – Island of Life. These beautiful mountains are an island of life on the edge of the Great Salt Lake desert. Without them and the

precipitation they receive, our cities and our present quality of life would not exist in this desert environment. It's critical for all of us to protect our watershed – it can't be replaced once it's destroyed.

Keep It Pure. Mountains to your Tap. 'What you see in the watershed today, you may drink tomorrow.' Salt Lake City Public Utilities – Watershed Management.” (City sign)

The southbound access located to the northeast is marked by a small gravel parking lot. An official Bonneville Shoreline Trail marker similar to the northbound marker is located alongside the beginning of the trail (see figs. 25-29).

G – Morris Meadows Trailhead

Morris Meadows Trailhead is located in a residential neighborhood, slightly north of the intersection of Hilltop Road and 18th Avenue. A small gravel parking lot is provided near the trail entrance marked by a doggie bag station and a City ordinance sign mounted on a gate listing the following prohibitions: no alcoholic beverages, no trespassing on private property, no camping, no fires, no discharging of firearms, no dogs off leash, no dumping and no unauthorized vehicles allowed on the trail. Beyond the gate is a trash receptacle and an official Bonneville Shoreline Trail marker which reads as follows (see figs. 30-36):

“Bonneville Shoreline Trail. Steiner Centennial Section. Trail Access.”
(Bonneville, Steiner, Morris sign)

H– Terrace Hills Trailhead

Terrace Hills Trailhead is located in a residential neighborhood at the end of the cul-de-sac of Terrace Hills Drive. Parallel parking is available along the length of the road. There is both north and southbound trailhead access. The northbound access is located to the southwest marked by a doggie bag station, a “no vehicles” sign and a City ordinance sign mounted on a gate. Immediately beyond the gate to the west is a dog watering station including a recirculating stream spilling into a dog wading pool, a drinking fountain and a stone bench with planters nearby (see figs. 37-43).

The southbound access, located to the northeast is marked by a doggie bag station, a trash receptacle, and a City ordinance sign listing prohibitions to all entering the foothill protection area, a “no vehicles” sign, and a sign welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail which is mounted on a gate. Immediately beyond the gate are two trail markers, an official Bonneville Shoreline Trail marker and an additional worn sign which read as follows, respectively left to right (see figs. 44-47):

“Bonneville Shoreline Trail. Steiner Foundation Segment.” (Bonneville, Steiner, Terrace sign)

“Bonneville Shoreline Trail. City Creek Saddle .8 mi. Bobsled Trail .8 mi². Dry Creek Trailhead 4.3 mi.” (Bonneville, Terrace Hills East sign).

² The Bobsled Trail is a southbound, steep downhill trail (1,000 vertical feet over 1.6 miles) which departs from the Bonneville Shoreline Trail. It is essentially the North Bonneville Drive Trailhead connection; however, it continues south past the trailhead connecting on to 11th Avenue.

I – Richland Drive Trailhead

Richland Drive Trailhead is located in a residential neighborhood at the end of the northern cul-de-sac of Richland Drive. Parallel parking is available along the length of the road. Access is marked by a doggie bag station, two trash receptacles, and a sign welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail (see figs. 48-53).

J – North Bonneville Drive Trailhead

North Bonneville Drive Trailhead is located in a residential neighborhood at the western end of North Bonneville Drive. Parallel parking is available along the length of the road. Access is marked by a doggie bag station and a City ordinance sign listing prohibitions to all entering the foothill protection area, a no parking sign and a regulatory sign reiterating to keep dogs on-leash at all times (see figs. 54-58).

K – Tomahawk Drive West Trailhead

Tomahawk Drive West Trailhead is located in a residential neighborhood approximately 0.08 miles east of Cambridge Way and Tomahawk Drive. Parallel parking is available along the length of the road. Access is marked by a series of cement bollards and a chain link fence on either side of the trail. Continuing along the trail is a doggie bag station mounted to the chain link fence and a sign welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail (see figs. 59-63).

L – Limekiln Gulch Trailhead

Limekiln Gulch Trailhead is located in a residential neighborhood approximately 0.1 miles southeast of Chandler Drive and Tomahawk Drive. Parallel parking is available along the length of the road. Access is marked with a sign welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail, a doggie bag station, and a trash receptacle. Continuing northeast along the trail, additional signs include a City ordinance sign listing prohibitions to all entering the foothill protection area, a “hiker’s trail” sign, and a regulatory sign reiterating to keep dogs on-leash and to clean up after them (see figs. 64-67).

A historic limekiln with four gated ovens/kilns is located approximately 0.15 miles up the trail atop the crest of a hill. A plaque is mounted on the second gated kiln in from the left, which reads as follows (see figs. 68-74):

“Historic Pioneer Limekiln. The University of Utah received a generous gift of land from Bernard P. and Frances M. Brockbank in 1975, which included this area known (since pioneer times) as Limekiln Gulch. There were originally three limekilns in this area, all constructed in the 1850s.

Limestone, quarried from nearby deposits, was broken into grapefruit-sized chunks and alternating layers of wood and limestone were loaded into the vertical shafts until they were full. The heat from the burning wood transformed the lime into a white powder by removing the water and carbon dioxide. Quicklime, masonry mortar, or slaked lime, a remix of powdery lime, was widely used in the state’s early construction work.

In addition to being used for making cements, mortar, plaster, and whitewash, lime was also used for softening water and reducing the acidity of butter, cream,

and milk, and as a whitening agent in sugar. Other uses included tanning leather, destroying diseased animal's bodies, drying cuts on livestock, sanitizing outhouses, and treating overly acidic soil. A violent rainstorm in 1908 destroyed about a year's worth of lime, approximately 10,000 bushels, that was stockpiled in this area. This resulted in the kilns being abandoned. Chunks of the ruined lime were used for the University's first block U. Through the interest and efforts of the University of Utah and the Utah Bicentennial Commission, the largest of the three limekilns was restored in 1976.

Much of the kiln's stonework had to be replaced and all remaining stonework had to be repointed. Stone walls were added at the back of the vaults, and bricks that had lined the vault were replaced. The chimneys themselves, where the limestone was burned, were not refurbished as any work would not have done justice to the glaze that resulted from the incredible heat that was generated in the lime-making process. After the structure was stabilized and rebuilt, a slab of concrete was poured around the vertical shaft to further stabilize and shed water away from the stone walls.

This historic landmark recalls an enterprise that helped build the state and significantly influenced the architecture of early Utah buildings. Very few pioneer limekilns remain today, making this historic landmark and the natural setting around it even more unique.

As a result of continued vandalism and uses not befitting a historic landmark, it became necessary to restrict public access into and on top of the limekiln. Please do your part in preserving the limekiln and keeping the area free of debris.

Photo is courtesy of the Special Collections Department. J. Willard Marriott Library. University of Utah.

This area is closed to visitors from sunset to 5:00 A.M.” (Historic plaque)

M – Tomahawk Drive East Trailhead

Tomahawk Drive East Trailhead is located in a residential neighborhood at the end of the cul-de-sac of Tomahawk Drive. Parallel parking is available along the length of the road. Access is marked by a trash receptacle and signs mounted on a gate including a City ordinance sign listing prohibitions to all entering the foothill protection area and a smaller sign stating it is a private community/no trespassing on private property. East of the marked trailhead is a doggie bag station and signs, including a sign welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail, a “no parking” sign, and a sign with directional information to view the “U” signifying the University of Utah (see figs. 75-77).

A short asphalt trail terminates at the intersection of New Bedford Drive channeling users onto the road. Continuing approximately 0.04 miles east on New Bedford Drive, a gravel trail is located along the remaining length of the road which then converts to a dirt footpath leading to the “U” is located on the hillside with a small marker at its base which reads as follows (see figs. 78-83):

“University of Utah Block U. This landmark is lighted during athletics contests held on the University of Utah campus. Its lights flash in victory...and burn

steady even in defeat.

First constructed at this site: 1905. Fabricated in concrete: 1907. Refurbished (lights added): 1969. Rebuilt with new concrete, lighting and erosion control: 2006.

The 2006 ‘Renew the U’ Project was made possible through generous gifts from students, alumni, faculty, staff, and friends matched by a challenge grant from Ira A. and Mary Lou Fulton. Addition funding was provided by the University and its athletics department.

The Block U was re-lighted at the University of Utah vs. Texas Christian University football game on Thursday, October 5, 2006. Following Utah’s 20 to 7 win, the ‘new’ U flashed in victory for the first of many times to come!

Lighting, concrete and erosion control by Layton Construction Company, Inc., Greene’s Inc., and GLS Electric, Inc.

Plaque erected October 2006.” (University plaque)

N – Avenues Trailhead

Avenues Trailhead is located in a residential neighborhood approximately 0.44 miles east of Popperton Parkway (11th Avenue) and Virginia Avenue. A parking lot is located 0.2 miles west of the trailhead, slightly east of Popperton Park, near a community garden plot. An asphalt trail follows the length of Popperton Parkway shifting from the north to the south side approximately 0.04 miles east from the parking lot. Trailhead access is marked near a turn-around area where Popperton Parkway becomes part of a gated community. A doggie bag station, trash receptacle, and signs welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail, a “bike trail” sign and a cautionary sign warning of a steep and winding trail are posted alongside the trailhead (see figs. 84-90).

O – Dry Creek Trailhead

Dry Creek Trailhead is located north of the University of Utah Hospital and east of the I. J. & Jeanne Wagner Jewish Community Center (JCC) at 2 North Medical Drive. A small area for parking is available in the northern extents of the parking lot primarily reserved for the JCC, next to the Rocky Mountain Power Medical Substation. Access is marked by a doggie bag station and a sign mounted on a chain link fence reminding users to keep dogs on-leash and to clean up after them, along with an additional sign posted by the University of Utah indicating the trail is closed to motor vehicles (see figs. 91-95).

A paved trail continues 0.12 miles in a northeasterly direction and then forks in the trail leading to the Bonneville Shoreline Trail to the south³ or continuing an additional 0.13 miles in a northeasterly direction. A worn, official Bonneville Shoreline Trail marker, a City ordinance sign listing prohibitions to all entering the foothill protection area, and an

³ The Red Butte Skyline Nature Trail follows parallel and slightly east of the Bonneville Shoreline Trail eventually departing eastward toward Red Butte Canyon. It is easy to confuse the Bonneville Shoreline Trail with this alternate trail without signage.

additional sign reiterating regulations to keep dogs on-leash and to clean up after them marks where the Bonneville Shoreline Trail continues to the north⁴ (see figs. 96-101).

P – Red Butte Creek Road Trailhead

Red Butte Creek Road Trailhead is located at the end of Stover Street where the paved road transitions into a unpaved road to Red Butte Canyon. A small off-street gravel parking lot is available for users of the Bonneville Shoreline Trail or the Red Butte Skyline Nature Trail, which also provides north and southbound trailhead access. The northbound access located approximately 0.12 miles southwesterly the trailhead parking lot is marked by a single brown carsonite post with a faded Bonneville Shoreline Trail logo attached. The trail passes by an Integrated Waste Management facility and chain link fencing where construction is currently underway (see figs. 104-110).

The southbound access located approximately 0.15 miles southwest of the trailhead parking and slightly northeast of the entrance to the Red Butte Garden Amphitheater, is marked by a drinking fountain and a doggie bag station mounted to an official Bonneville Shoreline Trail marker which reads as follows (see figs. 111-112):

“Bonneville Shoreline Trail. Steiner Centennial Section. University of Utah Segment.” (Bonneville, Steiner, University sign)

A large red abstract sculpture with an interpretive plaque is located nearby and reads as follows (see figs. 113-114):

“John Henry. (American, b. 1943) Le Mont Rouge. 2004 Painted aluminum. Collection of the Utah Museum of Fine Arts, purchased with funds from the Phyllis Cannon Wattis Endowment for Modern and Contemporary Art.” (John plaque)

Slightly southeast of the Red Butte Garden Amphitheater is an additional Bonneville Shoreline Trail Marker and a mounted map indicating driving and walking directions between Red Butte Garden’s main entrance and the amphitheater entrance. The trail continues in a southeasterly direction where an additional official Bonneville Shoreline Trail marker and two interpretive signs are mounted near the Red Butte Garden service entrance and creek, which reads as follows respectively left to right (see figs. 115-120):

“The University of Utah. Streamside Haven: Revealing Red Butte Creek.

Read the landscape. You’re standing in one of the few places on the University of Utah campus where you can actually see Red Butte Creek. Steep, nearly vertical banks and dense vegetation obscure much of its view as it winds through campus and Research Park.

Green ribbon of life. The area of land along streams and rivers – called the riparian zone – is one of the most productive and valuable of all landscape types. Riparian areas support a great diversity of plants and animals, thanks to the regular presence of water and periodic flooding. Healthy riparian areas improve water quality, reduce erosion, provide food and shelter for wildlife, protect against flood damage, and enhance a variety of recreational activities.

⁴ Note also that the trail connection from the Avenues Trailhead also terminates at this location (see figs. 102-103).

Urban impacts. Development poses many threats to stream health, especially when the riparian zone is affected. Buildings, pavement and landscaping often eliminate the floodplain and can severely degrade streamside vegetation. Storm runoff in urban areas, where there are more impervious surfaces like rooftops and pavement, will flow faster and pick up more pollutants (oil, fertilizer, etc.). Storm drains carry this polluted runoff straight into our local streams.

A healthy riparian zone will have abundant native vegetation which provides wildlife habitat, shade to cool stream waters, dense roots to stabilize stream banks, and a filter for pollutants before they enter the stream. It will also have a functioning floodplain which can slow, store, and absorb floodwaters. When water slows down its destructive energy dissipates and sediments drop out, nourishing the land and returning cleaner water to the stream.

Did you know? 82% of all bird species in the Intermountain West are dependent on riparian habitat. Less than 1% of all Utah lands are riparian. It is estimated that more than half of the pollution in our nations' waterways comes from storm water runoff. Storm drains flow directly into our streams and rivers. No filters, no treatment.

Salt Lake County. Brought to you by Salt Lake County Watershed Planning & Restoration, with funding administered by the Utah Division of Water Quality. Watershed.slco.org.” (Streamside sign)

“The University of Utah. Why Monitor Water Quality? We need clean, healthy water for people, agriculture, recreation and the environment. What we do on land can influence the water quality in our lakes and streams. Utah Water Watch volunteers monitor this site in partnership with water scientists. Monitoring water quality helps protect Utah’s aquatic resources.

Visit our Website. For more information and graphs of these data, scan the QR code or visit extension.usu.edu/utahwaterwatch/htm/red-butte-sign/. Utah State University Water Quality Extension. extension.usu.edu/waterquality.

Water Temperature...starts out cold due to snow melt high in the mountains. Rivers naturally warm as they move downstream. Trees along the river provide shade to help keep the water cool. Native trout, like the Bonneville Cutthroat, and aquatic insects need cold freshwater to live. Red Butte Creek water temperature should not exceed 68 degrees F (20 degrees C).

Dissolved Oxygen...is the concentration of oxygen molecules dissolved in the water (not the air bubbles). Fish and aquatic insects use their gills to absorb this form of oxygen underwater.

Cold water can hold more dissolved oxygen than warm water. Levels lower than 5 parts per million (mg/L) are stressful to cold water species, like this juvenile mayfly.

Total Dissolved Solids...are dissolved salts and minerals in the water that drains from the land. These vary by soils, rocks, and amount of runoff from the

watershed. High levels of some dissolved minerals and salts create ‘hard’ water.

We use most of our water in Utah for agriculture. Water that is too salty cannot be used to grow food.

You are in the Red Butte Creek Watershed. The upper area is a protected natural area and the creek winds through Red Butte Garden, University of Utah, and the city before it is placed in a pipe. The water then travels to the Jordan River and finally the Great Salt Lake. The creek provides water for drinking, recreation, cold water fisheries and agriculture.” (Why sign at the Red Butte service entry)

Q – Utah’s Museum of Natural History (UMNH) Trailhead

Utah’s Museum of Natural History (UMNH) Trailhead is located southeast of the UMNH near the intersection of Wakara Way and Colorow Road. Parallel parking is allowed along the length of the road. Access is marked by a doggie bag station and signs that welcome dogs on-leash with their owners to enjoy the Bonneville Shoreline, and provide regulatory information: “no motorized vehicles” and trail etiquette (see figs. 121-125).

After approximately 0.08 miles, the trail forks both north and southbound. The southbound trail shortcuts directly to the Bonneville Shoreline Trail. The northbound trail travels through the UMNH parking lot where it arrives at a junction of the entrance into the UMNH and Bonneville Shoreline Trail corridor. A series of UMNH interpretive markers recounting the history of the Earth in million year increments, along with a few dedicated to specific history and facts about the area, are located along the way for approximately 0.12 miles before arriving at a junction where the Bonneville Shoreline Trail and UMNH walkway to its main entrance intersect. One particular marker highlights the history of the Bonneville Shoreline Trail near the junction which reads as follows (see figs. 126-134):

“On the Edge of Wilderness. You stand on the Bonneville Shoreline Trail, where the Wasatch Mountains meet the bustle and boom of urban Utah. This trail system offers an everyday connection with wilderness for the 85 percent of Utahns who live along the Wasatch Front. When the trail is complete – from Idaho border south to Nephi – hikers, cyclists, equestrians, and runners will follow the level terrace by prehistoric Lake Bonneville for 280 miles.” (On sign)

East of the UMNH building, the Bonneville Shoreline Trail crosses Wakara Way as it continues further northbound. An official Bonneville Shoreline Trail marker is located on the west side of Wakara; a directional map indicating driving and walking directions between Red Butte Garden’s main entrance and amphitheater entrance, and an interpretive sign are located on the east side which reads as follows (see figs. 135-140):

“Welcome to the World of Waterwise Gardening. We can create beautiful, green landscapes using low-water-use plants and conserve precious water resources at the same time.

Because Utah is a desert, many of our native plants are drought tolerant, or low-water-use plants. Other non-native, horticulturally adapted plants are also drought tolerant, including many in this garden. Just take a look at some of our lovely native plants that know when to stop drinking – the Bigtooth Maples, Chokecherries and the Penstemons. When designing a low-water-use garden you

can mix native and non-native species, providing they all share the same drought tolerance. If you want to try designing a low-water-use garden, just remember to group plants with similar water needs together – you have any choices.

You are in for a wonderful experience as you enter Red Butte Garden – not only are the gardens beautiful, but Red Butte Garden is also a resource for environmentally sensitive, water conserving gardening. Much of what you have been shown here in the Waterwise Garden is repeated in other areas of Red Butte Garden.

When is Less-More? Why do we need to plant for water conservation?

We have to conserve our water resources. Utah is the second driest state in the nation, but over half of all water used in the Salt Lake Valley is poured into landscaping – and much of it is wasted. We use more water on gardens per capita than any other state in the U.S.

Over one million people are concentrated here on the eastern edge of the Great Basin and the western edge of the Rocky Mountains. Overwatering is a common practice. Our excess water use flows down gutters into the Great Salt Lake. But we can make things better. By using water-wise plants and garden techniques and educating our neighbors, we can work together to grow green gardens and save water – all at the same time.

Try this at home. Waterwise gardening is easy and fun – all it takes is a little common sense and planning. Follow these five steps to success.

Step 1: Make a map. Determine sunny, shady, moist and sloped areas. Recognize microclimates – areas with climate variations such as plant beds adjacent to south facing walls.

Step 2: Choose and group plants according to water and light requirements. A well-designed waterwise landscape can contain some plants that aren't drought tolerant as long as they are grouped together.

Step 3: Keep off the grass. Shallow root systems make lawns the biggest water waster of all. Minimize turf areas and limit them to play and outdoor activity areas.

Step 4: Sprinkle smart. Use water conserving technology for irrigation. Consider microsprinklers, efficiently designed automatic sprinkler systems and drip irrigation. Water deeper and less frequent. Water according to plant needs: lawn areas should be on a separate irrigation system from shrubs and flower beds.

Step 5: Mad about mulch – A mulch placed around groundcovers, flowers, shrubs and trees will keep the soil beneath cool and moist longer than exposed soil. Rocks and gravel will also help.

Red Butte Garden. University of Utah. Waterwise Garden.” (Welcome sign)

R – Research Park Trailhead

Research Park Trailhead is located east of the University of Utah Health Care: University Neuropsychiatric Institute and slightly north of Huntsman International near the intersection of Huntsman Way and Colorow Road. Parallel parking is allowed along the length of the road. Access is marked by a trash receptacle, a doggie bag station and a sign welcoming dogs on-leash with their owners to enjoy the Bonneville Shoreline Trail (see figs. 141-146).

S – Emigration Canyon Trailhead

Emigration Canyon Trailhead is located east of This is the Place Heritage Park, northeast of Hogle Zoo and northwest of Rotary Glen Park, a City-owned park on Sunnyside Avenue slightly west of the intersection of Crestview Drive. A small gravel parking lot is provided near the trail entrance marked by a chain link fence, a kiosk, posted signage regulations and an official Bonneville Shoreline Trail marker. Beyond the chain link fence is an additional sign which read as follows (see figs. 147-157):

“Have an enjoyable time on the Shoreline Trail! If you leave the Shoreline Trail you enter This Is The Place property. Admittance to This Is The Place requires a ticket, which may be purchased at the Visitor Center. Dogs, fireworks, cycling, and jogging through This Is The Place Heritage Park are prohibited. This Is the Place Heritage Park.” (This sign)

T – H-Rock Trailhead

H-Rock Trailhead is located at the end of the cul-de-sac of Devonshire Drive. Parallel parking is allowed along the length of the road. Access is marked by a doggie bag station, a trash receptacle, and signage mounted on a gate reminding owners to keep their dogs on-leash and to clean up after them. An additional free-standing sign reads as follows (see figs. 158-163):

“Arcadia Preserve & H-Rock. Hours 5:00 AM – 11:00 PM. Respect native plants and wildlife. No alcoholic beverages. Dogs must remain on-leash. Clean up after your dog. No Littering.” (Arcadia sign)

A notable, graffiti rock with an “H” on it is located approximately 0.08 miles up the trail to the east along the mountainside. The rock is a local landmark known as “H-Rock⁵”, a tribute to Highland High School. An additional sign is also noted along the trail to the west which reads as follows (see figs. 164-170):

“Salt Lake City Parks & Public Lands. Open Space Lands Program. Adopt-A-Spot Location. Protect & Enjoy Your Open Space. If you or your organization would like to adopt an open space area, contact the Open Space Program at (801) 972-7800.” (Adopt-A-Spot sign)

⁵ H-Rock is part of Salt Lake County’s open space. The 12-acre area encompassing H-Rock, known as part of the East Bench Preserve, was purchased as a conservation easement in 2007 for \$615,500. Partners included Utah Open Lands, Salt Lake City, LeRay McAllister Critical Lands Conservation Fund, Highland High Foundation and the East Bench Community Council (H Rock; Open, East).

U – Arcadia Trailhead

Arcadia Trailhead is located at the end of the cul-de-sac of Lakeline Drive⁶. Parallel parking is allowed along the length of the road. There are two northbound trailhead accesses, one to the east and the other to the west. The eastern northbound trailhead access is located to the northeast marked by a curvilinear path lined with retaining boulders and black metal railing. A black decorative metal drinking fountain is located at the base of the access. Two decorative metal-framed, and recycled plastic benches, and a bike rack are located approximately 0.01 miles up the trail (see figs. 171-174) (Parks).

The western northbound access located to the northwest is marked by a gate, trash receptacle, and freestanding sign stating Arcadia Preserve & H-Rock rules of use and prohibitions. Immediately beyond the gate is a doggie bag station mounted on an official Bonneville Shoreline Trail marker which reads as follows (see figs. 175-179):

“Bonneville Shoreline Trail. Upper Route. Trail continues on Lakeline Drive.”
(Bonneville, Upper sign)

V – Parley’s Canyon Trailhead

Parley’s Canyon Trailhead is bounded by I-80 eastbound to the north and I-215 to the west, at the mouth of Parley’s Canyon on Wasatch Boulevard and at the north end of the street. A small asphalt parking lot is provided at the trailhead entrance marked by a gate. There is east and westbound trailhead access. The northbound access located to the west is marked by a chain link fence. The trail ramps downward around the edge of the canyon wall arriving at a pedestrian overpass spanning I-80 eastbound. The trail veers to the west where it eventually underpasses another pedestrian overpass spanning I-215⁷. The trail continues parallel I-215 for approximately 0.60 miles where it eventually arrives at another pedestrian overpass which spans I-80 westbound and ultimately connects users to the Bonneville Shoreline Trail. A notable graffiti rock worth mentioning is located in the gully of Parley’s Canyon. The rock is a local landmark known as “Suicide Rock” (see figs. 180-186).

The southbound access located to the east is marked by a gated rest area including a drinking fountain, picnic table, and bench. Beyond the gate is a freestanding sign stating Salt Lake County Park Regulations, particularly related to dogs, and an informational kiosk. The trail continues southbound following the historic shoreline (see figs. 187-189).

History:

The Bonneville Shoreline Trail is a partially-complete, 280-mile long trail that traces the western foothills of the Wasatch Mountain Range, the eastern shoreline of the ancient Lake Bonneville, as far north as the Idaho border and as far south as Nephi⁸. Portions of the trail are also planned for and located along the eastern foothills of the Oquirrh Mountain Range. Currently 100 miles of the trail are officially established. The extent of the trail through Salt Lake City is 17.5 miles long from the southern boundary of North Salt Lake to Parley’s Canyon (Bonneville; Parks).

⁶ The name “Arcadia” is in reference to Arcadia Heights Open Space located southeast of the trailhead. There are currently no trails or amenities established at this time. Similar to the East Bench Preserve, it is intended for the preservation of open space (Open, Arcadia).

⁷ The pedestrian footbridge spanning I-215 links to the Parley’s Creek Corridor Trail, an east-to-west interconnecting planned trail through Salt Lake City and South Salt Lake City (Bonneville Shoreline Trail).

⁸ The counties included in Utah are Cache, Box Elder, Weber, Davis, Salt Lake, Utah and Juab (Bonneville).

The existence of Lake Bonneville dates to the Pleistocene⁹ period, the last glacial period. Unlike the desert-like Utah landscape known presently, the area was previously considerably wetter and included a 1,000-foot-deep freshwater lake that stretched for 20,000 square miles across much of Utah, extending into eastern Nevada and southern Idaho. The lake – Bonneville Lake – was fed by direct precipitation, rivers and streams and runoff from the glaciers at the tops of the Wasatch Range (see fig. 190).

As the end of the Pleistocene period drew to a close with increasingly warmer temperatures, the lake slowly rose to new levels eventually overflowing at the lowest point in the basin at Red Rock Pass in Idaho at 5,090 feet elevation. The lake continued to overflow at this point until the mountain saddle rock layer eroded away exposing a soft gravel layer which soon gave way to a massive historical flood, known as the Bonneville Flood. This flood roared through Snake River Canyon etching a 350-foot ravine as it continued its way to the Columbia River and eventually out into Pacific Ocean. The lake likewise dropped 350 feet and remained at this level until it dropped 550 feet more through evaporation and runoff, carving out canyons and ravines into the Wasatch bench as it left, whereupon settling to the current level of the Great Salt Lake today¹⁰ (see fig. 191) (Bonneville; Commonly; Fox, 2).

The discovery and scientific questioning of Lake Bonneville began as early as the 1800s with European explorers who entered the Great Basin. In 1843, Captain John C. Fremont, a United States Army officer and explorer, accompanied with Kit Carson as his guide, an American frontiersman, set out to explore the Great Salt Lake through part of their expedition. Fremont noted a series of shoreline rings around the Great Salt Lake basin suggesting earlier levels of the lake. In 1853, Edward Griffin Beckwith, a United States Army Lieutenant, was assigned to explore the area encompassing Utah and to map out the best route for the transcontinental railroad. He also noted the dry shorelines and theorized that at one time the Pacific Ocean must have stretched so far inland as to form the shores (Atwood; Commonly; Fox, 2).

In 1890¹¹, Grove Karl Gilbert (1843-1918), an American geologist who worked for the United States Geological Survey (USGS), conducted the first scientific study of Lake Bonneville. Along with a team of men, he mapped over 500 miles of the Bonneville shoreline. Their research, similar to Fremont and Beckwith's observations, noted multiple levels of concentric rings, almost like bathtub rings, around the perimeter of the mountains, indicative of rising and lowering water levels¹². Ruling out Beckwith's theory of the Pacific Ocean reaching inland, they also found that the water was completely contained by mountainous walls except for one location in southern Idaho (Red Rock

⁹ The Pleistocene period existed approximately 2.6 million to 11,700 years ago (Pleistocene).

¹⁰ The Great Salt Lake, Utah Lake, Sevier Lake and the Bonneville Salt Flats are all visible remnants of Lake Bonneville (Commonly).

¹¹ Gilbert did some preliminary research of Lake Bonneville during the 1870s as he took part in the Wheeler Survey, a survey led by George Montague Wheeler. The intent of the survey was to make topographic maps of the United States west of the 100th meridian line (Atwood; Wheeler).

¹² Gilbert's studies identified two of these concentric rings, which he named the Bonneville Bench and Provo Bench. He explained the Bonneville Bench, as the highest shoreline of Lake Bonneville during the last ice age, which reached close to 5,100 feet in elevation. The second lowest ring, the Provo Bench, was the new shoreline formed after the flood occurred at Red Rock Pass in Idaho draining the lake 350 feet. Two other benches have been identified since his original study along with approximate elevations and timelines (see figs. 193-197) (Atwood; Bonneville; Fox, 2).

Pass) where they concluded the water drained through a mountain saddle into the Snake River Valley and ultimately into the Pacific Ocean. Gilbert chose the name Lake Bonneville after Benjamin Louis Eulalie de Bonneville (1796-1878), a French-born American United States Army officer, fur trapper and explorer of the American west, who explored Oregon and the Great Basin in 1832 (see figs. 192-198) (Atwood; Bonneville; Commonly; Fox, 2; Lake).

The conception for a Bonneville Shoreline Trail began in 1990 as a result of strong public concern regarding the loss of a recreational walking, jogging and biking trail under threat of being fenced off by private property owners located along the east bench of Salt Lake City between Emigration Canyon and Dry Canyon. The University of Utah's Research Park and Red Butte Garden to the north, and This is the Place State Park to the south were also looking to expand, and were concerned about privacy issues and regulating admissions into their properties. Agreements were made to provide for a recreational corridor through the University of Utah's property, and a fence line was located below the recreational trail near This is the Place State Park. Simultaneously, as agreements were being negotiated, Salt Lake City Mayor Palmer DePaulis, the City Council and Planning Commission unanimously adopted the trail system, promoting it to extend along the foothills east and north of the City boundaries (Bonneville).

In 1991, the Bonneville Shoreline Trail Committee was officially formed and established a 501(c)(3) nonprofit organization to promote the vision and establish the trail as a regional trail system throughout all of Salt Lake County. Ogden City, the Mountainland Association of Government and Davis County quickly followed suit adopting the identity of the Bonneville Shoreline Trail along segments already in place within their boundaries as well.

By 1994, Utah, Salt Lake, Davis and Weber Counties all agreed with the Bonneville Shoreline Trail Committee that one continuous, uniform trail should extend along the Bench of Lake Bonneville. In 1995 an official logo and signs were established along with a Bonneville Shoreline Coalition which was formed in 1997 to help regulate standards, provide expertise and help trouble-shoot issues as they arose (see figs. 199-201).

By 1999, the 17.5-mile long extent of the Bonneville Shoreline Trail through Salt Lake City from was officially completed¹³ (Bonneville).

See figure 202 for the 2016 existing conditions map of Bonneville Shoreline Trail.

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Arcadia Preserve & H-Rock. Bonneville Shoreline Trail: H-Rock Trailhead, Salt Lake City, Utah. May 14, 2016. Sign.

¹³ Other communities continue to build their portions of the Bonneville Shoreline Trail through county and city government staff, city-designated citizen representatives and staff, and private nonprofit organizations who have taken the lead (Bonneville).

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---. Bonneville Shoreline Trail: Red Butte Canyon Road Trailhead, Salt Lake City, Utah. May 14, 2016. Sign.

---. Bonneville Shoreline Trail: Terrace Hills East Trailhead, Salt Lake City, Utah. May 14, 2016. Sign.

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Historian: JoEllen Grandy
Landmark Design
850 South 400 West, Studio 104
Salt Lake City, Utah 84101
801-474-3300
Prepared on June 22, 2016



Fig. 1. Context Map (2012).



Fig. 2. The Bonneville Shoreline Trail has twenty-two trailhead access points identified along Salt Lake City's trail segment (2012).

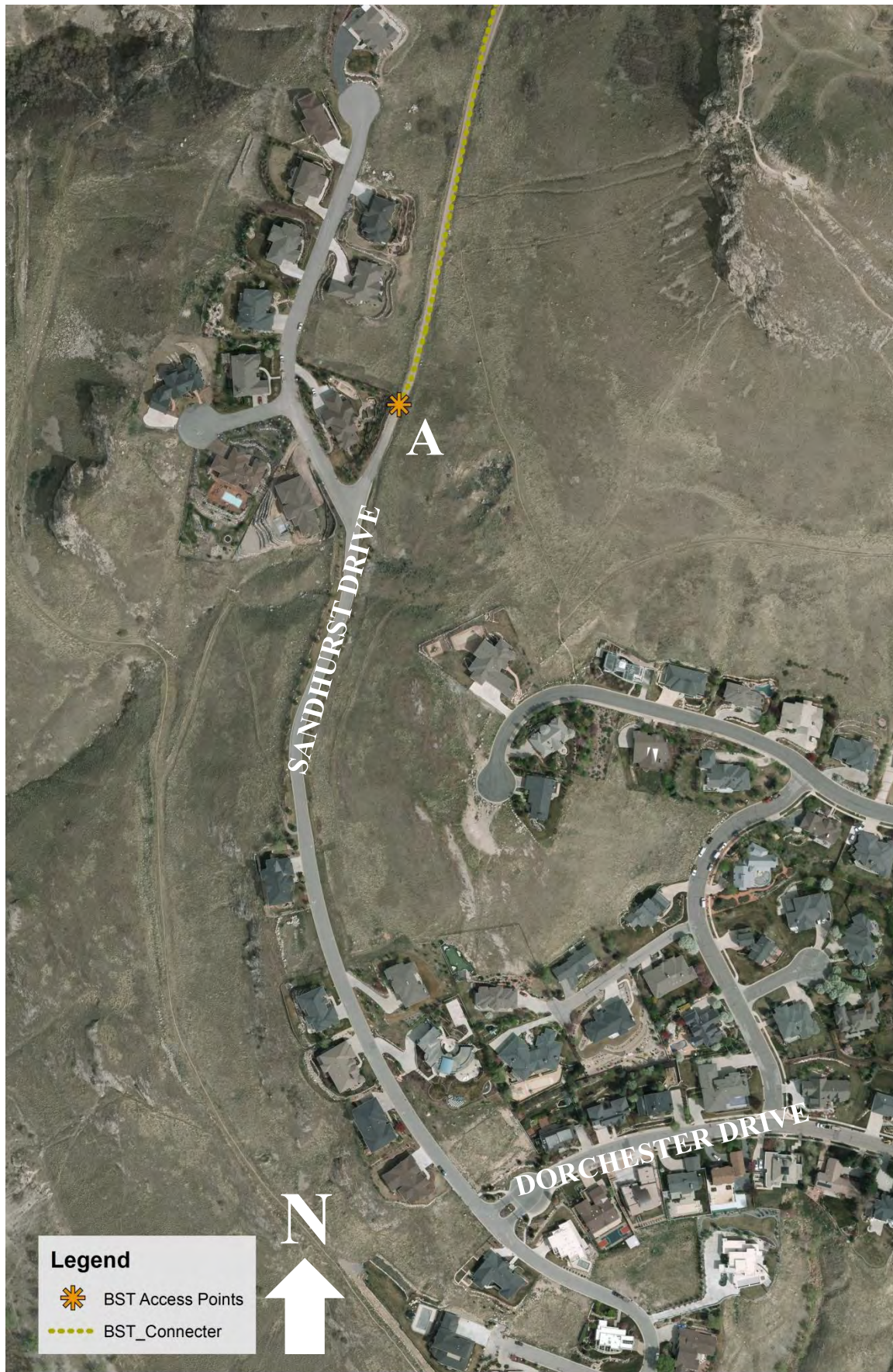


Fig. 3. Sandhurst Drive Trailhead, the northern-most trailhead within Salt Lake City limits.



Fig. 4. Capitol Street Trailhead. Note there are four trailhead access points (2012).



Fig. 5. View to the northeast of trailhead parking located along the east side of Capitol Street. Photograph taken near the intersection of 300 North and Capitol Street (JoEllen Grandy, 5/14/16).



Fig. 6. View to the northeast of the furthest south trailhead access located near the intersection of 300 North and Capitol Street. The trail connects to Memory Grove Park, with access to the Freedom Trail or Canyon Road offered as interconnecting routes to the Bonneville Shoreline Trail (JoEllen Grandy, 5/14/16).



Fig. 7. View to the northeast of the furthest north trailhead access located near the intersection of 500 North and Capitol Street. It is primarily used by bicyclists en-route to City Creek Canyon or the Bonneville Shoreline Trail (JoEllen Grandy, 10/22/16).



Fig. 8. Bonneville Boulevard Trailhead and Freedom Trailhead (2012).



Fig. 9. View to the northwest of Bonneville Boulevard Trailhead located approximately 0.21 miles north of the intersection of B Street (Bonneville Boulevard) and 11th Avenue (JoEllen Grandy, 5/14/16).



Fig. 10. View to the northwest of the pavilion, parking lot and portable restroom (JoEllen Grandy, 5/14/16).



Fig. 11. View to the southeast of the pavilion. Note the drinking fountain to the left (JoEllen Grandy, 5/14/16).



Fig. 12. View to the east of a rest area. Note three benches to the left and bike rack to the right (JoEllen Grandy, 5/14/16).



Fig. 13. View to the south looking toward Salt Lake City and the mouth of City Creek Canyon (JoEllen Grandy, 5/14/16).



Fig. 14. View to the northwest of Freedom Trailhead located on Bonneville Boulevard approximately 0.34 miles north of the intersection of B Street (Bonneville Boulevard) and 11th Avenue (JoEllen Grandy, 5/14/16).



Fig. 15. View to the west of the Freedom Trailhead access. Note the doggie bag station and trash receptacle (JoEllen Grandy, 5/14/16).



Fig. 16. Canyon Road Trailhead and City Creek Canyon Trailhead. Note the City Creek Trailhead has two trailhead access points (2012).



Fig. 17. View to the northwest of Canyon Road Trailhead located at the intersection of Canyon Road and Bonneville Boulevard. Note the orange gate prohibiting automobile access. Also note the City Creek Canyon Trailhead parking to the rear (JoEllen Grandy, 5/14/16).



Fig. 18. View to the north of City Creek Canyon Trailhead located on Bonneville Boulevard approximately 0.63 miles north of the intersection of B Street (Bonneville Boulevard) and 11th Avenue. Note the trailhead parking to the right (JoEllen Grandy, 5/14/16).



Fig. 19. View to the southwest of the trailhead access northbound from the City Creek Canyon Trailhead located at the intersection of Bonneville Boulevard and City Creek Canyon Road. Note the City Creek Canyon sign to the left and official Bonneville Shoreline Trail marker to the right (JoEllen Grandy, 5/14/16).



Fig. 20. View to the west of the official Bonneville Shoreline Trail marker located at the City Creek Canyon Trailhead, northbound trail (JoEllen Grandy, 5/14/16).



Fig. 21. View to the west of a watershed protection information City Creek Canyon sign located at the City Creek Canyon Trailhead, northbound trail (JoEllen Grandy, 5/14/16).



Fig. 22. View to the west of the Bonneville Shoreline Trail, located along the northbound City Creek Canyon Trailhead. Note the bench to the rear (JoEllen Grandy, 5/14/16).



Fig. 23. View to the southwest looking toward Salt Lake City from the Bonneville Shoreline Trail, located along the northbound City Creek Canyon Trailhead (JoEllen Grandy, 5/14/16).



Fig. 24. View to the southeast looking toward the City Creek Canyon Trailhead parking lot and southbound access (JoEllen Grandy, 5/14/16).



Fig. 25. View to the northeast of the City Creek Canyon Trailhead parking lot located on Bonneville Boulevard, near the southbound trailhead access (JoEllen Grandy, 5/14/16).



Fig. 26. View to the northeast of the southbound City Creek Canyon Trailhead access. Note the official Bonneville Shoreline Trail marker to the left (JoEllen Grandy, 5/14/16).



Fig. 27. View to the northeast of the official Bonneville Shoreline Trail marker located at the City Creek Canyon Trailhead, southbound trail (JoEllen Grandy, 5/14/16).



Fig. 28. View to the north of the Bonneville Shoreline Trail, located along the southbound City Creek Canyon Trailhead (JoEllen Grandy, 5/14/16).



Fig. 29. View to the north of the Bonneville Shoreline Trail, located along the southbound City Creek Canyon Trailhead. Note the bench to the right (JoEllen Grandy, 5/14/16).

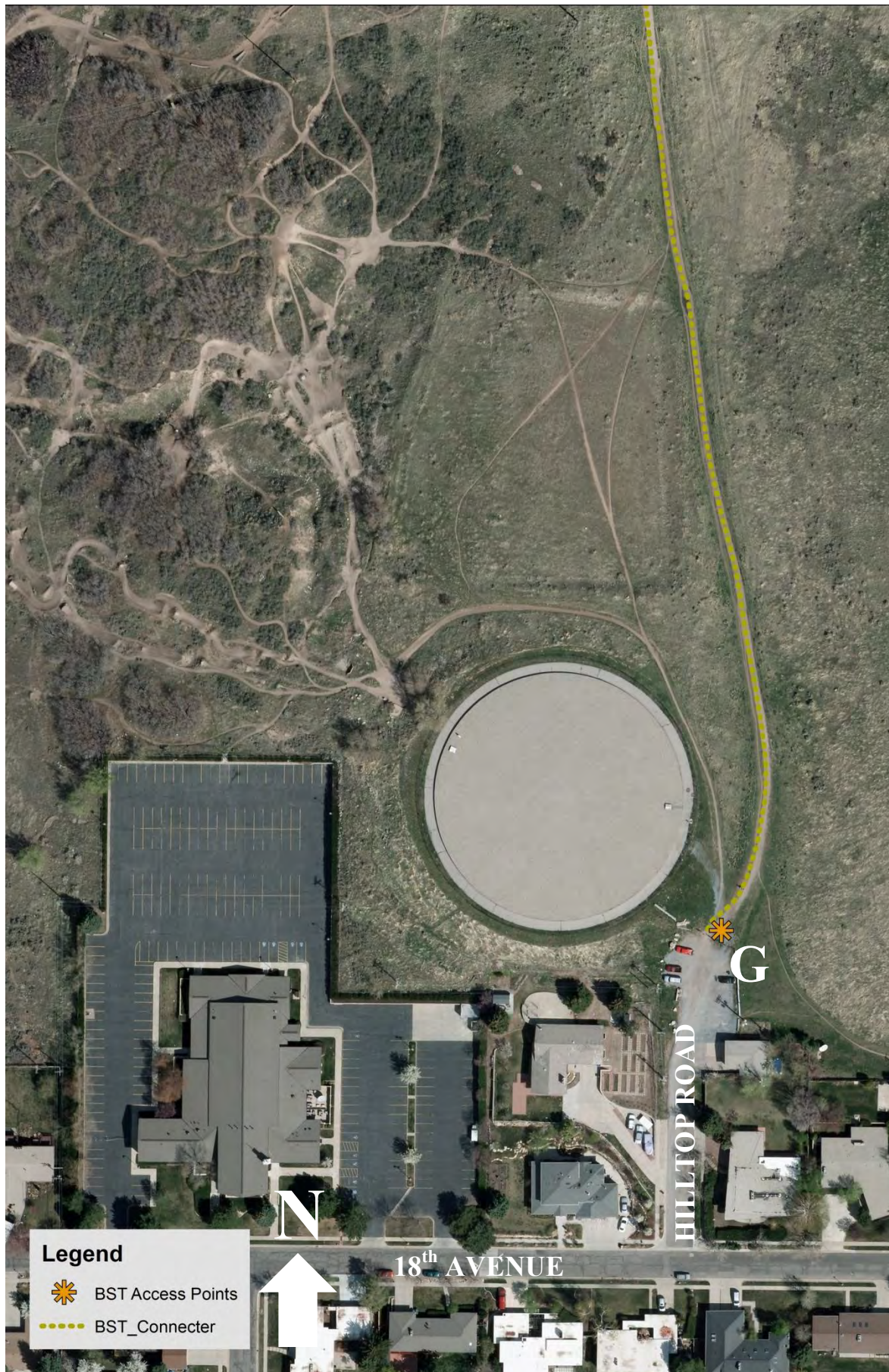


Fig. 30. Morris Meadows Trailhead (2012).



Fig. 31. Street view to the north approaching the Morris Meadows Trailhead located slightly north of the intersection of Hilltop Road and 18th Avenue (JoEllen Grandy, 5/14/16).



Fig. 32. View to the north of the Morris Meadows Trailhead located slightly north of the intersection of Hilltop Road and 18th Avenue (JoEllen Grandy, 5/14/16).



Fig. 33. View to the southwest of the Morris Meadows Trailhead gravel parking lot (JoEllen Grandy, 5/14/16).



Fig. 34. View to the north of the Morris Meadows Trailhead access. Note the doggie bag station to the left and City ordinance sign to your right. To the rear is the Bonneville Shoreline Trail marker and a trash receptacle (JoEllen Grandy, 5/14/16).



Fig. 35. View to the north of the official Bonneville Shoreline Trail marker located at the Morris Meadows Trailhead (JoEllen Grandy, 5/14/16).



Fig. 36. View to the north of the connecting trail bound for the Bonneville Shoreline Trail, located along the Morris Meadows Trailhead (JoEllen Grandy, 5/14/16).



Fig. 37. Terrace Hills Trailhead. Note there are two trailhead access points (2012).



Fig. 38. Street view to the northeast approaching the Terrace Hills Trailhead located at the end of the cul-de-sac of Terrace Hills Drive. Note the northbound trailhead access to the left and southbound trailhead access to the rear right (JoEllen Grandy, 5/27/16).



Fig. 39. View to the southwest of the northbound Terrace Hills Trailhead access (JoEllen Grandy, 5/27/16).



Fig. 40. View to the northwest of the northbound Terrace Hills Trailhead access. Note the doggie bag station mounted on the gate to the left, and City ordinance sign mounted on the gate (JoEllen Grandy, 5/27/16).



Fig. 41. View to the northwest of dog watering station located at the Terrace Hills Trailhead, northbound trail (JoEllen Grandy, 5/27/16).



Fig. 42. Close-up view to the northwest of dog watering station located at the Terrace Hills Trailhead, northbound trail. Note the dog wading pool, drinking fountain, stone bench and planters (JoEllen Grandy, 5/27/16).



Fig. 43. View to the west of the connecting trail bound for the Bonneville Shoreline Trail, located along the Terrace Hills Trailhead, northbound trail (JoEllen Grandy, 5/14/16).



Fig. 44. View to the northeast of the southbound Terrace Hills Trailhead access (JoEllen Grandy, 5/27/16).



Fig. 45. View to the northeast of the southbound Terrace Hills Trailhead access. Note the doggie bag station, the signage mounted on the gate, and the Bonneville Shoreline Trail marker right of the gate (JoEllen Grandy, 5/27/16).



Fig. 46. View to the northeast of the official Bonneville Shoreline Trail marker located at the Terrace Hills Trailhead, southbound trail (JoEllen Grandy, 5/14/16).



Fig. 47. View to the northeast of the connecting trail bound for the Bonneville Shoreline Trail, located along the Terrace Hills Trailhead, southbound trail (JoEllen Grandy, 5/14/16).



Fig. 48. Richland Drive Trailhead and North Bonneville Drive Trailhead (2012).



Fig. 49. Street view to the northwest approaching the Richland Drive Trailhead located at the end of the northern cul-de-sac of Richland Drive (JoEllen Grandy, 5/27/16).



Fig. 50. View to the north of the Richland Drive Trailhead access. Note the doggie bag station and sign to the right (JoEllen Grandy, 5/27/16).



Fig. 51. View to the northwest of the connecting trail bound for the Bonneville Shoreline Trail, located along the Richland Drive Trailhead (JoEllen Grandy, 5/14/16).



Fig. 52. View to the south looking toward the Richland Drive Trailhead (JoEllen Grandy, 5/14/16).



Fig. 53. View to the north of the connecting trail bound for the Bonneville Shoreline Trail, located along the Richland Drive Trailhead. Note the Bobsled Trail passes through the ravine to the right (refer to footnote number one, on page three for further details) (JoEllen Grandy, 5/14/16).



Fig. 54. Street view to the northwest approaching the North Bonneville Drive Trailhead located at the western end of North Bonneville Drive (JoEllen Grandy, 5/27/16).



Fig. 55. View to the northwest of the North Bonneville Drive Trailhead access. Note the doggie bag station and signage mounted on the gate (JoEllen Grandy, 5/27/16).



Fig. 56. View to the south looking toward Salt Lake City from the North Bonneville Drive Trailhead access. Note the Bobsled Trail continues to pass through the ravine to the rear (refer to footnote number one, on page three for further details) (JoEllen Grandy, 5/27/16).



Fig. 57. View to the west of the connecting trail bound for the Bonneville Shoreline Trail, located along the North Bonneville Drive Trailhead. (JoEllen Grandy, 5/14/16).



Fig. 58. View to the east looking toward the North Bonneville Drive Trailhead (JoEllen Grandy, 5/14/16).

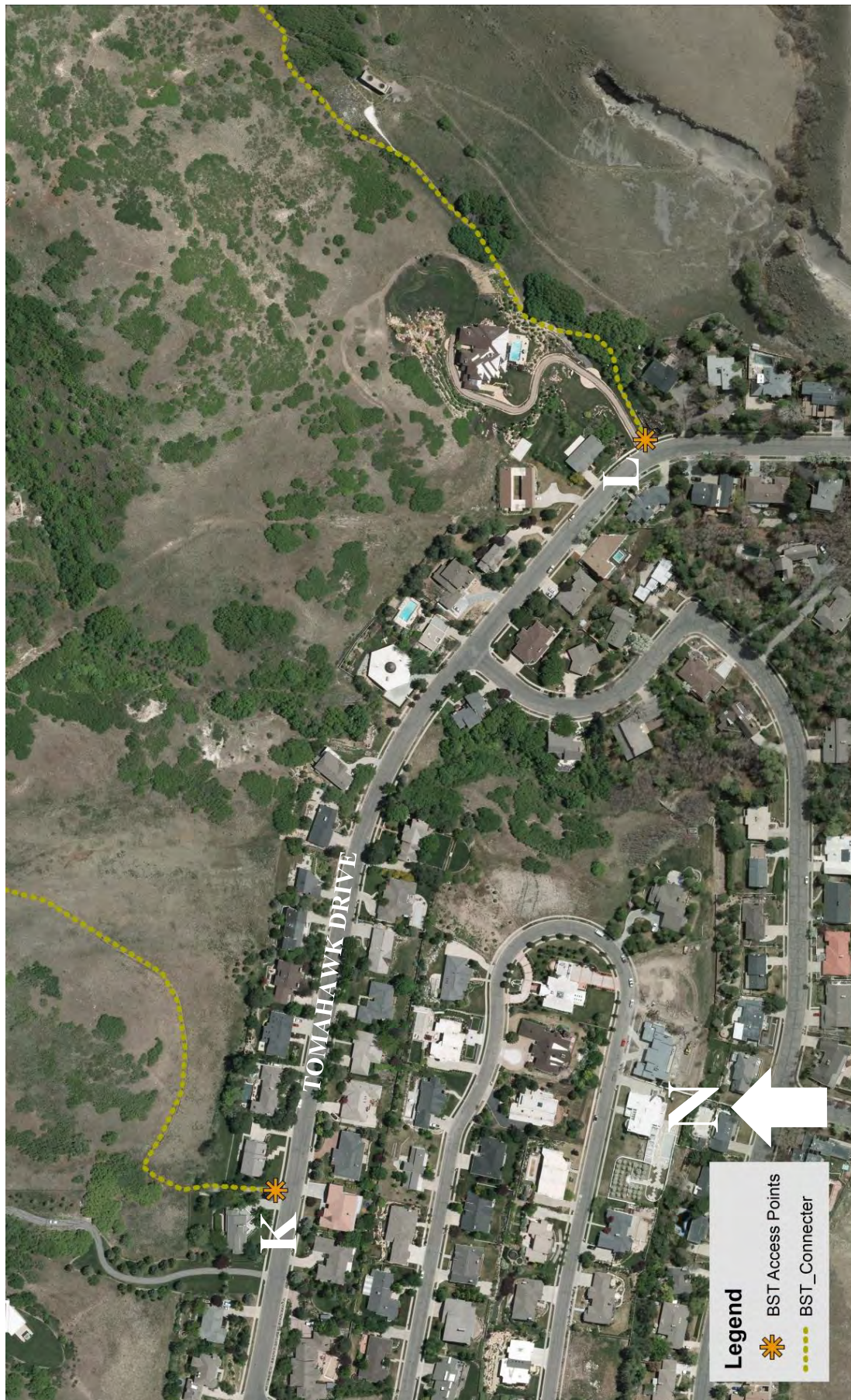


Fig. 59. Tomahawk Drive West Trailhead and Limekiln Gulch Trailhead (2012).



Fig. 60. Street view to the north approaching the Tomahawk Drive West Trailhead located approximately 0.08 miles east of Cambridge Way and Tomahawk Drive (JoEllen Grandy, 5/27/16).



Fig. 61. View to the north of the Tomahawk Drive West Trailhead access. Note the concrete bollards and chain link fence either side of the trail (JoEllen Grandy, 5/27/16).



Fig. 62. View to the north of the connecting trail bound for the Bonneville Shoreline Trail, located along the Tomahawk Drive West Trailhead. Note the doggie bag station mounted on the chain link fence to the right (JoEllen Grandy, 5/14/16).



Fig. 63. View to the north of the connecting trail bound for the Bonneville Shoreline Trail, located along the Tomahawk Drive West Trailhead (JoEllen Grandy, 5/14/16).



Fig. 64. Street view to the northeast approaching the Limekiln Gulch Trailhead located approximately 0.1 miles southeast of Chandler Drive and Tomahawk Drive (JoEllen Grandy, 5/27/16).



Fig. 65. View to the northeast of the Limekiln Gulch trailhead access. Note a doggie bag station is located behind the trash receptacle and signage to the right (JoEllen Grandy, 5/27/16).



Fig. 66. View to the northeast of additional directional and regulatory signage located along the Limekiln Gulch Trailhead (JoEllen Grandy, 5/27/16).



Fig. 67. View to the northeast of the connecting trail bound for the Bonneville Shoreline Trail, located along the Limekiln Gulch Trailhead (JoEllen Grandy, 5/14/16).



Fig. 68. View to the northeast of the connecting trail bound for the Bonneville Shoreline Trail, located along the Limekiln Gulch Trailhead. Note the historic limekiln atop the crest of the hill to the right (JoEllen Grandy, 5/14/16).



Fig. 69. View to the northeast approaching the historic pioneer limekiln atop the crest of the hill. A steep trail deviates from the main trail bound for the Bonneville Shoreline Trail (JoEllen Grandy, 5/14/16).



Fig. 70. View to the northeast of the historic pioneer limekiln located 0.15 miles up the Limekiln Gulch Trailhead (JoEllen Grandy, 5/14/16).



Fig. 71. View to the southwest of the historic pioneer limekiln located 0.15 miles up the Limekiln Gulch Trailhead. Note a plaque mounted on the second gated kiln in from the left (JoEllen Grandy, 5/14/16).

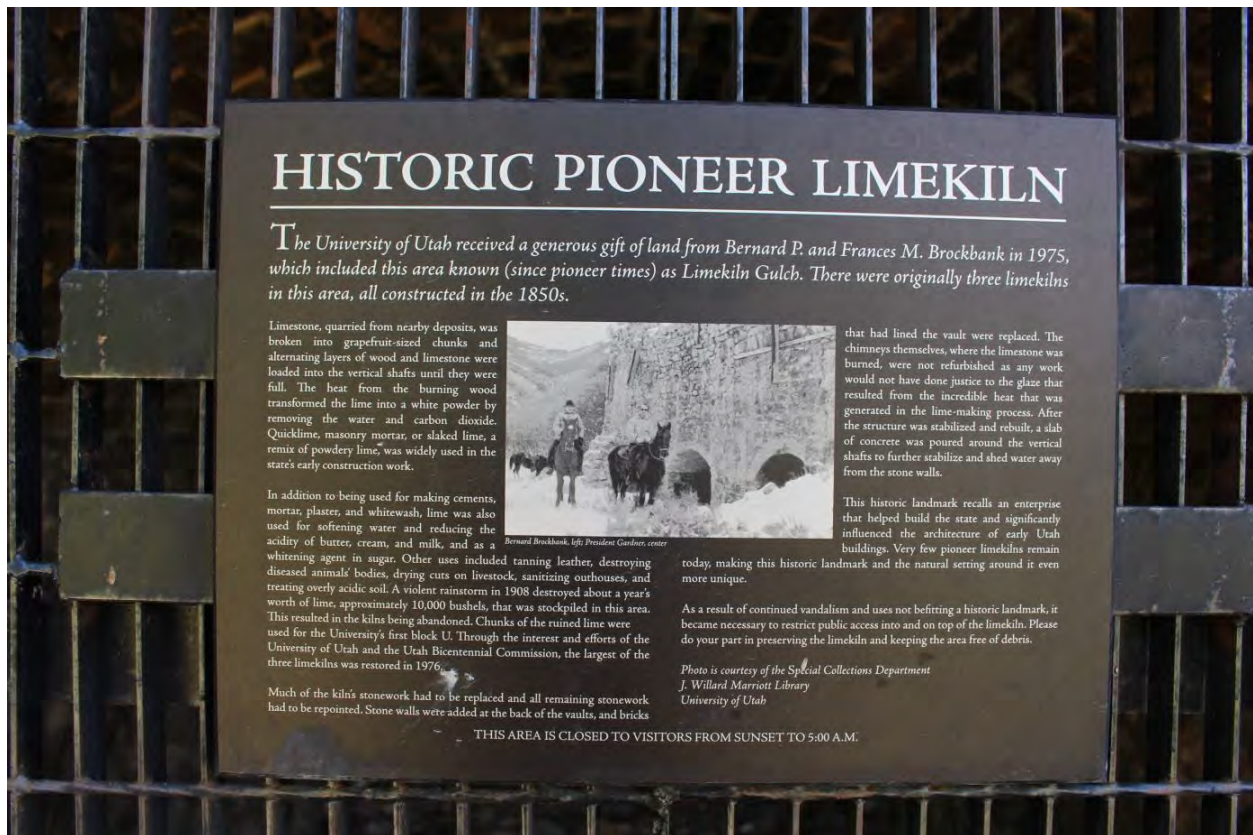


Fig. 72. Plaque dedicated by the University of Utah narrating details about the historic pioneer limekiln located 0.15 miles up the Limekiln Gulch Trailhead (JoEllen Grandy, 5/14/16).



Fig. 73. View to the southwest of the backside of the historic pioneer limekiln located 0.15 miles up the Limekiln Gulch Trailhead. Note the chain link fence restricting access (JoEllen Grandy, 5/14/16).



Fig. 74. View to the southwest looking toward Salt Lake City from the historic pioneer limekiln located 0.15 miles up the Limekiln Gulch Trailhead (JoEllen Grandy, 5/14/16).



Fig. 75. Tomahawk Drive East Trailhead (2012).



Fig. 76. Street view to the southeast approaching the Tomahawk Drive East Trailhead located at the end of the cul-de-sac of Tomahawk Drive (JoEllen Grandy, 5/27/16).



Fig. 77. View to the south of the Tomahawk Drive East Trailhead access. Note a doggie bag station and directional information signage to view the “Block U” of the University of Utah posted left of the streetlight (JoEllen Grandy, 5/27/16).



Fig. 78. View to the southeast of the connecting trail bound for the Bonneville Shoreline Trail, located along the Tomahawk Drive East Trailhead. Note the trail passes through a private community (JoEllen Grandy, 5/14/16).



Fig. 79. View to the south of the connecting trail bound for the Bonneville Shoreline Trail, located along the Tomahawk Drive East Trailhead, where it merges with New Bedford Drive for approximately 0.04 miles (JoEllen Grandy, 5/14/16).



Fig. 80. View to the east of New Bedford Drive, where the trail merges with the road for approximately 0.04 miles (JoEllen Grandy, 5/14/16).



Fig. 81. View to the east of the re-emerging connecting trail bound for the Bonneville Shoreline Trail, located along the Tomahawk Drive East Trailhead. Note the gravel trail on the left side (north side) of the road where access to view the “Block U” is made available (JoEllen Grandy, 5/14/16).



Fig. 82. View to the northeast of the “Block U” of the University of Utah located 0.04 miles east of New Bedford Drive, located along the Tomahawk Drive East Trailhead bound for the Bonneville Shoreline Trail (JoEllen Grandy, 5/14/16).

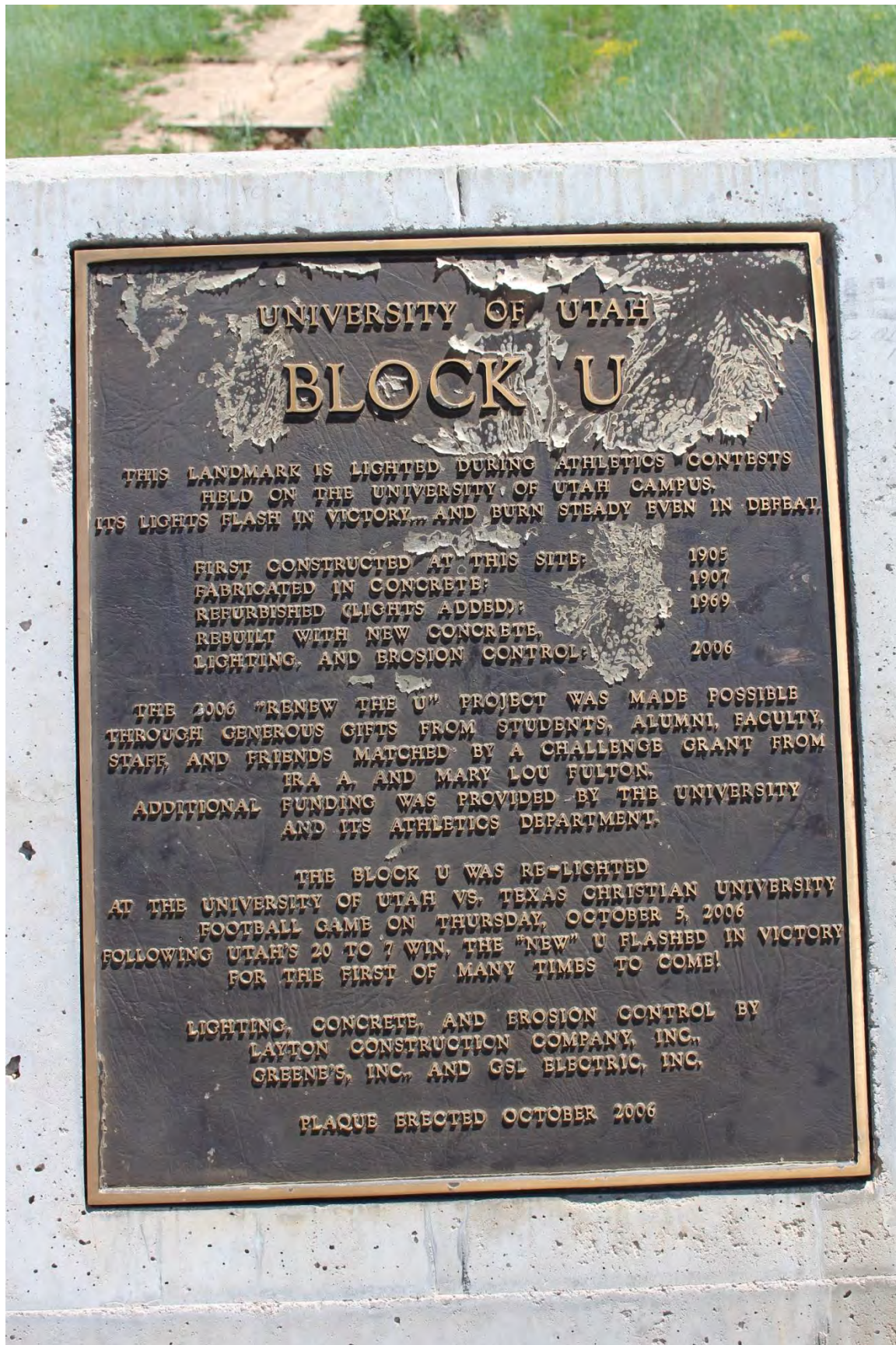


Fig. 83. Plaque narrating details about "Block U" of the University of Utah located 0.04 miles east of New Bedford Drive (JoEllen Grandy, 5/14/16).



Fig. 84. Avenues Trailhead and Dry Creek Trailhead (2012).



Fig. 85. Street view to the east from the Avenues Trailhead located approximately 0.44 miles east of Popperton Park Way (11th Avenue) and Virginia Avenue. Note the asphalt trail to the left, on the north side of the road (JoEllen Grandy, 5/27/16).



Fig. 86. View to the west of the connecting trail bound for the Bonneville Shoreline Trail, looking back toward the Avenues Trailhead parking lot. Note the signage indicating the trail crossing, north and south of the road (JoEllen Grandy, 5/14/16).



Fig. 87. View to the east of the connecting trail bound for the Bonneville Shoreline Trail, located along the Avenues Trailhead. Note the asphalt trail now located on the south side of the road (JoEllen Grandy, 5/14/16).



Fig. 88. View to the east of the Avenue Trailhead access. Note a doggie bag station, trash receptacle and advisory signage as the connecting trail bound for the Bonneville Shoreline Trail departs from Popperton Park Way near the turn-around area (JoEllen Grandy, 5/14/16).



Fig. 89. View to the east of the connecting trail bound for the Bonneville Shoreline Trail, located along the Avenues Trailhead slightly east of the turn-around area where Popperton Park Way becomes part of a gated community (JoEllen Grandy, 5/14/16).



Fig. 90. View to the east of the connecting trail bound for the Bonneville Shoreline Trail, located along the Avenues Trailhead. Note the University of Utah Hospital complex to the rear (JoEllen Grandy, 5/14/16).



Fig. 91. Street view to the northeast of the I. J. & Jeanne Wagner Jewish Community Center (JCC) entrance located at 2 North Medical Drive. Access to the Dry Creek Trailhead is provided through this entry (JoEllen Grandy, 5/27/16).



Fig. 92. View to the northeast of regulatory signage for parking. Similar signage is posted frequently throughout the premise. Directional signage to the Dry Creek Trailhead is nonexistent (JoEllen Grandy, 5/27/16).



Fig. 93. View to the north approaching the Dry Creek Trailhead parking lot. Note the Rocky Mountain Power Medical Substation to the right (JoEllen Grandy, 5/27/16).



Fig. 94. View to the north of the Dry Creek Trailhead access (JoEllen Grandy, 5/27/16).



Fig. 95. Close-up view to the north of the Dry Creek Trailhead access. Note the doggie bag station mounted on the chain link fence to the right and additional regulatory signage to the left (JoEllen Grandy, 5/27/16).



Fig. 96. View to the north of the connecting trail bound for the Bonneville Shoreline Trail, located along the Dry Creek Trailhead (JoEllen Grandy, 5/14/16).



Fig. 97. View to the south looking toward the Dry Creek Trailhead and University of Utah Hospital to the rear (JoEllen Grandy, 5/14/16).



Fig. 98. View to the northeast of the Bonneville Shoreline Trail approximately 0.12 miles from the Dry Creek Trailhead. Note the trail arrives at a fork where users may opt to travel north or southbound (JoEllen Grandy, 5/14/16).



Fig. 99. View to the northeast of the northbound Bonneville Shoreline Trail approximately 0.25 miles from the Dry Creek Trailhead. Note the official Bonneville Shoreline Trail marker (JoEllen Grandy, 5/14/16).



Fig. 100. View to the northeast of the official Bonneville Shoreline Trail marker and regulatory signage located approximately 0.25 miles from the Dry Creek Trailhead, northbound (JoEllen Grandy, 5/14/16).



Fig. 101. Close-up view to the northeast of the official Bonneville Shoreline Trail marker located approximately 0.25 miles from the Dry Creek Trailhead, northbound (JoEllen Grandy, 5/14/16).



Fig. 102. View to the southwest of the connecting trail bound for the Bonneville Shoreline Trail, located along the Avenues Trailhead, where it will shortly connect to the official Bonneville Shoreline Trail, where a marker and regulatory sign are located approximately 0.25 miles from the Dry Creek Trailhead, northbound. Note the trail to the rear left is the Bonneville Shoreline Trail en-route to the Dry Creek Trailhead (JoEllen Grandy, 5/14/16).



Fig. 103. View to the southeast from the connecting trail bound for the Bonneville Shoreline Trail, located along the Avenues Trailhead, looking toward the fork in the connecting trail located along the Dry Creek Trailhead; the Bonneville Trail continues southbound (trail to the left) (JoEllen Grandy, 5/14/16).



Fig. 104. Red Butte Creek Road Trailhead (2012).



Fig. 105. Street view to the northeast of Stover Street near the Red Butte Garden parking lot. Access to the Red Butte Creek Road Trailhead is located at the end of Stover Street where the paved road transitions into a gravel road to Red Butte Canyon (JoEllen Grandy, 5/27/16).



Fig. 106. View to the northeast approaching the Dry Creek Trailhead parking lot located at the end of Stover Street where the paved road transitions into a gravel road to Red Butte Canyon (JoEllen Grandy, 5/27/16).



Fig. 107. View to the northeast of the northbound Red Butte Creek Trailhead access located approximately 0.12 miles in a southwesterly direction from the trailhead parking. Note the single brown carsonite post to the right (JoEllen Grandy, 5/27/16).



Fig. 108. View to the east of brown carsonite post located approximately 0.12 miles in a southwesterly direction from the trailhead parking. Note the faded, peeling Bonneville Shoreline Trail logo (JoEllen Grandy, 5/14/16).



Fig. 109. View to the north of the Bonneville Shoreline Trail, located along the northbound Red Butte Creek Road Trailhead. Note the Integrated Waste Management facility to the rear (JoEllen Grandy, 5/14/16).



Fig. 110. View to the northeast of the Bonneville Shoreline Trail, located along the northbound Red Butte Creek Road Trailhead. Note the chain link fencing where construction is currently underway (JoEllen Grandy, 5/14/16).



Fig. 111. View to the southeast of the southbound Red Butte Creek Trailhead access. Note the Le Mont Rouge, a red abstract sculpture, and official Bonneville Shoreline Trail marker to the right (JoEllen Grandy, 5/27/16).



Fig. 112. View to the southwest of the official Bonneville Shoreline Trail marker located approximately 0.15 miles in a southwesterly direction from the trailhead parking (JoEllen Grandy, 5/14/16).



Fig. 113. View to the northeast of the Le Mont Rouge, a red abstract sculpture located approximately 0.15 miles in a southwesterly direction from the trailhead parking (JoEllen Grandy, 5/14/16).



Fig. 114. Plaque narrating details about the Le Mont Rouge, the red abstract sculpture located approximately 0.15 miles in a southwesterly direction from the trailhead parking (JoEllen Grandy, 5/14/16).



Fig. 115. View to the northeast of an additional Bonneville Shoreline Trail Marker and a mounted map indicating driving and walking directions between Red Butte Garden's main entrance and amphitheater entrance, located slightly southeast from the Le Mont Rouge sculpture and Red Butte Garden Amphitheater's entrance. Note the sculpture to the rear and amphitheater to the right (JoEllen Grandy, 5/14/16).



Fig. 116. Informational map indicating driving and walking directions between Red Butte Garden's main entrance and amphitheater entrance (JoEllen Grandy, 5/14/16).



Fig. 117. View to the northeast of an additional Bonneville Shoreline Trail Marker, located near the Red Butte Garden service entrance and Red Butte Creek. Note the fenced perimeter of the Red Butte Garden to the right (JoEllen Grandy, 5/14/16).



Fig. 118. View to the southwest of an additional Bonneville Shoreline Trail Marker and interpretive signage, located near the Red Butte Garden service entrance and Red Butte Creek. Note the Red Butte Garden service entry to the left and trees to the right where Red Butte Creek is located (JoEllen Grandy, 5/14/16).



Fig. 119. Interpretive sign narrating details about Red Butte Creek's influence and urban impact (JoEllen Grandy, 5/14/16).

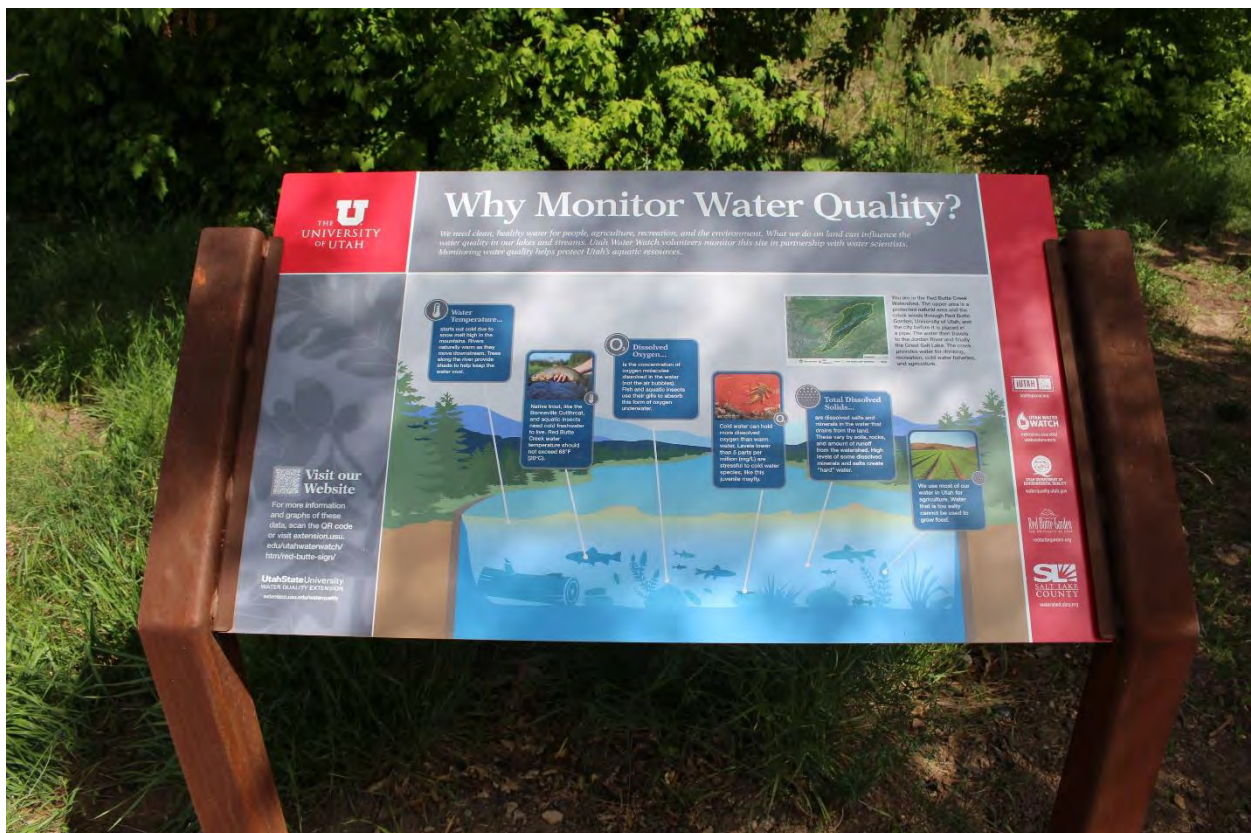


Fig. 120. Interpretive sign narrating details about why it is important to monitor water quality (JoEllen Grandy, 5/14/16).



Fig. 121. Utah's Museum of Natural History (UMNH) Trailhead (2012).



Fig. 122. Street view to the northeast approaching the Utah Museum of Natural History (UMNH) Trailhead located near the intersection of Wakara Way and Colorow Road (JoEllen Grandy, 5/27/16).



Fig. 123. Street view to the southwest where trailhead users may parallel park along Colorow Road. Note the UMNH Trailhead access to the left (JoEllen Grandy, 5/27/16).



Fig. 124. View to the northeast of trailhead access from the UMNH Trailhead located near the intersection of Wakara Way and Colorow Road. Note the doggie bag station and posted regulatory signage (JoEllen Grandy, 5/14/16).



Fig. 125. View to the northeast of the connecting trail bound for the Bonneville Shoreline Trail located along the UMNH Trailhead (JoEllen Grandy, 5/14/16).



Fig. 126. View to the northwest of the northbound connecting trail bound for the Bonneville Shoreline Trail located approximately 0.08 miles from the UMNH Trailhead entrance (JoEllen Grandy, 5/14/16).



Fig. 127. An example of an interpretive marker with specific facts about the area located along the northbound connecting trail bound for the Bonneville Shoreline Trail located approximately 0.08 miles from the UMNH Trailhead entrance (JoEllen Grandy, 5/14/16).



Fig. 128. Examples of interpretive markers narrating the history of the Earth in million year increments located along the northbound connecting trail bound for the Bonneville Shoreline Trail located approximately 0.08 miles from the UMNH Trailhead entrance. The interpretive signs continues for approximately 0.04 miles where the Bonneville Shoreline Trail and UMNH walk intersect. The interpretive signage continues toward the UMNH building (JoEllen Grandy, 5/14/16).



Fig. 129. Close-up view of an interpretive marker narrating the history of the Earth in million year increments located along the northbound connecting trail bound for the Bonneville Shoreline Trail located approximately 0.08 miles from the UMNH Trailhead entrance (JoEllen Grandy, 5/14/16).



Fig. 130. Close-up view of an interpretive marker narrating the history of the Earth in million year increments located along the northbound connecting trail bound for the Bonneville Shoreline Trail located approximately 0.08 miles from the UMNH Trailhead entrance (JoEllen Grandy, 5/14/16).



Fig. 131. View to the northeast of the northbound connecting trail bound for the Bonneville Shoreline Trail located approximately 0.12 miles from the UMNH Trailhead entrance (JoEllen Grandy, 5/14/16).



Fig. 132. View to the northeast of the junction where the northbound Bonneville Shoreline Trail and UMNH walkway to its main entrance intersect. Note the directional signage to the right and interpretive signage to the rear left interpret to the history of the Bonneville Shoreline Trail (JoEllen Grandy, 5/14/16).



Fig. 133. View to the northeast of the Bonneville Shoreline Trail near the main entrance into the UMNH. Note the interpretive signage to the left specific to the history of the Bonneville Shoreline Trail (JoEllen Grandy, 5/14/16).



Fig. 134. Interpretive marker narrating the history of the Bonneville Shoreline Trail located approximately 0.12 miles from the UMNH Trailhead entrance, near the junction of the Bonneville Shoreline Trail and walkway to the UMNH's main entrance (JoEllen Grandy, 5/14/16).



Fig. 135. View to the east of the Bonneville Shoreline Trail as it crosses Wakara Way. Note the official Bonneville Shoreline Trail marker and UMNH building to the rear. Photograph taken standing on the west side of Wakara Way (JoEllen Grandy, 5/14/16).



Fig. 136. View to the west of the Bonneville Shoreline Trail as it crosses Wakara Way. Note the official Bonneville Shoreline Trail marker, and to the rear on the west side of Wakara Way two signs, a directional map and interpretive sign about waterwise gardening (JoEllen Grandy, 5/14/16).



Fig. 137. Close-up view to the west of the Bonneville Shoreline Trail as it crosses Wakara Way. Note two signs on the west side of Wakara Way, a directional map (to the right) and interpretive sign about waterwise gardening (to the left) (JoEllen Grandy, 5/14/16).



Fig. 138. Informational map indicating driving and walking directions between Red Butte Garden's main entrance and amphitheater entrance (JoEllen Grandy, 5/14/16).



Fig. 139. Red Butte Garden interpretive sign narrating details about waterwise gardening (JoEllen Grandy, 5/14/16).



Fig. 140. View to the west of the northbound Bonneville Shoreline Trail, just west of Wakara Way (JoEllen Grandy, 5/14/16).



Fig. 141. Research Park Trailhead (2012).



Fig. 142. Street view to the northeast approaching the Research Park Trailhead located near the intersection of Huntsman Way and Colorow Road (JoEllen Grandy, 5/27/16).



Fig. 143. Street view to the northwest where trailhead users may parallel park along Colorow Road near the Research Park Trailhead (JoEllen Grandy, 5/27/16).



Fig. 144. View to the northeast of trailhead access from the Research Park Trailhead located near the intersection of Huntsman Way and Colorow Road. Note the doggie bag station and posted regulatory signage (JoEllen Grandy, 5/14/16).



Fig. 145. View to the northeast of the connecting trail bound for the Bonneville Shoreline Trail located along the Research Park Trailhead (JoEllen Grandy, 5/14/16).



Fig. 146. Additional view to the northeast of the connecting trail bound for the Bonneville Shoreline Trail located along the Research Park Trailhead (JoEllen Grandy, 5/14/16).



Fig. 147. Emigration Canyon Trailhead (2012).



Fig. 148. Street view to the northwest approaching the Emigration Canyon Trailhead gravel parking lot located on Sunnyside Avenue, slightly west of the intersection of Crestview Drive (JoEllen Grandy, 5/27/16).



Fig. 149. View to the north of the Emigration Canyon Trailhead access (JoEllen Grandy, 5/27/16).



Fig. 150. View to the north of the Emigration Canyon Trailhead access. Note the official Bonneville Shoreline Trail marker to the left and informational kiosk to the right (JoEllen Grandy, 5/27/16).



Fig. 151. View to the north of an informational kiosk located at the Emigration Canyon Trailhead (JoEllen Grandy, 5/14/16).



Fig. 152. View to the north of the regulatory signage located at the Emigration Canyon Trailhead (JoEllen Grandy, 5/14/16).



Fig. 153. View to the southeast looking toward the Emigration Canyon Trailhead parking lot (JoEllen Grandy, 5/14/16).



Fig. 154. View to the northwest of the connecting trail bound for the Bonneville Shoreline Trail located along the Emigration Canyon Trailhead. Note the additional regulatory signage to the right (JoEllen Grandy, 5/14/16).



Fig. 155. View to the north of the regulatory signage along the connecting trail bound for the Bonneville Shoreline located slightly northwest from the Emigration Canyon Trailhead entrance as it approaches This Is The Place Heritage Park (JoEllen Grandy, 5/14/16).



Fig. 156. View to the northeast of the connecting trail bound for the Bonneville Shoreline Trail located along the Emigration Canyon Trailhead. Note the additional regulatory signage to the left indicating no trespassing This Is The Place Heritage Park (JoEllen Grandy, 5/14/16).



Fig. 157. View to the south looking toward the Emigration Canyon Trailhead. Note Utah's Hogle Zoo to the rear (JoEllen Grandy, 5/14/16).



Fig. 158. H-Rock Trailhead and Arcadia Trailhead. Note there are two trailhead access points (2012).



Fig. 159. View to the southeast of the Bonneville Shoreline Trail southbound enroute to the H-Rock Trailhead on Vista View Drive near the corner of Sherwood Drive. Note the directional signage to the right (JoEllen Grandy, 5/14/16).



Fig. 160. View to the south of the Bonneville Shoreline Trail southbound enroute to the H-Rock Trailhead on Devonshire Drive, near the corner of Lancaster Drive. Note the directional signage to the right (JoEllen Grandy, 5/14/16).



Fig. 161. View to the north of the Bonneville Shoreline Trail slightly north of the H-Rock Trailhead located at the end of the cul-de-sac of Devonshire Drive (JoEllen Grandy, 5/14/16).



Fig. 162. View to the south of the Bonneville Shoreline Trail as it approaches the H-Rock Trailhead located at the end of the cul-de-sac of Devonshire Drive (JoEllen Grandy, 5/14/16).



Fig. 163. View to the south of the H-Rock Trailhead access. Note the posted sign to the right introducing the rules and regulations for Arcadia Preserve and H-Rock (JoEllen Grandy, 5/27/16).



Fig. 164. View to the south of the Bonneville Shoreline Trail along the H-Rock Trailhead access located at the end of the cul-de-sac of Devonshire Drive (JoEllen Grandy, 5/14/16).



Fig. 165. View to the north of the Bonneville Shoreline Trail along the H-Rock Trailhead access located at the end of the cul-de-sac of Devonshire Drive (JoEllen Grandy, 5/14/16).



Fig. 166. View to the southeast of the side of H-Rock standing on the Bonneville Shoreline Trail approximately 0.08 miles south from H-Rock Trailhead (JoEllen Grandy, 5/14/16).



Fig. 167. View to the northeast of the face of H-Rock standing on the Bonneville Shoreline Trail approximately 0.08 miles south from H-Rock Trailhead access located at the end of the cul-de-sac of Devonshire Drive (JoEllen Grandy, 5/14/16).



Fig. 168. View to the northwest of the Bonneville Shoreline Trail approximately 0.13 miles south from H-Rock Trailhead (JoEllen Grandy, 5/14/16).



Fig. 169. View to the southeast of the Bonneville Shoreline Trail approximately 0.13 miles south from H-Rock Trailhead access located at the end of the cul-de-sac of Devonshire Drive. Note the informational sign to the right (JoEllen Grandy, 5/14/16).



Fig. 170. View to the north of the informational signage located along the Bonneville Shoreline Trail and along the H-Rock Trailhead access approximately 0.13 miles south from H-Rock Trailhead access located at the end of the cul-de-sac of Devonshire Drive (JoEllen Grandy, 5/14/16).



Fig. 171. Street view to the north approaching the Arcadia Trailhead located at the end of the northern cul-de-sac of Lakeline Drive. Note the eastern northbound trailhead access to the right (where the boulders are located) and the western northbound trailhead access to the left (JoEllen Grandy, 5/14/16).



Fig. 172. View to the northeast of the eastern northbound Arcadia Trailhead access. Note the drinking fountain at the base of the trail (JoEllen Grandy, 5/27/16).



Fig. 173. View to the north of the black decorative metal drinking fountain located at the base of the eastern northbound Arcadia Trailhead access (JoEllen Grandy, 5/27/16).



Fig. 174. View to the north of two decorative metal-framed and recycled plastic benches, and a bike rack located approximately 0.01 miles up the eastern northbound Arcadia Trailhead access (JoEllen Grandy, 5/27/16).



Fig. 175. View to the northwest of the western northbound Arcadia Trailhead access. Note the posted regulatory signage and trash receptacle to the right (JoEllen Grandy, 5/14/16).



Fig. 176. View to the southeast of the western northbound Arcadia Trailhead access. Note the official Bonneville Shoreline Trail to the left underneath the tree (JoEllen Grandy, 5/14/16).



Fig. 177. View to the southeast of the official Bonneville Shoreline Trail marker located at the western northbound Arcadia Trailhead access (JoEllen Grandy, 5/14/16).



Fig. 178. View to the west of the Bonneville Shoreline Trail approximately 0.10 miles west from Arcadia Trailhead access located at the end of the cul-de-sac of Lakeline Drive. Note Salt Lake City to the rear (JoEllen Grandy, 5/14/16).



Fig. 179. View to the west of the Bonneville Shoreline Trail approximately 0.20 miles west from Arcadia Trailhead access located at the end of the cul-de-sac of Lakeline Drive (JoEllen Grandy, 5/14/16).



Fig. 180. Parley's Canyon Trailhead. Note there are two trailhead access points (2012).



Fig. 181. Street view to the north approaching the Parley's Canyon Trailhead located at the north end of Wasatch Boulevard. Note the perimeter of the northbound trailhead access to the left (the chain link fence) and the southbound trailhead access to the rear right (JoEllen Grandy, 5/14/16).



Fig. 182. View to the north overlooking I-80 eastbound and the northern connecting pedestrian overpass of the Bonneville Shoreline Trail, from the northbound Parley's Canyon Trailhead (JoEllen Grandy, 5/14/16).



Fig. 183. View to the north of the Bonneville Shoreline Trail approximately 0.04 miles from northbound Parley's Canyon Trailhead access located at the north end of Wasatch Boulevard (JoEllen Grandy, 5/14/16).



Fig. 184. View to the south of the Bonneville Shoreline Trail pedestrian overpass approximately 0.12 miles from northbound Parley's Canyon Trailhead access located at the north end of Wasatch Boulevard. Note I-80 eastbound below (JoEllen Grandy, 5/14/16).



Fig. 185. View to the south of the Bonneville Shoreline Trail approximately 0.14 miles from northbound Parley's Canyon Trailhead access located at the north end of Wasatch Boulevard. Note Suicide Rock to the right through the chain link fence (JoEllen Grandy, 5/14/16).



Fig. 186. View to the north of the Bonneville Shoreline Trail approximately 0.20 miles from northbound Parley's Canyon Trailhead access located at the north end of Wasatch Boulevard. Note the pedestrian overpass which spans I-215 where Parley's Creek Corridor Trail is planned to continue east-to-west through Salt Lake City and South Salt Lake City (JoEllen Grandy, 5/14/16).



Fig. 187. View to the northeast of the southbound Parley's Canyon Trailhead with a gated rest area including a drinking fountain, picnic table and bench (JoEllen Grandy, 5/27/16).



Fig. 188. View to the northeast of the southbound Parley's Canyon Trailhead access. Note the regulatory signage to the right and informational kiosk to the left (JoEllen Grandy, 5/27/16).



Fig. 189. View to the north of an information kiosk located at the southbound Parley's Canyon Trailhead access (JoEllen Grandy, 5/27/16).

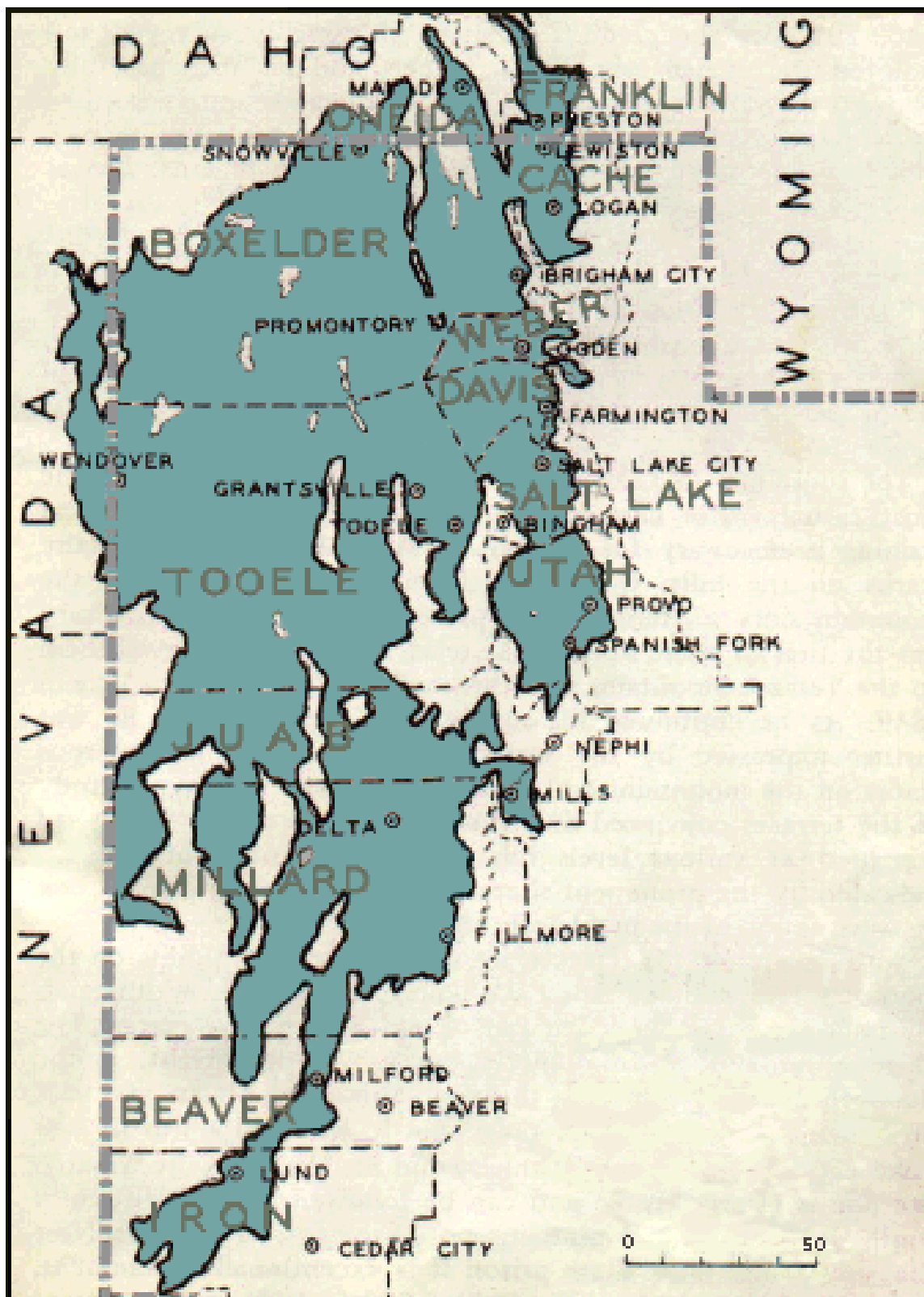


Fig. 190. Map of the ancient Lake Bonneville. Note the coverage of the lake in Utah and extensions into Idaho and Nevada (Bonneville).



Fig. 191. Pleistocene-era map of the Lake Bonneville including Pleistocene lakes approximately 14,500 years just prior to the flood. Note the direction of the flood and the location of the Great Salt Lake remnant of Lake Bonneville. Map courtesy of Fallschirmjager, based off of a map by Laura DeGrey, Myles Miller and Paul Link of Idaho State University, Department of Geosciences (Lake).

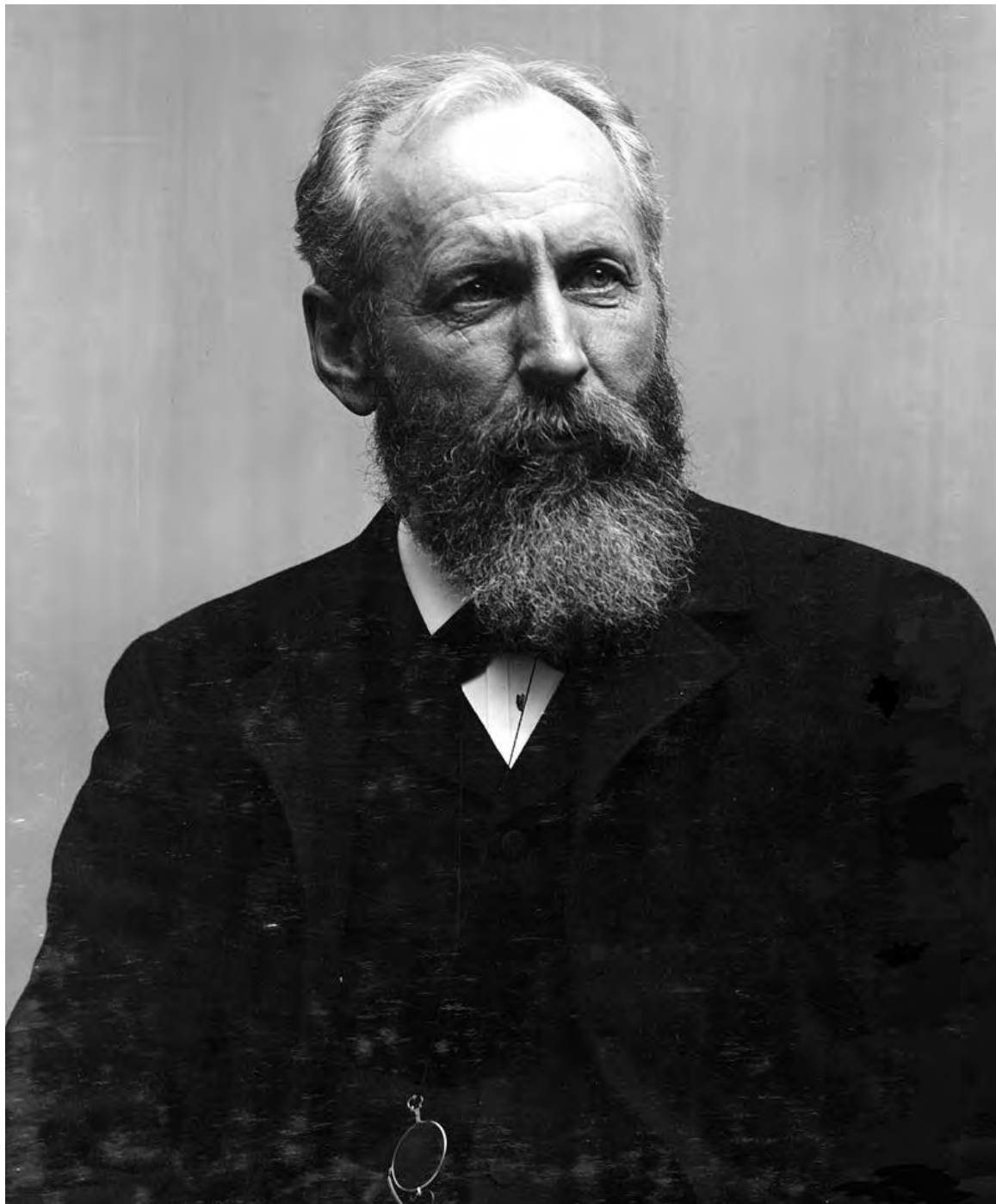


Fig. 192. Grove Karl Gilbert, an American geologist, conducted the first scientific study of Lake Bonneville in 1890 (Grove).

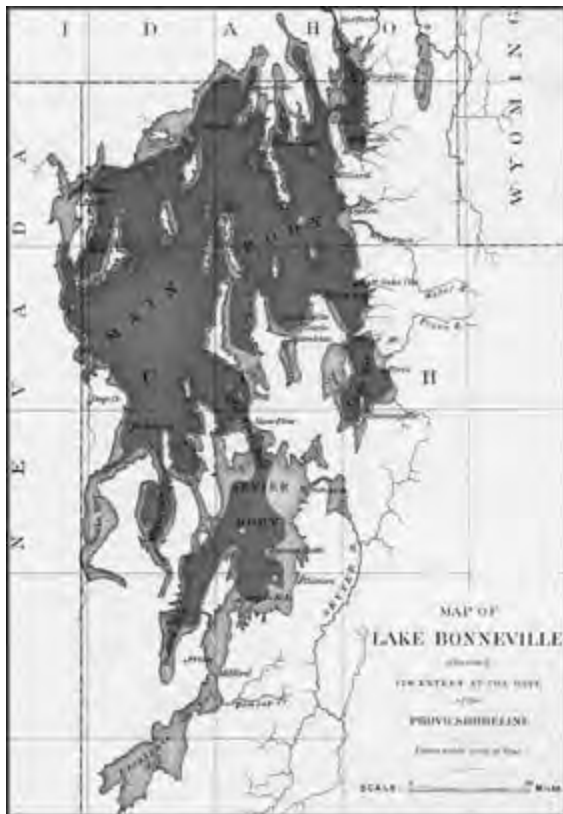


Fig. 193. Map of Lake Bonneville drawn by Grove Karl Gilbert (Yonkee).



Fig. 194. Drawing by Grove Karl Gilbert of remnant shorelines of Lake Bonneville along the Wasatch Range as the lake receded (Yonkee).

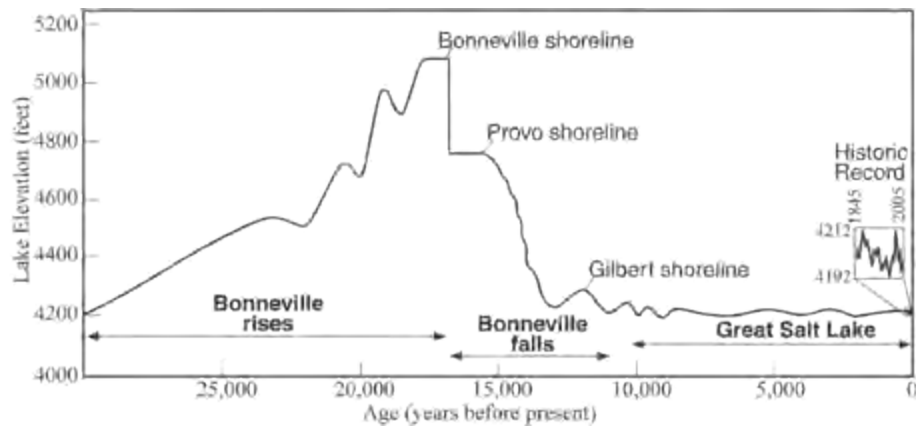


Fig. 195. Elevation drawing of Lake Bonneville (Yonkee).

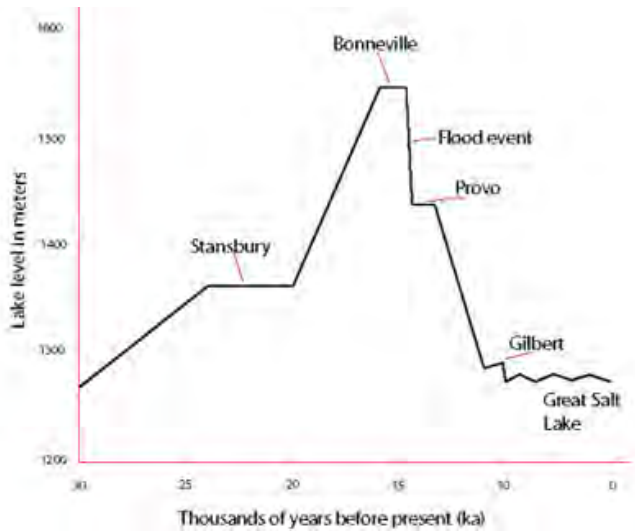


Fig. 196. Additional elevation drawing of Lake Bonneville (History).

MAJOR SHORELINES OF LAKE BONNEVILLE AND THE EARLY GREAT SALT LAKE		
SHORELINE NAME	ELEVATION*** AT ANTELOPE ISLAND	APPROXIMATE AGE IN CALENDAR YEARS BEFORE PRESENT
Gilbert*	4,275	12,800 – 11,600
Provo**	4,840	16,800 – 16,200
Bonneville**	5,220	18,000 – 16,800
Stansbury**	4,445	24,400 – 23,200
* Great Salt Lake shoreline ** Lake Bonneville shoreline ***Feet above mean sea level		

Fig. 197. Major shorelines of Lake Bonneville and the Great Salt Lake (Commonly).



Fig. 198. Benjamin Louis Eulalie de Bonneville, French-born American United States Army officer, fur trapper and explorer of the American west and namesake of Lake Bonneville (Benjamin).

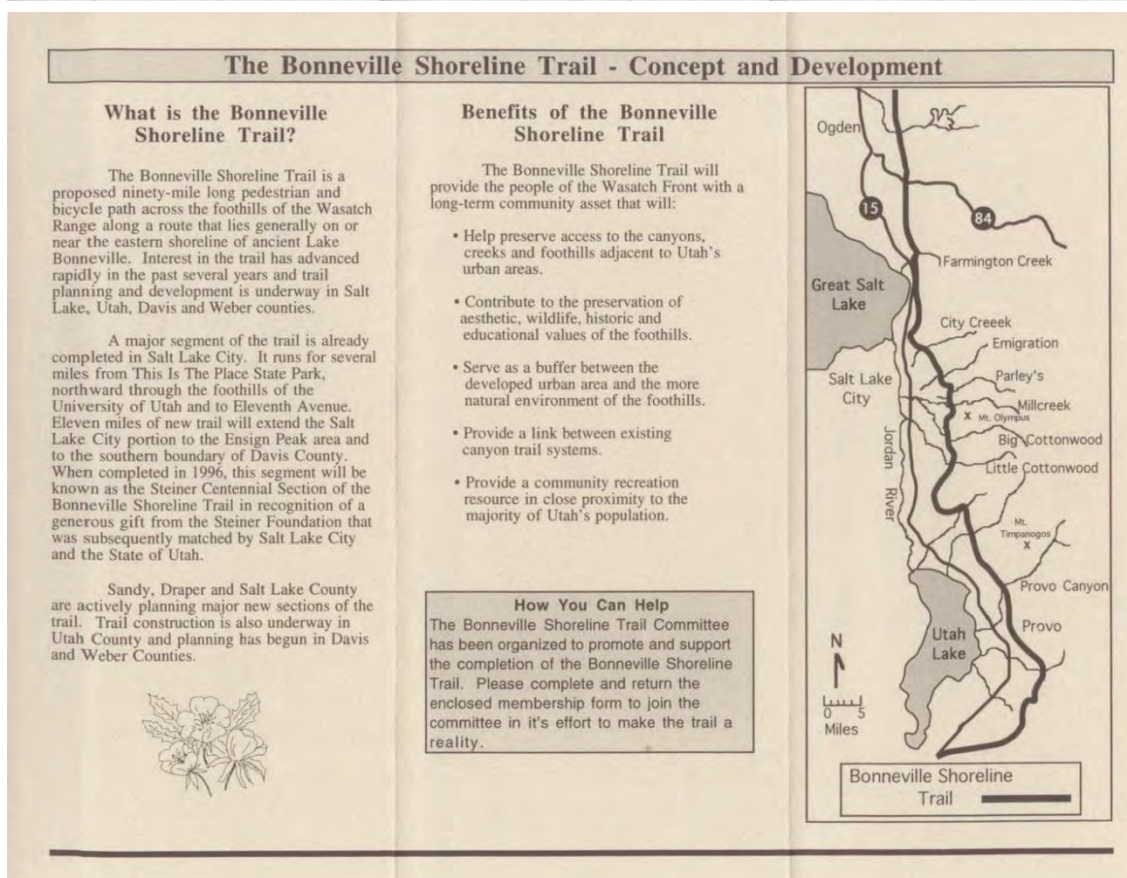
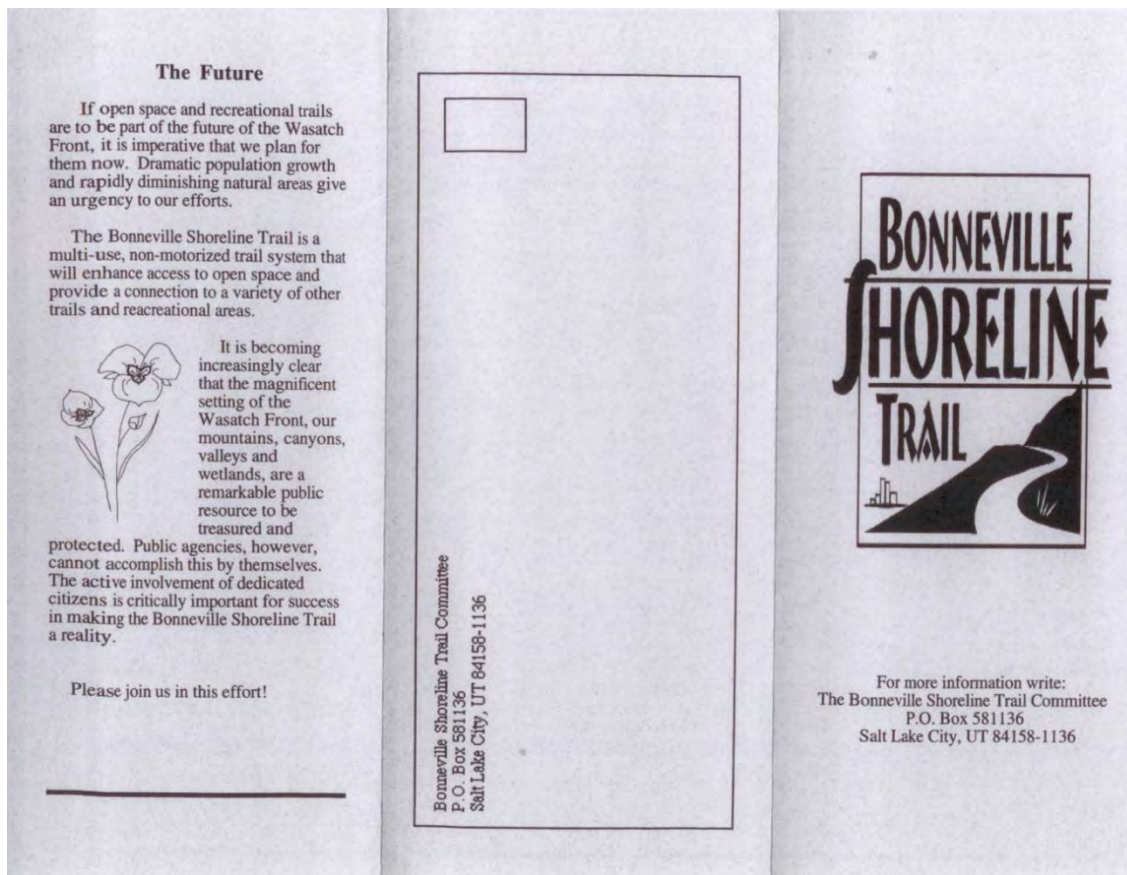


Fig. 199. A pamphlet describing plans for the Bonneville Shoreline Trail printed circa 1996 (Bonneville Shoreline Trail Committee).



Fig. 200. The official logo of the Bonneville Shoreline Trail (Macleod).



Fig. 201. Trailhead inset version of the Bonneville Shoreline Trail logo (Macleod).

Fig. 202. See attached map of 2016 existing conditions of the Bonneville Shoreline Trail.

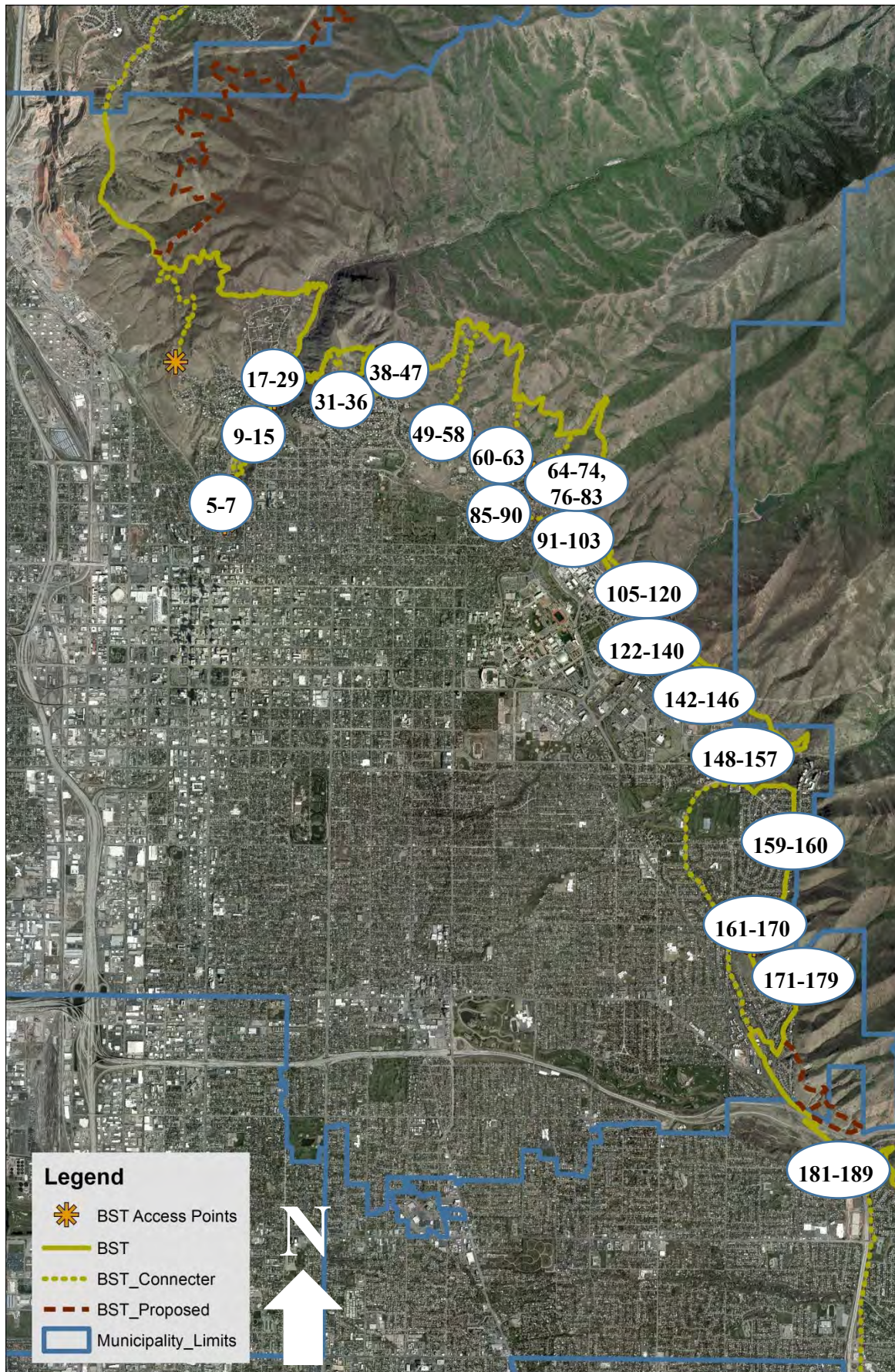
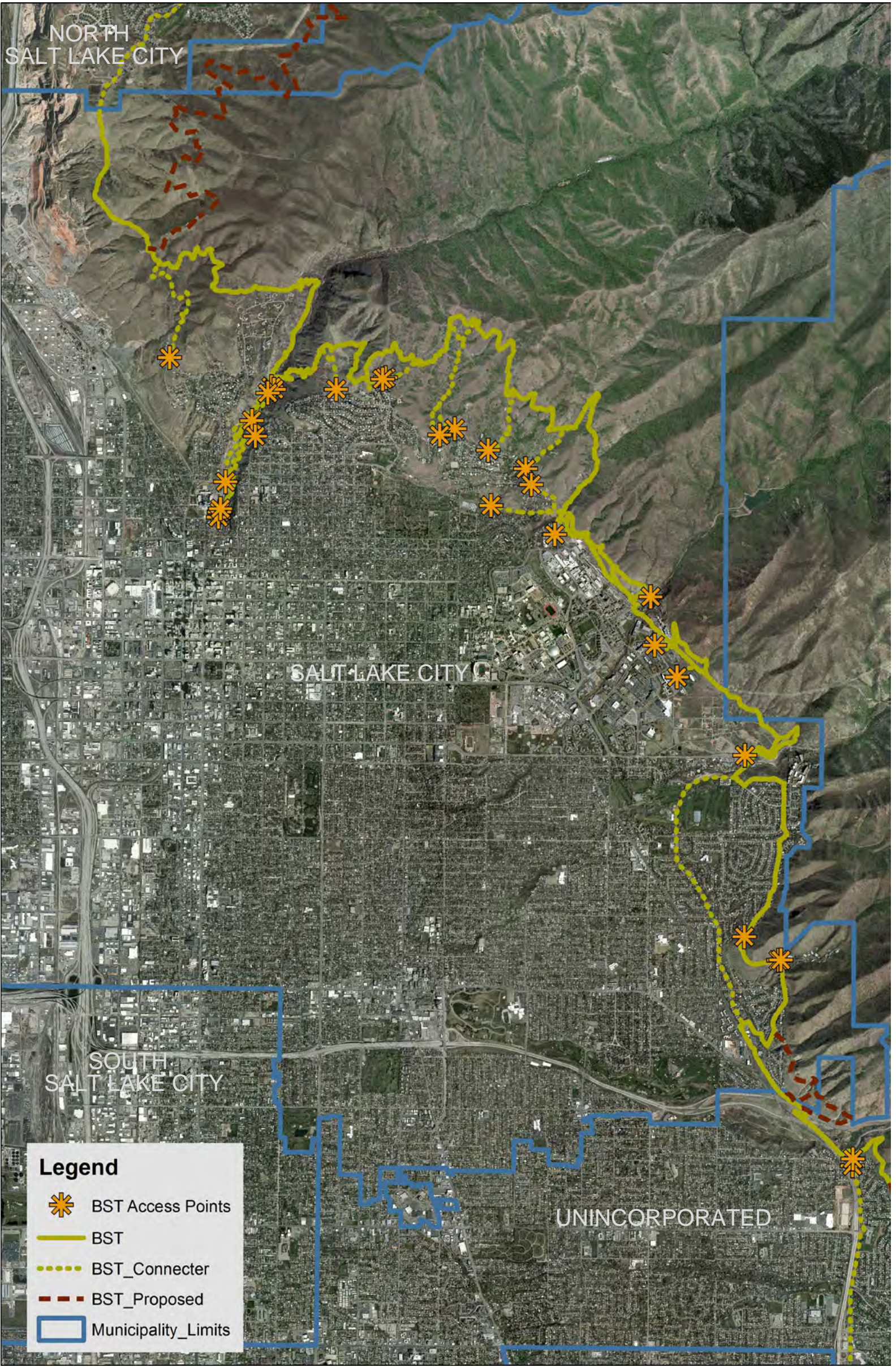


Photo Key (2012)



Imagery taken from AGRC's High Resolution Ortho-Photography (HRO) 6-inch resolution color aerial photography, 2012.



Bonneville Shoreline Trail

Salt Lake City Segment

SALT LAKE CITY SALT LAKE COUNTY UTAH

SALT LAKE CITY
HISTORIC LANDSCAPES REPORT
SLCHLR NO. 28
SHEET 1 OF 1