4.0 Urban Water Trail

One of the key elements of the Jordan River Trail Master Plan is the water trail. Numerous groups and individuals use non-motorized watercraft on the river for recreational purposes; yet to date there has been no documentation or information available to users. It has been a long-standing desire by users, interest groups, and the County to provide valuable information about recreating on the Jordan River, and while a plan was never completed, some data was collected and made available to this planning effort.

Water Trail Data

In 2000, the Great Salt Lakekeeper (GSL), a non-profit organization whose purpose is to protect Great Salt Lake and its tributaries and environment, received a grant from the National Park Service (NPS) RTCA Program, and partnered with the Salt Lake County Division of Parks and Recreation, and SWCA, Inc. and Monson Engineering (both local consulting firms with the intent to complete The Jordan River Navigational Hazards Removal and Recreational Boating Plan (unpublished). Project supporters included the Utah Division of Forestry, Fire and State Lands; Utah Division of State Parks and Recreation, Salt Lake County Engineering Department; Foundation for the Provo-Jordan River Parkway; Utah Whitewater Association; and SPOLE.

Data was collected during the summer of 2001 using Geographic Information Systems (GIS), and was processed over the winter of 2001. Maps and a database were created, and GSL then began making presentations to municipal representatives and government agencies during 2002. Though results of the data collection were never published, critical and valuable information regarding hazards, river conditions, and recreational opportunities was gathered. The data was generously provided in electronic format and was critical in developing the Urban Water Trail portion of the Master Plan, primarily because it provided the viewpoint of experienced boaters and recreation planners.

According to those who participated in the data collection, the conditions necessitating the study included the following: the Jordan River is largely perceived as unsafe for recreational boating, hazards create liability for responsible parties, the general public is not aware of hazard locations, demand for recreational boating is high, public access is severely limited, existing boating facilities are underdeveloped, the river is not perceived as a public waterway, and no coordinated water trail plan exists.

Desired results of the uncompleted project were to develop maps of hazards and recreation points, and to create navigational hazards removal and recreational boating plans, as well as produce information and marketing tools such as CD ROMS, multi-media shows, and website applications. The goal was an Urban Water Trail Guide Book that would act as a complete trail guide for the Jordan River with information on water trail facilities, wildlife in the Jordan River corridor, and cultural information.

Two Utah laws corroborate these goals, and designate the unique status of the Jordan River as a public, navigable waterway, and require planning and implementation providing better access for boating and public use.

Administrative Rule R652-70-100: Sovereign Lands

This rule provides for the management and classification of the surface of sovereign lands in Utah, which include but are not limited to, the beds of Bear Lake, the Great Salt Lake, Utah Lake, the Jordan River… It also provides for the issuance of special use leases, general permits, and easements on sovereign lands and the procedures and fees necessary to obtain these rights of use. This rule implements Article XX of the Utah Constitution, and Section 65A-10-1.

Administrative Rule R652-2-200

The State of Utah recognizes and declares that the beds of navigable waters within the state are owned by the state and are among the basic resources of the state, and that there exists, and has existed since statehood, a public trust over and upon the beds of these waters. It is also recognized that the public health, interest, safety, and welfare require that all uses on, beneath or above the beds of navigable lakes and streams of the state be regulated, so that the protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality will be given due consideration and balanced against the navigational quality or economic necessity or justification for, or benefit to be derived from, any proposed use.

About Water Hazard Names & Classifications

The existing condition of the Urban Water Trail is described beginning in Section 4.1, and represents the data collected during the GSL/NPS study. They divided the river corridor into 15 different sections, and the hazards and facilities within each section were given an individual waypoint number and mapped using GIS. Descriptions and photographs were also collected as necessary and are included here. Using the expertise of experienced boaters and recreation planners, the project team assigned a level of risk to each hazard and a functionality and location value to each facility using the most dangerous hazard as a point of comparison for other hazards, and the best facilities as points of comparison for water trail facilities.

The project section numbers do not correspond with the segment numbers of this plan, therefore, the waypoints described in the text and shown on the maps indicate the GSL/NPS section number followed by the data point number within that section. This number is followed by the hazard ranking in parentheses. Hazard levels can vary depending upon the level and flow of the river. The rankings shown were assigned at the time of data collection in the summer of 2000, a low water year.

Some waypoints are described as launches, take-outs, or portages. A launch is a put-in where boaters can begin a trip, a take-out is where boaters end a trip, and a portage is composed of two sites, where boaters must take-out around a hazard and put-in again on the downstream side of the hazard. Some locations may serve as both launches and portages or take-outs and portages. Sites that serve as launches or take-outs need convenient access to parking and restrooms and require larger ramps for staging large groups. Sites that serve only as portages require smaller ramps, and do not need access to restrooms or parking.

Launches, put-ins, and portages were ranked according to current level of functionality in 2002, and the value of the location as a system-wide element. For example, a waypoint that is rated with low functionality and high value location, does not function adequately in within the water trail system as a whole and individual site characteristics.

Overall Issues, Opportunities, and Recommendations

The issues pertaining to the overall water trail corridor are discussed below, followed by an explanation of water hazard documentation in general. Detailed descriptions of existing conditions, issues and opportunities, and recommendations for each of the twelve corridor segments are then provided in section 4.1 through 4.12.

Trail Gaps

Discontinuous trail segments prevent water trail users from enjoying a continuous trip on the Jordan River through Salt Lake County, and the primary factor causing this fractured condition of the water trail is the prevalence of hazards and impassable elements within the river corridor. These hazards range from dams, weirs, and debris to bridges with low clearance. In addition, portage facilities and rights-of-way have not been negotiated to give water trail users a clear, safe route through the entire Jordan River corridor.

One of the most important keys to improving the functional level of the water trail corridor is to "fill in" these gaps by negotiating hazard removal, negotiating and developing appropriate portage facilities around the hazards, and improving safety and awareness through signage and education efforts.

Signage

Signage along the Urban Water Trail currently represents a hodgepodge of designs, information content, and purposes, and presents trail users with incomplete and sometimes confusing, information about the trail facilities. Water trail facility signs are sporadic and inconsistent, and the trail lacks consistent location signs for information and emergency purposes as well as water hazard warning signs.

The Foundation for the Provo-Jordan River Parkway, along with Salt Lake County developed a standard trailhead sign which has been installed at several trailheads along the river, though they typically do not have any information regarding water trail facilities, guidelines,
safety information, or water trail maps. This plan recommends the implementation of a comprehensive signage program to improve the functional level, safety, and awareness of the water trail. Detailed information can be found in section 5.4 of this plan.

**Trail Maps**

The lack of a comprehensive, easy-to-read, readily available map prevents many potential water trail users from exploring the Jordan River. As discussed in Chapter 5, a comprehensive water trail map should be incorporated as part of the Salt Lake County standard trailhead sign design. In addition, the County should make mapping available online, and in printed format that water trail users can utilize to plan trips, and to take with them on their visits to the Jordan River. These map could take the form of a guide booklet or large foldout map, and could include information on the history of the river, flora and fauna found along the river, and cultural information. These printed guides should be made available online and at County facilities throughout the Salt Lake Valley. An excellent example is the “Willamette River Water Trail Guide,” which can be viewed and downloaded at www.willamettewatertrail.org.

**Bridges**

Too many bridges across the river detract from the quality of the water trail user experience and can present hazards if not designed and installed correctly. Therefore, the number of new bridges should be strictly limited.

**Water Trail Hazards**

Concrete, flooded debris, trees, garbage, and overhanging limbs cause dangerous boating conditions on the Jordan River, particularly those noted as medium, high, or very high hazard in the following text. Water trail hazards can vary with the level of the river. The general public needs to be informed of the risks to make educated decisions about recreation on the Jordan River. Salt Lake County should also be negotiating with responsible parties for hazard removal or safe portage around these facilities, including appropriate signage.

**Trailheads**

More water trailheads are needed that provide adequate parking in close proximity to launch and portage locations. Interpretive signage at water trailheads should inform water trail users about the history and ecology of the river, including plant and animal species they may encounter on their river trip.

**Water Trail Facility Designs**

Launches and portages need to be developed with safe, flexible, functional designs that meet water trail user needs at different flow levels of the river, and that accommodate boating parties of varying sizes and skill levels.

**Kayak Parks**

Kayakers have expressed an interest in developing kayak play areas at 2100 South and 6400 South. This plan recommends additional studies to explore the feasibility of such parks.

**Rowing**

Rowers are currently practicing on the Great Salt Lake and Surplus Canal, and have expressed an interest in rowing facilities closer to the cities. The site requirements for rowing cannot be met along the Jordan River and facilities are not included as part of this plan.

**Water Level**

The ability to travel the entire river length depends on the water level. Sometimes the flow is too low to allow boats to pass, and other times the flow is too high for all recreational users except those who are very skilled and who have first-hand knowledge of the corridor and its hazards.

**Comprehensive Planning**

A comprehensive regional plan for the Jordan River from its origin at Utah Lake to its destination at the Great Salt Lake should be developed in coordination with this plan to facilitate access to these sovereign waters.

### 4.1 Segment 1: Bluffdale

**(Southern County Line to 15400 South)**

(GSL segments 2, 3, and 4)

The Jordan River flows north from Utah Lake, and enters Salt Lake County at the Bluffdale City boundary, near the Jordan Narrows Diversion Dam and Canals. There is no official public access to the Jordan River Urban Water Trail in this area. The land is owned by the Jordan Valley Water Conservancy District, Union Pacific Railroad, and the canal companies, and there is no accessible water launch for recreational boaters to begin a trip in this segment, to end a trip from Utah County, or portage through the area. Water trail users are currently faced with unsafe conditions as they try to pass through the area, or to try to begin a river trip in this portion.

As water trail users travel downstream from Utah County, they encounter the Jordan Narrows Pump Station barrels at waypoint 2-08 (high hazard), just south of the Salt Lake County line. This forces boaters to take-out at waypoint 2-09 (high hazard) to get around the Jordan Narrows Pump Station and Turner Dam. This portage has low functionality, and is a high value location - it is a critical portage, but

![Figure 4.1.4 Portage put-in for the Turner Dam at the Narrows (WP 3-03)](image)

![Figure 4.1.5 Foot bridge for Gauging Station Bridge at the Narrows (WP 3-04)](image)

Concrete, flood debris, trees, garbage, and overhanging limbs cause dangerous boating conditions on the Jordan River. The river then flows through the Turner Dam, waypoint 2-09 (high hazard), and underneath the Union Pacific rail bridge, waypoint 2-09 (zero hazard). There is concrete in the channel under the bridge, waypoint 2-09a (high hazard). There is no accessible water launch for recreational boaters to begin a trip in this segment, to end a trip from Utah County, or portage through the area. Water trail users are currently faced with unsafe conditions as they try to pass through the area, or to try to begin a river trip in this portion.

![Figure 4.1.6 Rapids and split channel at the Narrows (WP 2-06)](image)

The ability to travel the entire river length depends on the water level. Sometimes the flow is too low to allow boats to pass, and other times the flow is too high for all recreational users except those who are very skilled and who have first-hand knowledge of the corridor and its hazards.

![Figure 4.1.7 Rapids, right channel at the Narrows (WP 2-07)](image)
because of the low clearance. Users proceed through small rapids, waypoint 3-05 (zero hazard), and past a mid-stream island which clogs the channel, resulting in a narrow passage, waypoint 3-06 (low hazard). The river splits around the island with the main channel passing to the left, waypoint 3-07 (low hazard), and an area with overhanging limbs along the west shore. There are only 3 islands remaining in the Jordan River Corridor within Salt Lake County - a remnant of the past historical character of the river before settlers modified the river course to meet their agricultural needs.

Next boaters encounter the Rock Garden rapids, waypoint 3-08 (low hazard), passing through the 50-yard-long right-split of the river with a riffle, waypoint 3-09 (zero hazard), and the tail end of the Rock Garden rapids, waypoint 3-10 (medium hazard). The water trail then proceeds through three sets of rapids, waypoints 3-11 (zero hazard), 3-12 (zero hazard) and 3-13 (medium hazard), where the left and right forks of the channel rejoin at waypoint 3-14 (medium hazard).

Boaters proceed north where the river splits again with the main channel going to the west, passing through rapids at waypoint 3-15 (zero hazard), 3-16 (zero hazard), 3-17 (medium hazard), 3-18 (zero hazard), 3-19 (zero hazard) rapids. The forks of the river join near waypoint 3-20 (zero hazard), where the spillway canal also meets the river. The water trail continues through rapids at waypoint 3-21 (zero hazard) where there are large chunks of debris and concrete in the channel. The river passes under waypoint 3-21a (zero hazard), a historic bridge crossing and through waypoint 3-22 (high hazard). Old pilasters of a bridge that have been left in the river channel and along the sides.

The trail flows north about a quarter of a mile to waypoint 3-23 (medium hazard), where flood debris with rapids block 90 percent of the channel. Boaters then pass an old irrigation diversion with one wall remaining on the bank, and an old structure on the west bank, waypoint 3-24 (zero hazard). Water trail users must then take-out before they reach waypoint 3-25 (zero hazard), the lower dam at Jordan Narrows. Waypoint 3-26 is the portage for this dam and is located on west side of the dam between the irrigation and diversion dam. It has low functionality and a high value location. Boaters then launch at waypoint 3-27, a put-in on the west bank composed of a concrete ramp heading down to the river. This launch has low functionality and a high value location.

The trail continues to waypoint 3-28 (high hazard), where flood debris totally chokes off the river and causes a one-foot drop in the water. There is no way to get a boat through this area, and boaters must take-out and put-in between the dam and railroad crossing with no safe portage and launch. The river then flows to waypoint 3-29 (high hazard), where a fallen tree on the west side and two closely-spaced trees impede travel. There is more flood debris at waypoint 3-30 (high hazard), just south of the railroad bridge, and at waypoint 4-01 (medium hazard), where flood debris has collected under the railroad bridge and covers 75 percent of the channel.
Issues and Opportunities

• The approach to the barrels and portage are not safe.
• The portage at waypoint 2-09 functions well, but is not in the best location. Water trail users continuing down the Jordan River from Utah Lake have been hauling their canoes along the rail line trying to get to a place where they can safely re-launch. There is not a safe route from the portage to a safe, convenient launch.
• The existing launch at waypoint 3-03 is too far from the existing portage.
• The gauge station bridge at waypoint 3-04 is too low.
• The concrete at waypoint 3-02a should be removed if users will be portaging around this area.
• Old pilasters of a bridge at waypoint 3-22 have been left in the river and are dangerous for boaters. The existing portage at waypoint 3-26 for the lower dam is not suitable for safe use.
• The launch at waypoint 3-27 is not suitable for safe use.

Recommendations

4.1 A Boaters Approaching From Utah County and Completing a Trip at the Narrows or Continuing Down-River
Provider signing up-river to warn boaters of the Jordan River Pump Station barrels stretching across the river at the diversion dam.

Provide a safe portage up-river of the pump station and diversion dam for boaters completing a trip from Utah County, or those who wish to continue on the river. The launch portion of the portage should take place on the downriver side of the dam north of the small parking lot and driveway at the caretakers home. This is not an official launch point; it is a fairly long portage allowing boaters to continue on their river trip.

Current land ownership and security issues may make this difficult; however, in the future the portage and limited parking spaces would greatly enhance the boating experience and enhance safety. As improvements in the area are addressed, consideration should be made to accommodate safely exiting the river at this point. A reservation system may also work, where boaters must make prior arrangements with the property owner to park a car and/or be picked up at the portage. Boaters would also have access to the restroom and parking available at the new Jordan Narrows Trailhead.

4.1 B Gauge Station Bridge (Waypoint 3-04)
Remove, and replace if necessary, as this bridge is too low and causes hazardous conditions.

4.1 C Hazards (Waypoint 3-22)
Remove and appropriately dispose of the concrete pilasters which remain in the river.

4.1 D Portage and Launch (Waypoints 3-26 and 3-27)
Redesign the existing portage and launch, and combine if possible. This is a desirable location for a portage and launch.

4.1 E Interpretive Opportunity (Waypoint 4-05)
A cultural interpretive opportunity exists with the old power station. Interpretation should be addressed corridor-wide and include consistent signing.

Construction Costs

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