

# JORDAN RIVER CORRIDOR

# **JORDAN RIVER CORRIDOR**

**A Proposal Prepared for the  
CUP Completion Act Section 8 Advisory Team**

**Prepared by the Jordan River Corridor Workgroup  
Led by Utah Division of Parks and Recreation**

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## JORDAN RIVER CORRIDOR WORKGROUP PARTNERS

Many individuals dedicated their time to participate in the various workgroup meetings, many which were held in the evening hours. Such time is one of the most valuable and yet often overlooked assets in the development of public policies and recommendations. A special thanks is expressed to those listed below who contributed their time to insure successful completion of the Central Utah Project along the Jordan River Corridor.

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# JORDAN RIVER CORRIDOR

## INTRODUCTION

The Jordan River runs through the most densely populated area in Utah from Utah Lake to the Great Salt Lake. What was once considered to be prudent use along the Jordan River is now recognized as abuse. Many characteristics of the Jordan River and adjacent lands have only recently been recognized for their own worth as integral components of a valuable ecosystem. Human use of the river and surrounding land has led to losses of wetlands including riparian wetlands, fish habitat, and many recreational opportunities. These losses increase flooding damage, and decrease water quality, wildlife use, and the quality of life in Salt Lake and Utah valleys. The many competing uses of the river and its flood plain for irrigation, water supply, water conveyance, housing, commercial and industrial activity, fish, wildlife, and recreation are often in conflict. Recent projects to preserve and restore these valuable natural resources have been quite successful locally, but efforts are fragmented.

The purpose of the Jordan River Corridor Proposal is to restore, preserve and promote wetlands, fish, wildlife, and recreational values in and along the Jordan River. Central Utah Project mitigation efforts will enable significant wetlands to be acquired for public ownership along the length of the river, riparian wetland vegetation and fish habitat to be restored at selected locations, and recreational access to be provided and educational/interpretive opportunities developed. Acquiring wetlands in public ownership

will allow management for public and natural values now and in the future.

Riparian wetland restoration projects will stabilize stream banks and improve aesthetics and wildlife habitat. Fish habitat improvement efforts will provide for more and better angling opportunities close to a large population center. Recreational and educational development will further enhance those opportunities and provide other benefits.

Under direction of the Utah Division of Parks and Recreation three task forces within a larger workgroup were established to develop a coordinated, comprehensive funding proposal that includes plans for wetland acquisition, fish habitat, riparian habitat and recreational facilities along the Jordan River corridor. The underlying policy statements for this project have been developed by an Interagency Coordinating Committee and are listed below.

- Projects must be within the Jordan River Corridor as designated in the 1973 Utah Code Annotated for the Jordan River Parkway Authority, now called the River Enhancement Act.
- Priority for project funding should be to acquire wetlands that available, or for which there are willing sellers. If neither are available, priority funding would go to other projects as outlined in the project budget. Wetland acquisitions are highest priority.
- Project funds should be allocated to benefit all communities. Significant

value consideration will be given to projects if: (1) matching funds, materials or services are available; and (2) projects benefit existing recreational and riparian capital improvements.

- Priority should be given to project implementation rather than planning, mitigation and studies.
- Projects must conform to NEPA and other local permitting processes/laws.
- To vouchsafe federal funding, an existing authority should administer the funds pursuant to federal accounting and auditing procedures, e.g., Riparian and fish habitat projects could be managed by the Utah Division of Wildlife Resources (see Appendix A); recreation projects and land acquisitions could be administered under the State Riverway Enhancement Grant Program by the Utah Division of Parks and Recreation (see Appendix B); and a *Jordan River Sub-Basin Watershed Management Council* has been established by Salt Lake County to coordinate and facilitate preservation and restoration efforts—including areas along the Jordan River (see Appendix C). The Management Council may address conflicting objectives related to flood control and water quality among various interests along the river. The *Jordan River Sub-Basin Watershed Management Council's* coordinating role may result in more efficient and effective management of the Jordan River's resources.

## AUTHORIZATION AND FUNDING

The Central Utah Project (CUP) Completion Act of 1992 provides for several projects along the Jordan River.

## SEC. 311. JORDAN AND PROVO RIVER PARKWAYS AND NATURAL AREAS

(a) FISHERIES - Of the amounts authorized to be appropriated by section 201, \$1,150,000 shall be available only for fish habitat improvements to the Jordan River.

(b) RIPARIAN HABITAT REHABILITATION - Of the amounts authorized to be appropriated by section 201, \$750,000 shall be available only for Jordan River riparian habitat rehabilitation, which amount shall be in addition to amounts available under the 1988 Definite Plan Report.

(c) WETLANDS - Of the amounts authorized to be appropriated by section 201, \$7,000,000 shall be available only for the acquisition of wetland acreages, including those along the Jordan River identified by the multiagency technical committee for the Jordan River Wetlands Advance Identification Study.

### (d) RECREATIONAL FACILITIES -

(1) Of the amounts authorized to be appropriated by section 201, \$500,000 shall be available only to construct recreational facilities within Salt Lake County proposed by the State of Utah for the "Provo/Jordan River Parkway", a description of which is set forth in the report accompanying the bill H.R. 429 (S. Rept. 102-267).

(2) Of the amounts authorized to be appropriated by section 201, \$500,000 shall be available only to construct recreational facilities within Utah and Wasatch Counties proposed by the State of Utah for the "Provo/Jordan River Parkway," a description of which is set forth in the report accompanying the bill H.R. 429 (S. Rept. 102-267).

The following intent language is provided by Congress: (*Conference Committee Report, October 5, 1992, for the Reclamation Projects Authorization and Adjustment Act*):

The Provo/Jordan River Parkway was initiated in the 1970's. First established under a special authority granted by the Governor, the Parkway was to cover a 131-mile corridor from the Great Salt Lake to the Uinta Mountains. Developed as a flood control measure and for environmental protection and recreational enhancement along the rivers, the Parkway experienced rapid development for the first ten years. In the mid-1980s, loss of funding sources left large segments of the Parkway incomplete. It is the Committee's intent in Section 311(d) that the Commission provide assistance to the State and local recreational agencies in completing the Parkway through the acquisition of lands or easements and the construction of small parks and recreational features within the Parkway, including but not limited to pedestrian and bicycle paths and bridges, nature trails, education centers, signs, parking areas, and sanitation facilities.

Additional federal, state, and local authorizations and regulations support projects contemplated in this proposal:

**Section 404 of the Clean Water Act** precludes dredging and filling of wetlands. A Jordan River Wetland Advanced Identification Study (WAIDS) identified wetlands unsuitable for fill pursuant to 40 CFR 230.80 of the 404 (b)(1) guidelines.

**Section 319 of the Clean Water Act** provides grants for non-point source pollutant programs.

**Section 104-b of the Clean Water Act** permits storm water pollutant programs and may be a future source of funds.

Utah Code Annotated 63-11-16.5 and 63-11-17.5 established the Provo/Jordan River Parkway Authority and its powers.

Utah Code Annotated 63-11-17.7 outlines the Riverway Enhancement Grant program.

Public Law 88-578, Land and Water Conservation Fund Act, stipulates and supports leisure development pursuant to the currently authorized SCORP and Open Project Selection Program authorized and required by the National Park Service and Department of the Interior.

Local ordinances and resolutions of intent by ten local jurisdictions supporting the Provo/Jordan River Parkway—State River Enhancement Program; S.L.County Ordinance, Chapter 17.06—Jordan River Sub-Basin Watershed Management Council.

## PROBLEM STATEMENT

The Jordan River lies in the heart of Utah's urbanized center. It extends 45 miles from Utah Lake in the south, to the Great Salt Lake in the north. The character of land uses near the river varies from farms and scattered homes to dense urban industrial and residential uses. Because of its urban location, it has a great potential for abuse, and, if protected and managed well, a tremendous resource management and leisure opportunity for the public.

The Jordan River ecosystem was developed for use by humans and has been used for a great number of activities



in conflict with its natural system and the public benefits that could be provided by it. The river has suffered from: industrial and municipal waste discharges; encroachment of industrial, commercial, and residential activities on its flood plain; dredging and channelization; extensive water diversions and manipulations; and polluted runoff from streets and fields. Many wetlands, riparian wetlands, fish habitat, and recreational uses have been destroyed by these activities.

In general, the section of river from Utah Lake to around 12300 South Street in Salt Lake County has been least affected by encroachment and channelization, but suffers from dewatering in the winter below the outlet works at Utah Lake. The section between 12300 South and 2100 South Streets has been channelized and has certain areas where sediment regularly deposits; various levels of encroachment affect the section. The section from 2100 South Street to the Great Salt Lake contains both the most channelized and urbanized portions of the river, but also has relatively wild areas in the delta as it enters the lake.

**Wetlands:** The sensitivity and scarcity of wetlands, combined with the values and functions they provide to the Salt Lake Valley as a whole (flood control, improving water quality, providing wildlife habitat, etc.), create a need for increased protection, conservation, management and restoration efforts of local, state, and federal agencies.

Only 2000 acres of wetland remain along the undeveloped reaches of the Jordan River between the 2100 South Street to the Point-of-the-Mountain or county line. Pressure for property development within the Jordan River corridor will increase,

with subsequent loss of critical flood storage, nutrient and pollutant retention, ecological food chain support, fish and wildlife habitat, and recreational opportunities.

The functional values of the Jordan River wetlands are important to Salt Lake County. It is notable that the Corps of Engineers and EPA have recommended these wetlands be "presumptively unsuitable" for issuance of any discharge or fill permits. The County then recommended to then Congressman Wayne Owens that these wetlands be purchased. A proposal was made to buy about 1000 acres of the highest priority wetlands for inclusion in the Central Utah Project Completion Act. **These wetlands are summarized in Tables 1 and 2 of the "Wetland Acquisition and Management Proposal for the CUP Completion Act" (Appendix A)**

**Riparian Areas:** Channelization, residential and industrial encroachment, and illegal dumping have disrupted or destroyed much of the natural riparian wetland vegetation along the river. Riparian wetland vegetation is important in stabilizing stream banks, filtering out pollutants and sediments and providing fish and wildlife habitat. Loss of vegetation creates stream bank erosion problems which are often "fixed" with expensive armoring projects, which further reduce fish and wildlife habitat. Stream channel instability provides an opportunity for encroachment by non-native or weed plant species. Riparian wetland vegetation is aesthetically more pleasing than either rip-rap or eroding banks and provides shading and cooling of the water. Past uses have severely compromised the historic value of the Jordan River ecosystem's wildlife habitat. Some species

that are dependent upon riparian plant communities, such as many neo-tropical migrating birds, some mammals, amphibians, and reptiles, have declined in numbers due to loss of riparian habitat. Active riparian rehabilitation efforts and long-term riparian management is needed in many areas to improve natural/ecological conditions.

*Fish Habitat:* The primary cause of fish habitat loss in the Jordan River has been flood control practices such as dredging and straightening the river channel. Since the time of settlement, the Jordan River has been transformed from a richly diverse meandering river to essentially a uniform bottomed trapezoidal channel resulting in high, uniform velocities, and little cover for fish and other wildlife. Effects of channelization on stream communities, including fish, macro invertebrates, and riparian habitat, have been shown to be extremely detrimental and long-term (Brookes, 1988). Channelized sections of the Jordan River are dominated by warm water, sediment tolerant fish, such as carpe and suckers that are not typically favored by local anglers. Less disturbed river sections support desirable game fishes such as trout, walleye, perch, and bass (Bio/West, 1988). Recent changes in flood control philosophies along the Jordan River (CH2MHill, 1992) may provide opportunities for improving fish habitat in the future; however, until flood plain encroachment by development is curbed, requests to rip-rap, dredge, and straighten will continue.

Diversions of water for municipal and irrigation uses reduce flow needed for fish habitat. In the winter, when no releases are made from Utah Lake, extreme low flow (or no flow) conditions exist that limit fish habitat from Utah Lake through Bluffdale.

In this river reach secretive flows maintain life for aquatic organisms during winter. Most of the flow in the lower river during the fall and summer is poor quality return water flow from irrigation or improved quality from sewage treatment facilities. In the future, proposals to re-use treated sewage effluent, rather than return it to the river, may diminish summer flow. High flows in this river destabilized by straightening tend to exacerbate bank erosion. Water quality in the river has improved significantly because two major municipal wastewater treatment plants were constructed between 1978 and 1985. New and future stormwater discharge regulations should help to control nutrients, bacteria, and heavy metals found in urban storm runoff now entering the river. In addition, several sources of toxic contamination are being removed or contained. Remaining water quality threats include unauthorized disposal of construction materials in riparian wetland areas and wetlands, illegal dumping of hazardous or toxic materials, and bank erosion resulting from instability caused by channelization and other alterations (Jensen, 1988).

Many areas of the river are "habitat limited," meaning lack of habitat limits the number of fish produced. If habitat were improved, the number of fish produced could be increased. The Jordan River is primarily a "put-and-take" fishery; it cannot support angling pressure through natural reproduction and must be stocked with catchable channel catfish and catchable rainbow trout. Although recent creel census data is not available, angling is popular in the Jordan River, especially with the local population. The Jordan River provides a unique opportunity for both children and adults to fish near their

homes. To improve the production of this urban fishery, habitat in the river must be improved. Restoration efforts need to be coordinated with Salt Lake City-County Flood Control and others to ensure compatibility with other uses of the river.

**Recreation:** The Jordan River corridor is immediately accessible to 1.2 million people in Salt Lake, Utah and Davis Counties providing an excellent opportunity for water-based recreation. Development of a system of recreational trails and facilities compatible with flood plain, wetland and wildlife functions of the river corridor has been a goal of local communities and the State for at least two decades as cited in the *Jordan River Parkway: An Alternative* published by Utah Technology Associates in 1971. Since the 1970s, over \$11 million has been spent to acquire property and upgrade recreation resources along the river—such as the Jordan River Parkway (trails, golf course, and playing fields); Murray City's Parkway, which includes a golf course, wetlands, and trails system; Salt Lake County's parks; and others. Technical assistance and matching grants are available to communities statewide through the River Enhancement Program, and the non-motorized Trail Grant Program administered by the Utah Division of Parks and Recreation.

## PROJECT DESCRIPTION

**Goal:** To improve and preserve fish and wildlife habitat and other functional wetland values in the Jordan River and to enhance urban wildlife recreational opportunities. This can be accomplished through completion of the following objectives.

**Objective 1:** *Acquire manageable tracts of land for public ownership or management through agreements to preserve the Jordan River wetland ecosystem.*

There are several tasks associated with the acquisition of priority wetlands along the Jordan River:

- Task 1: Wetland identification and confirmation
- Task 2: Processes associated with disclosure and owner notification
- Task 3: Appraisal and negotiation for sale/lease
- Task 4: Management of wetlands following acquisition

The Wetlands Acquisition Committee discussed various alternative solutions to these objectives (see page 2, Appendix A).

**Objective 2:** *Improve riparian wetland and associated terrestrial wildlife habitat.*

Riparian restoration projects will be implemented to: (1) reduce stream bank erosion; (2) improve aesthetics; (3) improve wildlife habitat; (4) improve fish habitat; (5) reduce non-native plants while increasing native plants; and (6) provide interpretive values in conjunction with recreational developments and complement leisure activities.

Riparian areas along the river will be considered for restoration using the following criteria:

1. Areas or projects with the best potential for improvement, especially where results are visible enough to encourage additional restoration efforts.
2. Areas or projects where the probability for success is high and the expected longevity of the project is long. This will include projects where management responsibility is clear and where responsible parties have demonstrated a commitment to improvement and preservation of riparian areas. Projects on publicly owned or managed lands are preferred; if on private lands, legal provision must be made to maintain riparian improvements in perpetuity.
3. Projects that enhance or improve an existing or planned conservation or recreation project are preferred. Riparian projects should be coordinated with CUP fish habitat improvement, wetland acquisition, and recreation projects, and with other city, county, or state projects and plans. Civic and non-profit groups will be encouraged to donate time or funds to assist with development or maintenance of projects.
4. Areas with existing public access are preferred. Access, however, may be managed to reduce recreational impacts to protect other riparian values.

Riparian restoration projects will include the following tasks *in order of priority*:

Task 1.

- Remove dumped material from stream-side areas. The *Jordan River Nonpoint Source Management Plan* (1988) cite unauthorized placement of construction wastes such as sediment, broken concrete, rebar and other debris along the banks and within the channel of the Jordan River, as a major water quality problem impairing many uses of the river, particularly aesthetics and recreation. \*
- Manage livestock and recreational use of riparian zones to avoid tramping and degradation of banks and plant communities. Successful riparian restoration will depend upon the maintenance of beneficial streamside vegetation. Degradation from human and livestock use has been documented. \*
- Regrade over-steepened eroding banks to a 30% - 40% slope. This will better support vegetation plantings, provide safe access for recreationists, and provide more stable banks during high flows. \*
- Remove non-native, nuisance and noxious plant species, such as tamarisk that aggressively invade disturbed areas, provide little wildlife habitat and transpire large quantities of water. Allow noxious weed control in restored areas. ?  
LATER?  
TAMARISK  
COST?
- Replant native species designed to improve bank stability, enhance aesthetics and improve habitat for wildlife and fish. Utah State

University's Department of Landscape Architecture and Environmental Planning has reviewed historic plant communities along the river and has designed some riparian restoration projects that can be used to demonstrate effective vegetative restoration techniques.

Task 2.

- Provide riparian and river corridor management guidelines for communities, along with technical assistance and workshops. Currently, local community leaders and subdivision developers ultimately determine whether riparian areas are enhanced, maintained, degraded or destroyed. The *Utah Reclamation Mitigation and Conservation Commission* (Commission) could fund riparian restoration efforts: a demonstration of the value riparian restoration can bring to the community. Management guidelines, technical assistance and workshops will educate and train those people in position to affect river and riparian health—thus reducing flood hazards, stabilizing stream banks, enhancing native plant communities, wetland protection, improving fish and wildlife habitat, controlling nuisance plants and animals, and managing leisure uses of the resource.

Task 3.

- Acquire key riparian areas that may not fall within the wetland acquisition criteria or priorities. Although no specific parcels have been identified presently, it may be necessary to acquire an easement or parcel not now

in public ownership, but critical to the success of a riparian restoration project.

*Objective 3: Improve fish habitat.*

Fish habitat improvement projects will be implemented to: (1) enhance the fishery, especially for children, with a put-and-take fishery of easy to catch species requiring an emphasis on adult fish habitat; (2) incorporate public access, including handicapped access (ADA), along with habitat improvement projects; (3) provide reproductive and juvenile habitat including enhancement of oxbows; and (4) incorporate interpretation of the fishery along with recreational developments.

**Fish habitat improvement projects along the river will be considered using the following criteria:**

1. Projects where water quality and water quantity are adequate to sustain fish populations or where quality or quantity will be improved by the project sufficiently to sustain fish populations.
2. Projects with the best potential for improvement, especially where results are visible enough to encourage additional fish habitat improvement efforts.
3. Projects where the outlook for success is high and the expected longevity of the project is long. This will include projects where management responsibility is clear and where responsible parties have demonstrated a commitment to improvement and preservation of fish habitat. Projects on or adjacent to publicly owned or

managed lands are preferred; if on private lands, legal provision must be made to maintain fish habitat improvements in perpetuity.

4. Projects that enhance or improve an existing conservation or recreation project are preferred. Riparian projects should be coordinated with CUP riparian restoration, wetland acquisition, and recreation projects, and with other city, county, or state projects and plans. Civic and non-profit groups will be encouraged to donate time or funds to assist with development or maintenance of projects.
5. Areas with legal public access are preferred. Access, however, may be managed to reduce or redirect recreational impacts to protect fish habitat improvements.

In general, from Utah Lake downstream to 2100 South Street in Salt Lake County, habitat to hold stocked catfish and catchable rainbow trout is needed so they will remain in the locations they are planted until they are harvested. Spawning and rearing areas can be improved to provide for natural reproduction and growth, but are of secondary priority. From 2100 South Street in Salt Lake County downstream to the Great Salt Lake, habitat to hold catchable-sized, stocked catfish (not rainbow trout) is needed.

**Fish habitat improvement projects will include the following activities *in order of priority*:**

Task 1.

- Realign or restructure channel to create a stable-river form. In its current

channelized condition, the Jordan River is unstable and will continue to erode its banks and deepen its channel. Where possible, given physical, economic and land use constraints, a stable riffle-pool or step-pool river form should be constructed. A meandering, riffle-pool river would provide better fish habitat, flood plain with riparian and wetland values and a natural corridor for a broad range of leisure uses—enhancing contiguous land ownership and development.

- Recapture oxbows to increase sinuosity and river length: providing a more stable river form.
- Re-slope, stabilize and replant stream banks. Increased riparian vegetation will reduce streambank erosion and subsequent water quality degradation. It will provide cover for fish, herptiles and give shade to keep water temperatures cooler.
- Provide bottom structure. In its current smooth-bottomed trapezoidal form, the Jordan River provides few places for fish to hide or escape high flows. Careful placement of boulders will enhance fish habitat without compromising flood control measures. Features must be carefully designed so as not to trap sediments.
- Provide backwaters for rearing juvenile fish. General lack of backwaters and embayments was identified in the BioWest (1991) study of the lower Jordan River as a limiting factor for fish production.
- Remove dumped material from the channel.

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Task 2.

- Control artificial high summer flows. Work with water users and the Division of Water Rights to find opportunities to reduce high velocities resulting in erosion and deposition that occurs when irrigation flows are released.

Task 3.

- Create rearing ponds in oxbows. If needed, acquire water to maintain the oxbows.

Task 4.

- Enhance winter flow from Utah Lake to 12300 South Street—again working with Water Rights and water users to increase water releases from Utah Lake in the winter to benefit the river system and fishery.

Task 5.

- Promote civic programs to better manage river resources.

*Objective 4: Provide public access to fish and wildlife areas, and develop recreational, educational, and interpretive opportunity (leisure opportunities).*

Recreational, educational, and interpretive facilities will be developed along the length of the Jordan River in accordance with local communities' plans. **The types of projects contemplated for funding, in order of priority, include:**

Task 1.

- Provide a continuous trail along the Jordan River from Utah Lake to the Great Salt Lake—linking communities, recreation features and implementing plans.

Task 2.

- Develop a signing system to advise users of the presence and location of the trail—aid management of sensitive resources and provide control.

Task 3.

- Provide wetland education plazas/kiosks to enhance the use and enjoyment of acquisitions in objective 1, above.

Task 4.

- Insure reference to and inclusion of the Jordan River trail system on state maps; and important linkages to canyons and other trail systems

Task 5.

- Create an information brochure with emphasis on features available.

In order to encourage community involvement, and to stretch funding sources, a program for adoption of certain features (plazas/kiosks/info panels) by civic and/or educational organizations will be created; foundation, corporate, and/or municipal support for wetland and wildlife interpretive sites will be developed; and funding available by

partnerships or other funding cooperation and by enhancing existing capital investment will be maximized. In addition, each school district along the Jordan River should have convenient access to educational features and plazas.

## EXPECTED RESULTS

**Wetlands:** Acquisition of significant wetlands along the Jordan River by public entities will ensure these valuable areas will be preserved for public benefits including flood storage, nutrient and pollutant retention, ecological food chain support, fish and wildlife habitat, and recreational opportunities. Acquisition of these critical areas is key to implementing other portions of this proposal; riparian restoration, fish habitat improvements, and recreational facilities development projects will be more secure and provide greater benefits if located on publicly owned lands, and adjacent to protected wetlands. Local initiatives, such as the acquisition of a Jordan River meander corridor for flood control, will also benefit.

**Riparian restoration:** Riparian restoration will anchor stream banks, reducing erosion, and sedimentation which destroys fish habitat. Aesthetics will be enhanced by providing a visually more pleasing landscape, attenuating urban noise and dust, and moderating temperatures in the stream environment. The project will provide shade, food production, a travel corridor, and habitat for all animal life. Native plant communities will be enhanced. Opportunities for interpretation of wildlife and nature will be increased. **Maintenance costs associated with river dredging will be reduced. Water quality will be improved.**

**Fish habitat:** Fish habitat improvement projects will enhance recreational use of the river, especially for kids. Stocking of easy to catch species of fish is planned. Habitat improvements with emphasis on adult fish habitat for holding and over-wintering will increase the numbers and sizes of fish, and provide greater angling opportunities and satisfaction.

Improvement of reproductive habitat, a secondary goal, will supplement stocked fish and increase the variety of species in the river.

**Recreational access, educational, and interpretive facilities:** Implementation of trails, interpretive, and educational projects will improve the quality of life, education and recreation for the public at large. Contiguous property values will increase, as will the tax base. Facilities will develop opportunities to showcase wetlands and recreational opportunities, including angling, wildlife watching, trail activity and aesthetics along the Jordan River corridor. Funding will allow implementation and enhancement of state and local outdoor recreation plans, including the 1992 *Utah SCORP* and *Parkway Master Plan*.

## PROJECT PARTICIPANTS

The primary entities responsible for implementation of the proposal described above include:

*Jordan River Sub-Basin Watershed Management Council*, will provide coordination of flood control and water quality activities at the federal, state and local levels. Proposed CUP mitigation project designs will be reviewed by the Council for consistency with other program goals and objectives.



Salt Lake County Commission, will sponsor the development of a detailed Wetland Management Plan, and may support wetland acquisition through its Division of Contracts and Procurement Real Estate program.

Utah Division of Parks and Recreation, will provide for disbursement and auditing of funds for implementation of wetland acquisition and recreation, education and interpretation portions of this proposal through cooperative agreements with interested state, federal, local, or non-governmental entities. The division will also encourage matching grants for mitigation projects to further leverage of federal funds.

Utah Division of Wildlife Resources, will implement, or provide for disbursement of funds for implementation of riparian restoration and fish habitat improvement portions of this proposal through cooperative agreements with interested state, federal, local, or non-governmental entities.

It is anticipated that many federal, state, and local interests could be involved in implementing this Jordan River proposal through cooperative agreements with one or more of the above entities. A partial list appears below.

- Bluffdale City
- Draper City
- Lehi City
- Midvale City
- Murray City
- Utah County
- Utah Department of Environmental Quality
- Utah Division of Parks and Recreation
- Utah Division of Water Rights
- Utah Division of Wildlife Resources

- North Salt Lake City
- Riverton City
- Salt Lake City
- Sandy City
- South Jordan City
- South Salt Lake City
- West Jordan City
- West Valley City
- Council of Governments
- Davis County
- Salt Lake County
- U.S. Army Corps of Engineers
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- Audubon Society
- Jordan River Parkway Foundation
- Salt Lake County Fish and Game Association
- The Nature Conservancy
- Trust for Public Lands
- Private land owners
- Utah Association of Conservation Districts
- Utah Outdoor Interest Coordinating Council

## PROJECT ADMINISTRATION AND ORGANIZATION

It is recommended that an existing organization or authority administer projects along the Jordan River. This will result in coordination of similar projects, utilization of existing resources and will take advantage of current policies and fund disbursements programs that are already proven and in place. Suggestions for project administration and organization are listed below:

- The Utah Division of Wildlife Resources (UDWR) will administer projects for the riparian restoration

and fish habitat improvement portions of the Jordan River project.

- The Utah Division of Parks and Recreation (UDPR) will administer project for the wetland acquisition and construction of recreational facilities along the Jordan River through their authorized River Enhancement/LWFC Grants program under the purview of the State Comprehensive Outdoor Recreation Plan (1992 SCORP).

Projects may be reviewed annually by the UDWR and UDPR in the field and by audit. The Jordan River Sub-Basin Watershed Management Council and other appropriate authorities will help maintain the integrity of the resource developments and enhance other land use and water quality impacts on the river, wetlands and riparian areas.

The U.S. Fish and Wildlife Service (USFWS) and the UDWR have responsibility for review of mitigation projects under the *Fish and Wildlife Coordination Act*. Priority wetlands meeting wildlife value criteria should be evaluated by USFWS. Resources within the Jordan River Parkway flood plain corridor may also be considered as part of the Jordan River Parkway, thus providing leisure opportunities where appropriate.

## ACTIVITIES TIMETABLE

Activities will follow the same schedule each year, except that in the first year, monitoring, maintenance and reporting are not necessary. The schedule is meant to generally follow the federal fiscal year, with the expectation that each year's allocation of funds will be available in October.

### Sequence:

*October:* Solicit detailed project proposals

*November:* Evaluate proposals based on criteria

*December:* Select projects for funding

*January:* Prepare contracts

*February-March:* Preliminary project design

*February-August\*:* Perform NEPA compliance

*March-June:* Final project design

*May-July:* Obtain permits

*July-September:* Implement project

*May occur any time of year:* Monitor project

*May occur any time of year:* Maintain project

*September:* Progress report to appropriate authority

*\*Projects should be allowed up to two years for completion. It is possible funding will not be released until NEPA compliance has been achieved.*

## PROJECT BUDGET

The annual total budget request for the Jordan River Corridor project is given in tabular form below:

Improvements	FY94	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Wetlands	*	1.365	3.5	2.135				
Riparian					0.250	0.250	0.250	
Fish Habitat					0.325	0.275	0.275	0.275
Recreation	0.200				0.300			
<b>Total</b>	<b>\$0.200</b>	<b>\$1.37</b>	<b>\$3.5</b>	<b>\$2.14</b>	<b>\$0.875</b>	<b>\$0.525</b>	<b>\$0.525</b>	<b>\$0.275</b>

Allocation of \$50,000 grant to Salt Lake County from EPA to begin wetland and acquisition study (cannot match CUP Mitigation funds). Note: dollar amounts are in "millions" of dollar—rounded—and total \$9.4 million.

A detailed budget for each improvement will be available annually as site-specific project proposals are evaluated and selected by the appropriate authority. It is recommended that these funds be used as a federal grant to encourage local match funding (leveraging when appropriate), where available, to increase the total funding available for each project.

Estimated O&M costs are calculated at 2% or +\$188,000 annually; monitoring and repartion costs are estimated at about +\$100,000 annually—from CUP Completion Act O&M funds.

### POST-PROJECT PLANNING

Following wetland acquisition, habitat improvements, and recreational and educational developments, maintenance and monitoring of the projects will be required. It is expected that funds from the Utah Reclamation Mitigation and Conservation Account, established in Title IV of the CUP Completion Act, will be available for these purposes.

Several types of monitoring will be required. Land must be monitored for encroachments, illegal dumping, vandalism, and other disturbances that may reduce its value for the purposes for

which it was purchased. Habitat and recreational improvements must be monitored periodically to ensure they are in good condition, continue to function and that public purposes and access are assured where appropriate; i.e., no conversions of use (4F).

Habitat improvements should be monitored before and after construction to document the effectiveness of particular designs in meeting the project's objectives. Photo points, population monitoring, or creelcensus techniques may be used. Repair or modification of habitat structures or riparian revegetation efforts may be required in the first years after project completion.

Maintenance will be required to keep the land and improvements in good condition. Activities will likely include repair of fences, weed and fire hazard control, repair of trails and habitat structures, and litter control. The entity responsible for monitoring and maintenance will be identified in the contract. Periodic reports detailing monitoring results and maintenance requirements will be made by the sponsoring agency to the appropriate authority.

**APPENDIX A**

**WETLAND ACQUISITION  
AND MANAGEMENT PROPOSAL**

Written for the Central Utah Project Mitigation Commission by  
Steven F. Jensen for the Salt Lake County Wetland Acquisition  
Committee.

M E M O R A N D U M

June 10, 1993

TO: C.U.P. Jordan River Wetland Acquisition Committee  
FROM: Steve Jensen, Chairman  
RE: Final Wetland Acquisition Plan

Find enclosed the final Wetland Acquisition and Management Proposal to be submitted for incorporation into the Coordinating Committee Report package to the State C.U.P. Mitigation Advisory committee. Hopefully our proposal will be presented in its entirety to the C.U.P. Mitigation Commission.

I would like to express my appreciation for your assistance and time in the preparation of these recommendations. Your input has been a valuable contribution to the entire effort for conservation of these important natural resources.

Sincerely,

Steven F. Jensen, M.P.A.  
Water Resources Planning Coordinator  
Salt Lake County Commission Staff

Attachment: Final Wetland Acquisition and Management Proposal

BOARD OF SALT LAKE COUNTY COMMISSIONERS  
COMMISSION STAFF OFFICE

WETLAND ACQUISITION AND MANAGEMENT  
PROPOSAL FOR THE  
CENTRAL UTAH PROJECT  
MITIGATION COMMISSION

Prepared by

Steven F. Jensen, M.P.A.  
Water Resources Planning Coordinator

for the

SALT LAKE COUNTY  
WETLAND ACQUISITION COMMITTEE

June 10, 1993

## ACKNOWLEDGEMENTS

Many individuals dedicated their time to participate in the Wetland Acquisition Committee meetings, most over which were held in the evening hours. Such time is one of the most valuable and yet often overlooked assets in the development of public policies and recommendations.

The Board of County Commissioners acknowledges the following members of the Committee who donated their time and energy in the development of these recommendations to the Central Utah Project Mitigation Commission:

Steve Jensen, Chairman	Salt Lake Co. Commission Staff
Terry Green	State Div. of Parks and Recreation
Lotti Wann	State Div. of Parks and Recreation
Nancy Lillquist	State Div. Wildlife Resources
Kristi Dubois	U.S. Fish and Wildlife Service
Terry Way	Salt Lake County Engineering
Brent Beardal	Salt Lake County Engineering
Don Davis	Salt Lake County Recreation
Frank Grover	City of West Jordan
Max Hogan	City of West Jordan
Ken Leetham	City of South Jordan
Brian Maxfield	City of Sandy
Sue Ellen Riffkin	Draper Parks Commission
Phil Markham	City of Murray
Carolyn Swenson	City of Riverton
Clo Dillman	City of Riverton
Jeffery Varley	City of Riverton
Rick Bliss	City of Bluffdale
Colleen Bliss	City of Bluffdale
Dale Bateman	Soil Conservation District

To these who have contributed their time to ensure the acquisition of these important wetlands for careful stewardship in perpetuity, the Board of County Commissioners extends its sincere appreciation.

-----  
E. James Bradley, Chairman  
Board of Salt Lake County Commissioners  
June, 1993

# WETLAND ACQUISITION AND MANAGEMENT PROPOSAL FOR THE CENTRAL UTAH WATER PROJECT MITIGATION COMMISSION

## INTRODUCTION

Pursuant to requests by the State of Utah and Central Utah Water Conservancy District, a committee was assembled to develop a proposal for acquisition of wetlands authorized under the Central Utah Water Project Completion Act. Section 311(c) of the Act authorizes \$ 7.0 million for acquisition of wetlands along the Jordan River in return for wetland losses resulting from development of the Central Utah Project facilities.

The process outlined for the Wetland Acquisition Committee includes identifying the problems associated with acquisition, developing an acquisition project and estimating the results, identifying project participants and administration, estimating the project timetable and budget, and identifying any post-planning project needs.

The Wetland Acquisition Committee held five work sessions to develop information supporting this proposal, and reached general consensus on the direction to be taken.

In view of forthcoming development of a site-specific management plan for the wetlands to begin late this summer, the committee outlined several key components to be addressed. The final site-specific acquisition plan is anticipated

to be completed by June, 1994. This plan will support, in greater detail, the priorities and processes to be implemented during the acquisition process which will begin during federal fiscal year 1995.

## PROBLEM STATEMENT

The sensitivity and scarcity of wetlands, combined with the values and functions they provide to the Salt Lake valley as a whole, demand increased protection, conservation, and restoration efforts local, state, and federal agencies.

Only 2,000 acres of wetland remain along the undeveloped reaches of the Jordan River between the 2100 South urban boundary to the Point-of-the-Mountain. This represents less than .005% of the total land area in Salt Lake County. Pressure for property development within the Jordan River corridor will increase, with subsequent loss of critical flood storage, nutrient and pollutant retention, ecological food chain support, fish and wildlife habitat, and recreational opportunities.

These values benefit all residents of Salt Lake County, not just private landowners along the river. Furthermore, these sensitive wetlands are protected by federal law, with the U.S. Army Corps of Engineers regulating wetland loss through the Section 404 permitting process.



However, the Corps faces continuous challenges with claims of inverse condemnation and purported denial of reasonable use of land. The best way to ensure wetland conservation in perpetuity—for all county residents—is fee title purchase, and placement in a conservation reserve.

The U.S. Environmental Protection Agency oversees the activities of the Corps of Engineers in regulating wetlands. In view of recent national policy to prevent "no net loss" of the nation's wetland resources, EPA and Salt Lake County funded an advance identification of Jordan River wetlands in 1986.

The functional values of these identified wetlands are so overwhelmingly important to Salt Lake County, the Corps and EPA have recommended they be "presumptively unsuitable" for issuance of any discharge or fill permits. The County then recommended to then Congressman Wayne Owens that these wetlands be purchased, and the proposal to buy about 1000 acres of the highest priority wetlands, at a cost of \$ 6.9 million, was included in the Central Utah Project Mitigation plan, and subsequently authorized in the Reauthorization Act. **These wetlands are summarized in Tables 1 and 2 on the following pages.**

## PROJECT DESCRIPTION

There are several problems associated with the acquisition of priority wetlands along the Jordan River:

- Wetland Identification and confirmation.
- Processes associated with disclosure and owner notification.

- Appraisal and negotiation for sale.
  - Management of wetlands following acquisition.

The Wetlands Acquisition Committee discussed various alternative solutions to these problems.

- **Wetland Identification and Confirmation**

Perhaps the most difficult process of wetland acquisition is identifying wetlands and attendant values worthy of long-term conservation. Fortunately, this process has been undertaken through previous studies. In 1986, Salt Lake County conducted an advance identification of wetlands along the Jordan River between the Point-of-the-Mountain and 2100 South.

This study used a functional value assessment model developed by Adamus (1983), to estimate relative priority of wetland communities falling within 22 sub-basins along the river (Figure 1). During the study, approximately 2,000 acres of wetlands were identified. About half (935 acres) were considered for acquisition (Table 1), and all 2000 acres were designated under section 404c of the federal Clean Water Act as "presumptively unsuitable" for discharge permits from the Corps of Engineers.

These wetlands were appraised at average values, and sent to Congressman Wayne Owens for inclusion into the Central Utah Mitigation proposal. The total value of these wetlands was estimated at \$6.9 million, which is the basis for the \$7 million authorization for wetland purchase in Section 311(c) of the reauthorization act (Table 2).

BASIN AREA ACREAGE:

BASIN 22: 114 ACRES

BASIN 21: 94 ACRES

BASIN 20: 41 ACRES

BASIN 19: 73 ACRES

BASIN 18: 40 ACRES

BASIN 17: 45 ACRES

BASIN 15: 94 ACRES

BASIN 14: 161 ACRES

BASIN 12: 35 ACRES

BASIN 11: 16 ACRES

BASIN 10: 35 ACRES

BASIN 9: 110 ACRES

BASIN 8: 20 ACRES

BASIN 7: 60 ACRES

BASIN 6: 60 ACRES

BASIN 5: 100 ACRES

BASIN 4: 200 ACRES

BASIN 3: 585 ACRES

BASIN 1: 95 ACRES

TOTAL: 1978 ACRES

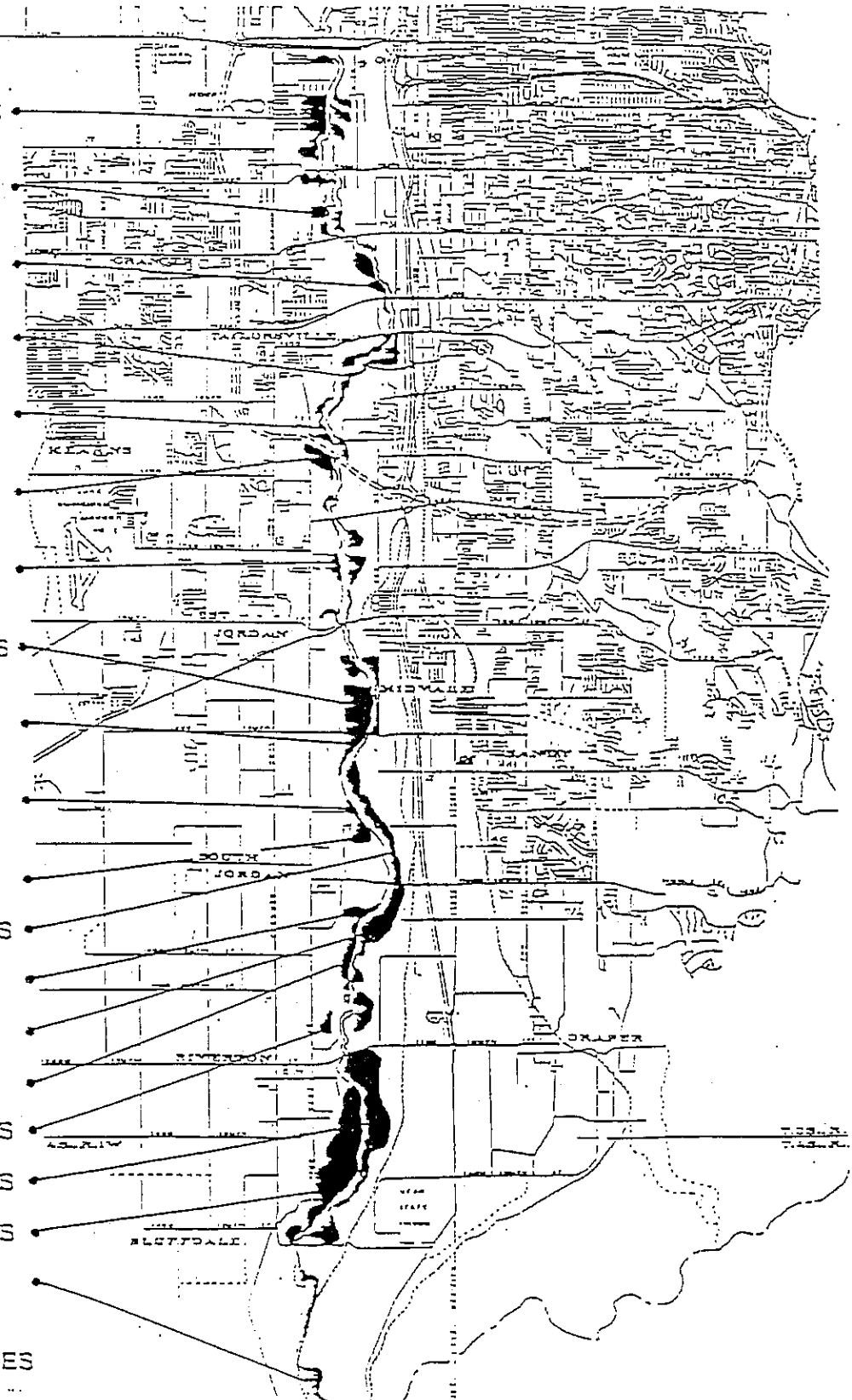


Figure 1. Twenty-two Sub-basin Wetland Areas Determined to be Unsuitable for Discharge of Dredged or Fill Material

TABLE 1.  
PRIORITY WETLAND BASINS  
BASED ON COMBINED VALUE RATING SCORES

BASIN #	TOTAL SCORE	TOTAL WETLAND ACREAGE	PRIORITY GROUP
3	4345	585	I: 3000+
14	3329	161	
19	3204	73	
1	3168	95	
4	3138	200	
Total	17,184	1114 acres	
15	2760	94	II: 2500+
9	2596	110	
21	2584	94	
Total	7940	298 acres	
18	2454	90	III: 2000+
22	2433	114	
7	2427	60	
5	2403	100	
20	2330	41	
6	2196	60	
17	2130	45	
Total	16,373	510 acres	
12	1950	35	IV: 1500+
10	1730	35	
16	1661	5	
8	1619	20	
11	1613	16	
Total	8573	111 acres	
2	1491	5	V: 1000+
13	1268	0	
Total	2759	5 acres	

**TABLE 2.**  
**PRIORITY WETLANDS IDENTIFIED IN 1987**  
**JORDAN RIVER STUDY AND ESTIMATED**  
**ACQUISITION COSTS**

BASIN NUMBER	ACREAGE	EST.COST/ACRE	TOTAL COST	COMMENTS
1	34	\$6,500	\$221,000	50% Public
3	273	\$6,500	\$1.7 million	
4	160	\$6,500	\$1.0 million	50% Public
14	80	\$6,500	\$520,000	CERCLA
15	40	\$6,500	\$260,000	
18	90	\$6,500	\$585,000	
19	73	\$12,000	\$1.6 million	90% Public
20	40	\$15,000	\$600,000	
21	45	\$15,000	\$675,000	50% Public
22	100	\$15,000	\$1.5 million	50% Public
<b>TOTALS</b>	<b>935</b>	<b>\$9,263 Avg.</b>	<b>\$8.7 million (est.)</b>	

- NOTES:
1. Changes in acreages may have occurred due to permitting, illegal activity, mitigation, or alterations in hydrology.
  2. Cost per acre values will be re-examined by Salt Lake County based on current assessed valuations, beginning in June, 1993.
  3. Some areas have been acquired in the last six years, making other areas potential acquisition candidates.

Combined values include flood storage, nutrient/pollutant retention, shoreline anchoring, sediment trapping, food chain support, groundwater discharge, fish and wildlife habitat, and both active and passive recreation.

Since the Jordan River study was completed seven years ago, prior to publication of EPA's jurisdictional delineation guidelines, none of these areas have been confirmed as wetlands regulated by EPA and the Corps of Engineers. However, this confirmation process will occur during development of the detailed wetland acquisition plan to be completed by June, 1994. This will consist of field investigations to begin August, 1993.

- **Processes Associated with Wetland Disclosure and Owner Notification**

Another problem is disclosure of the presence of wetlands to owners and prospective buyers, and methods required to notify property owners of the intent to purchase the wetlands.

One of the central activities to be carried out during development of the Acquisition Plan is owner notification through tax notices or other means. Flagging of these properties will also be considered on county property plats to facilitate disclosure during property and title searches, and help discourage property acquisition for land speculation.

- **Appraisal and Negotiation for Sale**

Although the Jordan River Study identified average costs per acre ranging from \$6,500 to \$15,000, other sources indicate these values to be either too high or too low. Standardization of appraised value is being accomplished in the office of the county assessor, and negotiations will be based on current value of confirmed

jurisdictional wetland, for which only "water-dependent uses" are allowed.

The negotiation process is often accompanied by numerous problems and externalities which may exacerbate property acquisition. Although two wetlands of equal acreage and functional value priority may be desirable for purchase, those who are willing sellers should be given the first option.

- **Post-Acquisition Management, Stewardship, and Operation**

A recurring issue during discussions of property acquisition is long-term management. There is presently no accepted agreement between cities, the county, State of Utah or federal government over which entity would ultimately manage and "operate" wetlands in the conservation pool. The committee did, however, develop a group of stewardship guidelines, which may establish the terms and criteria for good management by the agency acquiring the property.

The Wetland Acquisition Committee developed a series of recommendations that should be recognized by the Central Utah Project Mitigation Commission in requesting funding for mitigation components. These involve mainly pre-acquisition planning, selection criteria, acquisition process, and long-term management.

- **State and Local Activities in Support of the Utah Wetland Management Plan and C.U.P. Mitigation Commission**

The Committee anticipates that many details of these recommendations will be refined during the planning phase to be undertaken by Salt Lake County and the State of Utah beginning early autumn, 1993. This period marks the beginning

phase of the Wetlands Management Plan funded by EPA, State of Utah, and Salt Lake County. The acquisition portion of the project is expected to be completed by January of 1994, and lay the foundation for specific wetland areas to be acquired with federal funds available beginning in fiscal year 1995.

- **Planned Activities and Outputs**

Some of the activities and outputs expected from the County Wetland Management Plan include:

1. Implementing and utilizing the Jordan River Sub-Basin Watershed Management Council, to assist in institutional coordination and integration of river corridor planning activities, including coordination of public and private land uses within the meander corridor, consistent with wetland preservation philosophy. The Council will coordinate with Salt Lake County in the administration of the Jordan River Meander Corridor protection program currently under development by Salt Lake County Public Works. Other duties of the Council are listed in Figure 2.
  2. Identifying property plat parcels containing wetlands and facilitating notification and disclosure to property owners.
  3. Refining wetland parcel identification via field review and confirmation by the Army Corps of Engineers, and determine if Sidwell parcels should be divided for acquisition.
  4. Refining priority acquisition inventory based on collection of these data, and updating recommendations to the C.U.P. Mitigation Commission for funding.
5. Developing legal and institutional tools for implementing the Jordan River wetland management reserve program.
    - **Selection Criteria**

The Committee recommends the following selection criteria, in order of importance, in prioritizing wetlands for acquisition:

    1. **Wetlands possessing the highest composite value ratings contained in the Jordan River Advance Identification Study.**
    2. **Wetlands located within the Jordan River meander corridor identified in the CH2M-Hill Study.**
    3. **Larger wetland "blocks" that are easier to manage.**
    4. Imminence of development threat, such as impairment or loss from transportation, utility, or non-water dependent land use facilities.
    5. Private capital investment that affords enhancement opportunities, dedication, donation or partnerships.
    6. Areas with fewer land use conflicts, law enforcement problems, or which have been master planned for recreational use.
    7. Willingness to manage by a public corporate entity that can provide matching funding or in-kind services.
    8. Property owners "more willing" to sell should have priority over those "not so willing."
    9. Areas with existing parkway implementation activity.

10. Areas with high riparian values supporting greater wildlife habitat.

- Acquisition Process

The Committee addressed the potential of various public agencies to acquire and manage wetlands. Based on the final acquisition list developed from the Management Plan next year, the following recommendations were suggested:

1. **The State of Utah Division of Parks and Recreation should be the lead agency in facilitating distribution of acquisition funds.** In view of past experience in this process along the river, and the administrative capability to support further effort, Parks and Recreation may afford the best agency "clearinghouse" role.
2. **Municipalities should take the lead acquisition role if they commit to the management and stewardship responsibilities outlined in the final Wetland Acquisition Plan.** Cities may prefer to manage smaller acreages, and are in a position to solicit groups that may "adopt" wetlands under terms of the stewardship agreement.
3. **Salt Lake County should provide property acquisition services in conjunction with County Parks and Recreation.** Such assistance to the State of Utah is recommended through development of an agreement to provide such a service, in lieu of contracting for private services.

Since the County will manage the river meander corridor, it is important to involve its real estate program in coordinating acquisitions inside areas deemed under its regulatory jurisdiction.

4. **Consideration was given to purchase of conservation easements.** The Committee rejected easements in favor of fee title purchase. Cost, restrictions, liability and management in perpetuity are more economical through fee title purchase.

5. **Interlocal agreements will be formulated stipulating the requirements of long-term stewardship.** If local entities opt to manage wetlands purchased by the state or county, such a stewardship agreement would stipulate terms of management.

Some sources to be consulted in developing these terms include:

- a. Reversionary clauses used in other state contracts.
- b. Vandalism protection and litter maintenance programs.
- c. Section 404(b)(1) guidelines used by the Army Corps of Engineers in determining wetland impacts and suitable "water-dependent" uses.
- d. Nature Conservancy Standards for property management.
- e. Design criteria in Utah State University Urban Wildlife Manual.
- f. U. S. Fish and Wildlife refuge management guidelines.
- g. Training sessions for parkway management by State Divisions of Parks or Wildlife.
- h. Water monitoring guidelines from EPA.
- i. Implementing Adopt-A-Wetland Programs.

## PROJECT PARTICIPANTS

Participants in the preliminary planning process that comprised the Wetland Acquisition Committee included:

Salt Lake Co. Commission Staff; State Division of Parks and Recreation; State Division of Wildlife Resources; U.S. Fish and Wildlife Service; Salt Lake County Engineering; Salt Lake County Recreation; City of West Jordan; City of South Jordan; City of Sandy; Draper Parks Commission; City of Murray; City of Riverton; City of Bluffdale; Soil Conservation District.

Participants in the long-term and post-planning process for acquisition will include the following agencies comprising the Jordan River Sub-basin Watershed Council:

U.S. Army Corps of Engineers  
U.S. Fish and Wildlife Service  
Utah Division of Water Quality  
Utah Division of Wildlife Resources  
Utah Division of Lands and Forestry  
Utah Division of Parks and Recreation  
Utah Division of Water Rights  
Utah Department of Agriculture  
Utah State University Extension Service  
Salt Lake County Commission Staff  
Salt Lake County Development Services  
Salt Lake County Engineering  
Salt Lake County Parks and Recreation  
Salt Lake County Operations  
Salt Lake County Environmental Health  
Salt Lake County Soil Conservation District

All incorporated municipalities in Salt Lake County

The Draft ordinance creating the Council is attached as Appendix A. This organization will hopefully provide long-term management and coordination of issues

related to parkway and other river-related issues.

## ADMINISTRATION

Administration of the acquisition program is planned to involve state, county and local agencies. The Jordan River Sub-Basin Watershed Management Council will provide coordination of agency activities at the federal, state and local levels.

As explained above, the Salt Lake County Commission, with area-wide authority for both water quality and flood control planning, will sponsor the development of a detailed Wetland Management Plan to be submitted to the state of Utah and C.U.P. Mitigation Commission. Administrative costs for conducting, coordinating, printing and distribution will be born by Salt Lake County Commission Staff, who is contracting the project with the State of Utah and Region VIII EPA.

The State Division of Parks and Recreation should provide the lead agency role in the funding disbursement process. Salt Lake County may support the acquisition process through its Division of Contracts and Procurement Real Estate program.

## ACTIVITIES/TIMETABLE

Since other components of C.U.P. mitigation somewhat depend on the wetland acquisition process, the Committee feels it appropriate to suggest a "compressed" timetable which features more land acquisition early in the process.

Rather than anticipate equal annual funding increments, the maximum



possible, but not less than one-half of the wetlands should be identified for funding and appropriation in FY95, with not less than 30% the second year, and not less than 20% the third year. This enables riparian, fishery, and recreational facilities to be "designed" around wetland use. The Committee expects some overlap in the development of detailed project

proposals for acquisition with completion of the Salt Lake County Wetland Management Plan next winter, with the recognition that acquisition funds will not be available until FY95. wetlands should be identified for funding and appropriation in FY 1995.

PROJECT COMPONENT	INITIATION	COMPLETION
Wetland Acquisition Plan	August 1993	January 1994
Mit. Commission 5-Yr Plan	December 1993	March 1994
Application Deadline	December 1993	FY95

### BUDGET

The projected budget for Salt Lake County's Wetland Management Plan is approximately \$ 50,000, with supporting property acquisition overhead cost funding estimated at \$230,000. The distribution of these costs tracks the 50%-30%-20% acquisition ratio recommended by the Committee:

PROJECT COMPONENT	FY 93	FY 94	FY 95	FY 96	FY 9
A. Management Plan Phase I (SL Co.)	\$10,500	\$10,000			
B. Management Plan Phase II (SL Co.)		\$29,900			
C. Acquisition Phase (Millions \$)	\$3.5	\$2.1	\$1.4		
D. Admin. Acquis. Cost (SL Co.)		\$30,000	\$100,000	\$60,000	\$40,000

The total effort to be expended by Salt Lake County for Wetland Management Planning is approximately \$50,400, of which 75% is contracted with funds from Region VIII EPA. The wetland acquisition portion of the workplan should be completed in January, 1994 (40% of the total funds). The remaining part of the workplan, including project report, is scheduled for June, 1994. To date, no contracts have been signed with Salt Lake County, but the workplan is approved.

The projected appropriations to be requested reflect the recommendations of the Wetland Acquisition Committee to advance the acquisition process ahead of recreation, fishery and riparian activities, and propose a 50%-30%-20% funding ratio over three years.

The cost estimated for Salt Lake County activities in support of acquisition, principally through the Divisions of Engineering and Contracts and Procurement, is approximately \$230,000., a portion of which (\$30,000) would be dispersed from FY94 C.U.P. Mitigation planning funds.

The County will request the remaining \$200,000 in its FY94 budget for land acquisition associated with meander corridor property, about two-thirds of which falls within designated wetlands.

#### **POST-PROJECT PLANNING ACTIVITIES**

In addition to wetland reserve maintenance activities to be undertaken by the designated stewardship agency (discussed previously), some property acquisition is expected to continue.

- **On-going Wetland Acquisition  
Activities**

Only about one-half of the total wetland inventory along the Jordan River between Point-of-the-Mountain and 2100 South was identified for most immediate acquisition with C.U.P. Funds.

It is necessary to secure additional funding for purchase of smaller wetland enclaves not included in the mitigation program. Some type of fund-raising mechanism should be developed in conjunction with the Jordan River Parkway Foundation, State Riverway Enhancement Program, or other public/private organizations.

The Committee recommends that the Mitigation Commission consider funding post-acquisition management activities through the Utah Reclamation, Mitigation and Conservation account provided for under Title IV of the Reauthorization Act. This would provide a potential of up to \$13 million annually for on-going activities.

- **Federal Clean Water Act  
Implementation Funds**

Planning funds authorized under the Federal Clean Water Act for Section 104b and Section 319 entitlements may enable local cities and Salt Lake County to enhance and restore wetlands damaged or modified through historical practices. These funds are generally 60%-40% match dollars, and are directed at point and nonpoint sources of pollution. Updated plans for pollution control include constructed wetlands as a management component.

- **Nature Conservancy**

The Nature Conservancy is shifting its approach to include ecological system acquisition that may occur in urban areas. This program should be further explored.

- **U.S. Fish and Wildlife Service**

The U.S. Fish and Wildlife Service has introduced an Urban Refuge initiative which may provide opportunities in Salt Lake County. It also administers other purchase or wildlife easement programs which could be applicable to the Jordan River Sub-basin. **The Committee strongly urges the Service to pursue this avenue.**

### **PROPOSED SELECTION CRITERIA FOR PRIORITY WETLAND ACQUISITION**

1. Enhancement opportunities for private capital investment in the Jordan River Corridor; build upon proposed development and seek dedication, donation, or partnerships that may result in wetland enhancement.

2. Larger acreages providing more value and management options.

3. Avoid land use conflicts or law enforcement problems.

4. Update wetland jurisdictional delineations with the U.S. Army Corps of Engineers where appropriate, or where questions may arise. The Corps will support our efforts with this provision.

5. Wetlands with adjacent riparian values supporting greater wildlife habitat should have more weight.

6. Imminence of loss or threat by proposed development.

7. Opportunities that may arise for donation, dedication, private development with open space planning element.

8. Cities that have capability to provide matching funds should have more opportunity than those not willing to provide match. (What will happen to "poor cities" like Bluffdale?)

9. Credit and tradeoffs with private property owners who are willing to cooperate. No cooperation with those unwilling to cooperate?

10. Existing trail or parkway implementation activity.

11. Cost or price should be fair and not artificially inflated by speculators. (Prepare 4-5 independent appraisals to develop an accurate basis for pricing?).

12. Wetlands within Meander Corridor, floodways or floodplains should have priority.

13. High valued wetlands next to the corridor but not identified during WAIDS (but near Jordan River), should be evaluated and considered.

14. Composite value rating score from WAIDS study.

**Please consider this as a partial list of selection criteria.**

**ACQUISITION AND LONG-TERM MANAGEMENT  
COMPONENTS OF JORDAN RIVER WETLAND CONSERVATION  
PROCESS**

**MANAGEMENT**

**ACQUISITION**

<p>WHO: State of Utah prefers large acreages</p> <p>Salt Lake County Flood Meander Corridor</p> <p>Cities may prefer to manage smaller acreages</p>	<p>Develop Management Agreements with cities that stipulates terms and criteria</p> <p>Restrict Development by ordinance</p> <p>Solicit groups to adopt and manage wetlands</p>
---	---

<p>WHAT: Wetland parcels only? "Manageable blocks?" Smaller wet- lands?</p>	<p>Fee simple, development rights and/or easements? Between subdivisions? Within a manageable context?</p>
---	--

<p>WHERE: Only natural wetlands—not constructed or "artificial"</p>	<p>Conserve existing wetlands with access restrictions. Use "stormwater banking" of potential sites for enhancement.</p>
---	--

<p>WHEN: What is the recommended timetable? What is required by the Act? Budget restriction on requested amounts?</p>	
---	--

<p>HOW: What are present or potential institutional opportunities that could facilitate developing proposals and start the acquisition process?</p>	
---	--

## Draft Ordinance

May 25, 1993

- A. Prepare an annual report, in coordination with all government agencies represented on the Council, which addresses activities along the Jordan River and contributory watersheds relating to: water quality and pollution control, flood control, parkway and other development, wildlife habitat and wetland conservation, and proposed plans to effectively manage and regulate these activities;
- B. Review and evaluate development proposals within the flood channel, flood plain, meander corridor, wetlands, and other areas of important riparian resource value along the Jordan River, and evaluate potential impacts of such proposals;
- C. Recommend and prioritize planning activities to address or mitigate impacts of development proposals, and coordinate among the parties to effectively review, monitor, and evaluate the progress of plan implementation;
- D. Coordinate and integrate the interests of parties which may be impacted by proposals for development or mitigation, and assist local, state and federal management agencies in the prioritization of proposals for potential funds and cost sharing;
- E. Recommend priorities for acquisition of critical water related resources, including wetlands, riparian corridors, meander corridors, wildlife reserves, and park lands;
- F. Provide legislative and public education support for present and future stream and river corridor projects and programs, and encourage continuing review of new developments and considerations of innovative practices in technological, legal, and administrative aspects of watershed management.

Figure 2. Duties of Jordan River Sub-Basin Watershed Management Council

**MINUTES OF THE CENTRAL UTAH  
PROJECT ADVISORY COMMITTEE FOR  
WETLANDS ACQUISITION**

Meeting of  
May 13, 1993

The discussion centered on principal agency designation for the property acquisition process, criteria for long-term management and "operation" of the properties, and program budgeting processes and time frames.

**1. AGENCY DESIGNATION FOR  
PROPERTY ACQUISITION**

The concept of a state agency providing lead coordination for property acquisition was extensively discussed. The Division of Parks has staff experienced in the process, has worked previously along the Jordan River, and could coordinate and provide direction—even technical support—to cities interested in specific properties within municipal jurisdiction.

• **Salt Lake County Support**

Salt Lake County could augment state acquisition efforts through the County Division of Contracts and Procurement, which deals closest with property acquisition throughout the county. Such an arrangement could be sub-contracted between the state and county, or a private consultant could be secured to assist in providing such services.

• **Municipal Support**

Local municipalities interested in specific portions of the river under their jurisdiction could also provide the lead role in acquisition. It was determined that the entity demonstrating commitment to

stewardship and management should also undertake the acquisition process.

• **Confine Acquisition to  
Priority WAIDS Resources**

There was an indication that a state agency may deal more effectively with possible proposals by Davis or Utah County to obtain part of the \$7.0 million for acquisition in those areas. However, it was emphasized that the basis for the C.U.P. dollar amount is the priority wetlands classification developed during the Jordan River Wetlands Advance Identification Study in 1987.

It was the feeling of the committee that WAIDS wetlands should continue to be the focus for future acquisition efforts, and that wetlands around the Great Salt Lake ecosystem or Utah Lake should be purchased using other funds (\$14 million specified in the Act).

**2. WETLAND STEWARDSHIP  
TERMS AND CRITERIA**

Standards for management and "operation" of the newly acquired wetlands are needed to insure the long-term integrity of values that they possess. Limited access to wetlands important for feeding, resting, nesting, and breeding habitat are mandatory to avoid irreversible impacts by visitors and recreationists. A number of information sources for such standards were described in the meeting, including:

A. Water quality and quantity monitoring guidelines developed by Region 10 EPA (May, 1991).

B. Vandalism protection and litter cleanup programs.

C. Water right acquisition by Wildlife Resources.

D. Corps of Engineers 404(b)(1) guidelines.

E. Reversionary Clauses used in other state contracts.

F. Nature Conservancy standards for property management.

G. Design criteria in the Urban Wildlife Manual developed by Utah State University.

H. U.S. Fish and Wildlife fencing requirements to prevent livestock degradation.

I. Recreation design criteria used by various Park designers (ASLA guidelines?).

J. Training sessions for municipal stewardship personnel by State or U.S. fish and Wildlife personnel.

It was recommended by the Committee that these sources be included either by reference or narrative in the Stewardship agreements for agencies or organizations acquiring and/or managing wetlands.

### 3. TIMETABLE AND BUDGET SCHEDULES

Although the Completion Act specifies exact months and dates for initiation of funding and program milestones, the process has been delayed. The Committee estimated the following schedule after discussion:

A. The Mitigation Commission must develop a five-year plan by March 31, 1994.

B. Application deadlines for acquisition proposals was estimated at December 31, 1993. (These would go into the plan?).

C. The first planning dollars are expected to be appropriated during FY94.

The first acquisition implementation dollars are expected in FY95 (October 94).

D. Appropriations are intended to be equally distributed over a 6-year period, resulting in about \$1.1 million per year.

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**APPENDIX B**

**EXISTING AND PROPOSED RECREATIONAL  
FACILITIES ALONG THE JORDAN RIVER**

Appendix B, which follows, was prepared for the Recreational Facilities Committee in June 1993 by Bruce Maw, Bingham Engineering.



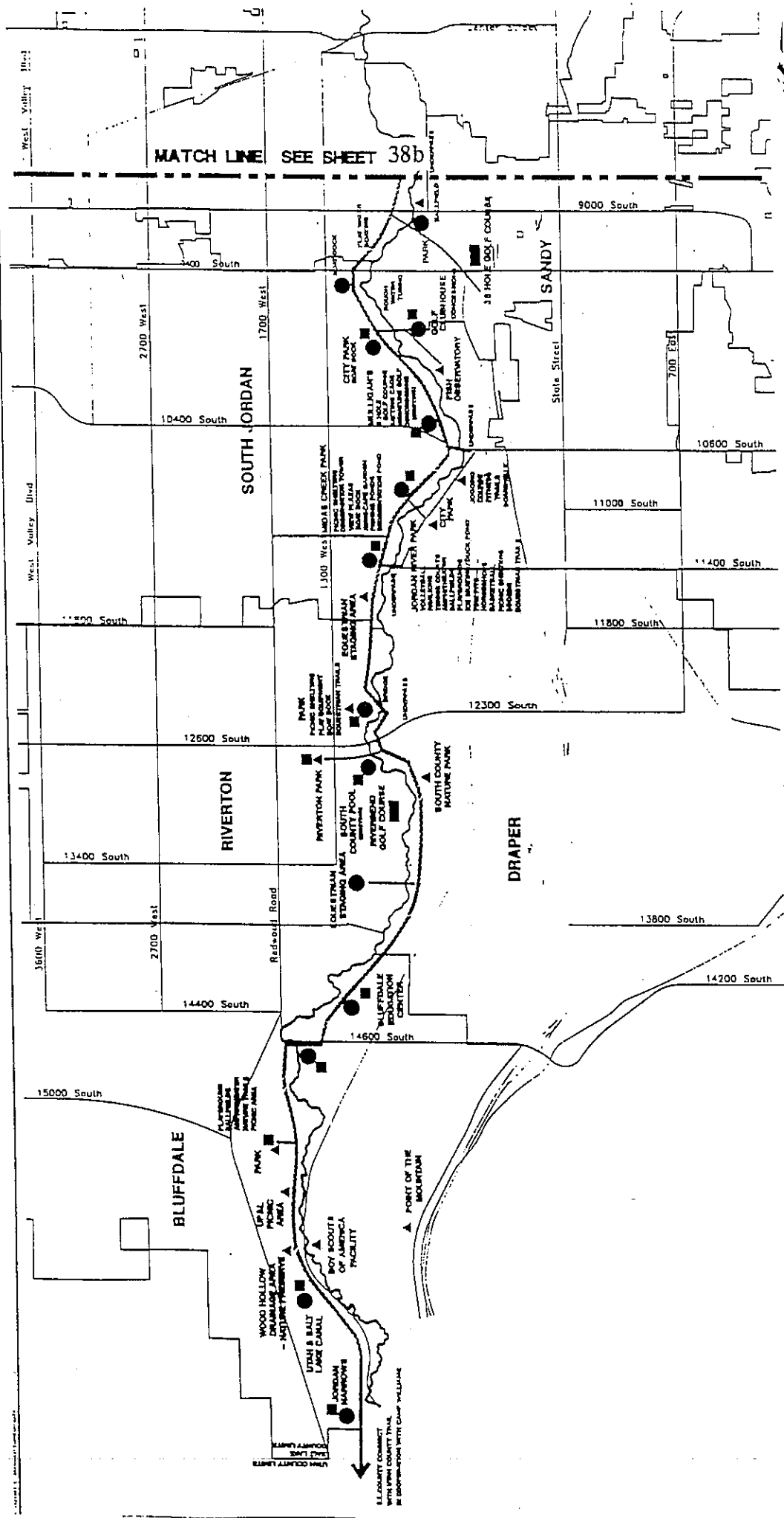
## JORDAN RIVER PARKWAY PROJECT DESCRIPTION

The following information is a compilation of the existing and proposed uses along the Jordan River from approximately 2100 South to the Salt Lake County Southern boundary at approximately 15700 South. This corridor includes Salt Lake County, South Salt Lake City, Murray, West Valley City, Midvale, West Jordan, Sandy, South Jordan, Riverton, Draper and Bluffdale. The project descriptions are outlined with information as it was provided by the representatives of the county and each of the municipalities.

*Note:*

The following information has been provided as a courtesy of the City of South Jordan and Bingham Engineering.

The Riverton, Draper and Bluffdale descriptions are preliminary as described by the Bluffdale Parks Committee. The City of Bluffdale is in the process of adopting a master plan that includes the same ideas as here presented. Utah State University is making a recreational study of the Riverton, Draper, Bluffdale area that will be ready the summer of 1993, at which time, the descriptions below may be altered. Further information may be available from the Utah State Department of Natural Resources/Division of Parks and Recreation at (801) 538-7220.



NOTE: THE LOCATION OF RECREATION FACILITIES AND TRAILS SHOWN ON THIS MAP IS SUBJECT TO CHANGE AS PROVIDED BY A RECREATION PLAN FROM EACH CITY OR COUNTY. THE LOCATION OF RECREATION FACILITIES AND TRAILS SHOWN ON THIS MAP IS SUBJECT TO CHANGE AS PROVIDED BY A RECREATION PLAN FROM EACH CITY OR COUNTY. THE LOCATION OF RECREATION FACILITIES AND TRAILS SHOWN ON THIS MAP IS SUBJECT TO CHANGE AS PROVIDED BY A RECREATION PLAN FROM EACH CITY OR COUNTY.

**JORDAN RIVER CORRIDOR**  
 RECREATION/LEISURE/RECREATIONAL FACILITIES PLAN  
**BRIGHAM**  
 1000 West 1000 South, Salt Lake City, UT 84119  
 801.462.1000



## SALT LAKE COUNTY

### Redwood Park - 2300 South

This is a trailhead facility with boat docking facilities mainly for all boats to exit the river before approaching the low bridge on 2100 South and the hazards of getting through the surplus canal diversion structures. The park has several individual picnic sites and a group pavilion with restrooms. The trail will go south from here towards the Jordan River Nature Park. When the trail system is ready for linking with Salt Lake City or the Jordan River State Park at 2100 South, the trail will be developed north from the Redwood Trailhead Park.

### Jordan River Nature Park

This parcel of about 65 acres which will be developed as a nature park for the enjoyment of the local residents, trail users passing through, and school or nature club groups. There will be additional plantings, contouring and wetlands to enhance the existing conditions on the site. The trail system to date is nearly complete. It loops around the perimeter of the property and makes a westerly connection to the Redwood Center where a trailhead will be located. Restrooms are available on the Redwood Center Park grounds.

### Oxbow Jail

The Jordan River Trail system will pass through a Salt Lake County Site which houses people who have committed misdemeanors. The facility is completely fenced and secure but the trail will pass on the perimeter of the property. The inmates have been involved in some of the trail construction and will assist in the trail maintenance.

### James Madison Park

This facility has the trail passing through it. There are parking, picnic, restroom and boat docking facilities in the park.

### Little Dell Mitigation Area

Salt Lake City, in partnership with the County, has planted riparian type vegetation in this area to mitigate the loss of riparian and wildlife habitat from the construction of Little Dell Dam. The trail will skirt the edge of the project but will provide the opportunity for viewing a successful mitigation project.

### Meadow Brook Golf Course

This eighteen-hole golf course is the oldest in the County system. The trail will pass the golf course at a safe distance from the east boundaries.

### 4800 South Park

This will be a west bank trailhead. Murray City will bring the trails to a trailhead on the east side of the river. A bridge will be constructed to make the final connection of the west bank and east bank trails. The trailhead will have picnicking, parking and trail amenities.

### South County Nature Park

This area was proposed as part of the Riverbend Golf Course. Much of the land is jurisdictional wetlands and will be preserved for a nature park. The park will be primarily for the enjoyment of trail users, members of nature organizations and school groups. There will be interpretive signs and a looping trail system adjoining the Jordan River Trail system.

### Riverbend Golf Course

This eighteen-hole golf course is presently under construction. It is contained totally on the west side of the Jordan River except for the driving range, which is located on an oxbow.

## MURRAY

### Cottonwood Creek Parkland 4800 South to 5100 South

This area is designated for wildlife habitat and nature study in conjunction with their function as detention basins for urban runoff and return irrigation water. Fishing is expected to be a popular activity at this site. Facilities include trailhead parking, asphalt pedestrian and bicycle trails, equestrian trail, restroom, pavilion, and playground. In addition, a canoe dock will provide a take-out point for those who have traveled the Jordan River upstream. A unique feature in this area will be an observation blind which will overlook the Hunters Woods wetland which is the second largest on the Jordan River.

### Germania Parkland 5100 South to 5400 South

This park area has been designed as a neighborhood park and is primarily for group and family picnic activities. A pavilion, restroom, playground, basketball court, sand volleyball court and a grass area for soccer and informal baseball will be provided. Three parking lots will be provided for approximately 120 cars. A unique feature of this park will be an environmental classroom which will be used by the school district during the daytime and will be rented out during evening and weekend hours. This will

also be a major access point for boaters and equestrian users. Asphalt pedestrian and equestrian trails will continue through this area. Water from existing ground water and irrigation return water has been collected to reclaim nearly 4 acres of wetlands.

### Walden Park 5400 South to Bullion Street

This narrow strip of parkland will be developed into a neighborhood park. Facilities will include a pavilion, two tennis courts, restroom, playground, sand volleyball courts and an outdoor basketball court. Parking will be provided for 50 cars. Pedestrian, bicycle and equestrian trails will continue through this area.

### Willow Ponds Park Bullion Street to I-215

This site has been designed to provide for both active and passive use. A trailhead at the north will provide pedestrian and bicycle access to the South. Several wetland features will be enhanced or restored in this area.

To the south, facilities will include three baseball/softball fields, a soccer field, pavilion, restrooms, playgrounds, outdoor volleyball and basketball courts and a running/jogging trail. Parking will be provided for these facilities. The unique feature in this area is the restoration of a fishing pond which will be stocked with warm water fish in sufficient numbers to support fishing.

### Winchester Park I-215 to 6400 South

This long narrow section of the parkway is devoted primarily to trails and wildlife

habitat. A pedestrian and bicycle trail will travel through this area. A trailhead, picnic area, boat launch and restroom are located in this area. Parking is provided for 64 cars. The Murray Parkway Golf Course is located on the east side of the Jordan River in this area.

## WEST JORDAN

### Utah Antique Machinery Center

For the past several years, the Utah Antique Machinery Association has held its fall antique machinery show in West Jordan, at a site near the Jordan River. This event annually brings hundreds of exhibitors and visitors together for collecting, restoring and displaying of antique machinery. The variety of machines displayed ranges from early power mowers from the 1920s to large one-piston steam engines from the 1800s that were used for everything from sawing wood to bailing hay. Included are all kinds of farm machinery, dozens of tractors of every vintage and several working steam engines—machinery that helped make the United States a major power in the developing world.

The Utah Antique Machinery Association, through the generosity of one of their members, has now acquired a parcel adjacent to the show grounds to construct a relocated building. The building, donated from the Park City area, will become a permanent club building and the basis for a proposed year-round Utah Antique Machinery Museum that will feature both covered and outdoor exhibits. Utah has been selected to host the 1994 National Show of the Early Day Gas Engine and Tractor Association at this Jordan River Parkway location.

### Jordan River Boulevard Nature Study

The City of West Jordan has assembled 29 acres on the west bank of the Jordan River for use as a public park/nature study area. This area is located south of the Jordan River Boulevard (7000-7200 South) road connection slated for 1993-94 highway construction. The parcel extends from the river westward beyond the North Jordan Canal to the ridge of the Jordan River bluff escarpment and contains an excellent variety of floodplain, riparian and wetland natural vegetation. The views of the river corridor and mountains beyond are fantastic.

Development plans provide for construction of a trail head parking facility south of the new highway on the west bank of the Jordan River. A "braided" loop trail system with interpretative signage will be developed beginning at this access point. This portion of the trail will be constructed of compacted trail base with a top layer of crushed brick, giving this portion of the trail compatible distinction with the natural environment. Any built construction will be minimal and will consist of rest rooms, benches and picnic tables for passive recreation use.

### Historic Gardner Mill

The Gardner Historic Village represents Utah's unique early history. Archibald Gardner, who had 11 wives and 48 children, constructed a flour mill in 1853 by commission from Brigham Young. The Gardner Mill, listed on the National Historic Register, now serves as a country furniture and gift store. The village also includes the Archibald Gardner Museum, log cabin, a train station, fine dining at Archibald's Restaurant and a historic

theme retail center (in a cluster of New England-style shops) featuring Victorian and country furniture, gift and craft items, antiques, and accessories.

### **Gardner Monument Heritage Walkway**

Adjoining the Gardner Historic Village is the Gardner Monument Heritage Walkway. This landscaped gateway area to the City of West Jordan features a family-erected monument constructed of millstones from the Gardner Mill to commemorate the early settlement of West Jordan by Archibald and Robert Gardner and their families. In addition to a saw mill and grist mill, a broom factory, mattress factory, tannery, and smelter were soon established nearby. The North Jordan Canal that passes by this location originally was a two-and-one-half-mile-long mill race for Gardner Mill. This canal was the first canal of any importance dug in Utah that opened irrigation throughout the West. The Gardner Monument Heritage Walkway commemorates these early settlement activities.

### **Historic Old Rock Church**

The historic old rock church was started in 1861 and completed in 1867. The building is constructed primarily of red sandstone hauled about six miles from the Jordan Range, and is trimmed with granite rock hauled from the mouth of Little Cottonwood Canyon. Money was scarce and workers were paid with all kinds of produce. A military dance was held to help raise money for the completion of the roof. They charged one dollar for tickets and a large crowd attended. Guests of honor included Brigham Young, George Q. Cannon, the Presiding Bishop of the Church, Bishop Hunter, Wilford Woodruff, and a contingent of officers from Fort

Douglas. Enough money was raised for completion of the roof. In 1913, a new church building was constructed one half mile west and the Old Rock Church fell into disrepair. However, in 1937 the Daughters of the Utah Pioneers leased the ground and building and restored the building as "Pioneer Memorial Hall" which continues in use as a meeting place.

### **Salt Lake County Water Conservancy District Trail Head and Xeriscape Planting Demonstration Plot**

The Salt Lake County Conservancy District headquarters, operations and maintenance center was constructed considering the proposed Jordan River Parkway and trail system. The project was set back from the Jordan River to allow continuity of the parkway trail system and the project was designed to minimize visual impact to trail users. The parking layout was designed to function as a major trail head for the Jordan River Parkway, with additional joint use of employee parking available during non-business hours. On the hill slope between the attractive main building and the operations/maintenance center, the Salt Lake County Water Conservancy District plans to install an interpretive xeriscape planting demonstration plot to show different types of plantings which may be used to help conserve the Utah's limited water resources.

### **SANDY**

The area of the Jordan River currently located within Sandy City is the east side of the river, between 9000 South and approximately 9800 South. For the most part, the lands bordering this part of the river are being proposed as part of a golf

course development. As part of that development, the Parkway would be improved with surfacing and bridge crossings, as well as any necessary screening to protect Parkway users from errant golf balls. As the trail approaches 9000 South, it would adjoin a commercial area developed to complement the Parkway in both design and use.

Associated uses might include such things as boat or bike rentals.

In addition, the east side of the river running north from 9000 South to approximately 8800 South is also being considered for future development as open space, including a trail head and parking area for the Jordan River Parkway.

Additional trails facilities would include restrooms and a trail information kiosk. The trail could be located on either side of the river at this point, with a crossing available at 9000 South.

## **SOUTH JORDAN**

### **11400 South to South Boundary Corridor**

A major component of this area and the other two areas south of 10600 South Street is the development of a proposed collector road along the Jordan River. The road is proposed to follow an existing sewer easement and will form the western boundary of the Parkway between 10600 South Street and the City's southern boundary (Approximately 11800 South).

This section contains a large wildlife habitat and wetland area which will require some reclamation and revegetation. Portions of the river bank will also need to be stabilized in this area. Other elements of this phase include: Picnic shelters, a hard surface trail terminus, equestrian trailer parking and staging area, an east-

west trail link, tree plantings, and revegetation. Also, users of the Parkway will be able to enter or leave the trail system at this location.

### **Jordan River Park to 11400 South Corridor**

The City has accomplished more in this corridor of the Parkway to date than in any other area. This phase contains a major recreational facility at the Jordan River Park. This facility is already under construction and the following features are planned: volleyball facilities, tot lots, pavilion/restrooms, soccer fields, baseball fields, tennis courts, basketball standards, horseshoe courts, parking and staging area, amphitheater, boat docks, bank stabilization, view plazas, sculpture garden, duck pond/ice skating area, a foot bridge over the River, and preservation of wildlife habitat and wetlands.

A second park facility is planned for this corridor between the Jordan River Park and 11400 South Street. The Midas Creek Park will contain a series of detention ponds which will function both as recreational amenities and as part of the City's flood control system. Fishing ponds, observation towers, picnic shelters, native plant and xeriscape garden with interpretive signage, restored wetlands, river bank stabilization and on street bike path are all included in the Midas Creek portion of this phase.

Finally, equestrian trails, large wetland and wildlife habitat areas, continued park facilities, and exercise stations (9-12) are planned for the east side of the River. This entire phase provides an outstanding variety of both natural and planned recreational and educational opportunities.



### **Mulligan's Sports Park to Jordan River Park Corridor**

This phase includes the northern terminus of the river collector road at 10600 South Street. Equestrian and pedestrian trails continue north in this area. This section also includes preservation of wildlife habitat and wetland area, tree planting and revegetation, foot bridge, board walk with educational and interpretive signage, boat dock, fishing dock, parking and staging area, sports park with 9 hole-executive golf course, driving range, batting cage, miniature golf, restrooms, concessions, rentals, underpass of major collector road, exercise stations (1-8), picnic shelters, on street bike path access, view plazas, trash and debris clean-up and parkway road construction along sewer line easement to 10600 South and adjacent 18 hole golf course. The east side of the River north of 10600 South includes a pristine wildlife habitat and wetland area, a boardwalk and interpretive signage. It is anticipated that the Mulligan's Sports Park facility will function as a staging area for trail users and as a concessions facility.

### **10000 South to Mulligan's Sports Park Corridor**

The principal element of this portion of the Parkway is the realignment of the River to include oxbows. Research into historical flow patterns indicate that these oxbows existed previously and that the River has been straightened to its present flow pattern. The proposed realignment will include bank stabilization, enhanced wetland areas, two lakes, and several educational features including view plazas and towers, lake and river fish observatories and interpretive signage. The uses intended in this area and northward are more passive uses

developed around valuable natural areas and open spaces.

### **Shields Lane (9840 South) to 10000 South Corridor**

The City currently owns property in this corridor and will be developing a park along the river at approx. 10000 South. Other components include development of major collector road and on street bike lane, multi-use/hard trail terminus, county and statewide trail link, on street bike access from trail, underpass of collector road, golf course club house with restroom, concessions, rentals, parking and staging uses, soft trail with possible boardwalk through wetlands, preservation of wildlife habitat and wetland area, boat dock access for tubing and canoeing, placement of boulders in river, picnic shelters, equestrian trail terminus and hitching posts, tree planting and revegetation, City Park improvements and adjacent 18 hole golf course.

### **North Boundary to Shields Lane (9840 South) Corridor**

The east side of the River at this location is not within South Jordan City limits. The west side of the River includes development of an access road to Parkway, parking and staging area, picnic shelters, boat dock, multi-use/soft trail terminus, view plazas, tree planting and revegetation, enhanced wetland and flat water/canoeing.

### **RIVERTON/DRAPER**

Development includes one softball, horseshoes, parking for horse trail, volleyball, basketball, amphitheater and pond.

### 11800 South to Bridge at 12400 South

The major objective within this portion is to connect to the trails running through South Jordan and Draper, wherever possible, and to provide those park and recreation services not within close proximity. In this area, a small park will be planned and include a boat dock, trailhead, play equipment, restrooms, and equestrian trails. The road running along the sewer easement through South Jordan will continue through the parkway and connect to 12600 South.

### 12600 South to 13400 South

There will be no additions other than what the County has planned.

### 13400 South to 13800 South

An equestrian staging area is proposed to connect to the County trail that will pass through Draper.

## BLUFFDALE

### Trails System

The Bluffdale trails system will follow the route proposed by Salt Lake County from the Riverton-Bluffdale border from 13800 South on the east side of the Jordan River to the 14600 South staging area. It will continue on both the east and west sides of the river to the Utah County line. The west side trails will follow the river to about 15000 South and then go away from the river and will follow the existing canal roads to the pumping station in the Jordan Narrows. It will then parallel the river to the Camp Williams Park where it will cross the river to the terminus of the existing Utah County Trail. Other trails

will hook into the system along powerline corridors and existing roads.

The trails will be developed for equestrian, hiking, biking and cross-country skiing. Trail signs of natural and historical interest as well as "bat house" signs and swallow nests are being planned to act as natural mosquito abatement factors.

### Basin Three Nature Reserve

The flood-plain valley between the east and west bluffs, between 13800 South and 14600 South is designated as Basin Three. This wetland area is the largest undeveloped wetland along the river and is used by many migratory birds. Deer and many small mammals reside in this partly riparian habitat. The east bluff, just off 14600 West, west of the D&RG railroad is the chosen site for the Bluffdale Education and Interpretive Center. It would include an information gallery, an observation deck overlooking Basin Three, restrooms, classroom and lab facilities. Self-guided tour booklets would be available here for use along the parkway trails that would radiate from there. In the wide meander plain, marked and signed trails and boardwalks as well as "blinds" are planned for close but unobtrusive observation of the wildlife in the area.

### Woodhollow Drainage Area

The Woodhollow Drainage area at about 15700 South between 18th and 16th West is targeted as a multiple-use area. With its lush foliage and many natural springs, it is the habitat of many animals. It is an ideal nature study area. Part of the area, at about 15200 South to 15700 South, 1600 West includes approximately 48 acres of flat land elevated above the Jordan flood

plain and is targeted for a general use park including ball fields, playgrounds and picnic facilities. At about 15500 South twin knolls (called Bone Hill) form a natural amphitheater. The area is large enough to provide ample parking for such a park. Access roads to this area are partially built at 15700 South and at Rock Hollow Road from Camp Williams Road.

#### Boy Scouts of America Campground

The Boy Scouts of America Campground on the east side of the river is approximately opposite the proposed multi-use park. It is an undeveloped area with limited dirt roads and roughed-in camp sites. No restrooms are presently developed but may be in the future. The BSA use the area throughout the year. Foot bridges across the Jordan would connect this area with the Woodhollow Drainage Nature Study.

#### Jordan Narrows - Camp Williams Park

The Jordan Narrows area is along the Jordan River from the Woodhollow area to the Utah County Line. This area is partly owned by Salt Lake County and Camp Williams. The Jordan River Trail will pass through this property on the west bank as it climbs out of the Jordan River Valley. It will skirt the narrows on the old Bamberger Railroad right-of-way on the east end of Camp Williams National Guard training facility. This would be used for a staging area with separate trailheads and parking areas for hiking and equestrian activities. Picnic areas with restroom facilities are also planned for development in this area. A bridge connecting the Salt Lake County trails with the Utah County trails is in the planning stage.

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## **APPENDIX C**

### **DRAFT ORDINANCE**

The following pages are the Draft Ordinance Enacting Chapter 17.06 of the Salt Lake County Code of Ordinances, 1986, Relating to Flood Control and Water Quality and Providing for the Creation of the Jordan River Sub-Basin Watershed Management Council.

ORDINANCE NO. 1241

DATE: June 21, 1993

AN ORDINANCE ENACTING CHAPTER 17.06 OF THE SALT LAKE COUNTY CODE OF ORDINANCES, 1986, RELATING TO FLOOD CONTROL AND WATER QUALITY AND PROVIDING FOR THE CREATION OF THE JORDAN RIVER SUB-BASIN WATERSHED MANAGEMENT COUNCIL.

The Board of County Commissioners of the County of Salt Lake ordains as follows:

SECTION I. Chapter 17.06 of the Salt Lake County Code of Ordinances, 1986, is hereby enacted to read as follows:

Chapter 17.06

JORDAN RIVER SUB-BASIN WATERSHED MANAGEMENT COUNCIL

Sections:

- |           |  |
|-----------|--|
| 17.06.010 | Findings                                     |
| 17.06.020 | Purpose of Provisions                        |
| 17.06.030 | Definitions                                  |
| 17.06.040 | Creation of Council                          |
| 17.06.050 | Duties of Council                            |
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17.06.010 Findings.

A. Pursuant to the provisions of the federal Clean Water Act, the Salt Lake County Board of Commissioners has been designated and approved as the area-wide Water Quality Planning Agency for Salt Lake County by the Governor of the State of Utah and by the United States Environmental Protection Agency. Pursuant to state statutes, the Board also has county-wide responsibility for flood control on all natural channels and flood plains, including the Jordan River and its tributaries:

B. The Board recognizes that numerous federal, state, and local government agencies have jurisdiction over and share responsibility for the management and regulation of the Jordan

River and its tributaries which flow through Salt Lake Valley and which provide multiple uses, including flood control, wildlife and fishery habitat, recreation, and water supply for irrigation and other purposes.

C. A need exists for increased communication and cooperation among these government agencies in order to promote efficient planning, implementation, and coordination of management and regulatory activities pertaining to the Jordan River watershed, and also to prevent or minimize the occurrence of conflicting or duplicative efforts. Increased communication and cooperation among these government agencies can be effectively assisted through the creation of an inter-jurisdictional advisory council specifically designed to promote such communication and cooperation and which will assist the Board of County Commissioners in fulfilling its responsibilities for area-wide water quality planning and flood control activities.

17.06.020 Purpose of Provisions.

The purpose and intent of this chapter is to: (1) facilitate the performance of the responsibilities of the Salt Lake County Board of Commissioners with regard to its role as the area-wide Water Quality Planning Agency for Salt Lake County and with regard to its county-wide flood control authority, and (2) facilitate more effective communication and cooperation among the various government agencies which have jurisdiction over and share responsibility for the management and regulation of the Jordan



River and its tributaries which flow through Salt Lake Valley.

17.06.030 Definitions.

For the purpose of this chapter, the following words shall have the following meanings:

A. "Jordan River sub-basin" means that portion of the Jordan River hydrologic unit extending from the Salt Lake County boundary with Utah County northward to the Davis County boundary, eastward including all Wasatch Canyon environs to the Wasatch and Summit County boundaries, and westward including all Oquirrh Canyon environs to the Tooele County boundary.

B. "Watershed" means all of the combined natural sub-basin drainage units within the Jordan River sub-basin, listed and on file in the office of the Salt Lake County Board of Commissioners. It includes designations for canyon and urban watersheds as single management units which contribute flow to the Jordan River and water storage to the Great Salt Lake.

17.06.040 Creation of Council.

There is hereby established as an advisory council to the Salt Lake County Board of Commissioners a "Jordan River Sub-Basin Watershed Management Council", hereafter referred to in this chapter as the "Council".

17.06.050 Duties of Council.

The Council may meet as often as deemed necessary, according

to current planning and management needs, and shall:

A. Prepare an annual report, in coordination with all government agencies represented on the Council, which addresses activities along the Jordan River and contributory watersheds relating to: water quality and pollution control, flood control, parkway and other development, wildlife habitat and wetland conservation, and proposed plans to effectively manage and regulate these activities;

B. Review and evaluate development proposals within the flood channel, flood plain, meander corridor, wetlands, and other areas of important riparian resource value along the Jordan River, and evaluate potential impacts of such proposals;

C. Recommend and prioritize planning activities to address or mitigate impacts of development proposals, and coordinate among the parties to effectively review, monitor, and evaluate the progress of plan implementation;

D. Coordinate and integrate the interests of parties which may be impacted by proposals for development or mitigation, and assist local, state, and federal management agencies in the prioritization of proposals for potential funding and cost sharing;

E. Recommend priorities for acquisition of critical water-related resources, including wetlands, riparian corridors, meander corridors, wildlife reserves, and park lands;

F. Provide legislative and public education support for present and future stream and river corridor projects and programs, and encourage continuing review of new developments and

considerations of innovative practices in technological, legal, and administrative aspects of watershed management.

17.06.060      **Composition and Selection of Council Members.**

The Council established in section 17.06.040 above shall be comprised of one representative from each of the following government agencies:

A. Federal agencies: U.S. Army Corps of Engineers Regulatory Section, Bountiful, Utah; and U.S. Fish and Wildlife Service, Salt Lake City, Utah;

B. State agencies: Division of Water Quality, Division of State Lands, Division of Water Resources, State Engineer (Stream Alteration Permit Program), Division of Wildlife Resources, Division of Parks and Recreation, and Department of Agriculture;

C. Local agencies:

1. Salt Lake County: Commission Staff, Development Services Division, Engineering Division, Operations Division, Parks and Recreation Division, Environmental Health Division, and Attorney's Office;

2. Municipalities: Salt Lake City, South Salt Lake City, Murray City, Midvale City, Sandy City, West Valley City, West Jordan City, South Jordan City, Draper City, Riverton City, Bluffdale City, and the Town of Alta.

Appointment to the Council shall be by the Board of County Commissioners after receiving nominations from each specific agency or municipality. Upon appointment, each representative may serve

as a member of the Council and may designate a substitute representative for any particular meeting or other purpose. The Board shall appoint a chairperson and a vice-chairperson from among the members of the Council.

SECTION II. This ordinance shall become effective fifteen (15) days after its passage and upon at least one publication in a newspaper published and having general circulation in Salt Lake County.

APPROVED and ADOPTED this 21 day of June, 1993.

BOARD OF COUNTY COMMISSIONERS  
OF SALT LAKE COUNTY

ATTEST:

Isabelle Velasquez  
Salt Lake County Clerk

By [Signature]  
Chairman pro tem

Commissioner Bradley voting absent  
Commissioner Horiuchi voting aye  
Commissioner Overson voting aye

C.A. #93-0303B

APPROVED AS TO FORM

Salt Lake County Attorney's Office

By [Signature]  
County Counsel Attorney  
Date 6.15.93