

Water Delivery Financing Task Force Report:
Financing the Lake Powell Pipeline and Bear River Projects
September 2005



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EXECUTIVE SUMMARY

The Governor's Office of Planning and Budget projects that Utah's population will increase from 2.2 million in 2000 to nearly 5.4 million in 2050, an increase of 145 percent. About 1.9 million, or 61 percent, of the 3.1 million population increase projected will be concentrated along the Wasatch Front. Utah County will experience the largest numerical gain during the projections period, followed by Salt Lake, Washington, Davis, and Cache counties.

At current water usage rates, this projected growth will require large amounts of additional water. In 1995 the Division of Water Resources (division) estimated the current water supply would need to be increased by 850,000 acre feet to meet 2050 demand. This future need is based on the 1995 water use of 321 gallons per capita per day (gpcd). However, the best and least expensive way to meet future need is to reduce current water use. The state has a goal to reduce municipal and industrial (M&I) water use by 25 percent by 2050. If this goal is met, the amount of water needed to meet the 2050 demand will be reduced by about 500,000 acre feet.

Future water users need to be much more water efficient than current users in order to stretch available water supplies. Effective water conservation measures need to be implemented for new and existing water users in order to minimize water usage and meet the 2050 water reduction goal.

Even after developing readily available water resources and meeting the conservation goal, there will still not be enough water to meet the projected need. Because of this shortage, the division has been planning two large water development projects: the Lake Powell Pipeline and Bear River projects. The Lake Powell Pipeline and Bear River projects are relatively close to population centers in Southern Utah and the Wasatch Front, where growth is most rapid. The Washington County Water Conservancy District calculates that the Lake Powell Pipeline will be needed in about 2020. The Wasatch Front water districts estimate the need for water from the Bear River project by about 2035.

These two large projects will be very expensive to build. They are expected to cost more than \$814 million in today's dollars. The bulk of the costs will be incurred at the time of construction. However, certain portions of the project such as design, engineering, rights-of-way acquisition, and environmental studies must occur prior to construction. As with any large water project, it can take many years to go from environmental studies to construction.

The Bear River project has already been memorialized in statute as a state project that will require state planning and significant amounts of state capital funding. The Lake Powell Pipeline project should be similarly recognized in statute.

It might be possible to defer further state involvement on these two new projects for another five to eight years. However, that would greatly increase the ultimate cost of these projects. Furthermore, it would unwisely compress the planning and engineering of these projects and the costs of financing them into a few critical years. Therefore, the task force makes the following recommendations.

RECOMMENDATIONS

A. General

1. Utah's preliminary planning and engineering of these projects should begin now. Early planning is essential to efficient project development.
2. Because federal construction funding is now very limited for such projects, the state, while maintaining full coordination with the water districts, should assume sponsorship of these water development projects and should provide long term construction financing through bonding or state appropriations.
3. All financing provided by the state for project construction and environmental mitigation costs allocated to M&I uses should eventually be repaid to the state with interest by subscribing water districts according to the flexible terms agreed to at the time of construction financing.
4. Site and right of way procurement should begin while costs are relatively low and land is still available. The funding of these projects should be spread out over a longer period of time to minimize the peaking of costs when construction begins. Early expenditures will lower the overall cost of these projects.
5. The cap on the 1/16th of a cent sales tax, which is currently allocated to water system improvement and water development issues, including species mitigation, should be removed and any new increment (currently \$5 million per year) should be directed to the division for priority planning, environmental assessments, engineering, and procurement of land and rights of way on these two projects. Any portion of the funds not needed for these purposes should be used by the division for the water loan fund, which monies would revolve back through repayment of loans to be available for these projects at a later date. A full accounting of the use of this money should be provided each year.
6. A yearly allocation to the division of 25 percent of any surplus available after the funding for the Rainy Day Fund and other statutory requirements have been met is recommended as an additional resource.

B. Statutory

At least four statutory changes must be made to implement the above recommendations. More changes may be needed when construction begins.

1. Remove the cap on the appropriation to the water loan funds.
2. Reserve a portion of the surplus for water development.
3. Remove the constraint in the Bear River statute that prevents money being spent on the project before contracts have been signed for 70 percent of the water.
4. Authorize the Lake Powell Pipeline as a state project.

I. INTRODUCTION AND BACKGROUND DATA

INTRODUCTION

To respond to the upcoming need for financing of large water development projects, Governor Olene Walker created the Water Delivery Financing Task Force through executive order. The task force was charged to evaluate financing for the proposed Lake Powell Pipeline and Bear River projects, and to recommend options for financing each project.

The executive order provides for the appointment of 17 members, including eight legislators, three executive branch officials, three representatives of water conservancy districts affected by the two proposed projects, and the financial advisor to the state on matters of public finance. The state treasurer is designated the chair of the task force.

The task force was instructed to report to the governor by July 1, 2005 and finish task force work by December 31, 2005. Task force members met eight times, including two subcommittee meetings, between November 2004 and June 2005.

The executive order stated the task force should: 1) consider all revenue sources including bonding, 2) specify responsibility for payment with the user bearing the ultimate responsibility, 3) provide repayment to the state of any funds loaned or fronted for the project, and 4) maintain the state's AAA bond rating.

This report:

- Presents data related to population and water supply and demand increases
(I. Introduction and Background Data)
- Presents a two-pronged approach to the state's water needs, Conservation and Development, and details current conservation and development projects
(II. The Two-Pronged Approach)
- Assesses a strategy for the future of these projects, including funding
(III. Water Development Funding)
- Outlines the statutory changes needed to implement the task force's recommendations
(IV. Statutory Authorizations)

POPULATION GROWTH AND WATER DEMAND

Statewide

Utah is one of the five fastest growing states in the nation, and it shares a border with the four other fastest growing states (*Exhibit 1*). From 1990 to 2000, Utah's population increased by more than 510,000 people, to over 2.2 million. In simple terms, Utah's semi-arid terrain is sprouting another city approximately the size of Salt Lake City (1990 population 160,000) about every three years.

Exhibit 1



According to the Governor's Office of Planning and Budget, Utah's rapid growth will continue, with the population more than doubling to over 5 million by 2050, an increase of 145 percent. Although the projected average annual growth rate decelerates from 2.4 percent per year in the 1990s to 1.3 percent per year in the 2040s, these growth rates are more than twice the projected rates for the nation as a whole.

The average annual rate of change for Utah's population from 2000 to 2050 is projected to be 1.8 percent. The most rapid growth will occur in counties within or adjacent to the Wasatch Front and in the southwestern portion of the state. Washington County is projected to be the fastest growing county in the state, with an average annual growth rate of 3.9 percent.

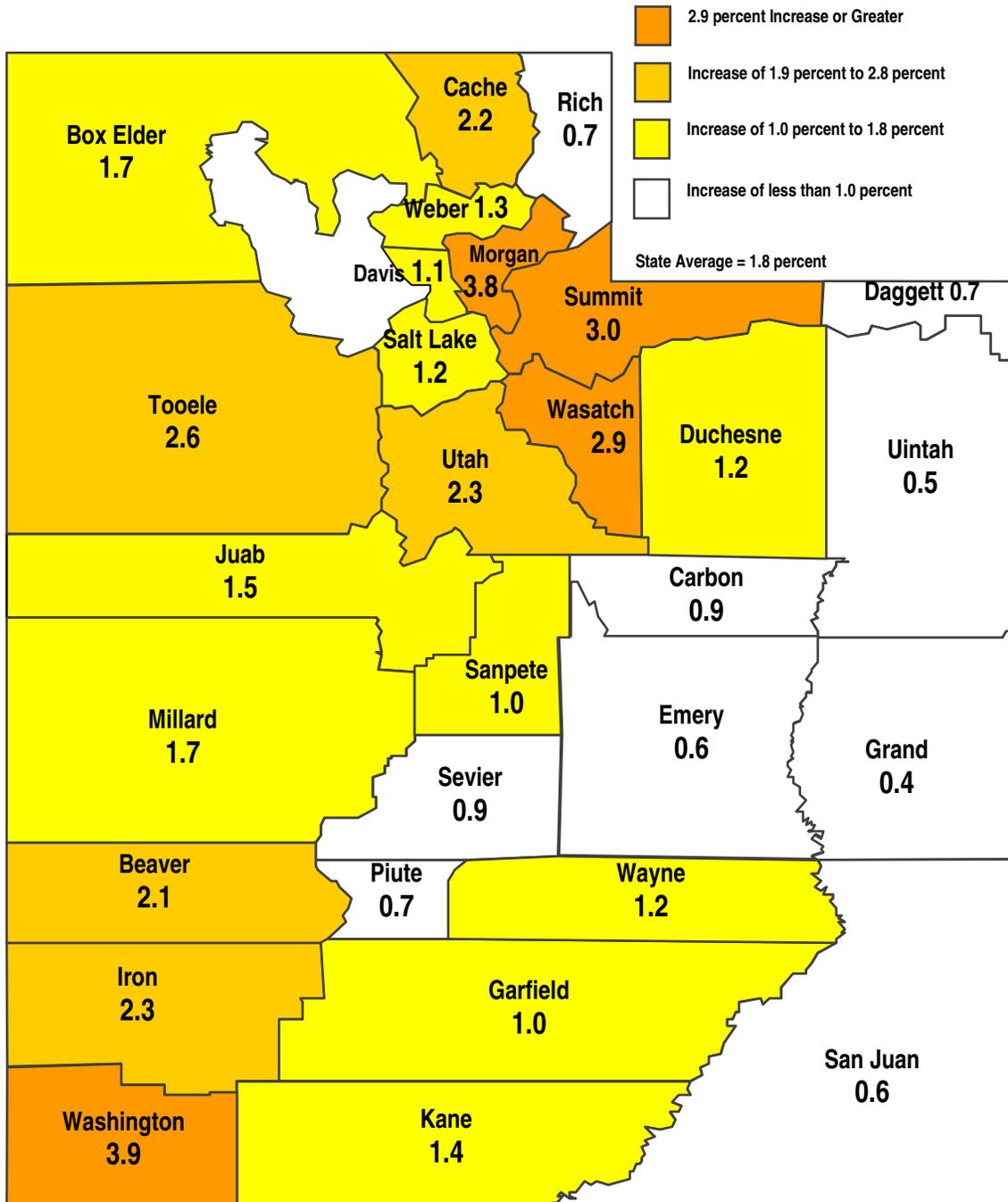
About 1.9 million, or 61 percent, of the 3.1 million population increase projected for the state between 2000 and 2050 will be concentrated in the counties of Salt Lake, Utah, Davis, and Weber. Utah County and Salt Lake County will experience the largest numerical gain during the projections period, with a population increase of 775,400 and 761,200 respectively. Those counties will be followed by Washington (516,230), Davis (184,000) and Cache (174,800) counties. The growth in these five counties will account for 77.2 percent of Utah's total population increase for the projections period. This population growth will drive the need for additional M&I water supplies in the future (*Exhibits 2 and 3*).

Exhibit 2

Selected Population Projections by County								
County	2000	2005	2010	2020	2030	2040	2050	AARC 2000- 2050
Cache	91,897	102,477	114,304	147,776	183,989	223,185	266,711	2.2%
Davis	240,204	276,374	304,502	352,320	382,219	404,170	424,177	1.1%
Iron	34,079	40,212	48,772	65,607	77,493	90,268	103,920	2.3%
Kane	6,037	6,093	6,618	8,359	9,783	11,033	12,327	1.4%
Morgan	7,181	8,525	10,183	16,200	24,595	34,290	46,596	3.8%
Salt Lake	902,777	970,748	1,053,258	1,230,817	1,381,519	1,521,926	1,663,994	1.2%
Summit	30,048	36,417	44,511	65,001	85,660	107,554	132,681	3.0%
Utah	371,894	453,977	527,502	661,319	804,112	964,893	1,147,333	2.3%
Wasatch	15,433	20,138	25,516	37,082	46,193	55,179	65,010	2.9%
Washington	91,104	125,010	162,544	251,896	353,922	472,355	607,334	3.9%
Weber	197,541	212,707	230,145	271,339	306,227	338,579	371,429	1.3%

Notes:
 1. AARC is average annual rate of change.
 2. All populations are dated July 1.

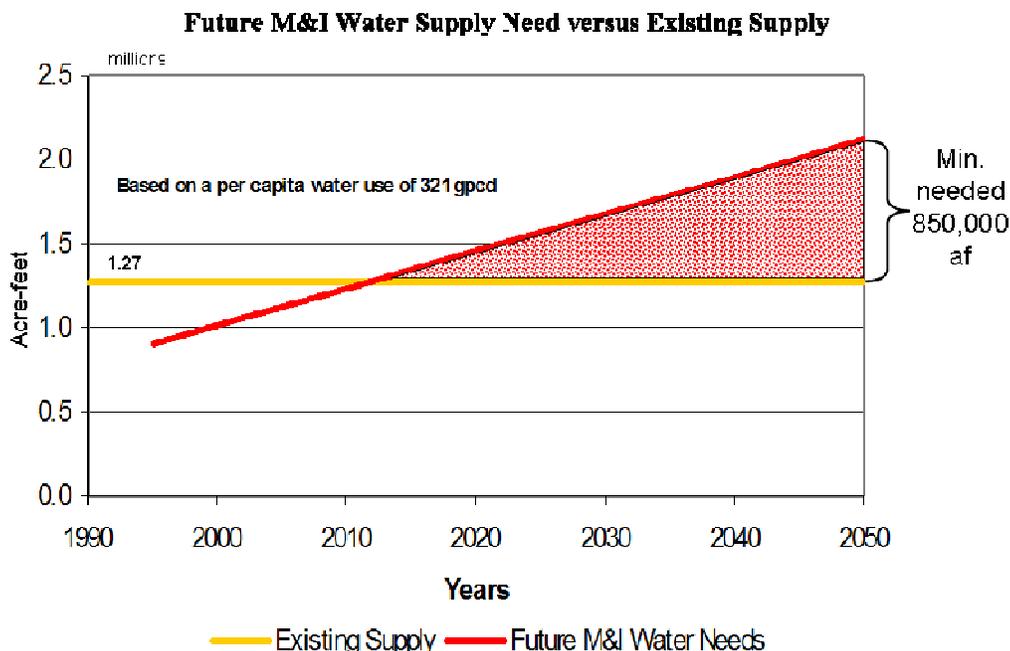
Utah Population Growth Rates by County: 2000 to 2050



Source: 2005 Baseline, Governor's Office of Planning and Budget

In 1995 the division estimated a need for an additional 850,000 acre feet of water in addition to the existing supply to meet 2050 demand. This future need is based on the 1995 water use of 321 gallons per capita per day (gpcd).

Exhibit 4



Project-centered areas

The water development being proposed centers in two areas of great population growth and consequent water demand: Washington County and the Wasatch Front.

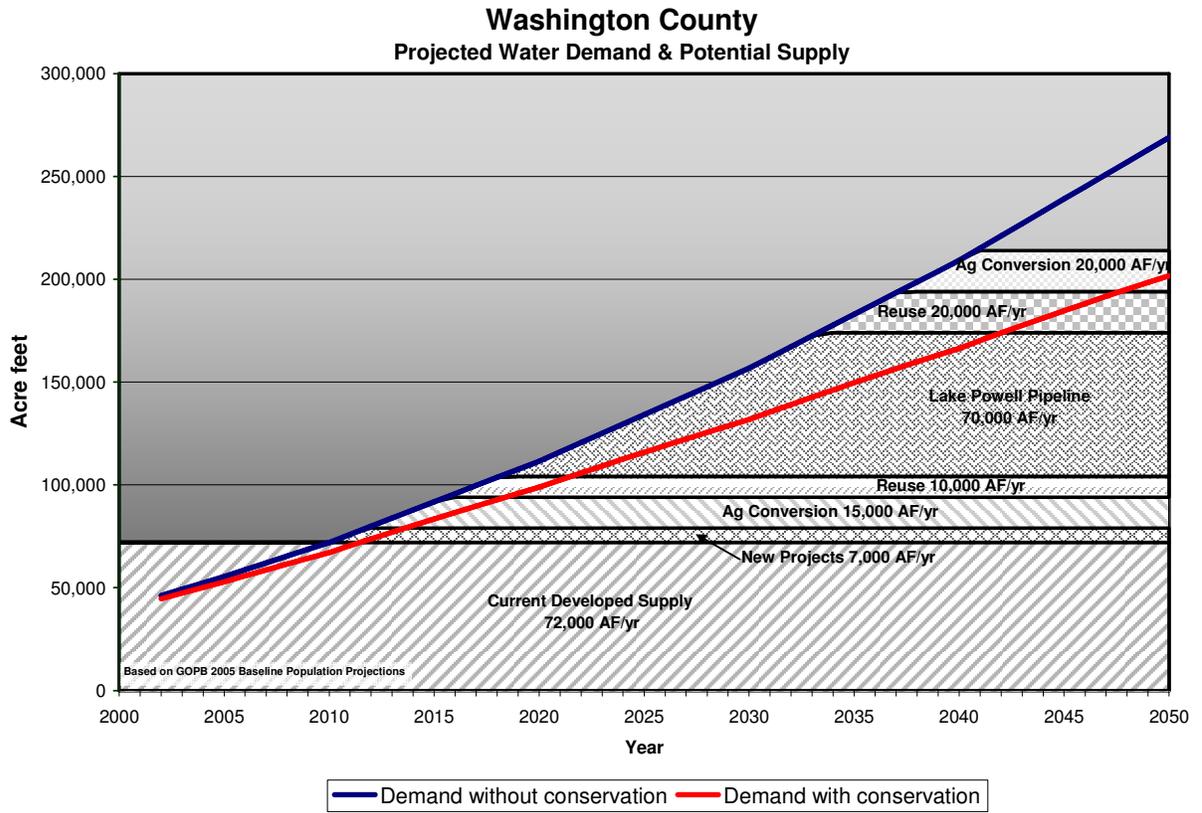
Washington County

While the state projects population growth for Washington County at a gradually decreasing rate starting at 6 percent per year in 2005 and decreasing to 2 percent per year in 2050, Washington County has historically been one of the fastest growing counties in Utah, with an average annual growth rate of over 6 percent for the last 30 years.¹

Readily available water resources in Washington County have already been developed (*Exhibit 5*). WCWCD has already financed and completed many water development projects to meet demands. These projects have been funded by the conservancy district (*Exhibit 6*).

¹ Population projections for Washington County, as stated by the Governor’s Office of Planning and Budget, are more elusive than for other areas in the state mostly due to the “snowbird” population. Approximately 15-20 percent of homeowners maintain a home in the county and reside there for a large portion of the year, but continue to list their primary residency in another location.

Exhibit 5



**Washington County Water Conservancy District
Water Development Projects**

PROJECT/DATE	DESCRIPTION	FINANCING
Quail Creek Reservoir 1985	Storage capacity 40,000 af, yield 22,000 af	\$24,344,830
Sand Hollow Reservoir and Recharge Project 2002	Storage capacity 50,000 af, surface yield 10,000 af, groundwater yield 7,000 af.	\$35,124,073
Regional Pipeline 2004-5	Culinary water transmission pipeline	\$18,843,853
Toquerville Secondary Water System 2000	Secondary	\$3,133,093
Santa Clara Pipeline Project 2004	Secondary water transmission pipeline system (included Ivins Reservoir)	\$6,415,193
Sand Hollow Basin Wells	Culinary	\$1,955,020
Anderson Junction (Cottam) Well & Pipeline Water System 1st well drilled – 1994 2nd well drilled - 2000	Culinary Water System	\$4,653,706
Kayenta (Ence Wells) Water System #1 well drilled – 1974 #2 well drilled - 2001	Culinary (purchased and redrilled)	\$538,617
Hurricane Valley Water System Purchased 1997	Culinary (Purchased and redrilled)	\$1,782,563
Sullivan Well 2002	Culinary (drilled)	\$887,329
Leap Creek Pipeline 2004	Secondary	\$324,988
Ash Creek Pipeline Project	Secondary (recharge reservoir and pipeline)	Pending
Additional Sand Hollow Basin Wells	Culinary	Pending
Crystal Creek Pipeline	Transmission pipeline to Kolob Reservoir	Pending

Current water supplies are expected to be fully utilized by no later than 2012. Water remaining available for development within the county is estimated at about 72,000 acre feet. This amount includes approximately 30,000 acre feet to be gained from treating wastewater for reuse and 35,000 acre feet from conversion of existing agricultural water uses to municipal water use. Approximately 32,000 acre feet are planned to be developed prior to construction of the Lake Powell Pipeline. These projects would serve population growth through about 2023. The Lake Powell Pipeline will provide sufficient water to meet the needs of the population projected through the year 2038 (approximately 447,230 people with a water demand of approximately 174,000 acre feet). Approximately 40,000 acre feet would be more costly or difficult to acquire before the Lake Powell Project water, due to current technology or other limitations. Development of these water resources is thus necessarily postponed until after 2038.

Wasatch Front

The Wasatch Front is represented by the Jordan Valley Water Conservancy District and the Weber Basin Water Conservancy District. Their presentations as to population and demand follow.

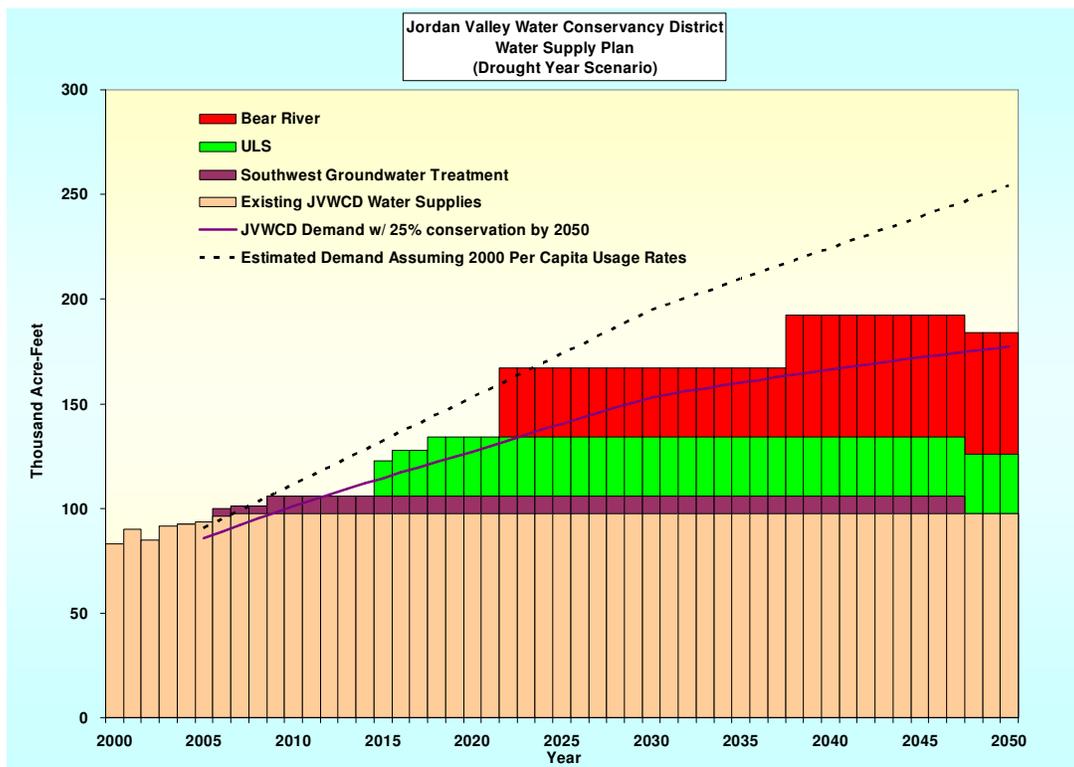
Jordan Valley Water Conservancy District

Jordan Valley Water Conservancy District (JVWCD) is the largest municipal water district in Utah, delivering water to entities in Salt Lake and Utah County including 22 cities, water districts, and private systems. The population within JVWCD's boundaries is in excess of 600,000 people, but JVWCD also assists the Metropolitan Water District of Salt Lake and Sandy in making deliveries to its member cities through the operation of the jointly owned JVWCD water treatment plant and Jordan aqueduct.

Salt Lake County's 2000 population of about 903,000 is projected to increase to over 1.6 million people by 2050. Most of this growth will occur within JVWCD boundaries. Water deliveries within JVWCD's service area are projected to increase over this same period from 80,000 acre feet per year to about 250,000 acre feet per year at historical consumption rates.

JVWCD's Board of Trustees has established a goal to reduce the 2000 per capita water use in its service area, through various water conservation programs, by 25 percent by the year 2025. If this goal is realized, the 2050 water demand will be reduced to 90,000 acre feet of water above currently available sources (*Exhibit 7*).

Exhibit 7



Notes:

1. ULS water supply is subject to the federal funding schedule of the U.S. Department of Interior and Central Utah Water Conservancy District.
2. Southwest Groundwater Treatment Project reverse osmosis discharge approval is for 40 years only.

Exhibit 8

Jordan Valley Water Conservancy District: Current Water Supply

Central Utah Project	50,000 af
Salt Lake County Groundwater	20,000 af
Welby-Jacob Exchange (Deer Creek Reservoir & Provo and Weber Rivers)	20,000 af
Total	90,000 af

If Jordan Valley's conservation goals are met, only an additional 90,000 acre feet of new water will be needed by 2050. This can be met as shown on the chart:

Exhibit 9

Jordan Valley Water Conservancy District: Projected Water Supply

Southwest Groundwater Treatment (groundwater remediation project)	8,000 af
ULS (additional Central Utah Project water)	22,000 af
Bear River Project	50,000 af
Wastewater Recycling Project	10,000 af
Total	90,000 af

Exhibit 10

Summary of Jordan Valley's Current Water Supply and Development Costs

<u>Sources</u>	<u>Quantity of Water</u>	<u>Estimated Replacement Costs</u>
1. Central Utah Project	50,000 af	\$527 million ¹
2. Salt Lake County Groundwater	20,000 af	\$42 million ²
3. Welby-Jacob Exchange	20,000 af	\$210 million ³
4. Transmission Distribution System	n/a	\$278 million ⁴
Totals:	90,000 af	\$1,057 million

¹ Financed by the U.S. Bureau of Reclamation. Includes proportionate share of Bonneville Unit CUP facilities, Jordan Aqueduct, and Jordan Valley Water Treatment Plant.

² Includes 28 wells with 112 cfs of capacity. The underlying value of the water rights have not been included.

³ Includes acquisition of water rights at current costs plus construction of Jordan Narrows Pump Station.

⁴ Includes 238 miles of pipeline, 170 million gallons of storage capacity, and 12 booster stations.

Weber Basin Water Conservancy District

The Weber Basin Water Conservancy District (WBWCD) was created on June 26, 1950 by a decree of the Second District Court of Utah under the guidelines of the Utah Water Conservancy Act. The district was formed to act as the local sponsor of the federal project and to further supply water resources to the population within its boundaries. The Weber Basin Water Conservancy District covers over 2,500 square miles within five counties: Davis, Weber, Morgan, Summit, and a portion of Box Elder County.

The original project, including reservoirs, canals, irrigation and drainage systems, and power plants was constructed by the Bureau of Reclamation from 1952 through 1969. The district entered into a repayment contract with the United States in 1952, which will be completed in approximately 2034, to repay all of the original project costs and interest related to water supply. Water sales and the original one mil property tax levied by the district at its inception fund this repayment and the development of other water sources.

Weber Basin presently delivers approximately 220,000 acre feet of water annually: 60,000 acre feet for M&I uses and 160,000 acre feet for irrigation, which includes secondary pressure irrigation systems. The district operates seven large storage reservoirs which store approximately 400,000 acre feet of the district's water. The reservoirs are: Causey, East Canyon, Lost Creek, Pineview, Smith & Morehouse, Wanship and Willard Bay. Due to the later priority of the district's water rights on the river systems, it is necessary to have storage volume equal to a two year water supply. The district operates three hydro-power generation plants that can produce up to about eight megawatts of electricity. Over 79 miles of canals, a trans-mountain tunnel, two multi-county aqueducts, hundreds of miles of raw water and culinary pipelines, and nine major pumping stations are also operated and maintained.

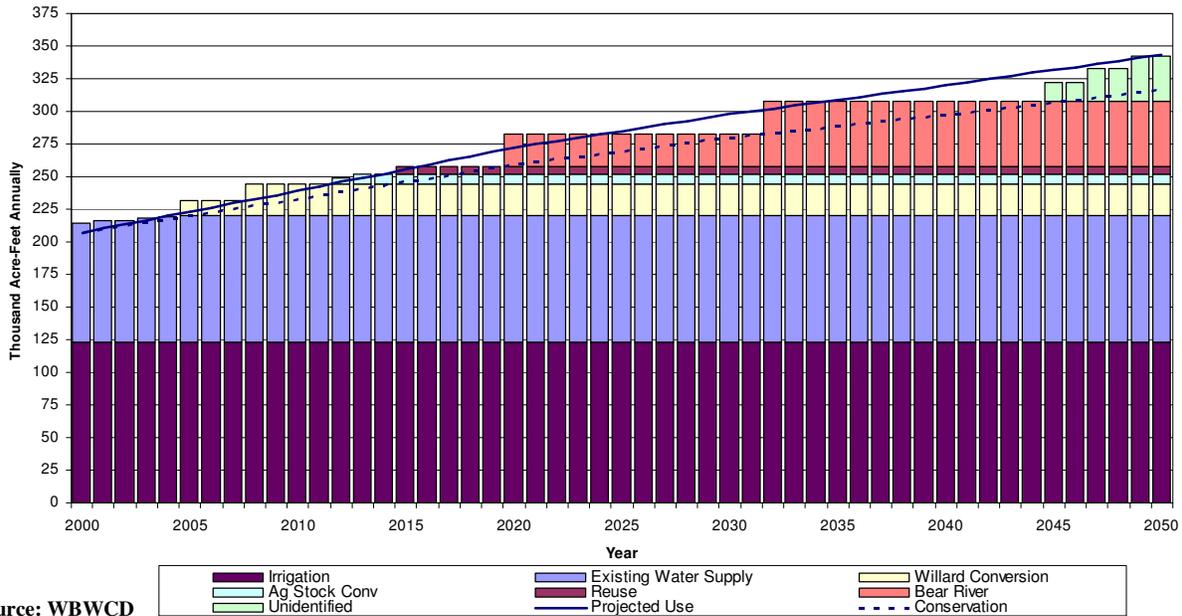
The district is unique for its ability to serve five classifications of water service, including agricultural water (flood and pressure), drinking water, industrial supplies, groundwater replacement, and pressurized/secondary water. The groundwater replacement water is used in the areas east of the Wasatch Front, including upper Weber County, Morgan County, and Summit County.

WBWCD wholesales drinking water to 30 cities, water districts, and private systems. The population served by these systems is over 400,000. Within WBWCD boundaries the population was 470,000 in 2000, and is projected to increase to nearly 1.0 million people by 2050. Most of the district's drinking water customers will rely on the WBWCD for their future water supplies.

Exhibit 11

**WEBER BASIN WATER CONSERVANCY DISTRICT
TOTAL WATER SUPPLY AND CONSERVATION PLAN**

January 2005



There are lands remaining in Davis and Weber Counties that are in agriculture production. Much of the water irrigating these farms is provided by the Weber Basin Water Conservancy District. As these and other lands are developed it is assumed that the water still available will stay on the land and be converted to an urban use, either secondary or potable. However, it is assumed that delivery of converted agricultural water will be reduced by well over half due to return flow requirements and National Environmental Policy Act (NEPA) compliance. Conversion of the Weber Basin agricultural water to an urban use will require NEPA compliance.

Exhibit 12

Weber Basin Water Conservancy District: Current Water Supply

Weber Basin Project Water	182,000 af
Smith & Morehouse Water	6,500 af
District Ground Water	29,000 af
Irrigation Stock water	7,500 af
Total	225,000 af

If WBWCD's conservation goals are met, only an additional 86,500 acre-feet of new water will be needed by 2050. This need can be met as shown in *Exhibit 13*.

Exhibit 13

Weber Basin Water Conservancy District: Projected Water Supply

Willard Bay Agriculture Water Conversion	24,000 af
Other Agriculture Water Conversion	7,500 af
Bear River Project	50,000 af
Wastewater Recycling Project	5,000 af
Total	86,500 af

Exhibit 14

Summary of Weber Basin's Current Water Supply and Development Costs

<u>Sources</u>	<u>Quantity of Water</u>	<u>Estimated Replacement Costs</u>
1 Weber Basin Project	182,000 af	\$1,555 million ¹
2 Smith & Morehouse Dam	6,500 af	\$24 million ²
3 District Groundwater Development	29,000 af	\$22 million ³
4 Water Stock Purchases	7,500 af	\$27 million ⁴
5 Transmission Distribution System	n/a	\$255 million ⁵
Totals:	225,000 af	\$1,883 million

1. Financed by U.S. Bureau of Reclamation and District Bonds. Includes dams, diversion dams, canals, tunnel, aqueducts, backup wells, and treatment plants. Non reimbursable cost to the District is not included.
2. Financed by Water Resources.
3. Includes 11 wells with 48 cfs of capacity. The underlying value of the water right is not included.
4. Includes stock purchases within the last five years.
5. Includes pipes, storage reservoirs, and booster stations for both the M&I and Secondary Systems.

II. THE TWO-PRONGED APPROACH

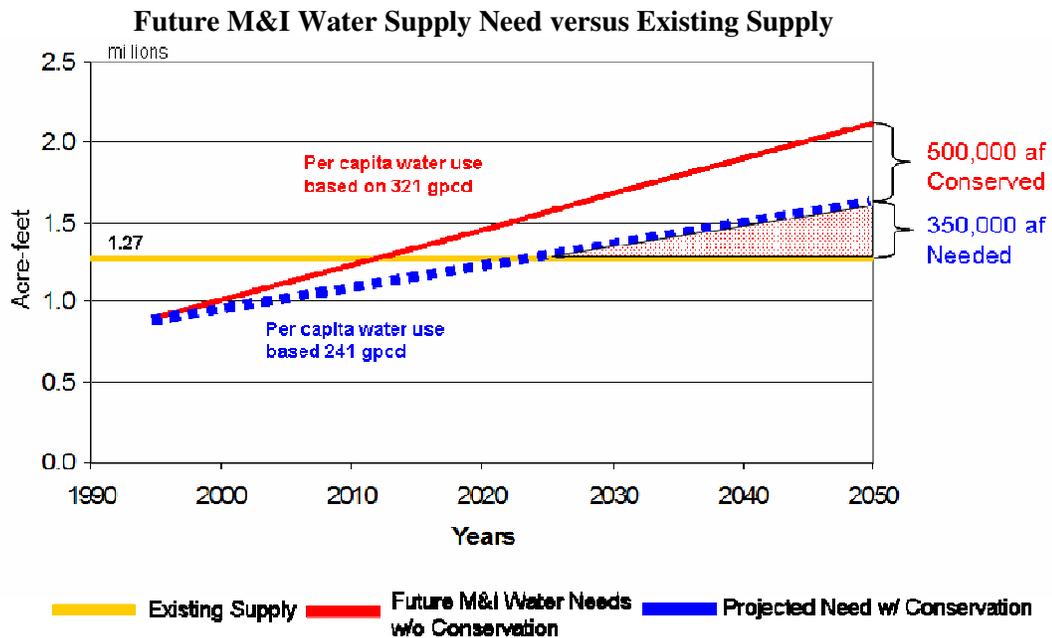
CONSERVATION

Statewide

Several different water sources will help to bridge the gap between future water supply and demand. Local water suppliers can increase water supply through additional groundwater development and increased water treatment plant capacity. However, the best and least expensive way to meet future need is to reduce current water use.

Most new water demands in Utah will occur in the M&I sector as a result of an increasing population. Therefore, the state has developed a specific goal to conserve water use directly linked to M&I needs. This goal is to reduce the 1995 per capita water demand from public community systems by at least 25 percent before 2050. Specifically, statewide average per capita demand will need to decline from 321 gallons per capita per day (gpcd) to 240 gpcd or less. The accomplishment of this goal is equivalent to a total decrease in demand of over 500,000 acre feet per year by 2050 and represents the most significant component in meeting Utah's future water needs.

Exhibit 15



The conservation goal is based on modeling and research that indicates total potable (indoor) and landscape water use can reasonably be reduced by 25 percent or more. Indoor reductions will be realized through public education and the installation of more efficient fixtures and appliances. Landscape reductions will also be realized through public education, more efficient application of water on landscapes, and reduction in turf areas.

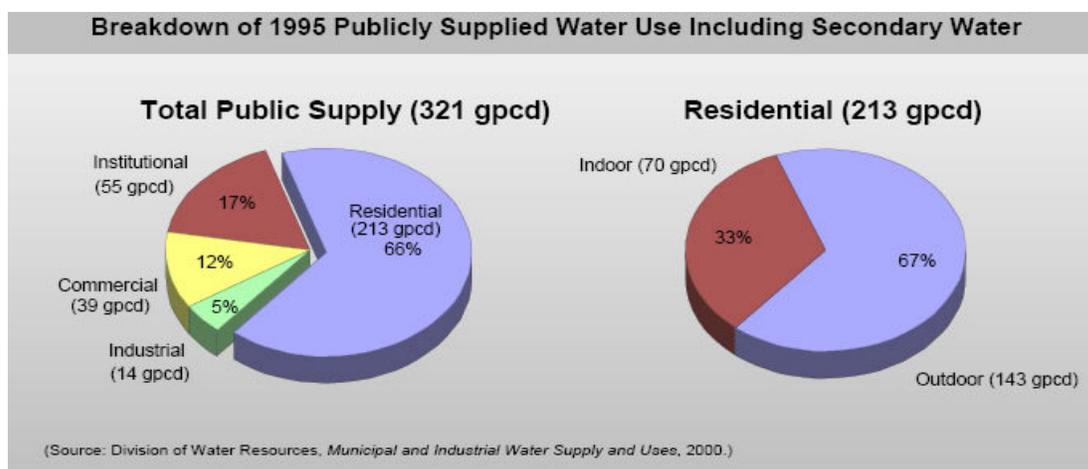
Because the state per capita use is an average by county and the county use is calculated from data provided by local water suppliers, per capita use in the future will continue to be different in each community or service area. There are several reasons why per capita use differs. The two major factors are climate and the area of landscaping (lot size). Other factors may include the price of water or pricing

water to encourage conservation, landscape ordinances, tourist and transient population, and local emphasis on water conservation education and assistance programs.

In order to monitor the progress toward achieving the state's water conservation goal, the division has established a baseline water use of 321 gpcd. This is an average statewide value for all potable and secondary water delivered through public community systems and represents the best estimate for water use in 1995. According to the U.S. Geological Survey, only Nevada (the driest state in the United States) used more water per capita than Utah (the second driest state) in 1995. While Utah's relatively high per capita water use is often compared to the national average of approximately 179 gpcd, a more appropriate comparison would be against the average of other Rocky Mountain States, which is approximately 245 gpcd. The division's most recent study shows the current M&I per capita water use to be 267 gpcd, a reduction of 17 percent from 321 gpcd in 1995.

Exhibit 16 breaks down the division's estimate for Utah's 1995 total per capita use of publicly supplied water into residential, commercial, institutional, and industrial components. Residential use is by far the largest component at about 66 percent or 213 gpcd. As shown on the pie chart on the right side of *Exhibit 16*, an estimated 143 gpcd, or 67 percent of the residential amount, is used outdoors and 70 gpcd (33 percent) is used indoors.

Exhibit 16



Currently, M&I water use data is collected by the division for several hydrologic river basins every year. This data is compiled and then published in an M&I water use study for each basin. Every five years, the data from each of these studies is compiled and a new statewide summary of M&I water use prepared. A process to monitor changes in water use during the years between the five-year statewide summaries has also been established.

Specifically, monthly data is collected from several water providers throughout the state and compared against equivalent use for prior years. Although this process helps provide a useful estimate of total water use for the state, the division relies primarily on the five-year summaries to gauge progress toward achieving the goal. Achieving the goal of at least a 25 percent reduction in per capita demand of publicly supplied water will have significant impacts on Utah's future water needs.

The state's 1995 M&I water demand is estimated to be approximately 900,000 acre feet with an estimated water supply of 1,270,000 acre feet, or about 40 percent above demand. Without water conservation, the annual M&I water demand would increase to about 2,120,000 acre feet by the year 2050. The largest

increases in demand will occur in the heavily populated basins of the Jordan River, Utah Lake, Weber River, Kanab Creek/Virgin River, and Bear River basins. These basins will also be the areas within the state that will benefit the most from water conservation.

If the state is successful in reducing the 1995 per capita water demand of publicly supplied water by 25 percent, it is estimated that M&I water demand in 2050 will be approximately 1,600,000 acre feet per year (or 500,000 acre feet less than would otherwise be needed). This cuts the minimum additional supply that would be needed to meet 2050 demand from 850,000 acre feet to 350,000 acre feet. This deficit will be met by agricultural to M&I water conversions and new water development.

Clearly, water conservation will play a very important role in meeting Utah's future water needs and helping Utahns use municipal and industrial water more efficiently. In addition, water conservation can:

- Delay expensive capital investments to upgrade or expand existing water facilities.
- Reduce sewage flows, delaying the need for more wastewater treatment facilities.
- Conserve energy as less water needs to be treated, pumped, and distributed to the consumer.
- Lessen the leaching of chemicals and sediments into streams and aquifers.
- Improve water levels in reservoirs.
- Reduce stream diversions thereby enhancing water quality and environmental and recreational functions.

Project-centered areas

Washington County Water Conservancy District

WCWCD is faced with unique challenges for water conservation, with its low precipitation (8 inches annually), long growing season, and summer temperatures rising into the 100s. Washington County has 300 sunny days per year, which draws new residents to the area. Many new residents are building secondary homes, which use the same amount of outside water whether or not the owner is in residence year round. Thus, unlike other parts of the state, WCWCD's per capita water use is skewed by factors that cannot be controlled solely through conservation measures. The district has been aggressive in promoting water conservation. In 1996, the district adopted its first water conservation plan, setting a goal of 25 percent water use reduction by the year 2015. A full-time water conservation coordinator was hired in 1996 to implement the recommendations made in the plan. The following programs promote water conservation in the county:

- Water conservation demonstration garden in partnership with other public and private groups
- Free water checks
- Annual water fair for all county 4th graders
- Water efficient workshops for the homeowner
- Assistance in developing courses for the landscape professional
- Media campaigns
- Conversion of open ditch systems into pressurized systems
- Membership on the governor's conservation team

Jordan Valley Water Conservancy District

JVWCD began its conservation programs in 1999 and has made a long-term commitment to promote water conservation. Water conservation will not only extend limited water supplies, but also defer costly infrastructure and future water development projects.

JVWCD's water conservation goal is to reduce per capita water use 25 percent by 2025. This goal will be measured in terms of per capita water use reduction beginning with the year 2000 as the base year. Water use in 2000 was calculated to be 250 gpcd; therefore, district-wide water use will need to be reduced to 188 gpcd by 2025. As of 2004, there has been a reduction in per capita water use to 207 gpcd. This reduction has occurred during the drought over the past five years. It is JVWCD's desire to continue on this trend even during non-drought years.

Exhibit 17

JVWCD Service Area Population and Water Usage

(Updated February 2, 2005)

Year	^(a) Population	^(d) System Demand (AF)	Calculated Water Usage Rate (gpcd)	% Reduction from Year 2000	^(b) Water Usage Rate Goal (gpcd)
2000	^(c) 464,773	129,868	250		250.0
2001	471,967	128,617	243	2.8	247.5
2002	^(c) 479,161	119,963	224	10.4	245.0
2003	491,968	116,758	212	15.2	242.5
2004	505,621	117,465	207	17.2	240.0
2005	519,274				237.5
2006	534,151				235.0
2007	549,028				232.5
2008	563,905				230.0
2009	578,782				227.5
2010	593,659				225.0

(a) Population each year is estimated based on data furnished by the Governor's Office of Planning and Budget and Wasatch Front Regional Council.

(b) JVWCD's conservation goal is to reduce per capita water use 25% by year 2025, or 1% per year.

(c) Actual population updated in the year shown.

(d) Does not include secondary water use in Bluffdale and South Jordan City.

In order to achieve this per capita reduction in water use, JVWCD has implemented water conservation programs to reduce the demand for water and delay costly water infrastructure and development projects. Some of the programs the district has implemented and continues to use include:

- Public information and education campaign
- Water Conservation Demonstration Garden
- Model residential and commercial landscape ordinances
- Ultra Low Flush Toilet Replacement Program
- Residential, commercial, and industrial water audits
- Water-wise landscaping classes
- Large water user workshops
- Water Quest: Saving Water by the Yard
- Water-wise landscape awards
- Member Agency Assistance Program

Weber Basin Water Conservancy District

In the last decade, Weber Basin Water Conservancy District (WBWCD) has implemented several new water conservation measures. These measures, along with increased awareness of the drought cycle, have resulted in a 14 percent decrease in annual urban use (not adjusted for increased population) since 2000. WBWCD was one of the first water purveyors in the state to implement aggressive conservation usage measures. Because of the unique and large scale pressurized secondary water systems throughout its service area, the district has enforced watering restriction times and other scheduling requirements.

Due to the large amount of outdoor water delivered through systems separate from the culinary systems, future water conservation methodologies are different from other areas in the state. They will include:

- Continued and increased restrictions on watering times and schedules
- Improved accounting systems, including metering of secondary irrigation systems
- Promotion of water-budget based ordinances in cities and counties
- Increased education and demonstration of water-wise landscaping
- Daily patrolling of usage within service areas
- Utilization of reuse and other lower quality water supplies

DEVELOPMENT

Statewide

Even after developing new groundwater supplies and meeting the state's conservation goal, there will not be enough water to meet the projected need in several of the fastest growing areas of the state. Because of this shortage, the state has been planning two large water development projects: the Lake Powell Pipeline and the Bear River projects. The Lake Powell Pipeline and Bear River projects are relatively close to population centers in Southern Utah and the Wasatch Front, where growth is most rapid. The Washington County Water Conservancy District calculates that the Lake Powell Pipeline will be needed by about 2020 (*Exhibit 5*). The Wasatch Front water districts estimate the need for water from the Bear River Project to be approximately in 2035 (*Exhibits 7 and 11*).

These two projects will be expensive to build. They are expected to cost more than \$814 million in today's dollars. The bulk of the costs will be incurred at the time of construction. However, certain portions of the project such as design, engineering, rights-of-way acquisition, and environmental studies must occur prior to construction. As with any large water project, it can take many years to go from environmental studies to construction.

Lake Powell Project

During the past ten years, the division and WCWCD have been investigating the feasibility of constructing a pipeline from Lake Powell to southwestern Utah.

The following investigations have been completed on the proposed pipeline:

- 1995 Lake Powell Pipeline Feasibility Study
- 1998 Water Supply Needs for Washington and Kane Counties
- 1998 Lake Powell Pipeline (All Utah Project Alignment)
- 2002 Preliminary Design & Cost Estimate for Lone Rock Pump Station
- 2003 Lake Powell Pipeline Feasibility Study, Supplemental Analysis of the Hurricane Cliffs, the Cockscomb, and Alternative Alignments
- 2003 Lake Powell Pipeline Feasibility Study Supplemental Analysis, Water Delivery to the Central Iron County Water Conservancy District

During these investigations it has been determined that the WCWCD will need 70,000 acre feet of additional water from the pipeline. During the initial studies on the Lake Powell Pipeline, meetings were held with the Kane County Water Conservancy District (KCWCD) to determine if they have a need for additional water because the pipeline would pass close to Kanab. After discussions with the KCWCD, it was determined the district could use 10,000 acre feet of water.

As part of the initial feasibility investigations of the Lake Powell Pipeline, various alternative alignments were examined in an effort to identify the least costly alignment that would have minimal impact on the environment. An attempt was made to identify alignment all in Utah, but the most cost-effective alternative with the least impact follows Highway 89 in Utah from Lake Powell to the Kanab area and dips into Arizona along Highway 389 before returning into Utah where the pipeline will terminate at Sand Hollow Reservoir.

In 1999 the Board of Water Resources, acting on a request from WCWCD, approved 69,000 acre feet from the Flaming Gorge water right for Washington County to supply water for the Lake Powell pipeline. At the same time the board reserved 10,000 acre feet of the Flaming Gorge water right for KCWCD.

During the most recent study, the Central Iron County Water Conservancy District (CICWCD) requested an investigation of the cost to increase the pipeline size from 60 to 66 inches in diameter to carry 100,000 acre feet, allowing 20,000 acre feet of water to meet future needs in the Cedar City area. The CICWCD has determined that its annual water needs over the next twenty to thirty years will be a minimum of 18,000 acre feet up to a maximum of 34,000 acre feet. The CICWCD would like to participate in the Lake Powell Pipeline project; it may be the only realistic possibility of bringing needed additional water resources into the Cedar Valley water basin.

Considerable work still must be completed on the Lake Powell Pipeline before final decisions are made on individual components to be included in constructing the project. The estimated cost to run the pipeline from Lake Powell to St. George is \$370 million in today's dollars, or approximately \$585 million if adjusted for inflation (*Exhibit 18*). If the pipeline is extended to Cedar City, it is estimated to cost an additional \$114 million. If WCWCD is successful in developing additional groundwater, new projects, and the reuse of sewage effluent, as well as agricultural conversion, the Lake Powell Pipeline Project may not be needed until approximately 2020. If WCWCD is unable to develop some of those water sources, the pipeline will be needed sooner.

Exhibit 18

LAKE POWELL PIPELINE PROJECT	
Preliminary Cost Estimate for Environmental Analysis and Feasibility Activities	
Year	Estimated Annual Expenditure
2005	\$4,249,000
2006	2,715,000
2007	979,000
2008	983,000
2009	674,000
2010	669,000
2011	667,000
2012	3,990,000
2013	4,015,000
2014	4,721,000
2015	188,175,000
2016	188,175,000
2017	185,291,000
TOTAL	\$585,303,000

¹ An inflation factor has been applied to the construction costs in this chart.

The pipeline is projected to go into Arizona past the Town of Fredonia, Colorado City, and the Kaibab Indian Reservation. Utah has sent the Arizona Department of Water Resources copies of many of these studies and has asked if Arizona would like to participate in the project and deliver water to both the towns and the Indian reservation. At present, discussions with Arizona suggest they have no interest in putting water into the Lake Powell Pipeline. Should they indicate such an interest early enough in the design phase, it would be possible to accommodate their interest.

WCWCD commissioned the Vanguard Media Group to conduct a public opinion survey on the Lake Powell Pipeline project. The survey sought to gather pertinent information from stakeholders, identify issues and perceptions, and develop audience-based strategies and tactics. The survey showed that the

public is supportive of the Lake Powell Pipeline project and places water development high on the list of top issues for the state. The majority of respondents stated the project is essential for growth, maintaining quality of life, and economic prosperity. An overwhelmingly high percentage of Utahns stated that Utah should tap into its unused portion of the Colorado River water.

Exhibit 19

LAKE POWELL PIPELINE—Facts

From Lake Powell to Sand Hollow Reservoir	
Pipeline Length	127 miles
Pipe Diameter	60 inch
Two pump stations	
Lone Peak @ Lake Powell	
Cockscomb	
Total pump lift	over 2,600 feet
Total water pumped	80,000 acre-feet
10,000 acre-feet delivered to Kanab	
70,000 acre-feet delivered to Washington County	
Two hydroelectric plants	
Estimated Construction Cost	\$370 million

Extend the Lake Powell Pipeline to Cedar City	
Increased Pipeline Length	42 miles
Pipeline diameter from Lake Powell to Sand Hollow	66 inch
Pipeline diameter from Quail Creek to Cedar City	30 inch
Three Additional Pump Stations at:	
Quail Creek	
Pintura	
New Harmony	
Total pump lift	over 2,000 feet
Additional water pumped to Cedar City	20,000 acre-feet
Estimated Additional Construction Cost	\$114 million

Bear River Project

The water needs of the Wasatch Front can best be met by developing resources from the Bear River. The average annual flow of the Bear River into the Great Salt Lake is about 1.2 million acre feet. This water resource has received a great deal of attention and is considered to be one of Utah's last large blocks of developable water. Development of the Bear River has been studied by state, federal, and local water development agencies for many years.

In 1991 the legislature passed the Bear River Development Act (Act). The Act directs the division to develop the waters of the Bear River and its tributaries. The division is to plan, construct, own, and operate reservoirs and facilities on the river as authorized and funded by the legislature and market the developed water.

Based on current water need estimates, public response, and cost analysis, the division's plan is: 1) if possible, modify the existing operation of Willard Bay by agreement with the Weber Basin Water Conservancy District and the United States Bureau of Reclamation to allow the storage of Bear River water; 2) connect the Bear River with a pipeline and/or canal to Willard Bay from a point near the Interstate 15 crossing of the Bear River near Elwood in Box Elder County; 3) construct conveyance and treatment facilities to deliver water from Willard Bay to the Wasatch Front (this item is not included in the division's responsibilities and will be done by Jordan Valley and Weber Basin Water conservancy districts); and 4) build a water storage project in the Bear River Basin. The use of Willard Bay, a federal reservoir constructed under the Weber Basin Project, to store Bear River water has not yet been verified or approved for non-federal project waters entering a federal facility. Related studies on environmental impacts, water quality, and hydrology will be required before such federal authorization will be considered.

Parts 1 through 3 would be timed to deliver water to the Wasatch Front by about the year 2035 (based on contracts with Jordan Valley and Weber Basin water conservancy districts and legislative assistance). The cost estimate for the construction of the facilities needed to divert high and winter flows from the Bear River to Willard Bay is \$70 million. The cost estimate for the treatment facilities and distribution system to deliver water from Willard Bay south is \$350 million. A reservoir or reservoirs would be constructed when additional water is needed. Part 4 would be carried out when the Bear River Water Conservancy District and/or Cache County water users need the water or earlier if it is found that utilizing Willard Bay is infeasible. The division has identified the Washakie Reservoir site as the current most likely first reservoir to be constructed. It is an off-stream site near Portage, Utah, about one mile south of the Idaho border. The cost estimate for the Washakie Reservoir is \$260 million. Due to the extended period of time this plan covers it is possible the plan would be modified. If an agreement can be reached with Weber Basin Water Conservancy District to store additional water in Willard Bay, the Bear River Project will produce 50,000 acre feet of water with the Willard Bay portion, and 140,000 acre feet of additional water will be developed with the Washakie portion of the project.

The division has already spent considerable time and money on feasibility studies, site investigation, water quality analysis, and geotechnical investigation. This money was appropriated to the division by the legislature in 1991. To continue moving the project forward, the division needs additional authority, direction, and money from the legislature. About \$20 million (included in the figures in *Exhibit 20*) will be needed for preliminary engineering, planning and economic work, and to acquire rights-of-way needed to get the project ready for permitting, design, and construction. Even though the project may not be needed until 2035, the task force suggests proceeding with the schedule outlined in Appendix E, realizing that delays should be expected and water may be needed earlier than is currently projected.

BEAR RIVER DEVELOPMENT PROJECT		
Preliminary Cost Estimate for Environmental Analysis and Feasibility Activities		
Year	Est. Annual Expenditure	
2005	\$197,000	
2006	627,000	
2007	589,000	
2008	524,000	
2009	649,000	
2010	682,000	
2011	427,000	
2012	857,000	
2013	107,000	
2014	1,156,000	
2015	1,000,000	
2016	1,075,000	
2017	1,200,000	
2018	775,000	
2019	200,000	
2020	20,000	
TOTAL	\$10,085,000	
Pipeline Right-of-Way Cost	\$2,000,000	
Reservoir Right-of-Way	7,500,000	
TOTAL	\$19,586,000	

The current Bear River Act directs the division to develop 220,000 acre feet of water right applications held by the Board of Water Resources. The Act allocates the water developed as follows: 50,000 acre feet each to Jordan Valley and Weber Basin Water conservancy districts, 60,000 acre feet to Bear River Water Conservancy District, and 60,000 acre feet to water users in Cache County.

To determine the facilities required to develop the Bear River, the division created the "Bear River Simulation Computer Model" (model). The model has the capability of simulating the effect of development scenarios and was used to determine the amount of water that could be developed using variations of direct diversion, dams and reservoirs, and combinations of both. The model assumes existing water rights would be honored and uses historical water flow records. It includes the option of using Willard Bay with its existing Weber River water supply and the BWCD's forecasted future demand schedule.

The model takes into consideration water rights and use patterns of downstream users and the Bear River Bay. The Bear River Migratory Bird Refuge has the major downstream water right and the delivery and demand pattern the model uses were developed by the U.S. Fish & Wildlife Service. The model meets the refuge demand before water is stored in a simulated reservoir or diverted from the river.

In 1991 an overview of the environmental impacts of the most cost-efficient dams and reservoirs was conducted by BioWest of Logan. BioWest concluded that unless there are unexpected findings of listed endangered species, all anticipated environmental impacts could be mitigated. This conclusion was further verified in another BioWest report prepared in 1996 for the U.S. Fish and Wildlife Service and the division.

Exhibit 21

Bear River Project—Facts	
Pipeline and/or Canal from near Elwood to Willard Bay Reservoir	
Pipeline length	17 miles
Pipe diameter	10 feet
Two pump/lift stations	
Peak flow	400 cfs
Average annual yield	50,000 acre feet
Estimated Pipeline Construction Cost	\$70 million
Washakie Reservoir	
Canal extension	5.5 miles
Canal maximum capacity	400 cfs
Maximum pump lift (canal to reservoir)	60 feet
Reservoir capacity	160,000 acre feet
Maximum dam height	66 feet
Estimated Reservoir Construction Cost	\$260 million

III. WATER DEVELOPMENT FUNDING

FINANCING

The amount of money required for the Lake Powell Pipeline and Bear River projects exceeds \$814 million in today's dollars, far more than the local water districts are able to finance upfront on their own. The local water districts do not have a large enough bonding capacity to finance the projects themselves and much of their bonding capacity has been used up by infrastructure and smaller water development projects (see *Exhibits 6, 10, and 11*).

The executive order creating the Water Delivery Financing Task Force charged the task force with "evaluat[ing] options for financing the proposed Lake Powell Pipeline and Bear River system projects and recommend[ing] preferred options for financing." This section of the report examines many of the funding options the task force considered before making concrete recommendations that will hold to the standards listed in the executive order, that "options considered shall:

- A. take into account all reasonable revenue sources and financing, including bonding;
- B. specify responsibility for payment, with users bearing the ultimate responsibility for payment;
- C. provide for repayment to the state of any funds loaned or otherwise fronted for the projects; and
- D. maintain the state's AAA bond rating."²

The task force determined one of the keys to minimizing the future financial cost of these substantial projects is to begin pooling resources and making relevant expenditures now. This will not only enable the groundwork to be laid for final construction but will save millions in inflation costs related to land and right of way acquisition. In addition, money spent along the way will decrease the size of the bond financing required for each project, which may be an important consideration given the constitutional and statutory constraints on the state's bonding capacity. If the state uses this time to its advantage by identifying revenue sources it can both spend and save along the way, the state is more likely to be in a position to arrange the ultimate construction financing.

The task force has identified five different areas where funds could be spent in the years leading up to project completion. These areas are: (1) engineering, (2) planning, (3) land acquisition, (4) right of way acquisition, and (5) environmental impact studies. By spending a few million dollars per year to address these areas, the state will generate significant savings by avoiding inflationary cost increases. Spending money in the interim will likewise decrease the overall size of whatever bond financing is required to ultimately complete the projects. We currently have an estimate of project costs in 2005 dollars, but cannot predict with certainty how inflation in land and construction costs will affect total project costs in the years before costs are actually incurred.

² <http://www.rules.utah.gov/publicat/bulletin/2004/20041115/ExecDoc87420.htm>

FEDERAL FUNDING

In 1902, Congress passed the Reclamation Act, declaring in effect that the development of the western United States was a matter of public interest requiring the assistance and involvement of the federal government. The Act provided federal funding for water resource reclamation work in 17 western states.

Utah was able to capitalize on this new funding source by organizing the Arid Land Reclamation Fund Commission to coordinate efforts to pursue water reclamation projects with the federal Reclamation Service. Utah has leveraged federal funding to complete many projects, beginning with Strawberry Reservoir and continuing through today with the Central Utah Project. Over the years state water developers have worked with the Bureau of Reclamation on jointly planned projects, leaving the state with a strong collection of dams, canals, and pipe structures throughout the state.³

Over time, the access to federal money has become much more limited, and the portion the Bureau of Reclamation was willing to pay has decreased. The likelihood that the state could receive federal funding for the Lake Powell Pipeline and Bear River Project is much lower today than it would have been fifty years ago. Increasing demands on the federal government to fund social programs, combined with the nationwide need for more and larger reclamation projects has led to a tightening of the federal purse. States are left more to themselves to work out the funding and financing of most municipal water projects. For those projects where federal funding is available, the inclusion of the Bureau of Reclamation often leads to increased project costs given the stringent requirements states must meet in order to claim these federal dollars. In addition, there is often a disconnect between when federal money will be committed and when funds are required for project construction. While the task force believes the option of federal funding should be pursued, it believes it is best to proceed for the present as if the state alone will be required to provide complete financing for both projects.

DEBT STRUCTURE OF THE STATE OF UTAH

Legal Borrowing Authority

In examining the options for funding the construction of the Lake Powell Pipeline and the Bear River Project, it is often anticipated that a bond, issued by the state, may be required to allow the water districts to bridge the time gap between when additional water must be secured and when full repayment can be expected. Although the governor's directive dictates the water districts will ultimately be responsible for full payment of project construction costs, it has also been assumed none of the districts involved has enough bonding capacity to fund these projects on their own. Therefore, it is important to examine the state's current bonding capacity and take into consideration other potential capital projects the state could finance through bond issuance in the years preceding construction of the Lake Powell and Bear River projects. This will permit a realistic view of the likelihood the state will in fact be able to bond for the projects when required.

Constitutional and Statutory Limitations on State General Obligation Indebtedness

Constitutional Debt Limit. Article XIV, Section 1 of the State Constitution limits the total general obligation indebtedness of the state to an amount equal to 1.5 percent of the value of the total taxable property of the state, as shown by the last assessment, for state purposes previous to the incurring of such debt. The approximate additional constitutional debt incurring capacity of the state is currently \$1,050,000,000.

³ "Creating an Oasis: Water Development and Funding in Utah", 2002 Utah Foundation Report; <http://www.utahfoundation.org/pdfs/rr647.pdf>

Statutory General Obligation Debt Limit. Title 63, Chapter 38c, of the Utah Code (the “State Appropriations and Tax Limitation Act”), among other things, limits the maximum general obligation borrowing ability of the state. Under the State Appropriations and Tax Limitation Act, the outstanding general obligation debt of the state at any time may not exceed 45 percent of the maximum allowable state budget appropriations limit as provided in that act, which limits state government appropriations based upon a formula that reflects the changes in population and inflation. The approximate remaining statutory General Obligation debt incurring capacity is currently \$243,354,000.

As additional general obligation bonds are issued and outstanding general obligation bonds are retired, the unused maximum general obligation borrowing capacity of the state under the State Appropriations and Tax Limitation Act will fluctuate. The State Appropriations and Tax Limitation Act may be amended in the future by majority vote of both houses of the legislature.

Synopsis

This analysis clearly demonstrates that the Lake Powell and Bear River projects cannot be bonded for under the currently existing statutory general obligation debt limit. The legislature could exempt these bonds from the statutory requirement. However, it is difficult to predict whether the state will have sufficient remaining constitutional bonding capacity 10-15 years down the road, when construction on the first of these projects will likely begin. One of the largest funding needs the state currently faces is for the construction of roads.

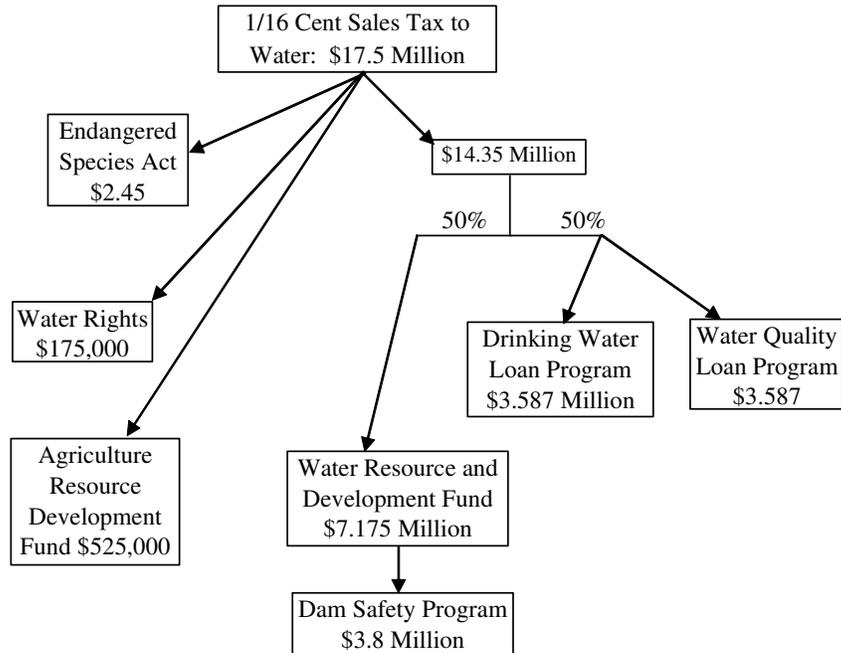
If the general obligation borrowing capacity does not exist to meet all of these requirements, the state could investigate alternative methods of funding. For instance, the state currently funds the construction of most buildings through its Building Ownership Authority, which does not count against its constitutional or statutory borrowing limits. The state could likewise utilize a sales tax revenue bond structure, currently used by many of Utah’s local cities and counties, to meet the funding requirements of these important water projects. This sales tax revenue bond structure would require a constitutional amendment and authorizing legislation.

WATER LOAN FUNDS

Some smaller water development projects are funded out of the state water loan funds. Some of the water loan funds within the Department of Natural Resources, the Department of Environmental Quality, and the Department of Agriculture and Food are from an annual dedication of 1/16th cent of the sales tax, but are capped at \$17.5 million per year. The cap was originally put in place to help balance the budget. The funds are divided up by percentages, so if the cap were to go up or down, the amounts to the various state agencies would fluctuate as well.

Within the Department of Natural Resources, the money that goes to the Division of Water Resources is loaned out through water loan programs, and is also expended for the dam safety program. All state funding covers about 20 percent of the water projects in Utah. There are several water loan funds, some that charge interest and one that does not, based on what the entity can afford to pay and how large the project is. The dam safety money is part of a grant program that repairs hazardous dams in priority order.

FLOWCHART OF CURRENT 1/16 CENT SALES TAX DIVERSION TO WATER



FUNDING OPTIONS

The task force discussed many alternate funding options, including a small statewide property tax, dedicating a small portion of the sales tax, annual General Fund appropriations, impact fees, real estate transfer tax, and the water loan funds. As the task force studied the projects, it was decided that the financing mechanism strategy could be easily broken down into three stages, with different financing needs at each stage.

**Funding Phases
Bear River Project and Lake Powell Pipeline**

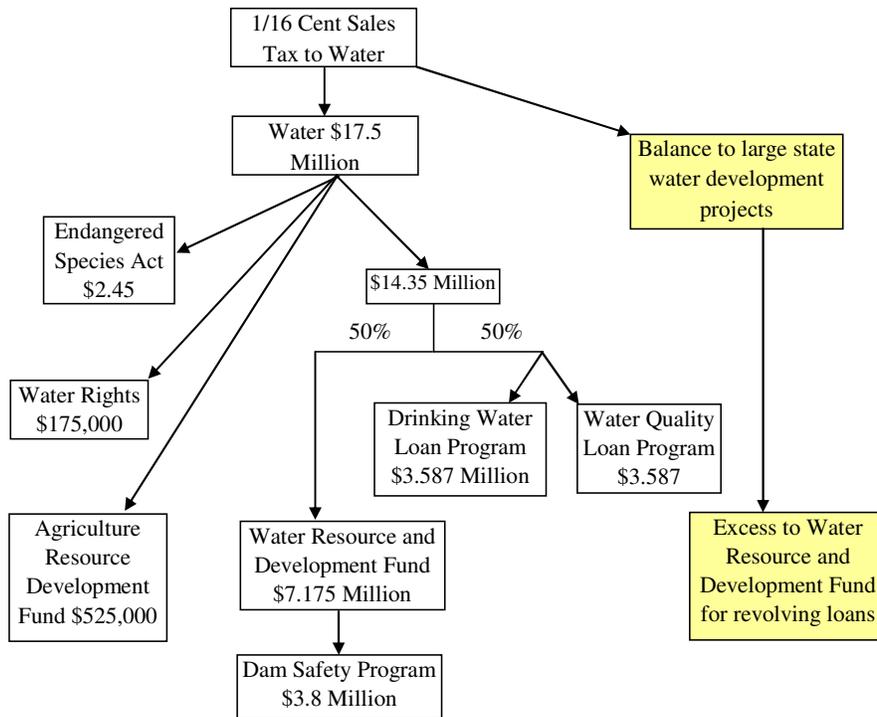
	Phase One: Pre-construction	Phase Two: Construction	Phase Three: Construction Completion
Costs	Planning Rights of way Environmental Impact Study Engineering Land acquisition	Construction commencement Land acquisition	Construction completion Option to state for: Recapitalization bond Costs paid in early stages
Revenues	Removal of cap on 1/16th cent allocation to water loan funds Percentage of the annual surplus	Bond Construction Financing - Bond Anticipation Notes - Bond (Property Tax, Sales Tax) Appropriations Recapitalization of water loan funds Removal of cap on 1/16th cent allocation to water loan funds Percentage of the annual surplus	Bonding (Property Tax, Sales Tax) Removal of cap on 1/16th cent allocation to water loan funds Percentage of the annual surplus
Water District Revenues	Impact fees Connection fees Increase water rates Property tax	Impact fees Connection fees Increase water rates Property tax	Impact fees Connection fees Increase water rates Property tax

Pre-Construction Funding

In Phase 1, pre-construction, the task force proposes that the money above the cap that is generated from the 1/16 cent sales tax be dedicated to pre-construction costs instead of going directly into the General Fund. The funds under the \$17.5 million cap will still be allocated according to the established formula. Allowing the money above the cap to be dedicated to water development costs would generate an estimated additional \$5 million annually for water development.

Exhibit 24

FLOWCHART OF PROPOSED 1/16 CENT SALES TAX DIVERSION TO WATER



In addition to removing the cap the task force proposes to designate 25 percent of the General Fund annual surplus for water development projects. The funds could be used for pre-construction costs and to build up the water loan funds. Currently a percentage of the surplus goes to the Rainy Day Fund, and some of the surplus goes to debt service and the Industrial Assistance Fund. The task force proposes designating 25 percent of the surplus for the Water Resources Construction and Development Fund already existing in the Department of Natural Resources. The surplus is an unpredictable source of funding that would be different every year; however, it would be well-suited for one-time pre-construction water development uses such as studies and land acquisition. Currently the legislature appropriates this money the following year for one-time use.

Funds made available through these two actions would be used by the Division of Water Resources to complete all requirements to get the projects ready for construction. These new monies could be placed in the Water Resources Construction and Development Fund, which already exists in the Department of Natural Resources. The money would be tracked separately and Water Resources could loan out excess funds not needed for other water development projects. The repayment of these loans would become available for a portion of the Bear Rive and Lake Powell Pipeline project construction costs. The annual cash flows for pre-construction items such as rights-of-way acquisition, environmental assessments,

design, and engineering are projected to be no more than a few million dollars annually. The money above the \$17.5 million cap and the designation of 25 percent of the General Fund surplus eliminates the need for bonding in the early years. This money will allow the state to fund preconstruction costs, acquire rights of way and property before the costs escalate due to inflation, and will substantially reduce the ultimate amount of bonding required to fund construction.

Construction Commencement and Completion Funding

The task force recommends the issuance of state bonds to finance the construction phase. The state could issue either general obligation or sales tax revenue bonds. General obligation bonds are secured by an ad valorem property tax levied by the state. Sales tax revenue bonds are secured by a pledge of the state's sales tax revenues. This type of bond would carry a rating very similar to the state's general obligation bond rating. Which type of bond to issue is better determined at the time of issuance when the state's available bonding capacity is known.

Future legislatures will have to contend with the fact there is a fundamental timing disconnect between when state-issued bonds will need to be retired and when the water districts will have sufficient collections to fully pay off such obligations. State-issued general obligation bonds currently must be repaid within twenty years. Sales tax revenue bonds could be issued for 20 to 30 years. But the task force has recognized that it could take up to forty years before full reimbursement from the water districts to the state could occur.

As a result of this funding mismatch, the state would need to identify and designate specific revenues towards the repayment of the state-issued bonds. The state would be free to negotiate whatever repayment terms with the water districts it felt were fair to both parties, with the understanding that the state is responsible for the retirement of the bonds, not the districts. If insufficient funds were available to make the semiannual payments on the bonds, the state's credit rating would be under stress. Ultimately the state is expected to receive repayment for 100 percent of the project and financing costs, but the state must be aware of its function to provide up to a forty year bridge loan to the water districts.

Another source of capital is the recapitalization of the water loan funds. Conceptually, the Division of Water Resources would issue water revenue bonds for a portion of the costs of these projects secured by the repayments on outstanding loans. In 2020, estimates suggest there will be about \$30 million revolving in the loan funds. If the division takes half of that amount to recapitalize the loan funds, the state could borrow \$120-150 million. The proceeds from the bonds would be lent to the subscribing water agencies for construction costs. The subscribing water agencies would then repay the loans based on the terms set by Water Resources. The task force recommends no more than 50 percent of the annual repayment stream be pledged to recapitalize the water loans. The balance of the repayment stream could continue to finance smaller water projects throughout the state.

State-wide Impact Fee

Many local government entities within the state, particularly in areas experiencing rapid growth, currently fund the addition of needed infrastructure through impact fees assessed on those who will benefit from a project. The assessment of such a fee is provided for in statute and requires the preparation of a detailed capital facilities plan. Capital facilities plans are required for any public entity that serves more than 5,000 residents and intends to establish an impact fee to finance system improvements required by growth.

Title 11, Chapter 36 of the Utah Code, Annotated 1953, as amended outlines the specific requirements associated with preparing and accepting a capital facilities plan. Impact fees need to be spent within five years of collection, so they could be used, as collected, for some of the costs incurred in preparation for the final project construction, such as engineering, planning, land and right of way acquisition, and environmental studies. WCWCD has recently implemented an impact fee within its district boundaries,

which will escalate at 5 percent per year. By instituting this impact fee, WCWCD is a model for how project funding problems may be worked out. Presently there is no state-wide impact fee in place, and historically, impact fees have never been utilized on a state-wide basis.

Nevertheless, a state-wide impact fee is a viable option that could be used to fund the construction of the Bear River and Lake Powell Pipeline projects. A state-wide impact fee would require legislative action and could be difficult to impose because not all geographical regions of the state will receive a direct benefit from the projects. The argument would have to be made that the Lake Powell Pipeline and Bear River projects are for the overall good of the state, and as such, the resources of the entire state should be marshaled to pay the costs of construction. While this is not an option the task force feels should be implemented at this time, the task force felt it necessary to disclose this option along with the other recommendations.

IV. STATUTORY AUTHORIZATIONS

At least four statutory changes must be made to implement the above recommendations. More changes may be needed when construction begins (see Appendix G for more details).

1. Remove the cap on the appropriation to the water loan funds.
2. Reserve a portion of the surplus for water development.
3. Remove the constraint in the Bear River statute that prevents money being spent on the project before contracts have been signed for 70 percent of the water.
4. Authorize the Lake Powell Pipeline as a state project.

APPENDICES

APPENDIX A: EXECUTIVE ORDER - CREATING THE WATER DELIVERY FINANCING TASK FORCE

WHEREAS, water is critical to Utah's future;

WHEREAS, experts predict that even with effective conservation, legitimate demand for water in some growing areas of the state within the next 20 to 25 years may exceed the supply of available water;

WHEREAS, proposals are being developed to deliver underutilized water resources from some areas of the state to other areas that will have greater need in the future;

WHEREAS, these proposals include a Lake Powell pipeline and a water delivery system for the Bear River;

WHEREAS, the planning of large water delivery systems is complex, takes many years, and requires much foresight in order to time project completion to coincide with future need; and

WHEREAS, in addition to the technical and regulatory aspects of planning these projects, policymakers must have a clear idea of how to fund a project well in advance of final approvals;

NOW, THEREFORE, I, Olene S. Walker, governor of the state of Utah, by virtue of the authority vested in me by the laws and constitution of the state of Utah, do hereby order the following:

1. There is created the Water Delivery Financing Task Force.
2. The task force shall evaluate options for financing the proposed Lake Powell pipeline and Bear River system projects and recommend preferred options for financing of each.
3. Options considered shall:
 - a. take into account all reasonable revenue sources and financing, including bonding;
 - b. specify responsibility for payment, with users bearing the ultimate responsibility for payment;
 - c. provide for repayment to the state of any funds loaned or otherwise fronted for the projects; and
 - d. maintain the state's AAA bond rating.
4. The task force shall consist of 12 to 16 members appointed by the governor as follows:
 - a. the state treasurer;
 - b. the director of the Governor's Office of Planning and Budget;
 - c. the director of the Division of Water Resources;
 - d. one to three members of the Utah Senate;
 - e. three to five members of the Utah House of Representatives;

- f. three representatives of water conservation districts affected by the two proposed projects;
 - g. a competent financial advisor to the state on matters of public finance; and
 - h. a representative of the Office of the Governor, who shall be a non-voting member.
5. Members of the task force shall serve without per diem or expenses.
 6. Terms of members serving on the task force shall correspond to their terms of service in the relevant state or water conservation district office.
 7. The state treasurer shall serve as the chair of the task force, plan agendas, and call meetings.
 8. The Governor's Office of Planning and Budget shall provide staff support.
 9. A majority of the task force constitutes a quorum for voting purposes, and all actions shall be by majority vote of the quorum in attendance.
 10. The task force may meet as often as necessary to perform its duties.
 11. The task force shall welcome and consider input from affected groups and individuals, including officials of affected political subdivisions of the state.
 12. The task force is empowered to establish task forces and working groups.
 13. The task force shall make a recommendation to the governor by July 1, 2005.
 14. The task force may remain active after July 1, 2005, for follow-up work until the expiration date of this order.
 15. This order expires December 31, 2005.

IN WITNESS, WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the state of Utah. Done at Salt Lake City, Utah this 26th day of October, 2004.

(State Seal)

OLENE S. WALKER
Governor

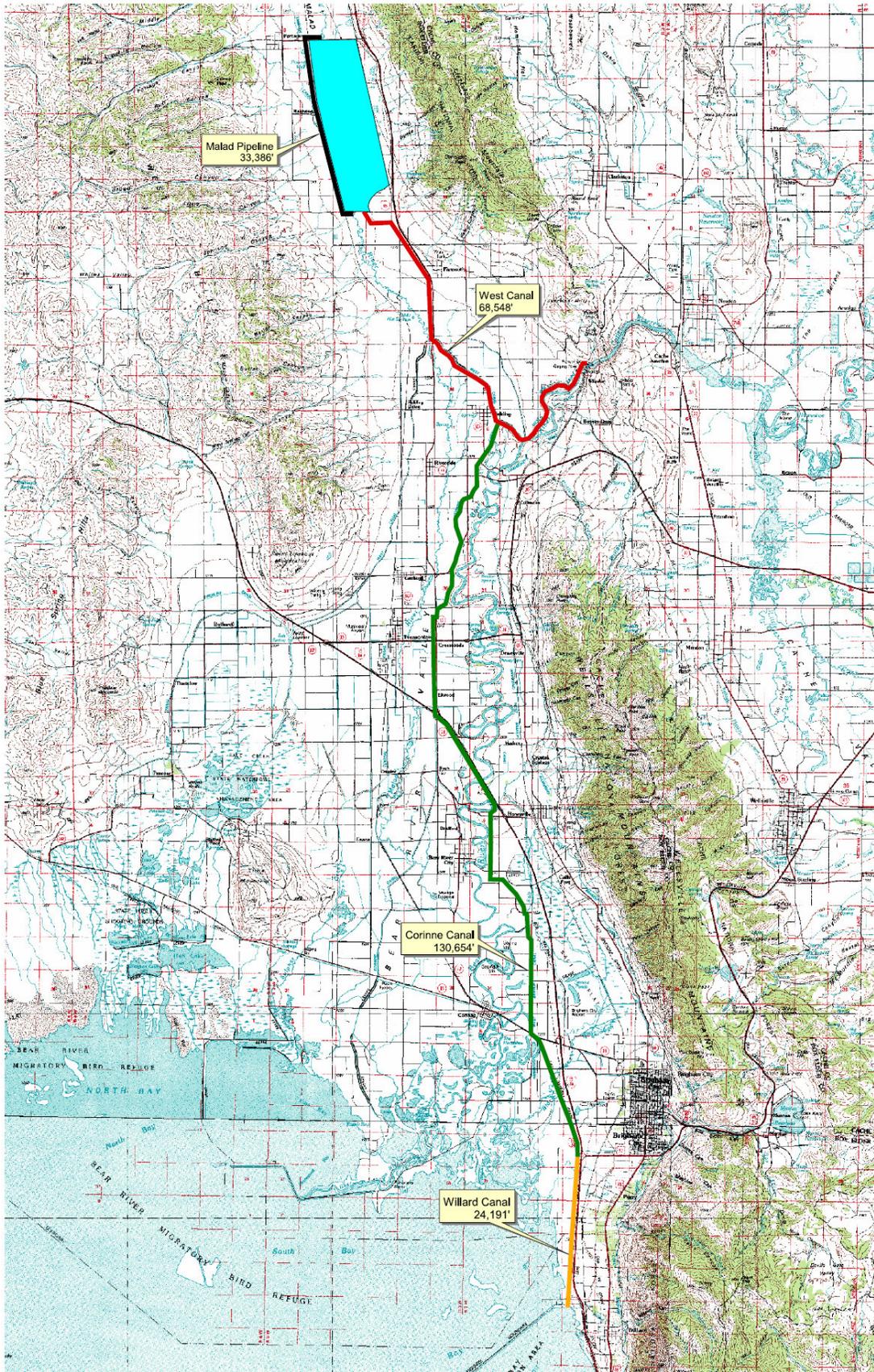
ATTEST:

GAYLE F. MCKEACHNIE
Lieutenant Governor

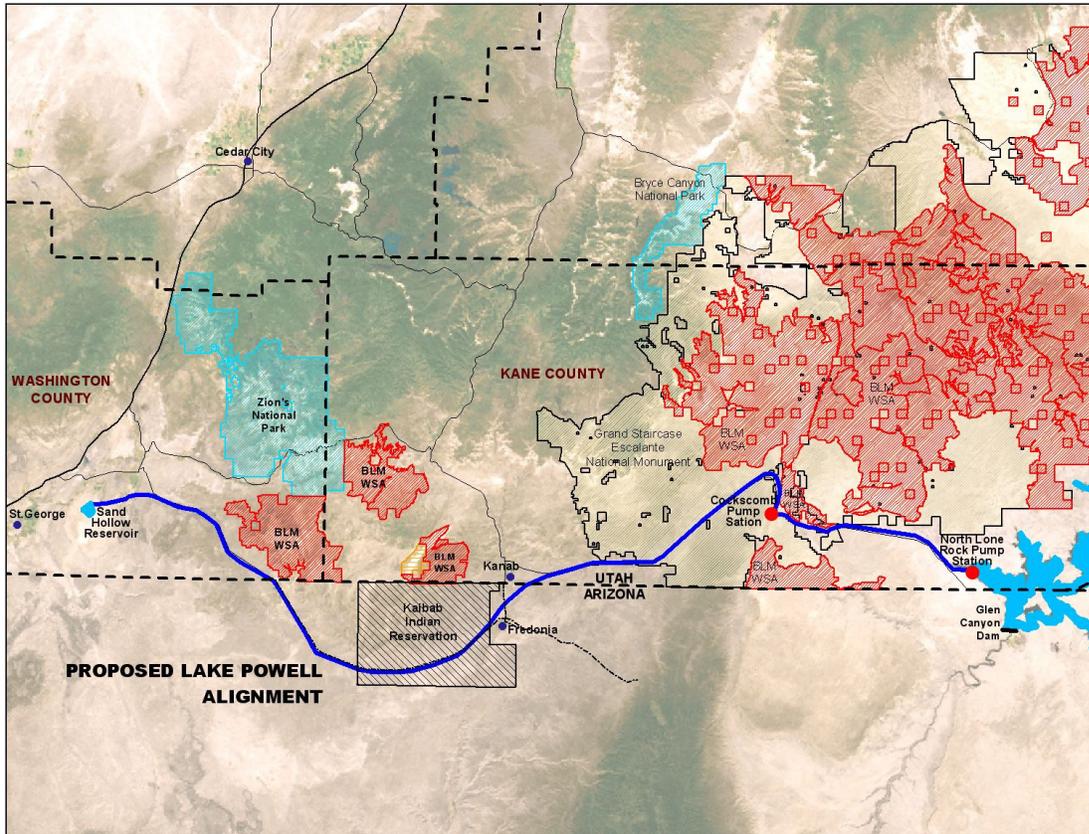
APPENDIX B: TASK FORCE MEMBERS

Ed Alter, Chair, State Treasurer
Richard Ellis, Governor's Office of Planning and Budget
Larry Anderson, Division of Water Resources
Tage Flint, Weber Basin Water Conservancy District
Dave Ovard, Jordan Valley Water Conservancy District
Ron Thompson, Washington County Water Conservancy District
Carl Empey, Zions Bank Public Finance
Ivan Flint
Senator Tom Hatch
Senator Bill Hickman
Senator Lyle Hillyard
Representative Stuart Adams
Representative LaWanna Shurtliff
Representative Ron Bigelow
Representative David Clark
Representative Mike Noel

APPENDIX C: MAP OF THE PROPOSED WASHAKIE RESERVOIR SITE



APPENDIX D: PROPOSED LAKE POWELL PIPELINE ALIGNMENT



APPENDIX E: ESTIMATED COST DETAIL OF THE BEAR RIVER PROJECT

Bear River Water Development Project Outline of Schedule and Preliminary Cost Estimate for Environmental Analysis & Feasibility Activities

	Estimated Duration (years)*	Start Year	Finish Year	Estimated Cost**
Record of Decision		2020	2021	\$20,000
Final EIS	1	2019	2020	\$200,000
Definite Plan Report	2	2017	2019	\$750,000
Mitigation and Monitoring Plan	1	2018	2019	\$250,000
Response to Comments	1	2018	2019	\$150,000
Draft EIS	1	2017	2018	\$600,000
Technical Reports (selected resources)	2	2016	2018	\$300,000
Alternative Impact Analysis	1	2016	2017	\$1,000,000
Resource Analysis	2	2014	2016	\$2,000,000
Surface Water Hydrology, Surface Water Quality, GW Hydrology, GW Quality, Aquatic Resources Wetland Resources, Wildlife and Habitat, Threatened and Endangered Species, Sensitive Species, Agriculture and Soil, Socioeconomics, Cultural Resources, Visual Resources, Recreation Resources, Noise, Public Health and Safety, Paleontology, Transportation and Utilities, Air Quality, Mineral and Energy Resources, Land use Plans and Conflicts, Environmental Justice, Indian Trust Assets				
Scoping - Phase 2	1	2014	2015	\$50,000
Preliminary Alternatives Development - critical issues				
Malad River Relocation	1	2012	2013	\$250,000
Reservoir Supply Conveyance	1	2012	2013	\$250,000
Reservoir Delivery Conveyance	1	2012	2013	\$250,000
Reservoir Delivery Site Feasibility & Purchase	1	2011	2012	\$250,000
Scoping Phase 1	1	2011	2012	\$50,000
Notice of Intent	1	2011	2012	\$20,000
Stakeholder Meetings and Public Information Program	2	2009	2011	\$150,000
<u>Background Data Collection - Overall</u>				
Comprehensive Bear River Water Quality Model development	2	2009	2011	\$500,000
Wetlands & Riparian Identification along Conveyance Corridors	1	2008	2009	\$150,000
Updated Review of Environmental Feasibility and Issues	3	2007	2010	\$350,000
Continued Bear River WQ monitoring	10	2005	2015	\$600,000
<u>Background Data Collection - Washakie Site</u>				
Additional Geotechnical Field Studies	1	2010	2011	\$150,000
TES Species Reconnaissance	2	2009	2011	\$200,000
Wetlands & Riparian Survey	1	2007	2008	\$200,000
Re-establish a Malad Stream gage	10	2005	2015	\$170,000
Expanded Water Quality monitoring - Malad River	10	2005	2015	\$300,000
<u>Other Issues/Feasibility Reviews</u>				
Divert Salt Creek to reduce/mitigate impacts on Lower Bear	1	2008	2009	\$100,000
Analysis of funding & project implementation mechanisms	1	2007	2008	\$90,000
<u>Washakie Feasibility Study</u>				
Develop Conveyance Plan	1	2008	2009	\$50,000
Review Reservoir Site (historical, floodplain, soil nutrients)	1	2006	2007	\$50,000
Confirm Hydrology and Operations	1	2006	2007	\$80,000
Develop Reservoir WQ Model	2	2006	2008	\$150,000
Update Project Cost Estimate	1	2006	2007	\$50,000
Update project needs, purposes, schedule, costs	1	2006	2007	\$175,000
Research feasibility of all storage sites	2	2005	2007	\$180,000
Totals	16			\$10,085,000

*Only non-overlapping schedules durations (highlighted) are totaled

**Rough, budgetary planning-level estimates, in 2005 dollars

APPENDIX F: CONSTITUTIONAL AND STATUTORY LIMITATIONS ON STATE GENERAL OBLIGATION INDEBTEDNESS

Constitutional Debt Limit. Article XIV, Section 1 of the State Constitution limits the total general obligation indebtedness of the state to an amount equal to 1.5 percent of the value of the total taxable property of the state, as shown by the last assessment, for state purposes previous to the incurring of such debt. The application of this constitutional debt limit and the additional debt incurring capacity of the state under the Constitution are estimated to be as follows:

Fair Market Value of Ad Valorem Taxable Property (1).....	\$164,567,249,587
Uniform Fees in lieu of Ad Valorem Taxable Property (2).....	<u>11,973,726,252</u>
Total Fair Market Value of Taxable Property (1).....	<u>\$176,540,975,839</u>
Constitutional Debt Limit (1.5 percent).....	\$2,648,114,638
Less: Currently outstanding General Obligation Debt (Net)	<u>(1,598,073,206)</u>
Estimated Additional Constitutional Debt Incurring Capacity of the State	<u>\$1,050,041,432</u>

(1) Based on 2003 taxable values.

(2) Based on 2003 “age based” values. For purposes of calculating debt incurring capacity only, the value of all motor vehicles and state–assessed commercial vehicles (which value is determined by dividing the uniform fee revenue by 1.5 percent) is added to the fair market value of the taxable property in the State.

Statutory General Obligation Debt Limit. Title 63, Chapter 38c, of the Utah Code (the “State Appropriations and Tax Limitation Act”), among other things, limits the maximum general obligation borrowing ability of the State. Under the State Appropriations and Tax Limitation Act, the outstanding general obligation debt of the State at any time may not exceed 45 percent of the maximum allowable State budget appropriations limit as provided in that act, which limits State government appropriations based upon a formula that reflects the changes in population and inflation.

On occasion, the legislature has amended the State Appropriations and Tax Limitation Act in order to provide an exemption for certain general obligation highway bonds and bond anticipation notes from the limitations imposed by the State Appropriations and Tax Limitation Act.

Using the budget appropriations for Fiscal Year 2005, the statutory general obligation debt limit under the State Appropriations and Tax Limitation Act and additional general obligation debt incurring capacity of the State under that act are as follows:

Statutory General Obligation Debt Limit (1).....	\$880,149,195
Less: Statutorily Applicable General Obligation Debt (Net)	<u>(636,795,631)</u>
Remaining Statutory General Obligation Debt Incurring Capacity	<u>\$243,353,564</u>

(1) 45 percent of Fiscal Year 2005 appropriation limit of \$1,955,887,100.

As additional general obligation bonds are issued and outstanding general obligation bonds are retired, the unused maximum general obligation borrowing capacity of the state under the State Appropriations and Tax Limitation Act will fluctuate. The State Appropriations and Tax Limitation Act may be amended in the future by majority vote of both houses of the Legislature.

APPENDIX G: STATUTORY CHANGES

BEAR RIVER STATUTE CHANGES

This statute change would allow money to be spent now on environmental studies and the purchase of rights-of-way. This is the only section of the Bear River Statute that would need to be changed.

73-26-301. Authorized projects - Work subject to legislative appropriations.

The division is authorized to develop the potential projects listed under Subsection 73-26-104(2) and associated works, including an interconnection from the Corinne area to Willard Reservoir, and shall proceed with design work, environmental assessments, acquisition of land and rights-of-way, and construction, subject to:

(1) the appropriation of funds for those purposes by the Legislature~~;~~ **and**
~~(2) fulfillment of the requirements specified in Section 73-26-302.~~

73-26-302. Construction contingent upon sale or lease of water.

(1) The division may not begin construction of any project until:

(a) contracts have been made for the sale or lease of 70 percent or more of the developed water; and
(b) all required permits have been obtained which shall include the development of an environmental mitigation plan by the environmental mitigation team.

(2) Construction of the project and implementation of the environmental mitigation plan shall proceed concurrently.

SURPLUS FOR WATER DEVELOPMENT

This statute addition (underlined) would allow part of the state surplus to fund water development projects.

63-38-2.5. Establishing a General Fund Budget Reserve Account -- Providing for deposits and expenditures from the account.

(1) There is created within the General Fund a restricted account to be known as the General Fund Budget Reserve Account, which is designated to receive the surplus revenue required by this section.

(2) (a) (i) At the end of any fiscal year in which the Division of Finance, in conjunction with the completion of the annual audit by the state auditor, determines that there is a General Fund surplus, 25% of the surplus shall be transferred to the General Fund Budget Reserve Account, except that the amount in the combined totals of the General Fund Budget Reserve Account and the Education Budget Reserve Account created in Section 63-38-2.6 may not exceed 6% of the total of the General Fund appropriation amount and the Uniform School Fund appropriation amount for the fiscal year in which the surplus occurred.

(ii) In addition to Subsection (2)(a)(i), if a surplus exists and if, within the last ten years, the Legislature has appropriated any money from the General Fund Budget Reserve Account that has not been replaced by appropriation or as provided in this Subsection (2)(a)(ii), the Division of Finance shall, before any contingent appropriations or other transfers required by law are made, transfer up to 25% more of the surplus to the General Fund Budget Reserve Account to replace the amounts appropriated until transfers of the surplus under this Subsection (2)(a)(ii) have replaced the appropriations from the fund.

(iii) In addition to Subsection (2)(a)(i) and Subsection (2)(a)(ii), if a surplus exists at the end of the fiscal year, after the Division of Finance has held back monies for the payment of additional debt service in accordance with Section 63-38-2.5, and subtracted monies earmarked to the Industrial Assistance Fund in accordance with Section 63-38f-904, there remains a General Fund surplus, there is appropriated from the General Fund to the Water Conservation and Development Fund an amount equal to 25 percent of the amount of the General Fund surplus that remains.

(b) The amount to be transferred to the General Fund Budget Reserve Account shall be determined before any other contingency appropriation using surplus funds.

(3) (a) If, at the close of any fiscal year, there appear to be insufficient monies to pay additional debt service for any bonded debt authorized by the Legislature, the Division of Finance may hold back monies from any General Fund surplus sufficient to pay the additional debt service requirements resulting from issuance of bonded debt that was authorized by the Legislature.

(b) The Division of Finance may not spend the hold back amount for debt service under Subsection (3)(a) unless and until it is appropriated by the Legislature.

(c) If, after calculating the amount for transfers to the General Fund Budget Reserve Account, the remaining surplus is insufficient to cover the hold back for debt service required by Subsection (3)(a), the Division of Finance shall reduce the transfer to the General Fund Budget Reserve Account by the amount necessary to cover the debt service hold back.

(d) Notwithstanding Subsection (2), the Division of Finance shall hold back the General Fund balance for debt service authorized by this Subsection (3) before making any transfers to the General Fund Budget Reserve Account or any other designation or allocation of surplus.

(4) (a) Any appropriation made by the Legislature from the General Fund Budget Reserve Account may only be used to cover operating deficits, state settlement agreements approved under Title 63, Chapter 38b, State Settlement Agreements, or retroactive tax refunds.

(b) The General Fund Budget Reserve Account is available for appropriation to fund operating deficits in public education appropriations.

(5) All interest generated from investments of money in the General Fund Budget Reserve Account shall be deposited into the account.

LAKE POWELL PIPELINE PROJECT ACT

New legislation that would allow state funds to be spent on the Lake Powell Pipeline project, similar to the Bear River Act.

CHAPTER XX: LAKE POWELL PIPELINE DEVELOPMENT ACT

Chapter 1 73-xx-101. Short title.

This chapter is known as the “Lake Powell Pipeline Development Act.”

PART 1: STATE TO CONSTRUCT THE LAKE POWELL PIPELINE

Chapter 2 73-xx-102. Findings.

- (1) The Legislature finds that:
- (a) the Board of Water Resources has significant filings for water of the Colorado River that could be developed;
 - (b) the continued growth and prosperity of communities in southern Utah will be enhanced by the development and utilization of the Colorado River, one of the last major sources of developable water in the state.
- (2) Therefore, it is the purpose of this chapter to:
- (a) direct the Division of Water Resources to develop the surface waters of the Colorado River as covered by filings of the board, or new filings, as approved by the state engineer;
 - (b) allocate the developed waters among various regions and districts; and (c) provide protection for existing rights.
- (3) Nothing in this chapter shall be construed to prevent any person from developing the waters of the Colorado River.

Chapter 3 73-xx-103. Definitions.

- As used in this chapter:
- (1) “Board” means the Board of Water Resources.
 - (2) “Construction costs” means all costs related to the development of a project, including the costs of environmental mitigation. Construction costs include:
 - (a) planning;
 - (b) engineering and legal work; (c) permitting;
 - (d) acquisition of land and rights-of-way;
 - (e) rebuilding and relocation of highways or other facilities affected by the project; (f) compensation for impairment of existing water rights;
 - (g) construction of the pipeline, and associated facilities; and (h) expenses of the division related to the project.
 - (3) “Developed waters” means surface water developed by projects authorized under this chapter.
 - (4) “Division” means the Division of Water Resources.
 - (5) “Districts” means the Central Iron County Water Conservancy District, the Kane County Water Conservancy District and the Washington County Water Conservancy District.
 - (6) “Project” means the Lake Powell Pipeline Project.
 - (7) “Environmental mitigation costs” means costs that may be required by federal, state, or local governmental agencies for project environmental permitting, including:
 - (a) planning;
 - (b) environmental and engineering studies;
 - (c) permitting;
 - (d) acquisition of land and rights-of-way; and

(e) operation, maintenance, and repair of facilities associated with project environmental mitigation.

(8) "Project costs" include construction costs, environmental mitigation costs, and costs of operation, maintenance, repair, and replacement.

(9) "Environmental mitigation team" means the team identified in the environmental impact statement (EIS) and chaired by the EIS lead agency.

(10) "Water Management Committee" means a committee comprised of one representative of each of the following:

(i) The Division,

(ii) The Board,

(iii) One representative from each of the Districts that participate in the Project. The Division representative shall act as Chairman of the Water Management Committee.

Chapter 4 73-xx-104. Lake Powell Pipeline Project.

(1) The division shall:

(a) construct the Lake Powell Pipeline and associated facilities as authorized and funded by the Legislature;

(b) own and be responsible for the operation of the facilities constructed; and

(c) market the developed waters.

(2) The purchase of real property does not constitute water development.

(3) The Division shall consult with the Water management Committee on a regular basis concerning the scoping, construction, operation, maintenance, repair and replacement of the Project.

Chapter 5 73-xx-105. Transmission and treatment facilities.

Entities purchasing developed water shall develop any facilities necessary for the treatment and local delivery of the water.

Chapter 6 73-xx-106. Participation of the federal government and other states.

(1) The division may allow the state of Arizona to participate in the project authorized under this chapter for the purpose of developing their water rights.

(2) The State of Arizona shall pay for all project costs represented by its share of the project.

Chapter 7 73-xx-107. Development of hydropower generating works - Power offered to public utilities or municipalities.

(1) In association with a project authorized under this chapter, the division may:

(a) construct and own hydroelectric generating works and incidental electrical facilities for the purposes stated in Subsection.

(2) Power and energy derived from any hydroelectric generating works owned by the division, except for power and energy needed for project operations, must be offered to public utilities or municipalities in the state. Revenue from the sale of excess power shall be used to reduce the annual cost of operation and maintenance.

PART 2: ALLOCATION OF DEVELOPED WATERS

Chapter 8 73-xx-201. Entities eligible to receive developed water - Selling or leasing water outside entity boundaries.

(1) Water developed by projects authorized under this chapter, except water reserved for wildlife or public recreation, shall be made available by contract exclusively to the following entities:

(a) the Central Iron County Water Conservancy District;

(b) the Kane Water Conservancy District; and

(c) the Washington County Water Conservancy District.

(2) A conservancy district that purchases or leases developed water may lease the water to any person.

(4) A conservancy district that purchases or leases developed water may use the water directly or by exchange in accordance with Section 73-3-20.

Chapter 9 73-xx-202. Limits on amount of water available to any entity or area - Exception.

(1) Except as provided in Subsection (2), the total amount of water from projects authorized under this chapter that may be made available to any entity or area is limited as follows:

(a) The Kane Water Conservancy District may purchase or lease no more than 10,000 acre-feet a year.

(b) The Washington County Water Conservancy District may purchase no or lease no more than 69,000 acre-feet a year.

(2) A district may purchase or lease water in excess of the limits specified in Subsection (1) on a temporary basis, if water is available from a project and no other entity eligible to receive water has offered to purchase or lease it.

(3) In the event the Central Iron County Water Conservancy District acquires a water right and elects to participate in the project the project shall be sized and constructed to transport the Central Iron County Water Conservancy District's water from Lake Powell. Facilities from the Sand Hollow Reservoir to Cedar City will also be included in the project.

Chapter 10 73-xx-203. Time period for submission of offers to purchase or lease water - Oversubscription of water - Allocation procedure.

(1) Prior to beginning the final design of the project, the division shall establish a period of time during which the districts specified in Section 73-xx-201 may offer to purchase or lease water developed by the project.

PART 3: AUTHORIZED PROJECTS

Chapter 11 73-xx-301. Authorized projects - Work subject to legislative appropriations.

The division is authorized to construct the Lake Powell Pipeline and associated works, and shall proceed with design work, environmental assessments, acquisition of land and rights-of-way, and construction, subject to the appropriation of funds for those purposes by the Legislature.

Chapter 12 73-xx-302. Construction contingent upon sale or lease of water.

(1) The division may not begin construction of any project until:

(a) contracts have been made for the sale or lease of 70% or more of the project water; and

(b) all required permits have been obtained which shall include the development of an environmental mitigation plan by the environmental mitigation team.

(2) Construction of the project and implementation of the environmental mitigation plan shall proceed concurrently.

PART 4: GENERAL PROVISIONS

Chapter 13 73-xx-401. Powers of division.

The division may:

(1) enter into contracts and agreements with one or more of the Districts or other qualified entity for the development, operation, maintenance, repair, and replacement of the project authorized under this chapter; and

(2) (a) set prices for the sale or lease of water and power made available by the project, in accordance with Section 73-xx-505 and rules made by the board; and

(b) enter into contracts for the sale or lease of the water.

Chapter 14 73-xx-402. Rulemaking power of the board.

In accordance with Title 63, Chapter 46a, Utah Administrative Rulemaking Act, the board may make rules to:

- (1) determine water charges as provided in Section 73-xx-505;
- (2) administer and operate the pipeline and associated facilities constructed;
- (3) establish procedures for reviewing offers to contract for the sale or lease of developed water and power; and
- (4) set the interest rate for repayment of construction and environmental mitigation costs.

Chapter 15 73-xx-403. Immunity from suit - Exception.

Activities engaged in under authority of this chapter are governmental functions. The state and its officers and employees are immune from suit for any injury or damage resulting from those activities, except as provided in Section 63-30-9.

Chapter 16 73-xx-404. Eminent domain.

In order to construct the facilities authorized under this chapter, the division may exercise eminent domain as provided in Title 78, Chapter 34, Eminent Domain.

PART 5: FINANCING AND COST RECOVERY

Chapter 17 73-xx-501. Analysis of benefits and costs - Allocation of costs.

The division shall:

- (1) identify the uses and calculate the economic benefits and costs of the developed water and power; and
- (2) allocate project costs according to the following purposes:
 - (a) municipal and industrial;
 - (b) hydropower;
 - (c) recreation;
 - (d) fish and wildlife; and
 - (e) flood control.

Chapter 18 73-xx-502. Payment of project costs.

- (1) Construction and environmental mitigation costs allocated to municipal or industrial uses shall be entirely repaid by the entities contracting for water designated for those uses.
- (2) The full costs of operation, maintenance, repair, and replacement allocated to municipal, industrial, and power uses shall be charged to the entities contracting for water for those uses.
- (3) Project costs allocated to recreation, fish and wildlife and flood control are not reimbursable and shall be paid entirely by the state.
- (4) (a) The Water Management Committee shall negotiate charges with any person receiving hydropower benefits from a project.
(b) The charges shall, at a minimum, be sufficient to pay all project costs allocated to hydropower.

Chapter 19 73-xx-503. Agreement for delivery - Period for repayment of construction and environmental mitigation costs.

- (1) The division and the contracting district shall, by contractual agreement, establish when and in what amount of project water will be delivered to a district.
- (2) If a contract was made before completion of the project, a district shall repay the construction and environmental mitigation costs as follows:
 - (a) any project water taken by a district during the first ten years after the project is completed shall be repaid within 50 years from the date the developed water is delivered to a district; and
 - (b) any project water taken by a district after the tenth anniversary date of the project's completion shall be repaid within 50 years from the date the project was completed.

(3) If a contract was made after the project was completed, a district shall repay the construction and environmental mitigation costs within a period not to exceed 50 years from the date the contract was made.

Chapter 20 73-xx-504. Interest.

Interest on the unpaid balance of reimbursable construction and environmental mitigation costs shall be charged at a rate set by the board.

Chapter 21 73-xx-505. Water and power charges.

The division shall set prices for the sale or lease of developed water and power sufficient to:

- (1) recover the reimbursable construction and environmental mitigation costs within the time period specified in Section 73-xx-503 and pay for the interest on those costs;
- (2) pay for operation and maintenance costs; and
- (3) accumulate an adequate reserve for repair and replacement.

Chapter 22 73-xx-506. Repayments returned to Water Resources Conservation and Development Fund - Establishment of a Trust Fund.

(1) Repayments of construction and environmental mitigation costs, the interest charged, and excess hydropower charges shall be deposited in the Water Resources Conservation and Development Fund.

(2) The Division of Water Resources shall establish a trust fund, in accordance with generally accepted accounting principles, for the deposit of revenues which shall be designated solely for Project operation, maintenance, repair, and replacement. Any unexpended trust fund revenues shall be returned to the Districts.

(3) All expenditures from the trust fund shall be approved by the Water Management Committee.

Chapter 23 73-xx-507. Transfer of title to Project and Water Rights to Districts.

(1) The Division may transfer title to the Project and associated water rights to the Districts subject to the following conditions:

- (a) The State has been fully compensated for all of its reimbursable costs.
- (b) A finding by the Board that transfer of title to the Project would be in the best interest of the State, the Districts and those receiving Project water.
- (c) An agreement between the Districts that would assure for the continued operation, maintenance, repair and replacement of the Project.

(2) If title to the Project is conveyed to the Districts, it shall be in proportion to the funds paid by each District for the water that it is receiving.