BACKGROUND

Draper Irrigation Company (Company) desires to establish its culinary water impact fee in accordance to the Utah State Impact Fees Act, as revised in May 2002 to include Private entities. The following Enactment presents a summary of the assumptions, procedures, projections, required improvements, and costs used to establish the Culinary Water Impact Fee. A complete discussion of all fees and rates is presented in the Company's Culinary Water System Master Plan.

The Company's current Culinary Water Impact Fee was first presented in the 2000 Culinary Water System Master Plan Update. The scope of this study is limited to nonoperating finances resulting from needed capital improvements for the next 20 years (i.e, from 2000 to 2020) and does not address operation and maintenance finances, such as water sales rates. This study also does not address existing debt payments for pre-2000 capital improvements and other pre-existent balances.

The impact of future growth was studied and capital improvements required to maintain the level of culinary water service were determined. The impact fee process is intended to provide the methodology to fund these needed projects. The culinary water impact fee creates the means to equitably fund the construction of these improvements as they are required to provide and/or maintain adequate service for the new demands created by new development.

IMPACT FEE DEFINITION

Under Utah's Impact Fees Act, an Impact Fee is defined as "a payment of money imposed upon development activity as a condition of development approval." An impact does not, however, "mean a tax, a special assessment, a building permit fee, a hookup fee, a fee for project improvements, or other reasonable permit or application fee." The establishment, collection and use of impact fees is governed by the Impact Fees Act (Sections 11-36-101 through -501 of the Utah Code). The Impact Fees Act imposes certain procedural requirements to be followed by governmental and private entities when imposing and collecting impact fees.

The purpose of an impact fee is to equitably recover all or a share of the capital costs from new development, so that existing customers (residences) are not caused to subsidize the construction of new facilities or infrastructure needed to support that development. The methodology is also intended to avoid unfairly overcharging new development.

Impact fees are distinctly different from a tax, a special assessment under the special improvement or a special district act, a building permit fee, a hook-up fee, a fee for project improvements, or other reasonable permit or application fees, such as conditional use or subdivision application fees.

The impact fee is imposed on new development as a condition of service or development. The

fee may only be applied within the system for which it is collected (e.g., water connection fees cannot fund pressure irrigation projects).

Impact fees can also be charged to recover some costs incurred by that system for already existing facilities and extra capacity paid for by existing customers that benefit the new customers. This is consistent with the statute in that new development benefits from already-existing capacity paid for by existing customers.

As documented in this analysis, Draper Irrigation Company intends to comply with all the requirements set forth by the Utah Impact Fees Act to ensure that the costs of public facility improvements are assessed in a fair and equitable manner.

BASIS OF CULINARY WATER IMPACT FEE

Given the narrow nature of this study and uncertainty of future growth, several assumptions were used to determine appropriate impact fees:

1. Culinary water consumption can be expressed in terms of residential connections. By using equivalent connections, disproportionate users of water (such as parks and schools) may cause extra water demand above that estimated in this analysis.

2. The expected growth rate within the Company Franchise area from 2000 to 2010 is based upon projected growth to the City of Draper. These growth rates are also based on both historical and predicted development trends.

3. Interest earned on collected impact fees will be accumulated and applied toward future capital improvements.

4. Historic distribution of population (defining the demand on the culinary water system in the computer model) will remain constant. Computer model simulations were run to determine solutions to major future system defects. In identifying capital improvements, preference has been given towards accommodating growth in the central and southeast portions of the Company's Franchise area.

5. Needed distribution system capital improvements can be sufficiently determined by examining the first five years of the ten year study period. These improvements are timed to meet, as a minimum, the culinary water demand at the time of their construction until the time of the next scheduled improvements. This procedure is intended to maintain an adequate level of service at all times, rather than beginning construction after problems have already developed.

SUMMARY OF IMPACT FEE PROCESS

X Company Board of Directors determined need to update impact fees for the Culinary Water System to ensure coverage of costs for upcoming system improvements.
X Company staff and Consultant completed the Culinary Water System Master Plan Update, including the following:
$ Determined magnitude and location of future growth.
$ Modeled culinary water usage determine areas of excessive pressure loss due to future demands.
$ Determined pipe sizes and configurations required to resolve pressure problems and associated costs.
$ Calculated the appropriate fee for an equivalent residential connection.
X Generate written analysis
X Evaluate impact fee verses Utah State Law.
X Generate Impact Fee Enactment.

FUTURE POPULATION GROWTH

Draper is currently experiencing a fast growth rate. From 1994 to 1998 the population growth in Draper has taken off, as the area has become a popular location for new development of the Salt Lake Metropolitan community.

It is projected that the population in Draper to will grow at 5 percent per year till the year 2010, after which the growth rate will reduce to 1.55 percent per year. The projected number of connections from the year 2000 to 2020 is 3,329 new connections. The number of existing connections in the year 2000 is 5,294. The total number of projected connections at full build-out is 11,200 connections.

FUTURE WATER DEMAND GROWTH

Water Usage

The years 1999, 2000 and 2001 are averaged to identify an average residential connection usage. Average residential connection demands for Draper Irrigation Company are shown in Table 1.

TABLE 1
Residential Culinary Water Demands*

Average Residential Connections	5,194	
Total Annual culinary Water Usage (MG)	1,408	
Unit Usage (Gal/Connection-Day)	742	

Reservoir Storage Analysis

Draper Irrigation Company owns and operates several water storage facilities for the culinary

water system. The existing available water storage capacity is 7,370,000 gallons. Construction of the additional 7 million gallon water storage reservoir identified in the Water Treatment Plant Upgrade improvements is under construction and will be completed in 2003.

Table 2 shows the storage requirements at five year increments from the year 2000 to the year 2020 using the criteria described above.

TABLE 2
Water Storage Requirements

	Storage (gallons)				
	2000	2005	2010	2015	2020
Equalization Storage	8,315,484	10,608,065	13,538,387	14,621,613	15,794,839
Fire Suppression Storage	540,000	540,000	540,000	540,000	540,000
Emergency Storage	1,771,097	2,229,613	2,815,677	3,032,323	3,266,968
Total Required Storage	10,626,581	13,377,678	16,894,064	18,193,936	19,601,807
Existing Storage	7,370,000	14,370,000	14,370,000	14,370,000	14,370,000
Surplus(Shortfall)	**(3,256,581)**	**992,322**	**(2,524,064)**	**(3,823,936)**	**(5,231,807)**

REQUIRED CAPITAL IMPROVEMENTS

Several capital improvements have been identified to correct existing deficiencies in the water supply network and provide better capacity for future growth. The cost of the required improvements is $1,551,284 over the next five years. Beyond these first five years it is projected that budget for capital improvement projects start at $200,000 in 2006 and increase by 5 percent every year thereafter.

Expanding water supply needs and upcoming water quality regulation changes has caused the Company to look at upgrading their water treatment plant. An expansion of the plant from it's existing 3.3 MGD capacity to a 6.0 MGD plant has been studied. The upgrade project includes a 7 MG reservoir on the plant site and a 20-inch waterline backbone several miles along the east bench of Draper to Rambling Road. The estimated cost of the Project is $11,700,000.

These improvements will benefit both current and future users of the water system. Most of the costs of the plant upgrade will be to get the treatment plant to conform to water quality regulations and to provide for the water needs of the current users. Therefore, it is proposed that 80% of the plant upgrade be paid by water rates. The other 20 percent is to be funded by impact fees.

The current amount of water storage required is approximately three million gallons greater than the current available storage. A reservoir of at least three million gallons is required for the system. As discussed earlier, current plans are to make optimal use of available area on the Company's Water Treatment Plant property in constructing a 7 million gallon reservoir in 2002. This reservoir will satisfy storage requirements through the year 2002. An additional 5 million gallon reservoir will be required after the year 2010. The estimated cost of this reservoir is $3,000,000.

CAPITAL IMPROVEMENT COSTS

The projected costs to new development for identified capital improvements required to provide service to that development are shown in Table 3 below.

TABLE 3
Capital Improvement Costs

CAPITAL IMPROVEMENT	COST
Source Supply Improvement	$2,340,000
Distribution System Improvements	$1,163,463
Storage Improvements	$3,000,000
TOTAL	**$6,503,463**

RECOMMENDED IMPACT FEE

3/4-inch Meter Impact Fee Calculation

The impact fee is consists of two parts, which are the fee for new capital facility improvements and the fee for existing capacity costs. The connection fee is first determined for a standard 3/4-inch metered connection.

The capital improvement portion of the impact fee is calculated by dividing the cost of new capital facility improvements directly benefitting future connections by the number of future connections benefitted. The resulting division produces an impact fee of $1,813 for a 3/4-inch connection or equivalent dwelling unit.

The recommended impact fee calculation recognizes that the Company has incurred expenses in behalf of the users of the culinary water system in providing capacity which is valuable to both existing and new development. These expenditures include construction of several large capital improvements, acquisition of water rights, and purchase of property to preserve the watershed. The "existing Facilities" item on the connection fee reimburses the existing system for these

expenses.

The company has historically charged an impact fee for reimbursement of costs on these existing facilities. The amount of the existing facility fee is $700 per connection for 3/4-inch connections and $1,115 per connection for 1-inch connections. The Company intends to continue collection of this existing facility impact fee.

New 3/4-inch Impact Fee

Existing Facility	$700
System Improvements	$1,813
TOTAL IMPACT FEE	**$2,513**

1-inch Meter Impact Fee

The water use characteristics for a 3/4-inch connection and a 1-inch connection are similar, so the recommended fee for a 1-inch meter connection is based on the maximum meter capacity. The maximum safe capacity of a 3/4-inch meter is 30 gallons per minute, and the maximum safe capacity of a 1-inch meter is 50 gallons per minute. Therefore the impact fee for a 1-inch meter is calculated as follows:

1-inch Capital Facilities Impact Fee = $1,813 * (50/30) = $3,022

The total impact fee for a 1-inch connection is:

New 1-inch Impact Fee

Existing Facility	$1,115
System Improvements	$3,022
TOTAL IMPACT FEE	**$4,137**

1-inch Impact Fee = $4,137

Larger Meter Impact Fees

A large meter connection is any connection that is larger than a 3/4-inch or 1-inch connection. Large meter connections include 1 ½-inch, 2-inch, 3-inch and larger metered connection. The portion of the impact fee that changes for different meter sizes is the capital facilities portion.

Impact fees for water connections larger than 1-inch diameter should be set individually based on a formula that considers the expected average water use of the improvement and the peak capacity for the desired size of water meter. The expected average annual water use and the

desired meter size must be known or estimated to calculate impact fees. The following formula is recommended to calculate the impact costs.

Water Impact Fee = $1,813 * [(0.48 * RE) + (0.52 * MC/30 * (PF/59 - 1/59))]

Where: RE = Residential Equivalent (expected annual average demand in gal per day divided by the residential average usage of 745 gal/day)

MC = Maximum Safe Intermittent Meter Capacity (gpm)

PF = Peaking Factor (MC divided by average annual demand in gpm)

The recommended Impact Fee for each meter size are summarized in Table 4 below. Because the impact fee for meters larger than 1-inch are based upon a formula that depends upon the actual annual water usage, the Impact fee for these meters shown in Table 4 is the minimum possible fee. Actual fees for these meter sizes may be larger than the shown minimum.

TABLE 4
Impact Fee Summary

Component	3/4"	1"	1 1/2"	2"	3"	4"	6"	8"
Existing Facility	$700	$1,115	$1,115	$1,115	$1,115	$1,115	$1,115	$1,115
System Improvements	$1,813	$3,022	$6,057*	$9,692*	$21,201*	$36,345*	$75,718*	$109,035*
IMPACT FEE	$2,513	$4,137	$7,172	$10,807	$22,316	$37,460	$76,833	$110,150

* These Impact fee values for meters 1 ½-inch and larger are minimum fees per the formula

ADMINISTRATION OF CHARGES

The impact fees, when imposed, will be separately accounted and restricted to capital purposes. This will be done in a manner which provides a clear audit trail which can demonstrate that they were used only for capital purposes within the system for which they were collected.

Whenever a developer constructs system facilities which are included in the capital improvement project list, Draper Irrigation may compensate that developer in one of two ways:

1. Through payment toward the portions of the project (such as over-sizing) which

provides general Company benefit and are included in the impact fee basis; or

2. Through issuance of impact fee credits for those project costs, which the developer(s) may use toward their impact fees. Such credits should have a finite life (e.g. ten years), be non-transferable, and be limited to the specific system for which issued (e.g. water versus sewer).

The Company's compensation to the developer shall be limited to the lesser of the developer's actual costs for the Company share of the project, or the Company engineer's cost estimate.

Finally, Draper Irrigation may annually adjust the costs of planned capital improvement projects based on an inflationary index such as the "Engineering News Record." Such an adjustment would be made by the Board and become an automatic cost adjustment that would not require a formal hearing process.

REVIEW OF IMPACT FEE VERSES UTAH STATE CODE REQUIREMENTS

As part of the Impact Fee Written Analysis a comparison of the impact fee with the Utah State Code was performed to show compliance with the ordinance.

CHALLENGING IMPACT FEES

Any person or entity residing in or owning property within Draper Irrigation Company's Culinary Water Service Franchise area may in accordance with the Utah Code may file a challenge or declaratory judgment action challenging the validity of the Impact Fee. Such individuals or agencies desiring to do so shall follow the procedures outlined in the Utah Code.

ADJUSTMENT OF IMPACT FEES

In accordance with Utah State Code, the Company has the right to permit an adjustment of the amount of the Impact Fee or basis of the Impact fee subject to the submission of sufficient studies, reports or data by the person or entity being assessed the impact fee. Such information shall provide sufficient justification to show that an adjustment in the Impact Fee is applicable for their development. The Company and Company's representative will have the right to evaluate and make judgment or adjustment based upon the information submitted to the Company.

SPECIAL PROJECT IMPROVEMENT FEE

The company's Franchise service area is located in the southeast corner of the Salt Lake Valley. The east and south edges of the service include mountainside terrain. Historical development has occurred on this mountainous terrain and the Company has constructed such improvements as sources in high elevations and pumping facilities to provide service to these high elevations.

As a result, the Company's Culinary Water System currently consists of six pressure zones.

There are some areas along this mountainous terrain within the Franchise area that are higher in elevation than any of the Company's current pressure zones. New development that wishes to occur on any of these properties will likely have extra expenses associated with providing culinary water to the development. These extra expanses are mainly due to the fact additional pumping, large diameter piping and storage will be required to provide adequate fire protection and service pressures to this higher land.

The costs of these extra improvements should not be born by the entire Company because they do not benefit any water user outside of the new pressure zone. A special project improvement fee should be assessed in addition to the system Impact Fee, to be paid by new connections within the new pressure zone. This special fee should be assessed based upon actual costs incurred at the time of construction of the new zone.