

RESOLUTION NO. 54-99

AUTHORIZING BOUNDARY ADJUSTMENTS BETWEEN THE UTE WATER CONSERVANCY DISTRICT WATER SERVICE AREA AND THE CITY OF GRAND JUNCTION WATER SERVICE AREA AND AMENDING BULK WATER PURCHASE ARRANGEMENTS BETWEEN THE CITY AND THE UTE DISTRICT.

WHEREAS, the City of Grand Junction and the Ute Water Conservancy District desire to amend water service area boundaries between the two entities to better manage the water and capital assets of both domestic water providers; and

WHEREAS, the City of Grand Junction and the Ute Water District have negotiated an exchange of boundaries and an amendment of bulk water purchases as outlined in the attached "Ute/City Water District Boundary Adjustments Study Summary" and Map, and;

WHEREAS, there was advertised and held a series of five (5) public meetings with customers to discuss the proposed boundary adjustments, and;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION, COLORADO:

That the City Manager is hereby authorized take all actions and execute all documents necessary or appropriate to effectuate the boundary adjustment process as contemplated between the City and Ute.

PASSED and ADOPTED this 7th day of April, 1999

Attest:

/s/ Stephanie Nye  
\_\_\_\_\_  
City Clerk

/s/ Janet L. Terry  
\_\_\_\_\_  
President of the City Council

# Ute/City Water District Boundary Adjustments Study Summary

April 10, 1998

## Executive Summary:

In an effort to provide a more efficient and cost effective water distribution system to the residents of the Grand Valley, City and Ute staffs have combined resources to study the elimination of bulk water purchases and to eliminate overlap areas where feasible.

Implementation of the recommendations in this proposal will eliminate three miles of duplicate water lines, untangle service areas and eliminate bulk purchases. The present values of each of the 12 areas were calculated based on current and proposed revenue streams, development potential (including tap fees and subsequent monthly revenue), as well as fire protection upgrades that would be required. The net financial effect appears to benefit Ute slightly more than the City, however the analysis does not address certain intangibles such as eliminating confusion on service areas, lowering maintenance costs due to fewer lines to maintain, and increasing Ute's capacity to serve new developments by 731 homes utilizing existing infrastructure. All of the changes in this proposal complement the goal of unifying the Grand Valley's water districts by simplifying district boundaries and constructing interconnects that allow for water to move from one district to another.

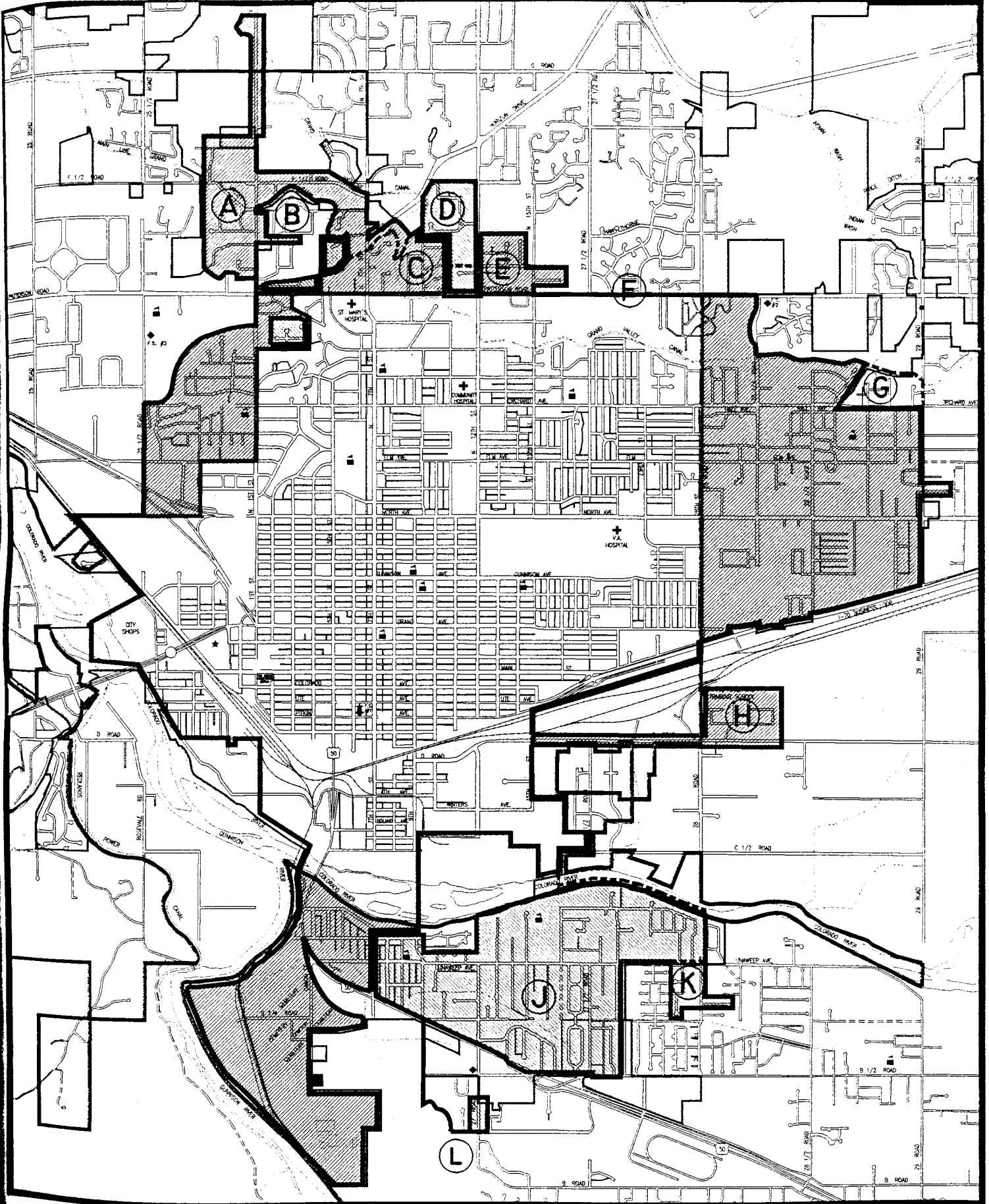
## Background:

This proposal was the combined efforts of both the Ute Water Conservancy District and the City Water District and represents many hours of staff time spent compiling data, analyzing and discussing how to make the two water systems function more efficiently.

This proposal identifies 12 areas where the Ute Water Conservancy District and the City Water District either have overlapping service areas or interests in each other's operations. These 12 areas were evaluated for:

1. *Duplicate water lines.* Six of the study areas had both the City and Ute water maintaining 6-8" lines less than 20' apart. From a big picture perspective this leads to many inefficiencies and should be held to a minimum where possible.
2. *Intertwined customers.* Orchard Mesa and the Patterson Road corridor had numerous areas where Ute served one customer, the City the next, and the City's bulk system the next customer. This lends itself to a lot of confusion on which lot is served by what system and again from a system standpoint is very inefficient to operate.
3. *Natural or Logical Boundaries.* For the north side of town, Independent Ranchmen's Ditch was an apparent natural boundary, where on Orchard Mesa Highway 50 made for a clean break. These boundaries were identified based on existing infrastructure for both the Ute and City water systems and would minimize the amount of infrastructure that would need to be added if this proposal is approved.
4. *Current / Proposed Revenues.* Monthly water usage and revenues were tabulated for every lot in each study area. For analysis, the present value of this revenue stream over a 30 year period at 8% was used.

5. *Development Potential.* Each lot was analyzed for development potential. Current City zoning, rather than the Growth Plan proposed zoning, was used for analysis. For development in the Ridges, an overall density of 3 units per acre was used rather than actual zoning of 4 units per acre due to how the area has actually been developing due to topographic constraints. Furthermore, the Ridges analysis includes the proposed 480 acre development occurring at 1 unit per acre. The analysis included in the following pages was based on an average annual growth rate of 2%, however the spreadsheets developed for this project would allow analysis of any growth rate. Staff feels the 2% assumed growth rate is conservative as the growth rate in the Grand Valley over the last 30 years has averaged almost 2.2%. The growth was assumed separately in each basin. For example, the Ridges (Area I) had 752 current accounts and potential for another 905 accounts. Applying the 2% growth rate to the 752 existing accounts, in 30 years there should be 610 new accounts in the Ridges area. An interest rate of 8% was used in determining present value.
6. *Upgrades required.* Some of the areas proposed to be swapped do not meet current fire protection standards. These upgrades were analyzed and assumed to occur immediately upon the swap for the present value analysis.
7. *Consumption.* Consumption was tracked for each account in each area to identify the net effect the swaps would have on the various treatment plants.
8. *Bulk System Elimination.* The bulk areas essentially allow for Ute water to be delivered through City maintained lines per previous agreements. The City generally pays Ute a monthly minimum of \$5.70 per account for the first 3000 gallons plus \$1.60 per thousand gallons for the next 2000 gallons, and then \$1.43 per thousand gallons for all other water. Overall, the City currently pays an average of \$1.67 / 1000 gallons to purchase treated water; this amount was used to simplify the analysis. As the City's retail rate is only \$2.00 / 1000 gallons the small \$0.33 margin does not justify the City's interest in the system. The Lakeside, Ridges, and Orchard Mesa are all areas served in this fashion.
9. *Outside City Rates.* Many of the City Water customers in Study Areas A and B pay two times the in-city rates as their lots are outside current City boundaries.



- CITY LIMITS
- IMPROVED ROADWAYS
- UNIMPROVED ROADWAYS
- RAILROADS

- SCHOOLS
- HOSPITALS
- POLICE STATION
- FIRE STATIONS (F.S.#)
- STUDY AREAS

- EXISTING CITY SERVICE AREA
- UTE SERVICE DIRECT
- UTE WATER PURCHASED BY CITY
- DISPUTED AREA
- PROPOSED BOUNDARIES

GN  
MN

11.5°



ALL OTHER MADE WATER BY LOCAL SOURCES

## Proposed Service Boundary Changes:

### Area A : W/O 1st Street

Currently served by: City  
Purveyor to serve: Ute  
Upgrades required: \$47,500  
Accounts in study area: 114  
Accounts requiring change of purveyor: 102  
Duplicate Lines: 5280 LF

### Area B: N/O Patterson 1st-7th

Purveyor to serve south of Independent Ranchman's Ditch: City  
Purveyor to serve north of Independent Ranchman's Ditch: Ute  
Upgrades required: \$152,500  
Accounts in study area: 198  
Accounts requiring change of purveyor: 37  
Duplicate Lines: 1450 LF

### Area C: N/O Patterson 7th-12th

Purveyor to serve south of Independent Ranchman's Ditch: City  
Purveyor to serve north of Independent Ranchman's Ditch: Ute  
Accounts in study area: 74  
Accounts requiring change of purveyor: 12  
Duplicate Lines: 0 LF

### Area D: Lakeside

Currently served by: City Bulk (Ute Water / City Lines)  
Purveyor to serve: Ute  
Accounts in study area: 256  
Accounts requiring change of purveyor: 256  
Duplicate Lines: 0 LF

### Area E: N/O Patterson E/O 12th

Currently served by: City and Ute  
Purveyor to serve: Ute  
Accounts in study area: 99  
Accounts requiring change of purveyor: 66  
Duplicate Lines: 1850 LF

### Area F: Patterson 27 1/2 to 28 1/4

Currently served by: City and Ute  
Purveyor to serve: 6 out of 7 to City  
Accounts in study area: 7  
Accounts requiring change of purveyor: 6  
Duplicate Lines: 0 LF

Area G: Orchard/Indian Wash/29 Rd

Currently served by: Ute  
Purveyor to serve: City  
Upgrades required: \$97,500  
Accounts in study area: 58  
Accounts requiring change of purveyor: 52  
Duplicate Lines: 1350 LF

Area H: State Home

Currently served by: City (with back up feed from Ute)  
Purveyor to serve: Ute

Area I: Ridges

Currently served by: City Bulk (Ute Water / City Lines)  
Purveyor to serve: Ute  
Development: Assumes 3 units/acre (rather than actual zoning of 4 units/acre) except for the 480 acre parcel south of Shadow (Gardner) Lake that has recently met with the City and is proposing an overall density of only 1 unit/acre.  
Accounts in study area: 752  
Accounts requiring change of purveyor: 752  
Duplicate Lines: 0 LF

Area J: Orchard Mesa N/O Highway 50

Currently served by: City Bulk (Ute Water / City Lines) and Ute  
Purveyor to serve: City (no bulk)  
Upgrades required: \$92,500  
Accounts in study area: 1,141  
Accounts requiring change of purveyor: 93  
Duplicate Lines: 4840 LF

Area K: Orchard Mesa S/O Highway 50

Currently served by: City  
Purveyor to serve: Ute  
Accounts in study area: 53  
Accounts requiring change of purveyor: 11  
Duplicate Lines: 950 LF

Area L: Orchard Mesa / Huffer & Collum Lane

Currently served by: City Bulk (Ute Water / City Lines)  
Purveyor to serve: Ute  
Upgrades required: \$22,500  
Accounts in study area: 65  
Accounts requiring change of purveyor: 65  
Duplicate Lines: 0 LF

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## Analysis Assumptions

**Tap Fees.** Tap fees were assumed to remain at today's levels for the entire 30 years. The current tap fees are as follows:

City:	\$1,000
City / Ridges:	\$2,240
Ute:	\$3,200
Ute / Ridges:	\$960

**Bulk Rate.** As stated above, the bulk rate the City pays Ute for treated water was assumed to be an average of \$1.67 per 1000 gallons.

**Present Value Assumptions.** For the present value analysis, a term of 30 years was used with an interest rate of 8%.

**Fire Protection Upgrades.** All fire protection upgrades were assumed at a cost of \$50 per foot and an additional \$2,500 per hydrant. For the present value analysis, the upgrades were assumed to occur immediately upon the exchange of the subject areas.

## Proposed Changes

The service areas studied encompassed 2877 accounts. The total number of accounts that would require a change in water purveyor is 1511. Approximately 15,720 feet or almost 3 miles of duplicate lines would be eliminated.

### **Proposed changes in monthly revenue.**

City:		
	Current Monthly:	\$21,405
	Proposed Monthly:	<u>\$27,121</u>
	Net Monthly change:	\$5,716
Ute:		
	Current Monthly:	\$30,413
	Proposed Monthly:	<u>\$26,640</u>
	Net Monthly change:	(\$3,773)

**Proposed Upgrades.** The City would be required to invest approximately \$190,000 in the existing water service areas in order to provide the areas with adequate fire protection. Ute would be required to invest approximately \$222,500 in the existing water service areas in order to provide the areas with adequate fire protection.

**Proposed Consumption Changes.** With the suggested boundary adjustments, the City would *increase* the demand on their plant by an average of 5,700,000 gallons per month (190,000 gallons per day) while Ute would *decrease* the demand on their system an average of 5,700,000 gallons per month.

These changes represent a change in demand on each plant of approximately 731 homes. This would equate to approximately 9 months of growth for the Ute Water Conservancy.

**Present Value Analysis.** The below table represents the difference between each purveyor's current system and the system proposed as part of this study.

City Revenues

Service Revenue:	\$772,205
Development Revenue (tap fees):	(\$589,012)
City Upgrades	<u>\$32,500</u>
Total difference in present value	\$215,693

Ute Revenues

Service Revenue	(\$509,766)
Development Revenue (tap fees):	\$793,065
Ute Upgrades	<u>(\$32,500)</u>
Total difference in present value	\$250,799

With the proposed boundary adjustments, Ute water does give up current revenue in exchange for greater development revenue and takes on an additional \$32,500 in upgrades. The City forfeits development income (primarily in the Ridges) in exchange for an increase in current service revenues. However the analysis did discover the proposed changes are a win for both districts if growth remains at 2% over the next 30 years.

**Summary**

In conclusion, the above proposal will benefit both the Ute Water Conservancy system as well as the City of Grand Junction system. Ute will benefit in additional development revenue as well as add 731 homes worth of capacity to their existing system by transferring various areas (primarily the old West Orchard Mesa water system) to the City. The City stands to benefit in that they will be adding current revenue and eliminate bulk purchases of water from the Ute District. Both systems will benefit from the elimination of 3 miles of duplicate water lines as well as eliminate confusing overlapping service areas. Grand Valley residents will benefit as both water systems will be able to operate more efficiently and effectively than the present service boundaries allow.