

The background is a light blue gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. The text is centered in the middle of the image.

# CENTRAL WELD COUNTY WATER

HISTORY OF THE DISTRICT

# HOW IT ALL BEGAN

## 1965

ON JUNE 17, 1965 THE QUESTION OF ORGANIZATION OF A PROPOSED WATER DISTRICT'S ORIGINAL ELECTION WAS HELD AT THE TOWN HALL IN KERSEY COLORADO AND THE PROPOSAL PASSED UNANIMOUSLY 26 – 0. CENTRAL WELD COUNTY WATER DISTRICT BECAME A SPECIAL DISTRICT UNDER STATE STATUTE 32, ARTICLE ONE. THE PURPOSE FOR THE SPECIAL DISTRICT WAS TO PROVIDE RELIABLE AND EXCELLENT QUALITY WATER TO RURAL USERS AND COMMUNITIES WHO WERE AT THE TIME, DEPENDENT ON SUB-SURFACE WATER SOURCES. THE AREA THAT WOULD BE SERVED IS 250 SQUARE MILES IN WELD COUNTY. THE NEW BOARD ALSO MADE A PRESENTATION TO THE CITY OF GREELEY TO PROVIDE WATER SERVICE BUT THE CITY DECLINED. ON DECEMBER 7, 1965 AN ELECTION WAS HELD FOR A \$3.8 MILLION DOLLAR GENERAL OBLIGATION BOND FOR CONSTRUCTION OF FACILITIES. THE MEASURE PASSED 106 TO 19.

## 1966

ON JANUARY 11, 1966 CWCWD, AFTER ADVERTISING ON THE RADIO AND IN THE NEWSPAPER, HELD A “SIGN UP DAY” FOR THE INITIAL PURCHASE OF TAPS. ORIGINAL PRICE FOR A 5/8” TAP WAS \$250.00, THE CUSTOMER PAID \$100.00 DOWN AND THE BALANCE TO BE PAID WHEN THE CONNECTION WAS MADE. TODAY THE COST FOR A 5/8” TAP IS \$73,000.00 FOR IN-DISTRICT CUSTOMERS.

## THE FUTURE

THE DISTRICT BEGAN BY SERVING APPROXIMATELY 393 TAPS AND DELIVERED 163 MILLION GALLONS OF WATER PER YEAR AND CURRENTLY HAS 2,334 ACTIVE TAPS AND DELIVERS 3.7 BILLION GALLONS TO RURAL RESIDENTS, AGRICULTURAL, COMMERCIAL INDUSTRIAL USERS AND MUNICIPALITIES. THIS IS FOR AN APPROXIMATE POPULATION EQUAL TO 50,000. CBT SHARES WERE PURCHASED FOR APPROXIMATELY \$110 PER SHARE IN 1966. THE DISTRICT CONTINUES TO PURCHASE ADDITIONAL SHARES OF CBT RANGING FROM \$58,000 TO \$61,000 PER SHARE. ALL WATER USED BY CWCWD IS COLORADO BIG THOMPSON AND WINDY GAP PROJECT WATER DELIVERED TO CARTER LAKE. THE DISTRICT OWNS 6,342 SHARES OF CBT WATER AND ONE SHARE OF WINDY GAP (100 ACRE- FEET). IN ADDITION, 10,510 SHARES OF CBT WATER ARE TREATED AND DELIVERED TO THE TOWNS SERVED THROUGH MASTER METERS.



# STORAGE AND CAPACITY

THE ORIGINAL PLANT WAS BUILT IN 1963 BY THE LTWD AND THE SOUTH PLANT WAS CONSTRUCTED IN 1993 AND EXPANDED IN 2001. THE CAPACITY OF THE SOUTH PLANT IS 18 MGD AND THE NORTH PLANT WAS 10 MGD. IN 2004 THE DISTRICTS DECIDED TO REPLACE THE NORTH PLANT WITH A NEW 30 MGD MEMBRANE PLANT, BRINGING TOTAL CAPACITY OF THE PLANTS TO 48 MGD. WATER IS TRANSPORTED INTO THE DISTRIBUTION SYSTEM BY A 20" AND A 42" LINE. THE DISTRICT HAS OVER 400 MILES OF PIPE RANGING IN SIZE FROM 2" TO 42". A 7 MG STORAGE TANK WAS CONSTRUCTION FOR ADDITIONAL STORAGE IN 2021. MOST OF OUR SYSTEM IS GRAVITY FED, HOWEVER, IT REQUIRES PRESSURE REDUCTION WITH 72 PRESSURE REDUCING VALVES, 5 PUMP STATIONS TO INCREASE PRESSURES TO HIGHER ELEVATIONS, AND 9 WATER STORAGE TANKS RANGING IN SIZE FROM 750,000 THOUSAND GALLONS TO 7 MILLION GALLONS AND PROVIDES STORAGE OF 25 MILLION GALLONS. WE HAVE EMERGENCY INTERCONNECTS WITH THE CITY OF GREELEY, LTWD AND ALSO LEFT HAND WATER DISTRICT. WATER IS FILTERED AT THE CARTER LAKE FILTER PLANTS (CLFP) THAT ARE JOINTLY OWNED WITH THE LITTLE THOMPSON WATER DISTRICT (LTWD).




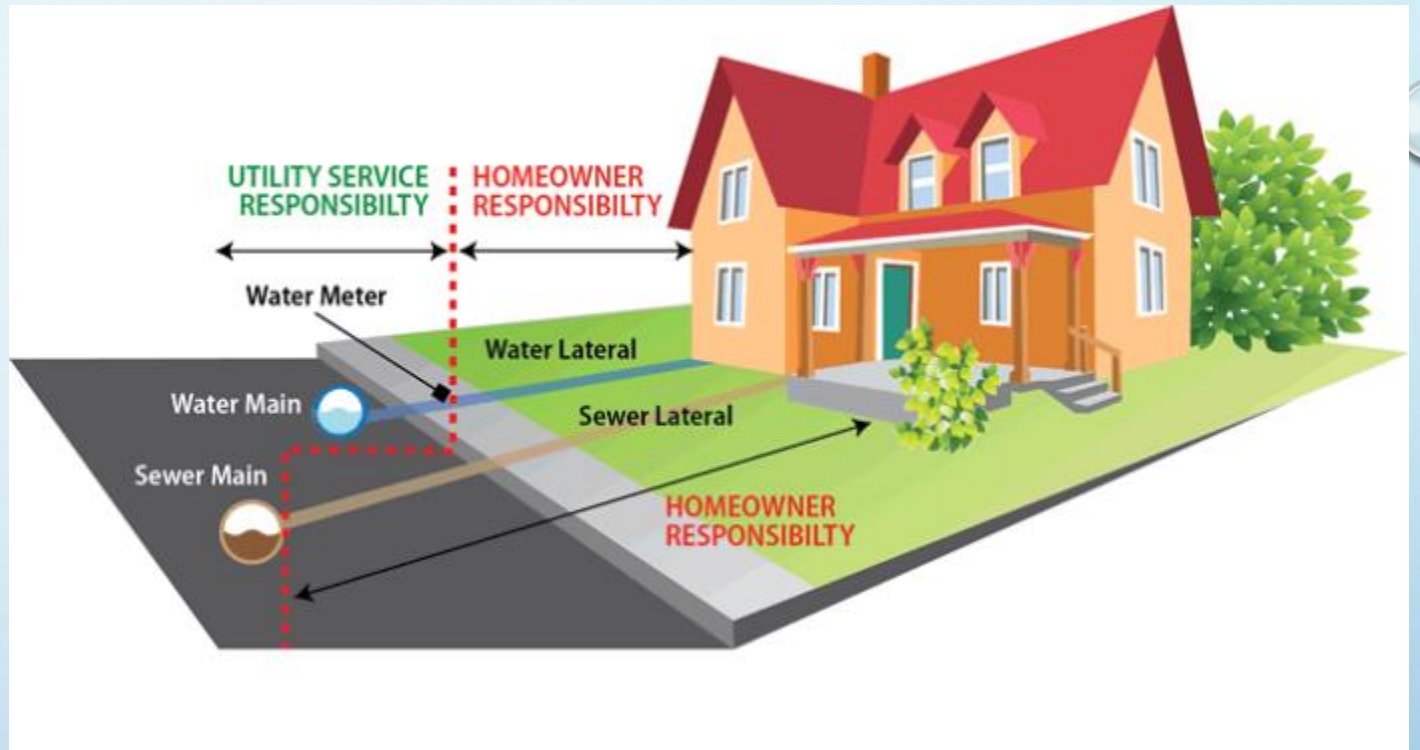
# TELEMETRY & GIS

TO SURVIVE IN TODAY'S ENVIRONMENT WE MUST BE CONSTANTLY CHANGING, EVOLVING AND IMPROVING HOW WE OPERATE. A DISTRICT THIS SIZE WITH ALL OF ITS CUSTOMERS REQUIRES CONSTANT MONITORING. WE HAVE JUST COMPLETED UPGRADING OUR SCADA SYSTEM. EACH FIELD TECH HAS THEIR OWN LAPTOP AND CAN ACCESS THE TELEMETRY FROM ANYWHERE IN THE FIELD OR AT HOME. AN OPERATOR CAN REMOTELY OPEN AND CLOSE STORAGE TANK VALVES, TURN THE PRESSURE IN THE PRV VAULTS UP OR DOWN AND SET RATES OF FLOW FROM ANYWHERE AT ANY TIME. THIS TYPE OF CONTROL IS INVALUABLE WHEN A TOWN OR CITY MIGHT NEED EXTRA FLOW OR PRESSURE FOR AN EMERGENCY. WE ARE CURRENTLY IN THE PROCESS OF BUILDING A GIS/GPS DATA BASE. WE WANT TO DOCUMENT OUR INFRASTRUCTURE USING GPS RECORDING DEVICES. THE GPS EQUIPMENT WE ARE USING IS SURVEY GRADE ACCURATE TO 1/4". WE HAVE RECORDED OVER 12,000 POINTS DURING THE PAST FEW YEARS. THE DATA WILL BE PRESENTED TO THE USER WITH GIS SOFTWARE FOR TECHNICIANS TO USE FOR LOCATING AND MAINTENANCE WORK. WE INTEND THIS TO BE A KNOWLEDGE DATABASE FOR MAINTENANCE AND NEW INSTALLATIONS TO THE PIPING NETWORK. WE TAKE GPS SHOTS OF ALL PHONE LINES, GAS LINES AND ANY UNDERGROUND STRUCTURES. EASEMENTS, REPAIRS, AND HISTORY OF THE DISTRICT'S INFRASTRUCTURE ARE RECORDED FOR PRESENT AND FUTURE NEEDS. THE DATA RESIDES ON OUR NETWORK SERVER AND IS ACCESSED BY FIELD STAFF VIA A LAPTOP CELL PHONE DATA CONNECTION WHICH ALLOWS VIEWING AND MANIPULATION OF THIS INFORMATION IN REAL TIME. STAFF WILL BE ABLE TO REVIEW THE HISTORY OF ANY VALVE, METER, TANK, PUMP STATION, ETC. ON LINE AT THE JOB SITE. THIS SYSTEM WILL ALSO PRODUCE AND RECORD WORK ORDERS FOR ALL JOBS AND STORE THEM FOR OUR RECORDS. TAP INFORMATION WILL BE AVAILABLE SO THE TECHNICIAN CAN SEE USAGE HISTORY AND TROUBLE SHOOT PROBLEMS BEFORE THEY HAPPEN.

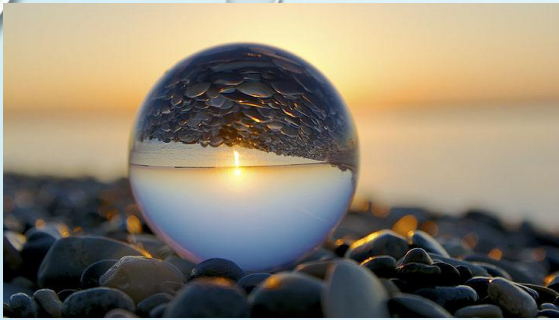




 EyeOnWater



THE DISTRICT WATER METERS HAVE BEEN READ MANUALLY SINCE THE BEGINNING. THIS LABOR INVESTMENT TOOK 6 MAN DAYS TO COMPLETE READING METERS. THE METER READINGS WERE MANUALLY ENTERED INTO THE OFFICE COMPUTER BILLING SYSTEM. THE NEW AUTOMATED METER READING PROJECT INSTALLS AN ELECTRONIC TRANSMITTER UNIT ON EACH EXISTING WATER METER. THE AMR THEN SENDS THE READING FOR THE MONTH TO A HANDHELD OR LAPTOP COMPUTER. THIS SYSTEM ALLOWS THE COMPUTER TO RECEIVE DATA WHEN IT IS WITHIN RANGE OF THE WATER METER. THE COMPUTER SOFTWARE WILL WARN THE TECHNICIAN OF A POSSIBLE LEAK IF THE WATER METER HAS CONTINUALLY OPERATED OVER A 24 HOUR PERIOD. IT WILL WARN THE TECHNICIAN OF ANY TAMPERING WITH THE METER. THE PRIOR 12 MONTHS OF READINGS ARE AVAILABLE FOR REVIEW. THE COLLECTED METER READINGS AND VOLUMES USED ARE ELECTRONICALLY TRANSFERRED TO THE BILLING SYSTEM FOR PROCESSING THE MONTHLY BILLS. DURING THE METER CONVERSION EACH PRESSURE REGULATOR VALVE WAS REPLACED AND A BACKFLOW DEVICE WAS INSTALLED. THIS PROJECT WAS STARTED A FEW YEARS AGO AND ALL METERS HAVE BEEN MODIFIED WITH THE ELECTRONIC TRANSMITTER. METER READING OR BEACON TRANSMITTERS AND NOW TAKES HALF OF THE TIME IT USED TO



# THE FUTURE OF WATER

## DRY CREEK RESERVOIR

IN 2002 CWCWD ALONG WITH LTWD STARTED ACQUIRING LAND FOR THE CONSTRUCTION OF A NEW 10,000 ACRE FT RESERVOIR CALLED DRY CREEK. THIS WAS BUILT TO STORE WATER FOR FUTURE USE IN TIMES OF SHORTAGE. TOTAL COST OF THE PROJECT WAS \$24.7 MILLION DOLLARS. WE STARTED FILLING THE RESERVOIR IN MARCH OF 2007 AND WAS FULL IN NOVEMBER OF 2008 ABOUT 3 YEARS AHEAD OF SCHEDULE. THE DISTRICT OWNS 50% OR ABOUT 5,000 ACRE FEET OF STORAGE. OUR MASTER PLAN INDICATES THAT DRY CREEK RESERVOIR MAY BE AN ADDITIONAL PLANT FOR FUTURE TREATMENT.

## CHIMNEY HOLLOW

THE CHIMNEY HOLLOW RESERVOIR PROJECT IS A COLLABORATIVE EFFORT BY 12 NORTHEASTERN COLORADO WATER PROVIDERS TO IMPROVE THE RELIABILITY OF THE WINDY GAP PROJECT. CHIMNEY HOLLOW RESERVOIR WILL BE LOCATED JUST WEST OF CARTER LAKE IN LARIMER COUNTY. ITS 90,000 ACRE-FEET OF DEDICATED STORAGE CAPACITY WILL SUPPLY A RELIABLE 30,000 ACRE-FEET OF WATER EACH YEAR FOR FUTURE GENERATIONS. CONSTRUCTION BEGAN IN AUGUST 2021.

## NISP

THE DISTRICT IS COMMITTED TO THE NISP PROJECT. THE PROJECTED COST IS APPROXIMATELY \$2 BILLION OR \$50,000 PER SHARE. THE CWCWD PROJECTED COST IS \$175 MILLION OR 8.75% OF THE NISP PROJECT OR 3500 ACRE FEET. TO DATE WE HAVE SPENT \$9.6 MILLION DOLLARS TOWARDS THE PROJECT.