

# ABOUT EAST VALLEY METRO DISTRICT

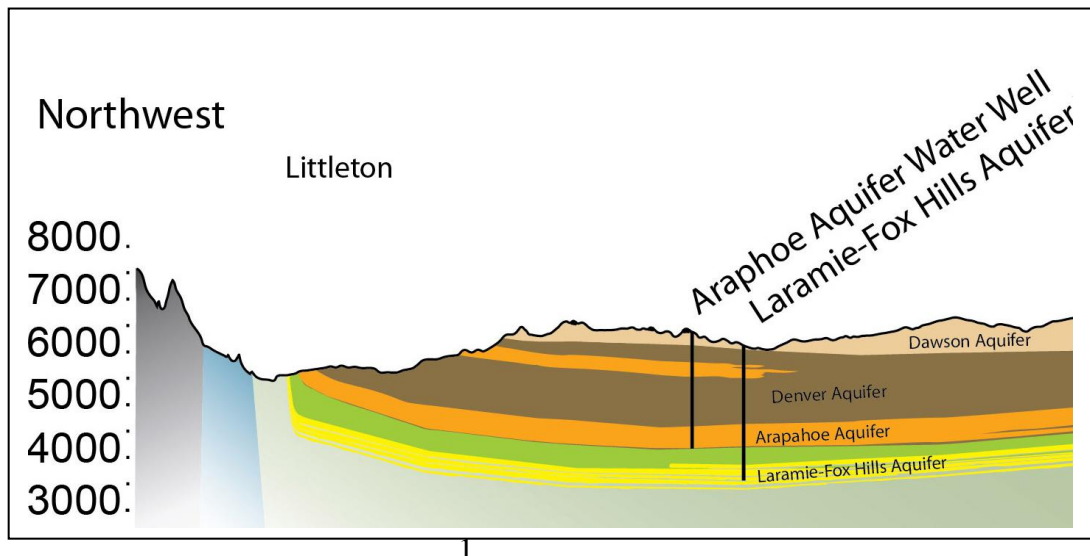
Last updated 11/2013

## I. History, Jurisdiction and Services

The East Valley Metropolitan District (EV) was established in 1959 as the East Valley Water and Sanitation District. Its legal status was changed to a “Metropolitan District” by a vote of the electorate in November of 2003 to allow for community trash collection service coordination. The District encompasses 76 homes on one-acre lots in Algonquin Acres (AA) and 23 homes on one-fifth to one-quarter acre lots in the Valley Country Club Estates (VCCE) located immediately northwest of the intersection of Arapahoe Road and Jordan Road in the City of Centennial, Arapahoe County, Colorado. The District also serves one irrigation tap in the VCCE for a total of 99 water taps. Other homes in the VCCE generally north of Fair Avenue are within the boundaries of the Arapahoe County Water and Waste Water Authority (ACWWA). Sewer services, through a contract with ACWWA, are provided to all homes within the District located in the VCCE and the four of the most northern homes in AA located along Caley Avenue. All other homes have septic systems. EV also coordinates a voluntary community trash collection contract with Waste Management, Inc. for homes in AA. Homes in the VCCE are obligated to participate in a similar trash contract through the VCCE homeowners association. All lots in the District are fully developed. There is no commercial development in the District

## II. Water Sources and Distribution System

Ground water (wells) supplies the system. The water supply system consists of three active wells, one obsolete well, two underground storage tanks, three distribution turbines, an electronic computer controlled center and chlorine/softening treatment unit. The aquifers below the district consist of the shallowest Dawson Aquifer (alluvial water), followed by the Denver, Arapahoe and Laramie-Fox Hills aquifers. All but the Dawson Aquifer are considered non-renewable or “non-tributary” water supplies.



The District has dual depletion adjudication rights to pump 183 acre-feet a year from the Denver and Arapahoe aquifers. An acre-foot of water covers one acre of land in one foot of water or about 326,000 gallons. Most of the water actually pumped due to availability, is from the Arapahoe formation, a deep aquifer where the water quality is very high. The District has two active wells reaching the Arapahoe aquifer, the Jordan (1990) and Carson II (2009) and one obsolete well, the Carson I, drilled in 1960 that is no longer unusable due to normal age related deterioration. Finally, District has a small well in the Dawson aquifer with an augmentation plan allowing the pumping of up to about 30 acre feet per year. Dawson Aquifer water is considered renewable and therefore, the amount of water that can be pumped from the Dawson is contingent upon the amount of new water the District adds to the watershed through pumping from the Arapahoe and Denver aquifers. The District used 26 acre feet of water rights it held Laramie-Fox Hills formation as a trade to increase its rights to draw Dawson water in 2001. The Laramie-Fox Hills water is 2,500 deep and thus expensive to drill into and pump from, and the quality is low being very high in dissolved minerals. Currently, the Arapahoe/Denver pumping rates between 25 and 30 acre feet to be drawn annually from the Dawson well. The Dawson aquifer is shallow and the water contains more dissolved minerals which to the end user, tastes more like "well water" but it is safe to drink. Dawson water is used mainly during summer months to help with irrigation needs. It is diluted with the very high quality Arapahoe/Denver water so the mineral impact is minimal.

East Valley does have an emergency intertie connection to the ACWWA water system that can only be used in emergency situations for short periods of time at a premium price.

Each year the District complies with a comprehensive set of water quality tests required by the State of Colorado. This report is mailed to all customers, per State requirements, each year. Additionally, monthly quality tests on a smaller number of key potential contaminants are conducted to ensure water quality and safety.

### **III. Long Term Water Sustainability and Challenges**

The Jordan and Carson II wells, East Valley's primary sources, have dropped during the past few summers to a point where only about 70 feet of water is over the pump when it is running at full capacity (currently about 200 GPM), then "recovers" somewhat during the winter months. This recovery isn't the result of new water entering the aquifer, but rather an equalization of overall aquifer water levels. Just over ten years ago, the Jordan well produced up to 600 GPM. Unlike a lake or pool of water, the water in the aquifer is held in sand and shale, much like a sponge where the "flow" or movement of water is held to a very slow pace. Water enters the well's "cone of influence" and actual well cylinder at slower and slower rates as the aquifer drops. District managers and consultants suggest that pumping levels should not exceed 200 GPM to protect from a system failure and possible damage to pumps should the well cylinder run dry.

Small storage capacity also limits the District's options. At 79,000 gallons, storage is about 100,000 gallons less than necessary to optimally manage the water supply at 200 GPM inflows. An additional 100,000 gallons of storage would improve irrigation time significantly, but would cost up to \$250,000 dollars and has some risk of having little return value if the aquifer deteriorates to below 100 GPM -- a future difficult to accurately predict.

East Valley has had discussion with all possible area water suppliers. The Denver Water Board has not expanded its "blue line" for many years and even if Denver made water available, the cost to reach the nearest connection near Orchard and Havana is cost prohibitive. Aurora Water has been approached but has a long standing policy that ties added customers only to city annexations. Aurora and Denver have instituted the "WISE" water sharing program with man larger south metro water districts, but the buy-in is costly, the water is not guaranteed in drought years and the current cost for treated water is \$5.78 per 1,000 gallons. Currently East Valley can produce water with its wells at 1/3 that price. Cottonwood Water, located near E-470 and Jordan Road to the south, has been approached and could supply East Valley through ACWWA water lines, but like most providers, is unable to commit water sales outside their borders for any long term period of time or at a cost lower than EV can produce water. Currently, the only available external water source is from the Arapahoe County Water and Waste Water Authority (ACWWA). ACWWA agreed in 2008 to sell us up to 50 acre feet of water a year at a cost close to what East Valley now charges customers for 95 acre feet. The Board believes that at this time, the most prudent course of action is to continue operating the system with a balance between conservation and reasonable water supply until ACWWA becomes a better option or other resources become available. The District is also hopeful that as surrounding larger water districts begin developing renewal water sources (such as northern supplies recently starting delivery to ACWWA and East Cherry Creek Valley, Parker's Reuter-Hess Reservoir, Cottonwood numerous new surface sources and the WISE project, that the pressure on deep wells will be reduced allowing EV an extended period of water supply. It is uncertain when a major change will be needed, what the costs will be, or forecast the condition of ACWWA and other possible future water providers if, or when, the time comes that EV can no longer provide acceptable water supplies at acceptable costs.

#### **IV. Funding**

##### **A. Water Supply and Distribution**

Funding to support water supply and distribution operations comes from user fees and to a lesser extent, from a property tax mill levy. Colorado law allows local government utilities such as EV to levy a limited property tax for operations. The District's mill averages about \$280 per tap or about \$28,000

annually in total revenue. The District collects the remainder of its revenue from customer water fees. These two revenue sources fund the water supply and delivery systems. User fees are based in part on flat rate so that some of the District's high fixed costs to ensure water availability are shared equally. The remainder of user fees are derived from a tiered rate structure based on usage. Rates per thousand gallons increase in higher usage tiers to encourage conservation. The fixed costs to maintain wells, the distribution system, water acquisition and administration represent up to 80% of the District's budget. The only cost with any significant variability when pumping water is the usage portion of electricity costs. Demand charges, another component of electricity costs, are incurred and quite high, with any single monthly start-up of large pump equipment.

B. Sewer and Trash Collection

Twenty six of the 98 home's sewer service in East Valley are on municipal sewer service provided by contract with the Arapahoe County Water and Waste Water Authority (ACWWA). This includes all homes in the Valley Country Club Estates and four Algonquin Acres homes along Caley. All other homes are on septic systems. ACWWA's Lonetree plant on Caley just west of Potomac provides this service for East Valley and a number of other water districts in the area. ACWWA sets sewer rates. Rates consist of a flat fee and a usage fee. Usage is based on actual water metered usage during the months of December through March. During the other months of the year, sewer usage fees are based on the average of the winter months' actual metered water usage (December through March). The concept, used by most water providers, is that just about all water usage in the winter is for indoor consumption. This winter consumption average is extrapolated and used for non-winter months (April through November).

Trash service for Algonquin Acres is based on a single contract price through Waste Management with a small District administrative surcharge of \$1 per month. Generally, the cost to District users of this service, because of the bulk rate contract pricing, is about 40% less than if each homeowner obtained individual service from any of the trash haulers service the area.

Both sewer and trash charges, where applicable, appear on the monthly water bill from East Valley.

C. Bonds and Special Assessments

Over the years, special assessment bonds have been approved by District voters to fund major projects like the large storage tank and Jordan well construction. The District currently is financing the Carson II well with \$500k in general obligation bonds issued in 2008 and scheduled to be paid in full July 1, 2028.

## V. Governance

### A. Board of Directors & Management

The District is governed by a board of five elected residents. The position each board member holds (President, Vice-President, Treasures, Secretary or Director) is determined annually in January through a vote by the Board. The Board contracts with a management company for services such as billing and general administrative coordination and oversight. System maintenance is provided through a contract with a water system maintenance firm. The firms now providing these services also provide similar services to other water districts. The District also has legal counsel mainly for water rights litigation issues. See the newsletter archives for more details about the district and its recent activity.

### B. Tax Payers Bill of Rights (TABOR) Exemption

In May of 2000, the District's electorate voted to exempt the District from the State TABOR amendment by 25 (78%) in favor and 7 (22%) opposed. A portion of District revenues operating revenue comes from the property mill. This measure will allow the District flexibility to adjust the mill in response to property valuation changes to keep revenue streams more consistent.

### C. Term Limit Exemption

In May of 2000, the District's electorate voted to exempt the District from a State initiative that required term limits for elected officials by 21 (66%) in favor and 11 (33%) opposed. Currently, State law limits elected officials to two terms of office or eight years. Given the District's small size (about 100 homes); it has historically been difficult to recruit and retain Board members. This measure is expected to help in this matter.

### D. Conversion to Metropolitan District

In November of 2003, the District electorate voted 27 (77%) in favor and 8 (23%) opposed to the following ballot question: "Shall the East Valley Water and Sanitation District be converted into a metropolitan district to be known as the East Valley Metropolitan District, possessing all of the rights, power and authority of a metropolitan district as provided for in Title 32 of the Colorado Revised Statutes?" The Primary purpose of this election was to provide the District with the legal capability under State of Colorado Statutes to offer a voluntary community residential trash collection service through a central contract with a trash removal company. In summary, metropolitan districts have the following authorities; assuming that funding is established to support them. Most of these services are already provided or regulated by the

City of Centennial, South Metro Fire, the Arapahoe County Parks District or Arapahoe County.

- Street lighting, safety protection services, traffic and safety controls and devices on streets and highways and at railroad crossings
- Extension for new telephone lines for districts with no property zoned or valued as residential (does not apply to East Valley)
- Fire protection
- Mosquito control
- Parks or recreational facilities
- Street services (curb & gutter, parking, drainage, paving, lighting, grading, landscaping and other street improvements)
- Television relay and translator facilities
- Solid waste disposal facilities or collection and transportation of solid waste.

EV has no interest or funding at this time to offer or be involved with the following services except for water/sanitation and trash collection services currently provided.