

Arapahoe County Water and Wastewater Authority 13031 E Caley Avenue, Centennial, CO 80111 9364 Phone (303) 790-4830, Fax (303)790-9364

Estimating your Domestic, Irrigation and Sewer Tap

Estimating your Tap costs:

The following tools are provided to help you estimate your domestic, irrigation and sewer tap costs. These tools apply to **standard commercial developments and multi-family developments** with the goal of providing you with a good idea (get you in the ball park) of what you can expect.

- Please refer to <u>Appendix A</u> for full details.
- Does not apply to Single Family Residential or Duplexes.
- ACWWA requires the tap, meter and service pipe be the same size.
- The tools provided here are for ESTIMATION ONLY. Final determination of Tap size and cost is the sole responsibility of ACWWA.

Domestic line and meter sizing:

- ACWWA uses the AWWA M22 Manual, 2004 second edition, to determine the total demand of the combined fixture value. The combined fixture value together with a maximum velocity of 10 feet per second determine the service line and meter size.
- Contact ACWWA for water pressure information. ACWWA will use the higher-pressure value or the pressure from an independent flow test.
- Submit plumbing fixture cut sheets and plumbing plans.

Irrigation line and meter sizing:

- Line size is determined using peak day irrigation demand and a maximum velocity of 10 feet per second.
- Irrigation Tap cost is calculated based upon annual irrigation demands.
- A separate irrigation and domestic water meter and service line shall be installed on commercial, industrial, and multi-family developments.
- If annual demand exceeds the line size yearly allocation, a water resource fee will apply. The water resource fee is based on the excess acre-footage above the annual allocation of the approved meter size. That excess is converted into a tap equivalent and is used to calculate the fee. One (1) Tap Equivalent "TE" is 0.5 acre-feet per year.

For example, assuming a project has 1.3 acre-feet total annual demand and the meter size is a 1" meter (that results in 2 TE or an allotted 1 acre-feet). The excess 0.3 acre-feet is then converted into the respective TE and multiplied by



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the water resource fee to give the cost for the excess demand above the annual allotted demand. The worksheet (see link below) factors this into the calculation.

• Contact ACWWA for water pressure information.

Using the "Required ACWWA Meter Size" value from the <u>M22 Manual Spreadsheet</u>, enter it into the <u>Standard Commercial Tap Fee Estimator</u> to see your estimated domestic tap cost. **Sewer** is a one-to-one (1:1) relationship to domestic water service; you will need to enter the return sewer line size to activate the calculation. You may also enter irrigation tap information to calculate your estimated irrigation costs within this Worksheet.

Multi-Family meter sizing Tap Calculation:

- For Multi-Family, ACWWA uses the AWWA M22 Manual, 2004 second edition, to determine the service line/meter size from the combination fixture values together with a maximum velocity of 10 feet per second for the building.
- Tap fees for multi-family developments shall be based upon the requirement of 0.28 T.E.'s per unit in the townhome, condominium, or apartment buildings.
- Contact ACWWA for water pressure information. ACWWA will use the higher-pressure value or the pressure from an independent flow test.
- Submit plumbing fixture cut sheets and plumbing plans.

Using the "Required ACWWA Meter Size" value from the <u>M22 Manual Spreadsheet</u>, enter it into the <u>Multi-Family Tap Fee Estimator</u> along with the number of units (doors) for the building to see your estimated domestic tap cost. **Sewer** is a one-to-one (1:1) relationship to domestic water service; you will need to enter the return sewer line size to activate the calculation. You may also enter irrigation tap information to calculate your estimated irrigation costs within this Worksheet.

If you have additional questions, please contact:

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