

## Section 21: Water Supply

(orig. 4-30-13)

### A. Public Water System

A Public Water System is an integrated arrangement of components for the treatment and/or distribution of a water supply in accordance with Federal, State and County regulations. Entities providing such services include public water districts and private water companies. These systems are permitted by the State and have a Public Water System Identification (PWSID) number. (orig. 4-30-13)

#### 1. Standards

- a. The water supply in terms of quality, quantity and dependability shall be in compliance with all State and County laws and regulations. (reloc. 7-12-05, am. 4-30-13)
- b. A public water district shall be operating within State and County regulations or have received approval of a service plan in accordance with Section 32-1-201, et. seq., C.R.S. and approval for site location in accordance with Section 30-28-110(1) and (2), C.R.S. (reloc. 7-12-05, am. 4-30-13)
- c. A private water company shall be operating or have approval to operate within State and County regulations. (reloc. 4-30-13)

#### 2. Requirements for Development

Based on the type of development proposed, the applicant shall submit the following documentation when service is to be provided by a Public Water System:

- a. All development proposals (except as qualified below) shall submit a letter from the district or company indicating that the proposed development:
  - (1) is within the boundaries or service area of the district, or is within the service area of the company; or (reloc. 7-12-05; am. 4-30-13)
  - (2) will be included within the district boundaries in accordance with Section 32-1-301 et. seq., C.R.S., or will be included in the service area of the company; or (reloc. 7-12-05; am. 4-30-13)
  - (3) has a contract for service with the district or company. (reloc. 7-12-05, am. 4-30-13)

For a Plat, Site Development Plan, Exemption or Minor Adjustment, the letter must also indicate that the district or company will, pursuant to their rules and regulations, supply water to the proposed development. (reloc. 7-12-05, am. 4-30-13)

- b. All development proposals shall provide a completed Water Supply Summary on the form provided by Planning and Zoning. This document will be sent to the Division of Water Resources for review and comment. (orig. 4-30-13)

#### 3. Approval of Public Water System Construction Plans

Public Water System Construction Plans may be required for a development as part of the Construction Plan set identified in the Submittal Requirements Section of this Regulation and of the Zoning Resolution. When required, these plans shall be in accordance the following: (orig. 4-30-13)

- a. The plans shall be prepared by a professional engineer, registered in the State of Colorado and qualified in the field of civil engineering. (orig. 4-30-13)

- b. The plans shall be prepared in accordance with the requirements of the applicable service authority. (reloc. 4-30-13)

## **B. Well Water Supply System**

A Well Water Supply System is an integrated arrangement of water supply components that does not meet the qualifications of a Public Water System. These systems will collect, store, and distribute water to one or more properties. These systems are typically individually-owned and maintained by the individual property owners. (orig. 4-30-13)

### 1. Standards

The water supply in terms of quality, quantity and dependability shall be in compliance with all applicable State and County laws and regulations. (orig. 4-30-13)

### 2. Requirements for Development

When a proposed development is to be served by a Well Water Supply System the following documents shall be provided as indicated:

- a. The applicant shall submit: (orig. 4-30-13)
  - (1) Proof of Legal Water: Information related to the proof of the legal right to the water supply. (orig. 4-30-13)
    - (a) Rezoning or Special Use:
      - (a-1) Documentation must be submitted demonstrating that the water source is legally available for the proposed use (except as qualified below). Such documentation may include, but not be limited to: water court decrees and well permits, which can be obtained from the Colorado Division of Water Resources. (orig. 4-30-13)
      - (a-2) If a subsequent Plat, Site Development Plan or Exemption process is required after the Rezoning or Special Use process, a letter shall be submitted describing the plan for obtaining legal rights to the water supply in lieu of the above requirement. (orig. 4-30-13)
    - (b) Plat, Site Development Plan, Exemption or Minor Adjustment applications must submit documentation that demonstrates that the water source is legally available for the proposed use. Such documentation may include, but not be limited to: water court decrees and well permits, which can be obtained from the Colorado Division of Water Resources. The water requirement for the proposed development shall not exceed the legally available water per the well permit or water court decree. (orig. 4-30-13)

Exemption: Water Supply Proof must either be provided as a part of the process or an improvements agreement must be created restricting the sale and/or the issuance of building permits until such time as Water Supply Proof has been satisfied. (orig. 4-30-13)
  - (2) Water Supply Summary: The completed summary form (available from Planning and Zoning) shall be submitted for all development proposals (orig. 4-30-13)
  - (3) Well Water Supply Report and Well Water Supply Report Summary: All Plat and Site Development Plan applications shall submit a Well Water Supply Report in accordance with the requirements of this Section. A Well Water Supply Report Summary on the form created and provided by Planning and Zoning shall be submitted as a part of the Well Water Supply Report. (orig. 4-30-13)

- (4) Aquifer Test: An Aquifer Test meeting the standards identified in this Section shall be included as a part of the Well Water Supply Report under the following circumstances: (orig. 4-30-13)
  - (a) If the development proposal is for Rezoning or Special Use that has a water requirement greater than 0.28 acre feet per acre per year (the equivalent of 250 gallons per day per acre). (orig. 4-30-13)
  - (b) If the development proposal is for a Plat or Site Development Plan that has a water requirement greater than 0.10 acre feet per acre per year (the equivalent of 90 gallons per day per acre). (orig. 4-30-13)

b. County Staff will provide:

Water Availability Analysis: The Water Availability Analysis (WAA) shall be in accordance with the requirements of this Section. The intent of the WAA is to provide information about the water supply in terms of quantity and dependability. (orig. 4-30-13)

3. Approval of Well Water Supply Report

- a. The Well Water Supply Report shall be prepared by either a professional Geologist (as defined by C.R.S. 34-1-201, as amended) or a professional engineer (registered in the State of Colorado), either of which shall be qualified in the field of water resource engineering. (orig. 4-30-13)
- b. The Well Water Supply Report shall be reviewed and approved by Planning and Zoning, and Public Health. (orig. 4-30-13)

**C. Standards**

1. Well Water Supply Report

The purpose of the Well Water Supply Report is to provide additional information to determine if the proposed water supply is sufficient in terms of quantity, dependability, and quality (orig. 4-30-13)

Content:

- a. The following information shall be provided on a representative well located within the proposed development: (reloc. 7-12-05; am. 4-30-13)
  - (1) Potability data shall include the following: (reloc. 7-12-05)
    - (a) Total Coliform, Presence/Absence (reloc. 7-12-05; am. 4-30-13)
    - (b) Standard Chemical Analysis, including the following: (reloc. 7-12-05, am. 4-30-13)

Turbidity	Silver	Radium 226	Dissolved Solids
Arsenic	Selenium	Color	Iron
Barium	Endrin	Total hardness of CaCO3	Manganese
Cadmium	Lindane	Calcium as CaCO3	Copper
Chromium	Methoxychlor	Magnesium	Zinc
Fluoride	Toxaphene	Sodium	Molybdenum
Lead	2,4-D	Chloride	Ammonia as N
Mercury	2,4,5-TP	Sulfate	Phosphate as P
Nitrate	Gross Alpha	Specific Conductance	Boron

- (c) Any exceedances of the Colorado Primary Drinking Water Regulations will be noted on the development plan document (orig. 4-30-13)
  - (2) Depth and location. (reloc. 7-12-05)
  - (3) Pumping rate expressed in gallons per minute. (reloc. 7-12-05)
  - (4) Duration of pump test. (reloc. 7-12-05)
  - b. The expected water requirements of the subdivision at full development, including the various water uses to be permitted. (reloc. 7-12-05)
  - c. The estimated consumptive use of water by the subdivision. (reloc. 7-12-05)
  - d. The source of water for the subdivision and the dependability of this source. (reloc. 7-12-05)
  - e. An evaluation of the potential for material injury to existing water rights as a result of the subdivision, including the cumulative effect of on-lot wells. (reloc. 7-12-05; am. 7-10-07)
  - f. Historic use and estimated yield of claimed water rights. (reloc. 7-12-05)
  - g. Amenability of existing water rights to a change in use. (reloc. 7-12-05)
  - h. Type of sewage disposal system proposed. (reloc. 7-12-05)
2. Aquifer Test:

The purpose of the Aquifer Test is to demonstrate the aquifer's ability to yield withdrawal rates that would satisfy the proposed uses. When required, the data from the Aquifer Test will be included in the Well Water Supply Report and the Well Water Supply Report Summary. In addition, the data from the Aquifer Test may be used to supplement the Water Availability Analysis. (orig. 7-10-07; am. 4-30-13)

Content:

- a. At least one viable Aquifer Test shall be conducted where individual wells are proposed. (orig. 7-10-07; am. 4-30-13)
  - b. Production wells shall be pumped for a minimum of 8-hours. (orig. 7-10-07, am. 4-30-13)
  - c. The yield of a well shall be determined as a stabilized production rate where the withdrawal rate and the drawdown do not change by more than 10 % during the last hour of the test. (orig. 4-30-13)
  - d. All existing wells within the proposed development should be monitored and if permission is granted, offsite wells within 600 feet of the production well. (orig. 7-10-07)
  - e. Water levels in the production well and observation wells, if any, shall be monitored for at least 24 hours after pumping stops, or until 90% recovery has occurred. (orig. 7-10-07)
  - f. Documentation of the aquifers hydraulic properties, including a narrative that evaluates the adequacy of the water supply for the proposed uses. (orig. 4-30-13)
3. Water Availability Analysis

The Water Availability Analysis will be completed by staff and used to determine if there is a sufficient water supply in terms of quantity and dependability for the proposed uses. The Water Availability Analysis will take into account the area of the sub basin, estimated hydrogeologic parameters based on published documents, estimated precipitation rates, existing land development in the basin, and existing allowed land uses in relation to the proposed

development. If the applicant does not agree with the results of the Water Availability Analysis they may complete their own water availability study which could be in the form of a similar Water Availability Analysis or an Aquifer Test. (orig. 4-30-13)

4. The Aquifer Test and the Water Availability Analysis applicable to a property shall only be valid for 3 years, unless Planning and Zoning determines that the hydrogeologic or land use conditions have not changed since the time of the last test or analysis. (orig. 4-30-13)

