

SECTION 18A WATER SUPPLY OVERLAY DISTRICT

Section Contents

1801A Intent 18A-2
1802A Applicability 18A-2
1803A Approval Standards..... 18A-2
1804A Water Supply Zones, Boundaries, and Source Standards 18A-3
1805A Water Demand Standards..... 18A-7
1806A Documentation Standards..... 18A-7
1807A New Special District Service Plan Submittal Requirements 18A-12
1808A Water Supply Plan Appeal Process 18A-13
1809A Public Notice Requirements – Appeal..... 18A-14
1810A Definitions 18A-16

1801A Intent

To ensure that development in all areas of Douglas County provides for a water supply that is sufficient in terms of quantity, quality, and dependability. [§30-28-133 (3)(d), C.R.S.]

Compliance with the following standards permits a presumption that a proposed water plan meets the standards set forth in these regulations. Any landowner may appeal these standards to the Board to prove a sufficient water supply, as set forth in Section 1808A.

1802A Applicability

The Water Supply Overlay District shall be applied as a supplemental regulation to those set forth in the underlying Zone District and to all applications submitted pursuant to the following regulations. Unless otherwise appealed as set forth in Section 1808A, the Board shall determine the adequacy of a water supply to meet the demand for a proposed development within a Preliminary Plan, Minor Development, or Use by Special Review application as applicable.

1802A.01 Douglas County Zoning Resolution:

- Planned Development
- Rezoning
- Site Improvement Plan – legal unplatted parcels
- Use By Special Review

1802A.02 Douglas County Subdivision Resolution:

- Preliminary Plan
- Final Plat
- Minor Development – Single-Family, Multifamily and Nonresidential

1802A.03 Douglas County Building Code, as described in the Pike-Rampart or Margin A Water Supply Zone Standards

1802A.04 County Review of Special District Applications

All of the restrictions and requirements set forth in other applicable regulations remain in full force and effect. In the case of overlapping or conflicting requirements, the most restrictive provision shall apply.

1803A Approval Standards

The Planning Commission and the Board of County Commissioners shall utilize these standards when evaluating land use applications.

Based upon the Documentation Standards described in Section 1806A, the Planning Commission and the Board of County Commissioners shall determine if:

- 1803A.01 The applicant has demonstrated that the water rights can be used for the proposed use(s).
- 1803A.02 The reliability of a renewable water right has been analyzed and is deemed sufficient by the County based on its priority date within the Colorado System of Water Rights Administration.
- 1803A.03 The Water Plan is deemed adequate and feasible by the County to ensure that water supply shortages will not occur due to variations in the hydrologic cycle.
- 1803A.04 The Water Plan is sufficient to meet the demand applicable to the project based on the minimum water demand standards in Section 1805A herein.

1804A Water Supply Zones, Boundaries, and Standards

The Water Supply Overlay District encompasses the entire area of Douglas County. The District is divided into zones identified as Pike-Rampart, Margin A, Margin B, and the Central Basin, as depicted on the Water Supply Overlay District Map, attached hereto and incorporated herein with this reference.

Compliance with these standards shall be demonstrated through the Documentation Standards set forth in Sections 1806A.

1804A.01 Pike-Rampart Water Supply Zone

1804A.01.1 Groundwater from Granitic Fractures

A well in the granitic metamorphic fractures may only be allowed as the source of water in the Pike-Rampart Water Supply Zone, when required for issuance of a building permit, for a principal or accessory use currently allowed by zoning on a legally created parcel as follows:

- (1) The applicant must submit evidence of a well test in one of two forms, as follows:
 - (a) A minimum 4-hour, constant-discharge test that would require the well to be pumped at a constant rate commensurate with the ability of the aquifer to yield not less than 1 gallon per minute (gpm), with water level measurements being made throughout the duration of the test. To conduct an acceptable well test, the pump shall be valved to maintain a constant rate, a calibrated flow meter used to measure flow, and a

means to obtain water levels from the pumped well provided. The well test results must be signed by a licensed water well contractor or professional geologist or engineer.

- (b) A statement signed by a licensed well contractor that the average yield of the well is greater than 10 gpm after 4 hours of airlifting, which is indicative of a sustained pumping rate of greater than 1 gpm.
- (2) If the water flow is less than 1 gpm, the applicant shall install a cistern in compliance with the Douglas County plumbing code, as amended. Further, if the water flow of the well is not sufficient to fill the cistern, as required by the plumbing code, the landowner shall submit an agreement with a water provider for the balance of the water, in a form acceptable to the County.

1804A.01.2 For other land uses proposed within Pike-Rampart, the water supply shall be from one of the following water sources, or any combination thereof:

- (1) Renewable water rights
- (2) A water supply beneath land located in the Central Basin or Margin B in accordance with Section 1804A.03.2 that has been zoned as Open Space Conservation District, or is subject to a perpetual open space conservation easement. A copy of the conservation easement shall be submitted to the Planning Division, and shall contain provisions which restrict the uses of the land to substantially the same uses and level of development as are permitted on land zoned as Open Space Conservation District, as determined by the Director. A copy of the declaration of restrictive covenants shall be provided, as required.

1804A.02 Margin A Water Supply Zone

1804A.02.1 Nonrenewable Water – Margin A Water Supply Zone

A groundwater well may only be allowed as the source of water, when required for issuance of a building permit, for a principal or accessory use currently allowed by zoning on a legally created parcel as follows:

The applicant must submit evidence of a well test in one of two forms, as follows:

- (1) A minimum 4-hour, constant-discharge test that would require the well to be pumped at a constant rate commensurate with

the ability of the aquifer to yield not less than 1 gpm, with water level measurements being made throughout the duration of the test. To conduct an acceptable well test, the pump shall be valved to maintain a constant rate, a calibrated flow meter used to measure flow, and a means to obtain water levels from the pumped well provided. The well test results must be signed by a licensed water well contractor or professional geologist or engineer.

- (2) A statement signed by a licensed well contractor that the average yield of the well is greater than 10 gpm after 4 hours of airlifting, which is indicative of a sustained pumping rate of greater than 1 gpm.

If the water flow is less than 1 gpm, the applicant shall install a cistern in compliance with the Douglas County plumbing code, as amended. Further, if the water flow of the well is not sufficient to fill the cistern, as required by the plumbing code, the landowner shall submit an agreement with a water provider for the balance of the water, in a form acceptable to the County.

- (3) Proof that the water rights in all Denver Basin aquifers have been reserved in perpetuity, for the benefit of future landowners within the proposed development, pursuant to a declaration of restrictive covenants in a form prescribed by the County.

1804A.02.2 For other land uses proposed within Margin A, the water supply shall be from one of the following water sources, or any combination thereof:

- (1) Renewable water rights
- (2) A water supply beneath land located in the Central Basin or Margin B in accordance with Section 1804A.03.2 that has been zoned as Open Space Conservation District, or is subject to a perpetual open space conservation easement. A copy of the conservation easement shall be submitted to the Planning Division, and shall contain provisions which restrict the uses of the land to substantially the same uses and level of development as are permitted on land zoned as Open Space Conservation District, as determined by the Director. A copy of the declaration of restrictive covenants shall be provided, as required.

1804A.03 Margin B Water Supply Zone

The water supply shall be from one of the following water sources, or any combination thereof:

1804A.03.1 Renewable water rights

1804A.03.2 Denver Basin aquifers, not exceeding 50 percent of the total annual appropriable water supply contained within the Denver Basin aquifers underlying the subject land associated with the water rights or decree.

1804A.03.3 A water supply beneath land located in the Central Basin or Margin B in accordance with Section 1804A.03.2 that has been zoned as Open Space Conservation District, or is subject to a perpetual open space conservation easement. A copy of the conservation easement shall be submitted to the Planning Division, and shall contain provisions which restrict the uses of the land to substantially the same uses and level of development as are permitted on land zoned as Open Space Conservation District, as determined by the Director. A copy of the declaration of restrictive covenants shall be provided, as required.

1804A.04 Central Basin Water Supply Zone

The water supply shall be from one of the following water sources, or any combination thereof:

1804A.04.1 Renewable water rights

1804A.04.2 Denver Basin aquifers, not exceeding 100 percent of the total annual appropriable water supply contained within the Denver Basin aquifers underlying the subject land associated with the water rights or decree.

1804A.04.3 A water supply beneath land located in the Central Basin or Margin B in accordance with Section 1804A.03.2 that has been zoned as Open Space Conservation District, or is subject to a perpetual open space conservation easement. A copy of the conservation easement shall be submitted to the Planning Division, and shall contain provisions which restrict the uses of the land to substantially the same uses and level of development as are permitted on land zoned as Open Space Conservation District, as determined by the Director. A copy of the declaration of restrictive covenants shall be provided, as required.

1804A.05 The water rights in all Denver Basin aquifers shall be reserved in perpetuity, for the benefit of future landowners within the proposed

development, pursuant to a declaration of restrictive covenants in a form prescribed by the County.

- 1804A.06 When a new water source is not proposed and the landowner does not own rights to all of the water within the underlying Denver Basin aquifers, a groundwater well may be allowed as the source of water as required for a building permit, for a principal or accessory use currently allowed by zoning, on a legally created parcel.
- 1804A.07 When a proposed land use overlies two or more of the water supply zones or when a water supply is proposed to be obtained from multiple water supply zones, the water supply shall comply proportionately with the requirements of the zone from which the water is supplied.

The location and standards of these zones will be periodically reviewed by the County, as new data are available, and boundaries adjusted, as needed, to meet changing aquifer conditions.

1805A Water Demand Standards

- 1805A.01 For service governed by an Existing District, the applicant shall submit a copy of the governing board's resolution establishing minimum water standards for the Existing District.
- 1805A.02 For service not governed by an Existing District, or when the Existing District has not established its own minimum water standards, the following minimum water demand standards, unless amended through an Appeal Process, shall be demonstrated:
- 1805A.02.1 Residential: ER, RR, LRR, and A-1 zone districts: 1 acre-foot/year/residence
- 1805A.02.2 Residential: All other zone districts: 0.75 acre-foot/year/residence
- 1805A.02.3 Non-residential irrigated lawn, garden, or golf course: 2.50 acre-foot/year/acre
- 1805A.02.4 Commercial/office/industrial: 0.75 acre-foot/year per 6,695 square feet of building space
- 1805A.02.5 Other uses: Sufficient water supply for the proposed uses, based on the estimate of the proposed usage and analysis by the County.

1806A Documentation Standards

The following documentation standards are established for the purpose of demonstrating that definite provision has been made for a water supply that is sufficient in terms of quantity, quality, and dependability [§30-28-133 (3)(d), C.R.S.] in accordance

with the water source standards of the water supply zone in which the proposed development lies.

1806A.01 For individual applicants and non-District entities:

Renewable Water – when service is proposed by renewable tributary water rights the following documentation standards shall apply:

1806A.01.1 For rezonings and Planned Development amendments to increase the number of dwelling units, increase the Planned Development boundary, or change allowed land use categories, the applicant shall submit a letter stating the intent to obtain renewable water rights or a copy of the conditional water right(s) as decreed by the court.

1806A.01.2 For preliminary plan, minor development final plat, use by special review, and site improvement plan applications for legal unplatted parcels the applicant shall submit:

(1) A letter from a qualified attorney stating ownership by the applicant of, or an executed contract granting rights to the applicant for, adjudicated renewable water rights and a copy of the court decree adjudicating the renewable water rights.

(2) An adjudicated Augmentation Plan, if required by the Colorado State Engineer, and a copy of the court decree adjudicating the Augmentation Plan. An adjudicated Augmentation Plan shall be submitted prior to the scheduling of a public meeting or public hearing for the application.

(3) A Water Plan.

1806A.01.3 For final plat applications where the previous preliminary plan review process did not undergo the review in Section 1806A.01.2, the application shall be subject to review under the standards of Section 1806A.01.2. For all other final plat applications the applicant shall submit:

(1) A letter from a qualified attorney reaffirming renewable water rights ownership by the applicant and either verifying that the statements made in the letters and reports for the previous review process are still true and accurate, or identifying what conditions have changed since the previous review process. If proposed changes have the potential impact the applicant's ability to serve the subdivision, the applicant shall submit updated letters and reports as set forth in Section 1806A.01.2.

Nonrenewable Water – when service is proposed from Margin B and Central Basin Water Supply Zones, the following documentation standards shall apply:

- 1806A.01.4 A letter from a qualified attorney stating ownership by the applicant of, or an executed contract granting rights to the applicant for, adjudicated water rights and a copy of the court decree adjudicating the water rights.
- 1806A.01.5 An adjudicated Augmentation Plan, if required by the Colorado State Engineer, and a copy of the court decree adjudicating the Augmentation Plan. An adjudicated Augmentation Plan shall be submitted prior to the scheduling of a public meeting or public hearing for the application.
- 1806A.01.6 Proof that the water rights in all Denver Basin aquifers have been reserved in perpetuity, for the benefit of future landowners within the proposed development, pursuant to a declaration of restrictive covenants in a form prescribed by the County.
- 1806A.01.7 A Water Plan.

1806A.02 For District entities:

When service is proposed by a District, the applicant shall submit documentation of the District's ability to serve, the amount of water available, and the feasibility of extending service.

1806A.02.1 For rezonings or Planned Development amendments to increase the number of dwelling units, increase the Planned Development boundary, or change allowed land use categories the applicant shall submit:

- (1) A letter from the District referencing the development name (as submitted to the County), stating:
 - (a) The District's intent and ability to serve the development.
 - (b) The conditions under which the District will commit to serving the development.
 - (c) The estimated demand of the development based on the water demand standards as established in Section 1805A.
 - (d) The proposed uses, the allowed uses of the District's water rights, and that the proposed uses correspond to the allowed uses of the District's water rights.
 - (e) The feasibility of extending service to the development.
- (2) A Water Supply Report from the District.

1806A.02.2 For preliminary plan and minor development final plat applications, the applicant shall submit:

- (1) A letter from the District referencing the subdivision name (as submitted to the County), stating:
 - (a) The District's commitment to serve the subdivision.
 - (b) That the commitment is irrevocable, or the conditions under which the commitment may be revoked.
 - (c) That the property that is the subject of the application has been included in the District or is served by contract.
 - (d) The estimated demand of the subdivision based on the water demand standards as established in Section 1805A.
 - (e) The amount of water that can be supplied to the subdivision pursuant to deeded water, contracts, and/or IGAs.
 - (f) The proposed uses, the allowed uses of the District's water rights, and that the proposed uses correspond to the allowed uses of the District's water rights.
 - (g) The feasibility of extending service to the development.
- (2) A Water Supply Report from the District.
- (3) Evidence concerning the potability of the proposed water supply for the subdivision. [§30-28-133(3)(d), C.R.S.]
- (4) Proof that the water rights in all Denver Basin aquifers have been reserved in perpetuity, for the benefit of future landowners within the proposed development, pursuant to a declaration of restrictive covenants in a form prescribed by the County.
- (5) When service is proposed through an intergovernmental agreement (IGA), the applicant shall provide evidence that the IGA has been executed by both parties.
- (6) When service is proposed by a New Special District, an applicant shall provide evidence that the new special District has been organized.

1806A.02.3 For final plat applications where the previous preliminary plan review process did not undergo the review in Section 1806A.02.2, the application shall be subject to review under the standards of Section 1806A.02.2. For all other final plat applications the applicant shall submit:

- (1) A letter from the District reaffirming its commitment to serve and either verifying that the statements made in the letters and reports for the previous review process are still true and accurate, or identifying what conditions have changed since the previous review process. If proposed changes have the potential to impact the District's ability to serve the subdivision, the applicant shall submit updated letters and reports as set forth in Section 1806A.02.2.
- (2) Evidence that the water rights to serve the subdivision have been conveyed to the District and are available for the intended uses, and that the water credits to serve the subdivision have been purchased from the District (as necessary) and/or the water supply is the subject of a fully-executed contract or IGA with another water supply provider in which all of the terms and conditions of the contract and/or IGA have been fully satisfied, as confirmed by a signed will-serve letter from the provider of the water supplies.
- (3) To the extent that water supplies are to be provided by a separate water supply entity by contract or IGA, evidence that all of the necessary infrastructure is in place and is capable of providing water to the District.

1806A.02.4 For a use by special review application or for a site improvement plan application for legal unplatted parcels, the applicant shall submit:

- (1) A letter from the District referencing the development name (as submitted to the County), stating:
 - (a) The District's commitment to serve the development.
 - (b) That the commitment is irrevocable, or the conditions under which the commitment may be revoked.
 - (c) Whether the property that is the subject of the application has been included in the District.
 - (d) The estimated demand of the development based on the water demand standards as established in Section 1805A.
 - (e) The amount of water that can be supplied to the development.
 - (f) The proposed uses, the allowed uses of the District's water rights, and that the proposed uses correspond to the allowed uses of the District's water rights.
 - (g) A statement regarding the feasibility of extending service to the development.
- (2) A Water Supply Report from the District.

- (3) Evidence concerning the potability of the proposed water supply for the subdivision. [*§30-28-133(3)(d), C.R.S.*]
- (4) Proof that the water rights in all Denver Basin aquifers have been reserved in perpetuity, for the benefit of future landowners within the proposed development, pursuant to a declaration of restrictive covenants in a form prescribed by the County.

1807A New Special District Service Plan Submittal Requirements

The organization of a New Special District to provide water service is authorized by §32-1-201, et seq., C.R.S. The Board is authorized by §32-1-203, C.R.S., to review and approve the service plan.

When a New Special District Service Plan or a Service Plan Amendment to authorize provision of water service is proposed, the applicant shall submit:

- 1807A.01 An attorney's opinion letter stating ownership by the applicant(s) of adjudicated water rights and a copy of the court decree adjudicating the water rights.
- 1807A.02 An adjudicated Augmentation Plan, if required by the Colorado State Engineer, and a copy of the court decree adjudicating the Augmentation Plan. An adjudicated Augmentation Plan shall be submitted prior to the scheduling of a public hearing for the application.
- 1807A.03 A Water Plan.
- 1807A.04 Water demand standards as established in Section 1805A.
- 1807A.05 For service plan provisions to use Denver Basin wells in Margin B and Central Basin Water Supply Zones, the service plan shall include a well-field analysis that demonstrates that such wells will not adversely impact existing water rights on adjoining lands, considering the statutory requirement that material injury does not result solely from reductions of hydrostatic pressure or water level in an aquifer.
- 1807A.06 When a New Special District Service Plan proposes to use a water supply from another District that has not been previously reviewed subject to the requirements herein, the service plan shall include information from the District in accordance with Section 1806A.02.2.
- 1807A.07 Proof that the water rights in all Denver Basin aquifers have been reserved in perpetuity, for the benefit of future landowners within the proposed development, pursuant to a declaration of restrictive covenants in a form prescribed by the County.

1808A Appeal Process

An appeal to the standards of Section 18A shall be processed as follows:

- 1808A.01 The applicant shall discuss the appeal informally with planning staff to discuss the procedures and submittal requirements.
- 1808A.02 The applicant shall submit an explanation in narrative form explaining the appeal and attach any information including site-specific data, for the Board to consider.
- 1808A.03 The following analyses will be required for appeals to use Denver Basin water underlying land in the Margin A Water Supply Zone and for appeals to use more than 50 percent of appropriable Denver Basin water underlying land in the Margin B Water Supply Zone for the purpose of assessing the suitability of those Denver Basin aquifer supplies:
- 1808A.03.1 A static analysis to include an evaluation of the volume of the appropriable water supply for the proposed development.
- 1808A.03.2 A dynamic analysis that evaluates whether the adjudicated and appropriable water supply is sustainable for 100 years, including:
- (1) Site-specific aquifer hydraulic characteristics.
 - (2) Simulation of the current and future pumping effects from all pumping centers in the Denver Basin, using currently accepted estimates of present and future pumping volumes in the Basin.
 - (3) Simulation of pumping of the applicant's proposed wells to evaluate if, under these pumping conditions, the applicant's wells can satisfy the Minimum 100-year Useful Life.
 - (4) Simulation of the hydraulic control that is exerted by pumping of other wells in the confined portion of the aquifers. This will require simulation of the layering effects in the aquifers.
 - (5) Simulation of the elevation differences within each aquifer, e.g., the bowl-shaped nature of the Basin.
- 1808A.03.3 A well-field analysis to evaluate impacts on neighboring wells using information gained from the dynamic analysis.

- 1808A.04 Upon receipt of the narrative and attached documents, staff shall submit this information for review by the County's water consultant and any other referral agencies deemed relevant by staff. Staff shall schedule the appeal for public hearing before the Planning Commission and Board for public hearings and notify the applicant of the hearing dates and times.
- 1808A.05 The applicant is responsible for providing notice of the hearings in accordance with the public notice requirements set forth in Section 1809A, herein.
- 1808A.06 At a public hearing, the Planning Commission shall evaluate the application based on the technical data, the water consultants' opinions, site-specific data, the water demand standards, the staff report, and public testimony and shall make a recommendation to the Board to approve, conditionally approve, or deny the appeal. The Planning Commission's comments shall be based on the evidence presented.
- 1808A.07 At a public hearing, the Board shall evaluate the application based on the technical data, the water consultants' comments, site-specific data, the water demand standards, the staff report, the Planning Commission's recommendation, and public testimony and shall approve, conditionally approve, table for further study, or deny the appeal. An appeal shall be approved only upon the finding, based upon the evidence presented in each specific case, that:
1. The request will not be detrimental to the health, safety, or welfare of the present or future inhabitants of the County.
 2. For appeals to the Water Demand Standards set forth in Section 1805A or to the Documentation Standards set forth in Section 1806A, the application provides sufficient supporting data of alternate water demand criteria so the water supply is still considered sufficient in terms of quantity, quality, and dependability.
 3. For appeals to the timing of determining the adequacy of the water supply, the application identifies the stage at which the determination of adequacy shall be made.

The Board's decision regarding an appeal shall supersede or adjust any conflicting County land use regulation, unless prohibited by law.

1809A Appeal Process Public Notice Requirements

In calculating the required time period for posting and publishing a notice of a public hearing, the day of publishing or posting shall be counted in the total number of days

required. The day of the hearing shall not be counted toward the total number of days required for the notification period.

The degree of accuracy required for the information contained in these public notices shall be that of substantial compliance with the provisions of this section. Substantial compliance for these public notices shall be determined by the Planning Commission and the Board of County Commissioners for their respective public hearings.

1809A.01 Published Notice

At least 14 days prior to the Planning Commission hearing and 14 days prior to the Board hearing, the applicant shall:

- Publish a notice in at least one publication of a daily or a weekly legal newspaper of general circulation, printed or published in whole or in part in Douglas County.
- Provide a publisher's affidavit of said published notice to the Planning Division at least 7 days prior to the hearing. The notice shall read:

NOTICE OF PUBLIC HEARING BEFORE THE
PLANNING COMMISSION OR BOARD OF COUNTY COMMISSIONERS

A public hearing will be held on *(date)*, at *(time)*, in the Commissioners' Hearing Room, 100 Third Street, Castle Rock, CO, for an appeal concerning water regulations in the Douglas County Zoning Resolution for the property located at approximately *(distance and direction from nearest major intersection)*. For more information call Douglas County Planning, 303-660-7460.
File #/Name:

When concurrent notice has been approved by staff, the notice shall read:

NOTICE OF PUBLIC HEARINGS BEFORE THE
PLANNING COMMISSION AND BOARD OF COUNTY COMMISSIONERS

A public hearing will be held before the Planning Commission on *(date)*, at *(time)*, and before the Board of County Commissioners on *(date)*, at *(time)*, in the Commissioners' Hearing Room, 100 Third Street, Castle Rock, CO, for an appeal concerning water regulations in the Douglas County Zoning Resolution for the property located at approximately *(distance and direction from nearest major intersection)*. For more information call Douglas County Planning, 303-660-7460.
File #/Name:

1809A.02 Posted Notice

At least 14 days prior to the Planning Commission hearing and 14 days prior to the Board hearing, the applicant shall post a notice on the property that is the subject of the appeal. The sign posting shall consist of at least 1 sign facing each abutting public or private street open for travel, within 10 feet of the lot line abutting such street, placed on posts at least 4 feet above ground level. In the event the staff planner determines a sign cannot be placed abutting such street and be visible

from such street or that there is no abutting public or private street open for travel, the staff planner may require an alternate location for a sign. Each sign shall measure not less than 3 feet by 4 feet. Letter size shall be a minimum of 3 inches high, and a minimum of six inches high for the sentence that reads, "For more information call Douglas County Planning at 303-660-7460.". The notice shall read:

NOTICE OF PUBLIC HEARING BEFORE THE
PLANNING COMMISSION OR BOARD OF COUNTY COMMISSIONERS

This land shall be considered for an appeal concerning water regulations in the Douglas County Zoning Resolution. The public hearing is on *(date)*, at *(time)*, in the Commissioners' Hearing Room, 100 Third Street, Castle Rock, CO. For more information call Douglas County Planning, 303-660-7460.
File #/Name:

When concurrent notice has been approved by staff the notice shall read:

NOTICE OF PUBLIC HEARINGS BEFORE THE
PLANNING COMMISSION AND BOARD OF COUNTY COMMISSIONERS

This land shall be considered for an appeal concerning water regulations in the Douglas County Zoning Resolution before the Planning Commission on *(date)*, at *(time)*, and before the Board of County Commissioners on *(date)*, at *(time)*, in the Commissioners' Hearing Room, 100 Third Street, Castle Rock, CO. For more information call Douglas County Planning, 303-660-7460.
File #/Name:

1810A Definitions

- 1810A.01 Appropriable Denver Basin Water Supply: The volume of water in storage in the Denver Basin aquifers beneath a parcel of land, exclusive of prior appropriated rights. The volume of appropriable water in storage is calculated based on overlying land area, aquifer saturated thickness, and the specific yield of the aquifer. Under Colorado law, 1/100th of the appropriable water in storage can be extracted on an average annual basis from each Denver Basin aquifer.
- 1810A.02 Appropriable Tributary Water Supply: The amount of water from either a stream or tributary ground water source that can be appropriated under the Colorado Doctrine of Prior Appropriation and a Water Court decree can be obtained for such water supply.
- 1810A.03 Augmentation Plan: If a tributary or not-tributary water right is sought to be appropriated, it is incumbent upon the applicant for these water rights to demonstrate non-injury to existing, vested senior water rights. If such analysis indicates that there is the potential for injury to existing vested senior water rights, an augmentation plan must be adjudicated in Water Court which defines the uses of the water sought in the appropriation, defines the extent of the injury that will occur due to

this appropriation, and presents a plan that will fully mitigate injury to all existing vested senior water rights.

- 1810A.04 Colorado System of Water Rights Administration: Colorado operates under a “first in time, first in right” water rights administration for tributary waters of the state. This means that the most senior tributary water rights are wholly satisfied first, prior to any junior water rights diverting. If there is insufficient water to meet the water demands of all of the water rights, some water rights will be deemed “out of priority,” and will not be allowed to divert any water until sufficient supply is available for all rights senior to that right.
- 1810A.05 Denver Basin: A large groundwater basin of sedimentary rock formations containing four principal aquifers, the Dawson, Denver, Arapahoe and Laramie-Fox Hills. This water basin extends from Greeley on the north to Colorado Springs on the south, Limon on the east to the foothills on the west. Groundwater contained within the Denver Basin aquifers is considered to be either nontributary or nontributary water under the Colorado Water Rights System.
- 1810A.05.1 Central Basin: The area comprising most of the eastern half of Douglas County that is underlain by the Denver Basin. This is the area of the Denver Basin where the four principal aquifers are present and where the aquifers are located at, or near, the base of the bowl-shaped Denver Basin. Due to the presence of the four principal aquifers and the relative location in the Central Basin, water supplies developed in this zone can provide the Minimum 100-Year Useful Life.
- 1810A.05.2 Margin B: An area west of the Central Basin of the Denver Basin, where aquifer elevations are comparable in relation to the Central Basin of the Denver Basin. Water supply availability in this zone may not provide a Minimum 100-Year Useful Life.
- 1810A.05.3 Margin A: An area west of Margin B of the Denver Basin, which is characterized by the westernmost extent of the Denver Basin. Due to the outcrop of the Denver Basin in this area and the relative elevation of the Denver Basin aquifers compared to the remainder of the Basin, water supplies in this zone may not provide a Minimum 100-Year Useful Life.
- 1810A.06 District: A special district currently offering water service, organized or validated pursuant to the Special District Act, §32-1-101, et seq., C.R.S.; or a non-specified governmental entity including, but not limited to, municipalities, authorities, and public improvement districts, as well as private water companies.

- 1810A.07 Dynamic Analysis: Water supply availability and reliability evaluation required if an applicant wishes to use Denver Basin water in Margin A or more than 50 percent of the water supply available in Margin B, as estimated from the static analysis. This analysis requires the use of a model that accurately simulates the geologic and hydro geologic characteristics of the Denver Basin and how aquifer parameters and water levels will change over time. A dynamic analysis can evaluate long-term water supply availability and reliability because it simulates actual conditions and how they likely will change in the future, rather than assuming constant values for all time, as in the static analysis. This analysis is typically completed using a numerical groundwater model.
- 1810A.08 Dakota Sandstone Formation: An area of the County that is located in the water supply zones between the Pike-Rampart and the Denver Basin. This area consists of older sedimentary formations that generally underlie the Denver Basin aquifers but are uplifted to the surface in this area and are characterized by pronounced hogback and red sandstone features. Water supplies obtainable from these older sedimentary formations are quite limited and closely resemble the water availability of Margin A of the Denver Basin. Therefore, this area is considered part of Margin A for the purposes of the regulations set forth in the Water Supply Overlay District.
- 1810A.09 Existing District: A special district currently offering water service, organized or validated pursuant to the Special District Act, §32-1-101, et seq., C.R.S., with a service plan or statement of purposes approved by Douglas County prior to August 12, 1998.
- 1810A.10 Minimum 100-Year Useful Life: A water supply that will reliably provide water for a minimum time frame of 100 years. The County policy to determine useful life requires a showing from both a static and dynamic basis that a proposed water supply will be viable for a minimum 100-year period. The static analysis would include evaluation of the volume of water that is appropriable for the proposed development. The dynamic analysis would evaluate whether the appropriable water supply is sustainable for 100 years, giving consideration to the location within the Basin, as well as impacts caused by both current and future pumping by others in the Basin.
- 1810A.11 New Special District Service Plan: A document for the organization of a new special district as authorized by §32-1-201, et seq., C.R.S. The service plan generally outlines the services a District will provide and provides a financial plan for the procurement of land and facilities that may be necessary to provide District services.
- 1810A.12 Non-Renewable Water: Water that is not annually recharged through the hydrologic cycle and development of the water resource relies upon

drawing water principally from storage in an aquifer. This is also referred to as a finite water supply.

- 1810A.13 Nonresidential Equivalent: The quantity of water necessary for light industrial or office uses which corresponds to the residential standard of 0.75 acre-feet per year. The nonresidential equivalent is equal to 0.75 acre-feet per year required for each 6,695 square feet of building space.
- 1810A.14 Nontributary Water: Waters of the Denver Basin that, when pumped, will not, within 100 years, affect the flow of any natural stream by greater than one-tenth of one percent of the annual pumping volume. This is a non-renewable water supply.
- 1810A.15 Not-Nontributary Water: Waters of the Denver Basin that, when pumped will, within 100 years, affect the flow of a natural stream by greater than one-tenth of one percent of the annual pumping volume. Because the pumping of not-nontributary water will cause an impact to the surface stream system, an adjudicated plan for augmentation is required prior to the use of not-nontributary groundwater from the Denver Basin aquifers. This is a non-renewable water supply.
- 1810A.16 Pike-Rampart: The western portion of Douglas County that is characterized by the uplifted granitic mountains west of the Dakota Sandstone Formation and the Denver Basin. Water supplies in this zone are primarily through fractures in the granitic and metamorphic rock. While this water is renewable, due to the relatively low permeability of these fractures, water supply availability is relatively limited in the Pike-Rampart.
- 1810A.17 Renewable Water: Water from a source that is recharged during one or more stages of the hydrologic cycle, such as streams, and alluvial aquifers associated with streams so that the water supply is reliable over time, subject to physical supply and legal availability within the prior appropriation system.
- 1810A.18 Reusable water: Water either from fully-consumable tributary water rights or from the treatment of the portion of first-use Denver Basin aquifer water that is reusable to extinction. Reusable water can be part of a water rights portfolio, subject to a showing of its availability, reliability, and quality.
- 1810A.19 Static Analysis: Water supply availability evaluation required for proposed land uses that plan to use Denver Basin water in Margin B or in the Central Basin. This analysis is based on assumed constant values for the land area, aquifer specific yield and aquifer-saturated thickness. Aquifer specific yield and saturated thickness values are obtained from the Denver Basin Rules, promulgated by the Colorado State Engineer's Office, or, when available, from a decree from the

water court or from geophysical logs of wells drilled on, or near, the subject property.

Annual water supply availability is calculated by static analysis as: land area available for appropriation X aquifer specific yield X aquifer saturated thickness / 100 years. A static analysis cannot evaluate the long-term reliability of a water supply.

- 1810A.20 Tributary Water: Water contained within the surface stream systems, or in groundwater that is hydraulically connected to the stream system. Tributary waters are considered waters of the state, are available for appropriation through the Colorado Water Rights System, and are subject to the Colorado System of Water Rights Administration. Tributary Water rights are based on the priority of the rights to the extent that they can be relied upon as a water supply and meet the minimum water supply criteria, herein. This is a renewable water supply.
- 1810A.21 Water Conservation Plan: A description of implementation and enforcement efforts put forth to reduce water losses, waste, or use for both indoor and outdoor uses, dependent upon the land use application.
- 1810A.22 Water Plan: Documentation provided to Douglas County in support of a land use application which details:
- (1) The source(s) of water to be supplied to meet the development demand.
 - (2) The water supply delivery system, including the structures to be used for the diversion or extraction of the water, the conveyance system, and the required storage facilities.
 - (3) Demonstration of the reliability of the water supply, both from a physical and legal supply perspective, and including all losses associated with the delivery and storage system to be used.
 - (4) Proof that the water supply is owned and can be used by the applicants for the purposes intended in the application.
 - (5) Proof that all necessary decrees, permits, and any other legal requirements are in place that allow the legal use of the water supply.
 - (6) The timing of the development demands through the build out of the project.
 - (7) Estimated demand of the development.
- 1810A.23 Water Supply: The legal and physical delivery of water service that is sufficient in terms of quantity, quality, and dependability to meet the demand of a proposed development.
- 1810A.24 Water Supply Report: A report documenting the amount of water that can be supplied to the proposed development, containing the following:

- (1) A summary or report of the water rights owned or controlled.
- (2) A description of fully-executed contracts and/or IGAs with other water providers in which all of the terms and conditions of the contract and/or IGA have been satisfied, as demonstrated by a signed will-serve letter from the provider.
- (3) The anticipated yield of these rights in both an average year and a dry year.
- (4) The present demand and the anticipated demand on the supplier due to commitments for service entered into that are not yet supplied.
- (5) The amount of uncommitted firm supply available for future commitment and development.
- (6) A summary of what water rights the applicant will convey to a District and what water credits the applicant must purchase from a District, if any, to serve the development.
- (7) A map of the service area.

The information above shall be provided in a manner that demonstrates sufficient water resources to meet commitments in terms of an overall annual water supply and daily availability.

- 1810A.25 Well-Field Analysis: Evaluation required with proposed land-uses that plan to use Denver Basin water in Margin B or the Central Basin, to assess whether a new proposed well field associated with the proposed land use will create water level change impacts such that the ability of neighboring wells, either on or off the subject property, to produce would be impaired. A change in water level at an adjacent well is not, in and of itself, considered to be an impairment. This analysis is typically completed using an analytical ground water model.

THIS PAGE LEFT BLANK INTENTIONALLY