

SECTION 18A WATER SUPPLY OVERLAY DISTRICT

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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.*]

In order to accomplish the intent, this section includes methods and provisions for:

- Delineating the various water supply areas of the County.
- Aligning the water supply standards with statutory provisions.
- Restricting the dependence on nonrenewable water sources.
- Encumbering groundwater through the use of restrictive covenants.
- Verifying water rights and adjudication of these rights.
- Identifying minimum water demand standards.
- Identifying minimum water supply standards.
- Identifying the land-use process affected by these standards.
- Providing an appeal process to prove water supply sufficiency.

Compliance with the following water supply standards permits a presumption that a proposed water supply meets the standards set forth in these regulations. Any landowner unable to comply with these water supply standards may appeal to the Board to prove a sufficient water supply, as set forth in Sections 1807A and 1810A.

1802A Applicability

The Water Supply Overlay District shall be applied as a supplemental regulation to those set forth in the underlying zoning District and to all applications submitted pursuant to the following regulations:

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:

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

1802A.03 Douglas County Building Code:

- Building Permit, 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 described in Section 1802A.

Based upon the applicable documentation standards described in Sections 1808A and 1809A, the Planning Commission and the Board of County Commissioners shall determine if:

- 1803A.01 The available water rights are sufficient based on the minimum water demand standards.
- 1803A.02 The applicant has demonstrated that the water rights can be used for the proposed use(s).
- 1803A.03 For renewable water rights, the reliability of the 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.04 For renewable water rights, the water storage capacity is deemed sufficient by the County to ensure that no water supply shortages will occur due to variations in the hydrologic cycle. At a minimum, storage capacity sufficient to provide 1-year of additional carryover storage, on an average annual basis, beyond that necessary to meet all demands under all anticipated hydrologic conditions will be required.
- 1803A.05 Delivery of the water supply to the development is adequate and feasible.

1804A Water Supply Zones, Boundaries, and Source 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 Water Supply Documentation Standards set forth in Sections 1808A and 1809A, unless a Permanent Water Supply Plan is demonstrated through the Adjusted Water Demand Standards, as described in Section 1806A.

1804A.01 Pike-Rampart Water Supply Zone

A renewable water supply is required for land uses proposed within Pike-Rampart, except for the issuance of a building permit only.

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

1804.01.1 Renewable water rights.

1804.02.2 A water supply beneath land located in the Central Basin 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

A renewable water supply is required for land uses proposed within Margin A, except for issuance of a building permit only.

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

1804.02.1 Renewable water rights.

1804.02.2 A water supply beneath land located in the Central Basin 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 at least one of the following types of 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.
- 1804A.03.3 A water supply beneath land located in the Central Basin or Margin B 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 at least one of the following types of 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.
- 1804A.04.3 A water supply beneath land located in the Central Basin 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.

- 1804A.06.1 For a principal or accessory use currently allowed by zoning, on a legally created parcel, a groundwater well may be allowed as the source of water as required for issuance of a building permit.
- 1804A.06.2 For new development, any remaining water rights, without or in conjunction with additional water supplies, may be used based on further information provided, as required in Section 1808A or 1809A, demonstrating the adequacy of the quantity, quality, and dependability of the overall water supply.
- 1804A.07 When a proposed land use overlies 2 or more of the water supply zones, the water supply shall comply with the requirements of the zone from which the water is supplied.
- 1804A.08 When a water supply is proposed to be obtained from multiple water supply zones, the regulations for each zone shall apply based upon the proportionate land area within each zone and the land's corresponding water availability.

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 Minimum Water Demand Standards

The following minimum water demand standards shall be demonstrated at the point of service, unless adjusted through Section 1806A or when an Existing District providing the water supply has its own standards adopted by its Board of Directors:

- 1805A.01 Residential:
ER, RR, LRR, A-1 zone Districts: 1 acre-foot/year/residence
All other zone Districts: 0.75 acre-foot/year/residence
- 1805A.02 Non-residential irrigated lawn, garden, or golf course: 2.50 acre-feet/year/acre
- 1805A.03 Commercial/office/industrial: 0.75 acre-feet/year per 6,695 square feet of building space
- 1805A.04 Other uses: Sufficient water supply for the proposed uses, based on the estimate of the proposed usage and analysis by the County.

1806A Adjusted Water Demand Standards

An applicant may propose a reduced minimum water demand standard based on the unique nature of a proposed land use application and the provision of additional information as determined necessary by the applicant and the County.

1806A.01 The following information shall be submitted in written narrative form, unless waived by the Director:

1806A.01.1 A narrative explaining how the proposed development will achieve the reduced minimum water demand standards.

1806A.01.2 Water Infrastructure Plan, as defined in Section 1812A.

1806A.01.3 A plan for a Renewable Water supply or Conjunctive Use Supply that results in a Permanent Water Supply, as defined in Section 1812A.

1806A.01.4 Enforceable Water Conservation Plan, as defined in Section 1812A.

1806A.01.5 Data demonstrating how system inefficiencies are addressed, and any demand standard security factors that are included in the water supply system.

1806A.01.6 Evidence supporting reduced water demand standards based on water use of comparable projects, water conservation, and historical data.

1806A.01.7 A narrative explaining how future potential water demand variability will be addressed, including, but not limited to, future County review.

1806A.02 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 concurrent with the processing of the land use application.

1807A Adjusted Water Demand Standards – Density Bonus

When a density bonus is not already applied to an application, a 20% increase in density shall be allowed in the A-1, LRR, RR, ER, and SR zone Districts when adjusted water demand standards are approved by the Board.

1808A Water Supply Documentation Standards – District: Water supplied by a central water service.

The following water supply documentation standards shall demonstrate 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 requirements of the water supply zone in which the proposed development lies:

1808A.01 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.

1808A.01.1 For rezonings or Planned Development amendments which increase the intensity of land uses or expand a Planned Development boundary 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 minimum water demand standards as defined in Section 1805A.
 - d) The proposed uses, the uses of the District's water rights, and that the proposed uses correspond to the uses of the District's water rights.
 - e) A statement regarding the feasibility of extending service to the development.
- (2) For applications including Adjusted Demand Standards, additional information in accordance with Section 1806A.

1808A.01.2 For sketch 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 minimum water demand standards as defined in Section 1805A.
 - e) The amount of water that can be supplied to the subdivision.
 - f) The proposed uses, the uses of the District's water rights, and that the proposed uses correspond to the uses of the District's water rights.
 - g) A statement regarding the feasibility of extending service to the development.
- (2) A Water Supply Report, as defined in Section 1812A, 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) For applications including Adjusted Demand Standards, additional information in accordance with Section 1806A.
 - (5) For New Special District Service Plan proposing intergovernmental agreements (“IGAs”) with a District, an applicant shall provide:
 - (a) Evidence that the new special District has been organized.
 - (b) Evidence that the IGA has been executed by both parties.
 - (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.
- 1808A.01.3 For preliminary plan, final plat, and combined preliminary and final plat applications where the previous review process (sketch plan and preliminary plan, respectively) did not undergo the review in Section 1808A.01.2, the application shall be subject to review under the standards of Section 1808A.01.2. For all other preliminary plan and 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 the changes have the potential to negatively impact the District’s ability to serve the subdivision, the applicant shall submit updated letters and reports as set forth in Section 1808A.01.2.
 - (2) Evidence that the water rights to serve the subdivision have been conveyed to the District and/or that the water credits to serve the subdivision have been purchased from the District (as necessary).
- 1808A.01.4 For use by special review applications and site improvement plan applications 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 minimum water demand standards as defined in Section 1805A.
 - e) The amount of water that can be supplied to the development.
 - f) The proposed uses, the uses of the District's water rights, and that the proposed uses correspond to the uses of the District's water rights.
 - g) A statement regarding the feasibility of extending service to the development.
- (2) A Water Supply Report, as defined in Section 1812A, from the District.
 - (3) For applications including Adjusted Demand Standards, additional information in accordance with Section 1806A.
 - (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.

1808A.04 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 is proposed, the applicant shall submit:

- 1808A.04.1 An attorney's opinion letter stating ownership by the proponent(s) of sufficient adjudicated water rights and a copy of the court decree adjudicating the water rights.
- 1808A.04.2 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.
- 1808A.04.3 A Water Supply Plan, as defined in Section 1812A.
- 1808A.04.4 For applications including Adjusted Demand Standards, additional information in accordance with Section 1806A.
- 1808A.04.5 For service plan provisions to use Denver Basin wells in Margin B and Central Basin Water Supply Zones
 - (1) The proposed service plan shall include a well-field analysis that demonstrates that such wells will not adversely impact

existing water rights on adjoining lands, consistent with the provisions in §37-90-137(4)(c), C.R.S., as amended.

- (2) The proposed service plan shall require the District to install an acceptable water level measuring device in all new District wells to measure and record water levels on a monthly basis, whether the water level obtained is a static or pumping water level, and provide for an annual report of such data to Douglas County.

1808A.04.6 When a New Special District Service Plan proposes to use a water supply from another District that has not been reviewed previously subject to the requirements herein, the proposed service plan shall include information from the District in accordance with Section 1808A.01.

1808A.04.7 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.05 The Board may defer, through conditions of approval or Planned Development commitments, these water supply documentation requirements, in whole or in part, to a later stage of development review for reason of good cause shown.

1809A Water Supply Documentation Standards – Non-District: Water supply not provided by a central water service.

The following water supply documentation standards shall demonstrate 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 requirements of the water supply zone in which the proposed development lies.

The following methods of providing a water supply are allowed, in compliance with the standards set forth below:

1809A.01 Renewable Water

When service is proposed by renewable tributary water rights the following standards shall apply:

- 1809A.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:

(1) A letter from a qualified attorney stating the intent to obtain renewable water rights or a copy of the conditional water right(s) as filed with the court.

1809A.01.2 For sketch 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) For applications including Adjusted Demand Standards, additional information in accordance with Section 1806A.

1809A.02.3 For preliminary plan, final plat, and combined preliminary and final plat applications where the previous review process (sketch plan and preliminary plan, respectively) did not undergo the review in Section 1809A.01.2, the application shall be subject to review under the standards of Section 1809A.01.2. For all other preliminary plan and 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 the changes have the potential to negatively impact the applicant's ability to serve the subdivision, the applicant shall submit updated letters and reports as set forth in Section 1809A.01.2.

1809A.02 Renewable Water - 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:

1809A.02.1 The landowner 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 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.

1809A.02.2 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.

1809A.03 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:

1809A.03.1 The landowner 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 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.

1809A.03.2 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.

1809A.03.3 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.

1809A.04 Nonrenewable Water - Margin B and Central Basin Water Supply Zones

The following methods of providing a water supply are allowed for land uses proposed within Margin B or the Central Basin, in compliance with the standards set forth below:

1809A.04.1 A letter from a qualified attorney stating ownership by the applicant of, or an executed contract granting rights to the applicant for, sufficient adjudicated water rights and a copy of the court decree adjudicating the water rights.

1809A.04.2 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.

1809A.04.3 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.

1809A.05 The Board may defer, through conditions of approval or Planned Development commitments, these water supply documentation requirements, in whole or in part, to a later stage of development review for reason of good cause shown.

1810A Water Supply Documentation Standards Appeal Process

An appeal to the water supply documentation standards is allowed as follows:

- 1810A.01 The applicant shall discuss the appeal informally with planning staff to discuss the procedures and submittal requirements.
- 1810A.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.
- 1810A.03 The following analyses will be required for appeals to use Denver Basin water in the Margin A Water Supply Zone and for appeals to use more than 50% of appropriable Denver Basin water in the Margin B Water Supply Zone:
- 1810A.03.1 A static analysis to include an evaluation of the volume of the appropriable water supply for the proposed development.
- 1810A.03.2 A dynamic analysis that evaluates whether the 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.
- 1810A.03.3 A well-field analysis to evaluate impacts on neighboring wells using information gained from the dynamic analysis.
- 1810A.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 before the Planning Commission and Board for public hearings and notify the applicant of the meeting dates and times.

- 1810A.05 The applicant is responsible for providing notice of the hearings in accordance with the public notice requirements set forth in Section 1811A, herein.
- 1810A.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.
- 1810A.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. The Board's decision shall be based on the evidence presented.

1811A Public Notice Requirements - Appeal

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.

1811A.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:

1811A.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' by 4'. Letter size shall be a minimum of three inches high. 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:

1812A Definitions

- 1812A.01 Appropriable 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 annual basis from each Denver Basin aquifer.
- 1812A.02 Augmentation Plan: If a tributary or non-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.
- 1812A.03 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.
- 1812A.04 Conjunctive Use Supply: A supply that combines the use of both renewable and non-renewable water supplies to reduce the potential for adverse physical, economical, and environmental effects caused by the failure of a single source water supply. A Conjunctive Use Supply provides at least 50% renewable water. Use of any non-renewable source shall not exceed 33% of its total annual appropriable supply.

When a Conjunctive Use Supply includes non-renewable water from multiple water supply zones, the regulations for each zone shall apply based upon the proportionate land area within each zone and the land's corresponding water availability.

- 1812A.05 Denver Basin: A large groundwater basin of sedimentary rock formations containing 4 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.
- 1812A.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.
- 1812A.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.
- 1812A.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.
- 1812A.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., with a service plan or statement of purposes approved by Douglas County; or 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 an entity other than Douglas County; or a non-specified governmental and quasi-governmental entity including, but not limited to, municipalities, authorities, and public improvement Districts, as well as private water companies.
- 1812A.07 Dynamic Analysis: Water supply availability and reliability evaluation required if a land use applicant wishes to use Denver Basin water in Margin A or more than 50 percent of the water supply availability in

Margin B, as estimated from the static analysis. This analysis requires the use of a model that accurately simulates the geologic and hydrogeologic 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.

- 1812A.08 Dakota Sandstone Formation: An area of the County that is depicted on the Water Supply - Overlay District Map in the area 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 Area A of the Denver Basin. Therefore, this area is considered part of Margin Area A for the purposes of the regulations set forth in the Water Supply - Overlay District.
- 1812A.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.
- 1812A.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.
- 1812A.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.
- 1812A.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 the aquifer. This is also referred to as a finite water supply.

- 1812A.13 Nonresidential Equivalent: The quantity of water necessary for light industrial or office uses which corresponds to the residential standard of .75 acre-foot per year. The nonresidential equivalent is equal to .75 acre-foot per year required for each 6,695 square feet of building space.
- 1812A.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.
- 1812A.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.
- 1812A.16 Permanent Water Supply: A water supply that is adequate and reliable under reasonably foreseen technical, financial, legal, or water supply conditions. Permanent water supplies are comprised of first use renewable and non-renewable water supplies, water conservation and water reuse programs that make up the long term water supply of a water provider.
- 1812A.17 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.
- 1812A.18 Renewable Water: Water that is annually recharged through the hydrologic cycle, such as streams, and alluvial aquifers associated with streams so that the water supply is sustainable over time.
- 1812A.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.

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.

- 1812A.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.
- 1812A.21 Water Conservation Plan: A description of efforts put forth to reduce water losses, waste, or use for both indoor and outdoor uses, dependent upon the land use application.
- 1812A.22 Water Infrastructure Plan: Documentation provided to Douglas County in support of a land use application which details:
- (1) The water demands of the proposed development.
 - (2) The source(s) of water to be used to meet the development demand.
 - (3) 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.
 - (4) 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.
 - (5) Proof that the water supply is owned and can be used by the applicants for the purposes intended in the application.
 - (6) Proof that all necessary decrees, permits, and any other legal requirements are in place that allow the legal use of the water supply.
 - (7) The timing of the development demands through the buildout of the project.
- 1812A.23 Water Supply: The legal and physical delivery of water service that is sufficient in terms of quantity, quality, and dependability for proposed development.
- 1812A.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, leased, or controlled.

- (2) The anticipated yield of these rights in both an average and dry year.
- (3) The present demand, and the anticipated demand due to commitments for service entered into that are not yet supplied.
- (4) The amount of uncommitted firm supply available for future commitment and development.
- (5) 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.
- (6) A map of the service area.

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

- 1812A.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 neighboring wells, either on or off the subject property, will have their ability to produce their water rights impaired. A change in water level at an adjacent well is not, in and of itself, considered to be an impact. This analysis is typically completed using an analytical ground water model.