

Town of Norwood

Hydrology of The Watershed Ordinance



Prepared for:
The Town of Norwood
Norwood Water Commission
PO Box 528
Norwood, CO 81423



Wright Water Engineers, Inc.

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091-039.020

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Hydrology of the Norwood Watershed Protection Ordinance

1.0 INTRODUCTION

1.1 Location

The NWC Existing Service area is generally located in an area known as Wrights Mesa on a bench south of the San Miguel River in western San Miguel County and south-western Montrose County (see Figure 1).

The NWC Service Area is in the San Miguel basin in Water District 60 of Water Division 4. The Beaver Creek drainage basin marks the eastern extent of the Service Area and extends nearly 20 miles south of its confluence with the San Miguel River. Elevations in the basin range from 6,600 to 11,300 feet. The Naturita Creek basin represents the western boundary of the Service Area and extends approximately 16 miles from its headwaters north to the NWC Service Area. Naturita Creek then turns sharply to the west with its confluence with the San Miguel River approximately 13 miles west at the Town of Naturita.

A map of the existing NWC Service Area is shown in Figure 2A. The existing service area is supplied solely by gravity. A future NWC Service Area was developed during meetings with the NWC and is shown in Figure 2B. The NWC is projecting a 40 percent increase in the size of the service area.

1.2 Objectives/Purpose

This report evaluates the hydrology of the Town of Norwood Watershed Protection Ordinance and provides baseline hydrology for implementation of the watershed ordinance. This project is partially funded through a grant from the Colorado Water Conservation Board (CWCB).

2.0 HYDROLOGY OF THE NORWOOD WATERSHED PROTECTION ORDINANCE

The Norwood Watershed Protection Ordinance No. 1113, Series of 2008, can be found in Appendix A. The areas covered by the Watershed Protection Plan and Ordinance are shown in Figure 3.

Pursuant to Colorado Revised Statutes (C.R.S.) Sections 31-15-707 (1)(b), 31-15-101 (2), 31-15-103, and 31-15-401 (1)(c), the Town of Norwood (the Town) has the power to enact ordinances and regulations for the purpose of maintaining and protecting the Town's waterworks from injury and to protect the water from pollution in territory occupied by such waterworks, and over the streams or sources from which the water is taken for five (5) miles above the point from which it is taken.

The water rights in Appendix B encompass the Town's current water supplies. Some of them are owned by the Town and others are provided to the Town under lease agreement. Figure 3 shows the intake locations for the water rights used for Town supply as well as the areas in which the Ordinance is currently applicable. Only Zone A is applicable to the Town of Norwood water collection system. Zone A refers to an area 5 miles upstream of town intakes as well as all waterworks within the system. Zone B encompasses tributary areas more than 5 miles beyond the waterworks of the Town. The Watershed Ordinance defines "Waterworks" as:

"any and all naturally occurring, man-made or designed components of the Town's water collection and delivery system, including but not limited to all springs, seeps, streams, surface intakes, ditches, drains, pipelines or reservoirs and all decreed points of diversion for the same, and any transmission, storage and filtration facilities which are used in the construction, maintenance and operation of the Town's water collection and delivery system."

The Norwood Watershed Protection Ordinance gives the Town of Norwood the ability to enforce land use regulation and practices for the protection of source water areas that serve the NWC Existing Service Area. The areas include a 5-mile buffer upstream of the intakes for the Priority 214, Gardner Springs and Pipeline, and the Norwood Infiltration Pipeline. Source Water Protection Areas beyond the 5-mile buffer include the source waters for Gurley reservoir (28,602 acres) in the headwaters of Beaver Creek as well as the area in Gurley Canyon below the reservoir (94.9 acres), shown in Figure 3 by the red shaded area south of the intake points.

Surface waters covered under the Norwood Watershed Protection Ordinance include NWC collection locations on Beaver Creek, the Naturita Canal, and various locations within Gurley Canyon. The hatched area on Figure 3 depicting Zones A and B above the proposed San Miguel

intake is shown for information only, and will only become enforceable when the Town and NWC begin diverting water at this point.

The Naturita Canal collects water at 10 headgates in the Beaver Creek drainage and conveys it to Gurley Reservoir. The contributing area covered under the Watershed Ordinance for the Naturita Canal is approximately 28,602 acres. The average annual yield from Gurley Reservoir according to WestWater Engineering is 18,597 AF/yr.

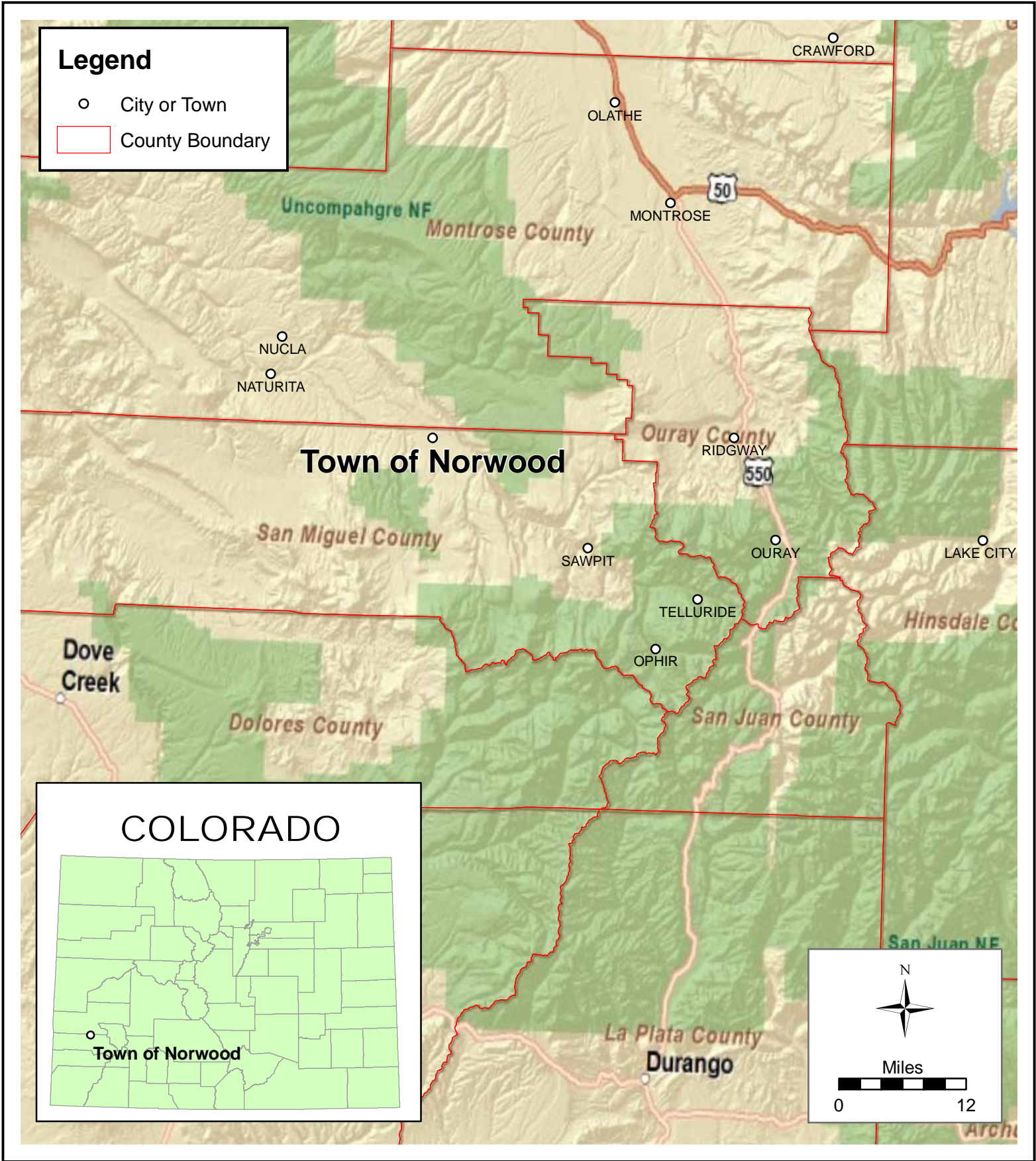
Below Gurley Reservoir, the NWC Watershed Ordinance covers a 5-mile area upstream of the Priority 214 right. The hydrology of this water right covers the contributing area within Gurley Canyon below the reservoir. While diversion records are lacking WestWater Engineering estimated an annual yield of the 214 right and Gardner Springs and Pipeline to be approximately 71 AF during a dry year and 166 AF during an average year (see Appendix C). It should be noted that the 214 water right is subject to an order from the Office of the State Engineer and faces curtailment during the irrigation season.

The Norwood Infiltration Pipeline protection area extends 5 miles upstream of its point of diversion and covers generally the same area as the 214 intake (Figure 3). Its sources, per Decree CA5882, include surface waters from Maverick Draw (Gurley Canyon) in the amount of 0.75 cfs. The estimated yield of this water right, by WestWater Engineering, is approximately 70 AF in a dry year and 115.6 AF during an average year (Appendix C).

In order to estimate the amount of water in Gurley Canyon that is released from Gurley Reservoir, WWE evaluated diversion records for the Gurley Reservoir. Based on annual diversion records from 1978 through 2010, approximately 18,597 AF is released each year from the Gurley Reservoir. The annual diversion records for the Gurley Reservoir are contained in Appendix D.

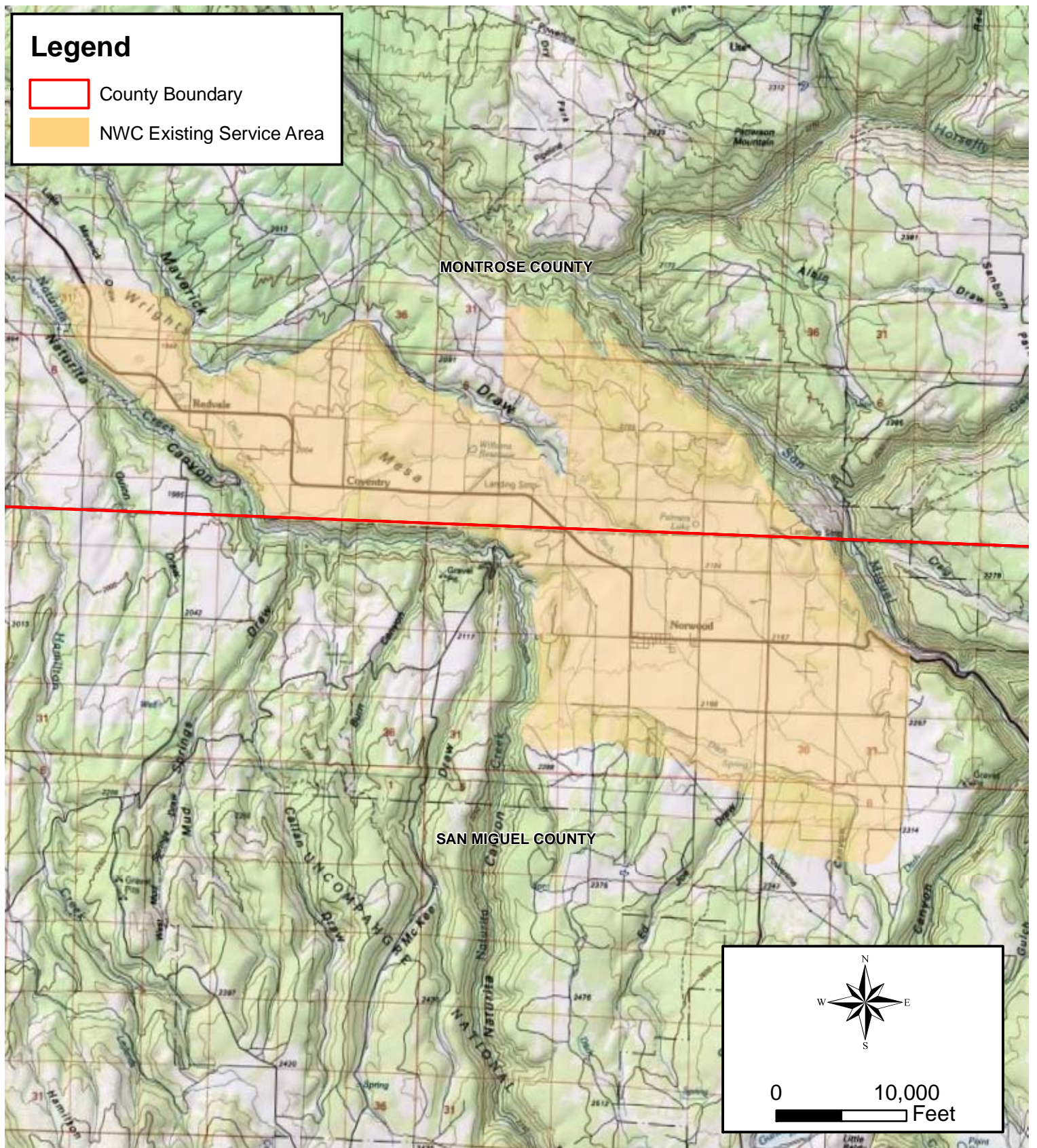
The Town of Norwood may decide to establish a monitoring program for each of these Source Water Protection Areas to better define the hydrology of each basin. In addition, water quality analysis at various locations within each basin may be beneficial to establish baseline water quality data for future enforcement of the Ordinance.

Figures



P:\091-039\010 - Raw Water System Update & Future Needs\Mapping\Figure 1 - Norwood Location Map.mxd

<p>WWE</p> <p>WRIGHT WATER ENGINEERS, INC.</p> <p>1666 N. Main Ave., Suite C Durango, CO. 81301 (970) 259-7411</p>	<p>SAN MIGUEL COUNTY, COLORADO</p> <p>LOCATION MAP</p> <p>NORWOOD WATER COMMISSION</p>	<p>PROJECT NO.</p> <p>091-039.010</p>	<p>FIGURE</p> <p>1</p>
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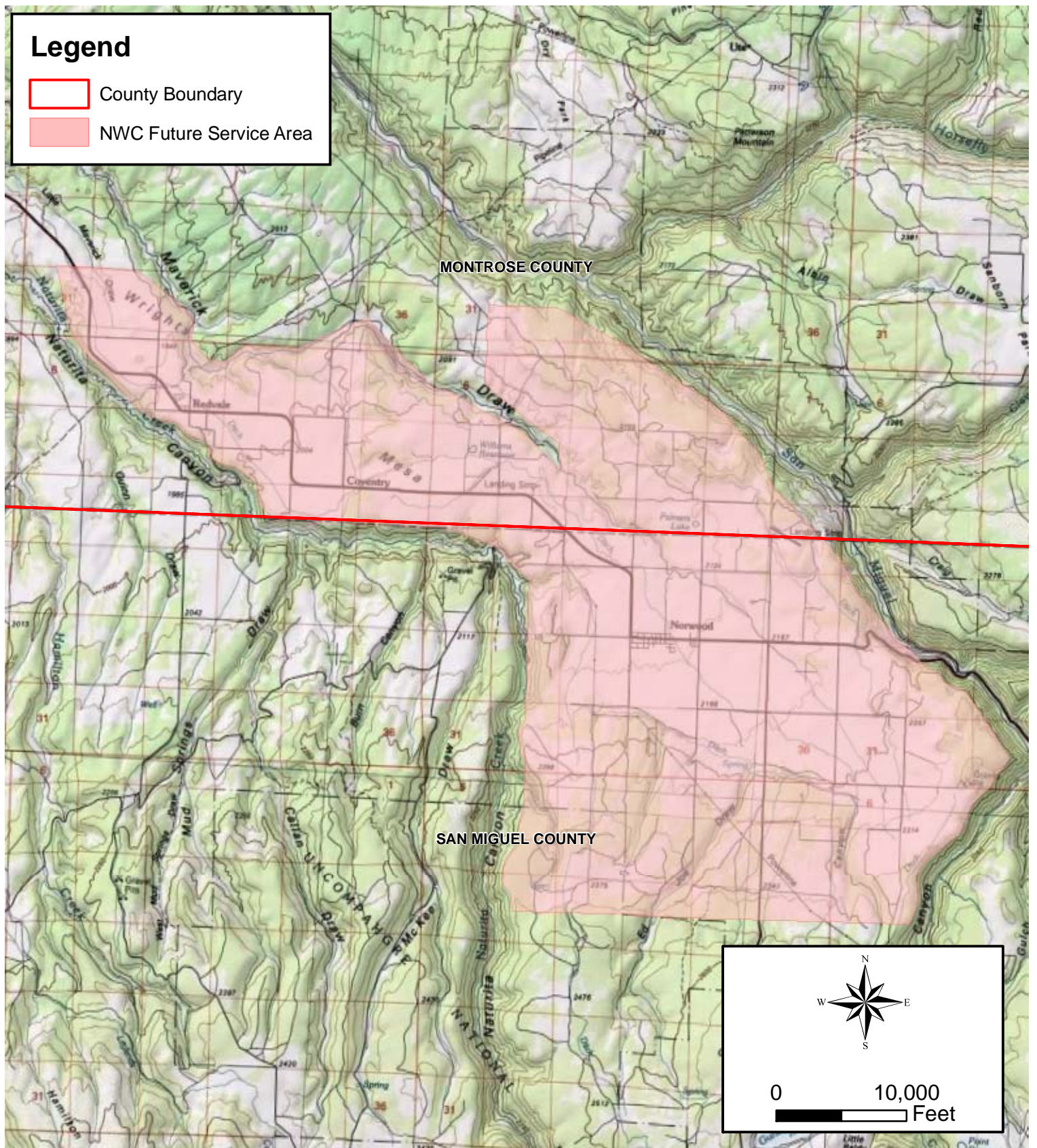
P:\091-039\010 - Raw Water System Update & Future Needs\Mapping\Figure 2A - Existing Service Area.mxd

WWE
WRIGHT WATER ENGINEERS, INC.
 1666 N. Main Ave., Suite C
 Durango, CO. 81301
 (970) 259-7411

SAN MIGUEL & MONTROSE COUNTIES, COLORADO
NORWOOD WATER COMMISSION
EXISTING SERVICE AREA
NORWOOD WATER COMMISSION

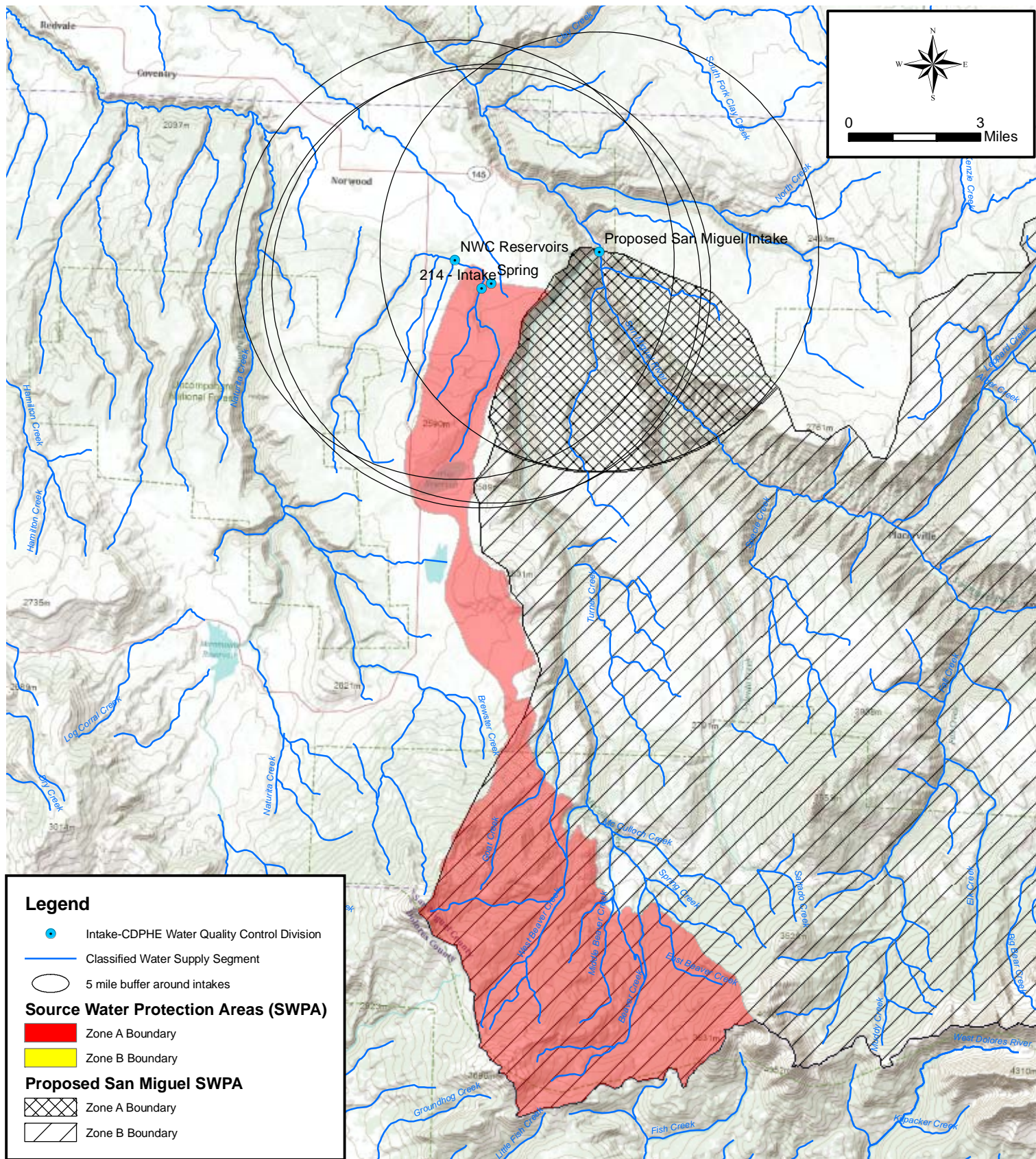
PROJECT NO.
 091-039.010

FIGURE
2A



P:\091-039\010 - Raw Water System Update & Future Needs\Mapping\Figure 2B - Future Service Area.mxd

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P:\091-039\010 - Raw Water System Update & Future Needs\Mapping\Figure 3 - Norwood SWPA's.mxd

WWE
WRIGHT WATER ENGINEERS, INC.
 1666 N. Main Ave., Suite C
 Durango, CO. 81301
 (970) 259-7411

SAN MIGUEL & MONTROSE COUNTIES, COLORADO
NORWOOD WATER COMMISSION
SOURCE WATER PROTECTION AREAS
NORWOOD WATER COMMISSION

PROJECT NO.
 091-039.010

FIGURE
3

Appendices

Appendix A

Ordinance No. 1113

Series of 2008

**TOWN OF NORWOOD
STATE OF COLORADO
Ordinance No. 1113, Series of 2008**

AN ORDINANCE FOR THE PROTECTION OF THE NORWOOD MUNICIPAL WATER SUPPLY AND SOURCE WATER FOR THE PRESERVATION OF THE HEALTH, SAFETY AND WELFARE OF THE CITIZENS OF NORWOOD, COLORADO.

WHEREAS, The Board of Trustees of the Town of Norwood desires to exercise all right, powers and authority under law to provide its citizens with an adequate water supply of the highest quality; and,

WHEREAS, The Board of Trustees of the Town of Norwood finds that pristine water at its source significantly reduces the level of treatment and processing of the Town's water supply thereby reducing costs and repairs which is in the best interest of Norwood's citizens; and

WHEREAS, The Board of Trustees recognizes that an open ditch water system is inherently more susceptible to a variety of environmental contaminants and the Town wishes to reduce the risk of environmental contamination;

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF NORWOOD, COLORADO, that it does hereby adopt the following Watershed Protection District Regulations.

WATERSHED PROTECTION DISTRICT REGULATIONS

**ARTICLE I
General Provisions**

Section 1-1. Short Title.

These Articles may be cited as the "Watershed Protection District Regulations" or generally as "Watershed Regulations" or "Regulations."

Section 1-2. Intent.

The Board of Trustees of the Town of Norwood finds that the maintenance and protection of an adequate water supply of the highest quality and quantity is essential to the public health, safety and welfare of the citizens of the Town, and that the Town's water supply and waterworks shall be protected from pollution, impairment, injury or damage.

Section. 1-3 Authority.

The Town has the power to enact ordinances and regulations for the purpose of maintaining and protecting the Town's waterworks from injury and to protect the water from pollution in territory occupied by such waterworks, and over the streams or sources from which the water is taken for five (5) miles above the point from which it is taken, pursuant to, *inter alia*, Sections 31-15-707 (1)(b), 31-15-101 (2), 31-15-103, 31-15-401 (1)(c), C.R.S.

Section 1-4 Severability.

If any section, subsection, paragraph, clause, phrase or provision of these Watershed Regulations shall be adjudged invalid or held to be unconstitutional by a court of competent jurisdiction, the validity of these Watershed Regulations shall not be affected in whole or in part, other than the provision adjudged to be invalid or unconstitutional.

Section 1-5 Prevailing Provisions.

The Town's review authority over proposed activities within the Watershed Protection District, shall be exercised concurrently with the review authority of San Miguel County, the United States Department of Agriculture, United States Forest Service, and the United State Department of the Interior, Bureau of Land Management, subject to the Town's jurisdiction as authorized by law and implemented by these Watershed Regulations.

Section 1-6 Preemption.

The Town acknowledges that it may not have jurisdiction to apply part of this ordinance to certain persons conducting certain activities on certain lands within the District, whether because of federal or state law or otherwise; and it is the intent of the Board of Trustees that in those circumstances, this ordinance shall be interpreted as if it contained an express exception for those persons or activities beyond the jurisdiction of the Town, but only to the extent absolutely necessary, and that otherwise this ordinance shall apply to the fullest lawful extent.

Similarly, if the Town issues a permit which contains one or more conditions determined by a Court of competent jurisdiction to be beyond the jurisdiction of the Town to impose, the permit shall thereupon be deemed to be revoked or suspended pending review by the Board of Trustees to determine if it shall be reinstated without the invalid condition, reinstated with additional or different conditions, or be denied.

ARTICLE II

Definitions

Section 2-1 Rules of Construction.

For the purpose of these Watershed Regulations, any words and phrases set forth herein shall have the meanings respectively ascribed to them and, in addition, whenever appropriate with the context, words used in the present tense include the future tense, words used in the singular include the plural and vice versa. The word "shall" is always mandatory and the word "may" is permissive.

Section 2-2 General Terms Defined

Whenever the following words or phrases are used, they are defined as follows:

Board of Trustees or *Board* means the Board of Trustees of the Town of Norwood.

Commercial means of or connected with business, commerce or trade.

Feed Lot or Livestock Impoundment means a lot, pen, enclosure or building where cattle are fed and which is secured by gates to prevent the livestock from movement to adjoining areas outside of the feedlot or impoundment.

Foreseeable risk means the reasonable anticipation that harm or injury may result from acts or omissions.

Impact means any alteration or change resulting directly or indirectly from an action.

Mitigation means methods which:

- (a) Avoid an impact upon the land by redesigning an activity;
- (b) Minimize an impact upon the land by substantially limiting the scope of an activity;
- (c) Rectify an impact upon the land through the use of remediation, rehabilitation or restoration techniques; or
- (d) Compensate for the impact upon the land by replacing or providing substitute facilities or resources.

Person includes any individual, corporation, association, organization, partnership, trust, estate or any other recognized legal entity.

Pollution means the man-made, man-induced or natural alternation of the physical, chemical, biological or radiological composition or integrity of water.

Significant degradation means to lower in grade or desirability to a significant, rather than to a minor or trifling, degree.

Substantial means material or considerable in importance, value, degree, amount or extent.

Town means the Town of Norwood and, where appropriate, an officer, employee or authorized agent of the Town of Norwood.

Watershed Protection District or *District* is the area designated in Article III, including the hydrologic basins and land area encompassed by the District.

Watershed Protection District permit or *permit* means the written approval issued by the Town for a land use activity within the Watershed Protection District.

Waterworks means any and all naturally occurring, man-made or designed components of the Town's water collection and delivery system, including but not limited to all springs, seeps, streams, surface intakes, ditches, drains, pipelines or reservoirs and all decreed points of diversion for the same, and any transmission, storage and filtration facilities which are used in the construction, maintenance and operation of the Town's water collection and delivery system.

ARTICLE III

Watershed Protection District

Section 3-1 Establishment of District

The Town of Norwood Watershed Protection District is hereby established. The district is that area of land in which the Town shall exercise its powers to maintain and protect the Town's water supply and waterworks from pollution, impairment, injury or damage.

Section 3-2 Jurisdiction.

The jurisdiction of the District shall extend over all of the territory occupied by the Town's Waterworks and all reservoirs, streams, trenches, pipes and drains used in and necessary for the construction, maintenance and operation of the same, and over the stream, spring or other sources from which the water is taken for up to five miles above the point from which it is taken, diverted, or collected including, but not limited to, drainages tributary thereto, areas of surface run off and groundwater. The District is generally depicted on the Wright's Mesa Source Water Protection Area Map ("Map" or "District Map") dated June 20, 2002, which Map, with all notations, references and other information shown thereon, is incorporated herein as part of these Watershed

Regulations, and is located and available for inspection in the Office of the Norwood Town Clerk. The Map is intended for general reference only. Determination as to whether or not a specific activity is within the boundaries of the District may require location by survey.

The District Map shall be amended in the event of any change in the Town's waterworks or points of diversion or collection for its water supply which materially alters the geographical extent of the Town's jurisdiction under this Article.

Section 3-3 Exception for San Miguel River Conditional Decree

The Map currently depicts within the District an area established to protect a proposed surface diversion from the San Miguel River. Although included in the Map these regulations will not be effective with respect to the area established to protect this diversion unless and until the Town commences diversion of water pursuant to its decrees, at which time these Regulations will be in full force and effect with respect thereto.

ARTICLE IV Activity Within The District

Section 4-1 Unlawful to Tamper With or Cause Injury to Town Waterworks

It shall be unlawful for any person to tamper with or cause substantial impairment, injury, damage or significant degradation to the Town's Waterworks, including all groundwater sources, springs, seeps, streams, surface intakes, ditches, drains, pipelines and reservoirs used in and necessary for the construction, maintenance and operation of the same.

Section 4-2 Unlawful to Pollute Town Water Supply

It shall be unlawful for any person to discharge or allow the discharge into any part of the Town Waterworks of any substance or material which may substantially injure, contaminate, pollute or obstruct the same, or will lead to the substantial injury, contamination, pollution, obstruction or cause significant degradation of the same, in any manner whatsoever.

Section 4-3 Activities Requiring District Permit

In addition to the general prohibitions of Sections 4-1 and 4-2, it shall be unlawful for any person to engage in any of the following activities within the Watershed District, which activities the Board of Trustees finds pose a potential or threat of injury to the Waterworks or pollution of the Town's water supply, unless such person shall, prior to commencement of such activity, receive a permit for such activity under the provisions of Article V:

- (a) Commercial logging and lumber mills.
- (b) Surface and subsurface mining operations and extractions, and mineral processing.
- (c) Oil and gas extraction or mining.
- (d) Commercial feed lots and other commercial livestock impoundments not part of any on going farming or ranching operations; and excluding agricultural operations including grazing and noncommercial domestic livestock impoundments.

ARTICLE V

Permit Administration

Section 5-1 Permitting Procedures

Applications for activities requiring a permit under Sections 4-3 are to be made to the Town Public Works Director or his or her designee. The application shall contain, at a minimum, unless waived, all of the information required by Section 5-2, below, and the quality of the information provided shall be such as to enable the Town Public Works Director to review the application and make informed recommendations as set forth herein. The Town Public Works Director reserves the right to reject all or part of an application that is not complete or does not address all of the requirements of Section 5-2 in a concise and coherent manner.

Section 5-2 Submittal Requirements

The permit application shall include a completed application form as prescribed by the Town, and contain the following information:

- (a) Land use activity description
 - (1) Name and address of the applicant and the property owner. Where the applicant and the property owner are not the same, a written authorization by the property owner is required before the applicant may appear on behalf of the property owner in regard to the proposed land use activity.
 - (2) Legal description of the property to be affected by the land use activity.
 - (3) Vicinity map and other pertinent information indicating the site location, and a survey, prepared by a licensed surveyor, of the property to be affected by the land use activity.
 - (4) Detailed plans and specifications of the proposed land use activity.

- (5) A list of all federal, state or local permits or approvals that are required for the proposed land use activity and copies of any such permits or approvals when and where available.
- (6) Copies of all applications and documents submitted to any federal, state or local authority concerning the proposed land use activity.
- (7) Itemization and volumes of all hazardous, toxic or explosive substances or materials to be used, transported, stored or handled as a part of the proposed land use activity.
- (8) Operational and maintenance analysis of the proposed activity.
- (9) A description of any future activity anticipated by the applicant with respect to the subject property for which a permit may be required by these Regulations.

(b) **Potential Injury.** Identification of any activity that may present or create a foreseeable risk of injury to the Town's Waterworks or pollution of the Town water supply, along with a specific description of the measures, including best management practices, that will be employed by the applicant to obviate such risk.

(c) **Alternatives.** A detailed description of any reasonable alternatives to the proposed land use activity which may result in less of an impact to the District.

(d) **Environmental assessment and mitigation measures.** An environmental assessment and proposed mitigation measures addressing the following:

(1) **Water Resources**

- (i) A map of all surface waters, springs, seeps, wetlands and groundwater potentially affected by the proposed land use activity.
- (ii) Existing water quality in all affected waters for each parameter established by the Colorado Water Quality Control Commission.
- (iii) A detailed description of the potential impacts the proposed land use activity will have on the quality and quantity of the Town's water resources.
- (iv) A detailed description of proposed mitigation of impacts to the Town's water resources.

(2) **Vegetation**

- (i) A map showing the type and extent of all vegetation within one hundred (100) yards of any proposed land use activity.
- (ii) A detailed description of the potential impacts the land use activity will have on that vegetation.
- (iii) A detailed description of proposed mitigation of impacts to vegetation.

(3) **Soils**

- (i) A description of all soil conditions in the area potentially affected by the proposed land use activity, including contour maps

at intervals determined by the Town, which maps identify soil types, drainage areas, slopes, avalanche areas, debris fans, mudflows and rockslide areas.

(ii) A detailed description of potential impacts to the soils by the proposed land use activity, and a description of potential adverse effects to the proposed land use activity as a result of existing or created soil conditions.

(iii) A detailed description of proposed mitigation which addresses soil conditions.

(4) Drainage

(i) A map showing all natural drainage patterns in the area of the District potentially affected by the proposed land use activity.

(ii) A detailed description of potential impact to the natural drainage patterns in the District by the proposed land use activity.

(iii) A detailed description of proposed mitigation of impacts to natural drainage patterns.

(5) Wastewater Treatment

(i) A description of proposed wastewater treatment, including facilities, necessary to support the proposed land use activity.

(ii) A detailed description of potential impacts to the District associated with the proposed wastewater treatment.

(iii) A detailed description of proposed mitigation of impact to the District caused by the proposed wastewater treatment facilities.

(6) Water Supply

(i) A description of the water supply for the proposed land use activity, including any proposed wells, water rights and diversion structures and facilities, and augmentation plans.

(ii) A Detailed description of potential impact to the District associate with the proposed water supply.

(iii) A detailed description of proposed mitigation of impact to the District caused by the proposed water supply.

(7) Mitigation Plan. A description of all mitigation activities and their location; a map and legal description of all property upon which mitigation activities may occur; and written authorization, easements and any other agreements from affected property owners.

(e) Revegetation Plan providing for all vegetated areas within the District disturbed by the activity to be successfully revegetated or restored.

(f) Spill Prevention Plan designed and implemented to prevent spilled fuels, lubricants or other hazardous or toxic materials from entering any waters or being deposited upon any soil in the District during construction, implementation or operation.

(g) Soil Erosion Control Plan providing for temporary (during construction) and permanent erosion and sediment control measures.

(h) Water Quality Monitoring Plan for all water affected by the proposed land use activity within the District to be developed and implemented by, and at the cost of, the applicant. addressing identification of surface and ground water, baselines, operational and post operational monitoring frequencies.

(i) Grading Plan. showing elevations, dimensions, location and extent of all proposed excavating, filling, grading or surfacing within the District by the proposed land use activity.

(j) Emergency Response Plan describing the potential threats or risks to the environment as a result of the development and an emergency response plan including event monitoring, verification and reporting.

(k) Additional Information. Any additional information or certification deemed necessary by the Town to determine whether or not the proposed land use activity will comply with the Standards set forth in Section 5-4.

(l) Waiver of Requirements. The Public Works Director may waive one or more of the above requirements if he or she shall determine that such information is not required under the circumstances to adequately evaluate the impacts of the proposed land use activity.

Section 5-3 Fees and Review Costs.

The applicant shall be assessed a fee, in accordance with the most current Board of Trustees fee resolution, to cover the costs incurred by the Town for reviewing and processing the application, including the costs of publication, hearing, administration, inspection and enforcement of such requested permit. The applicant shall also be assessed the costs of any legal and technical consultants retained or employed by the Town for the purpose of evaluating the application's compliance with these Watershed Regulations. An initial fee deposit based on the Town's reasonable estimate of the total anticipated fees, including any consultants' fees, shall be paid by the applicant to the Town within fifteen (15) days of the fee being set by the Town. Any balance of fees owed by the applicant to the Town shall be paid prior to and shall be a condition of issuance of any permit or, if no permit is issued, such balance of fees shall be payable within fifteen (15) days of billing by the Town. Any unused fees shall be returned to the applicant timely in either event. Failure to pay any fee when due shall be a violation of these Regulations.

Section 5-4 Standards.

No activity requiring a permit shall be authorized in the District except in compliance with the following standards:

(a) Damage to Waterworks Prohibited. Any activity causing impairment,

damage or injury to the Waterworks shall be prohibited.

(b) Increase in Pollution Prohibited. All point and nonpoint sources of pollutants caused by or associated with the proposed land use activity shall not result in any measurable increase in pollution over the existing water quality of any waters affected by the proposed land use activity.

(c) Proof of Lack of Risk. The burden of proving the lack of risk of pollution or injury, in terms of quantity and quality, to the Town's water supply and/or Waterworks shall be on the applicant.

(e) Wastewater Treatment. All new wastewater treatment and facilities necessary to serve the proposed land use activity within the District shall be engineered systems meeting the approval of the Public Works Director and the Town Engineer.

(f) Impacts from Ground Water Wells. In the event the application shall include the development of a well or wells that may adversely impact water quality or quantity, the applicant may be required to prepare a hydrogeological assessment or a water augmentation plan to demonstrate no potential for injury or mitigation of any potential injury.

(g) Compliance with Other Permits. The proposed land use activity shall be constructed, implemented, operated and maintained in compliance with all other applicable federal, state or local permits or approvals at all times. The terms and conditions of such permits and approvals shall be incorporated by reference as District permit conditions.

(h) Additional Factors. In addition to the foregoing standards, in evaluating any request for a permit, the Town may consider the following factors in making an analysis of the proposed activity set forth in the permit application:

- (1) The nature and extent of the proposed activity.
- (2) The proximity of the proposed activity to existing watercourses and Waterworks.
- (3) The drainage patterns and control measures.
- (4) Soil characteristics and erosion potential.
- (5) Slope steepness and stability.
- (6) Effects of denudation of vegetation.
- (7) Geologic hazards, including but not limited to avalanche paths, floodplains, high-water tables, fault zones and similar factors.
- (8) Point-source effluent and emissions into the air or water.
- (9) Ambient and nonpoint-source emissions into air and water.

Section 5-5 Review and Permitting Procedures

(a) **Town Review.** The Public Works Director shall review the application and determine whether it is complete and of sufficient quality and whether a site inspection is necessary. If the application is found to be complete, the Public Works Director shall review the application for compliance with these regulations.

(b) **Minor Impact.** The Public Works Director may classify in writing an application as having a minor impact if the proposed land use activity has been or will be properly permitted by applicable federal, state or local authorities and if the proposed land use activity clearly does not present or create a violation of any of the applicable standards set forth in Section 5-4. Upon making a written classification of a minor impact, the Public Works Director may approve, or approve with conditions, a Watershed District permit.

(c) **Public Works Director Review.** If the Public Works Director does not classify an application as having a minor impact, the Public Works Director shall, within thirty (30) days of the acceptance of a complete application, submit a staff report to the Board of Trustees together with a recommendation that the District permit be approved, approved with conditions or denied. If the complexity of the application or the proposed land use activity so requires, or if the application requires a site inspection and current weather conditions do not permit such inspection, the deadline for the staff report may be extended for a period of time not to exceed an additional ninety (90), unless a longer time is agreed to between the Town and the applicant.

(d) **Board of Trustees Hearing and Notice.** The Board of Trustees, sitting with the Norwood Water Commission, shall hold a public hearing within sixty (60) days of receipt of a staff report to consider the application for a permit. No fewer than ten (10) days prior to the hearing, the Town shall publish a notice stating the date and time, place and purpose of the hearing in a newspaper of general circulation in the Town.

(e) **Effect of Other Approvals.** If a proposed activity requires the approval of or a permit from federal, state or local authorities, and such approval or permit procedures exceed the time requirement for Town action stated in this Article, the Town shall have until sixty (60) days following the issuance of the federal, state or local permit or approval to hold the public hearing provided for in Section 5-5(d).

(f) **Additional Information.** If the Board of Trustees requests additional information from an applicant, then the public hearing and decision may be delayed or continued until the receipt of such additional information. Any applicable time limitation within which the Board of Trustees is required to act shall be tolled from the time the request is made until the applicant supplies the requested information.

(g) **Permit Decision.** The Board of Trustees shall issue a permit only when and if it finds that the applicant has sustained the burden of proof that the proposed activity does not present or create a foreseeable risk of injury to the Town's Waterworks or pollution to the Town's water supply. Within thirty (30) days of the public hearing, the

Board of Trustees shall approve, approve with conditions or deny the District permit. Any application for a proposed activity which fails to conform to the applicable standards set forth in Section 5-4 shall be denied.

(h) **Permit Conditions.** The Public Works Director or Board of Trustees may prescribe any condition or conditions on a permit that he/she or it may deem necessary to effectuate the powers granted to the Town to protect the Waterworks and the Town water supply from pollution, impairment, injury or damage, including a requirement for periodic inspections, the cost of which shall be borne by the permittee.

(i) **Permit Security.** The Public Works Director or the Board of Trustees may require an applicant, as a condition to issuance of a permit, to post a surety bond or cash in a form and an amount, as determined by the Town, sufficient to ensure compliance with the permit, including, but not limited to, the cost of mitigation, best management practices, maintenance and operations, re-vegetation, re-grading, reclamation, costs to clean up or mitigate the effects of any spill, release or other discharge, and other requirements of proposed activities. The Public Works Director may release to the applicant all or part of any such bond or cash from time to time when no longer necessary to ensure compliance with the terms of the permit.

(j) **Duration.** Unless otherwise established during the review process, if any proposed activity for which a District permit is issued is not commenced within nine (9) months from the date of issuance of such permit, the permit shall expire and become void and of no further force and effect. If the applicant abandons an activity after commencement for a period of one hundred twenty (120) days for reasons other than weather, the permit shall expire and become void and of no further force and effect.

(k) **Transferability.** Permits may not be transferred. Any successors to a District permittee must apply for and receive a new District permit before resuming a previously authorized land use activity.

(l) **Joint Review Process.** Any permit required hereunder may be reviewed and issued pursuant to a joint review process with any other governmental entity or agency charged with review and approval of the same activity.

ARTICLE VI

Appeals

Section 6-1 Appeal of Administrative Action

Any person, including the permittee, seeking to appeal any administrative action, determination or decision by the Public Works Director shall file a written appeal with the Board of Trustees within thirty (30) days of such administrative action, determination or decisions by the Public Works Director. Such appeal shall be heard by the Board of Trustees at the next regularly scheduled Board of Trustees meeting, if practicable, but in

no event later than sixty (60) days after the written appeal is filed.

Section 6-2 Appeal of Board of Trustees' Decision

A person desiring to challenge the Board of Trustees' decisions to grant a permit, to grant a permit with stated conditions or to deny a permit, or desiring to challenge the result of any appeal heard by the Board of Trustees pursuant to Section 6-1 above, may seek review of the Board of Trustees' decision in the District Court in the manner provided for in the Colorado Rules of Civil Procedure.

ARTICLE VII Enforcement

Section 7-1 Stop Work Order

(a) Stop Work Orders. Should the Town discover any activity which violates the provisions of any permit or condition thereof, or where the information submitted in the application is found to be inaccurate, the Town may issue a Stop Work Order and suspend the activity until compliance with the permit or these Watershed Regulations is demonstrated. The continuation of any activity or use in violation of a Stop Work Order is prohibited and upon conviction, a penalty shall be imposed as provided by Section 7-3.

(b) Revocation of Permit. The Town may revoke a permit issued under these Watershed Regulations for any violation of these Regulations, or violation of the permit or any permit condition, or for the provision of false or incorrect information in the permit application. Upon permit revocation, the Town may require the permittee to restore the site to a condition acceptable to the Town in order to prevent further injury to the District. The Town may, in its discretion, perform or cause to be performed the necessary restoration, and the permittee shall be assessed such costs of restoration.

Section 7-2 Entry and Inspections

Any authorized representative of the Town, based on substantial evidence of a violation, may enter and inspect any property within the District and under the jurisdiction of these Watershed Regulations at reasonable hours for the purpose of determining if any land use activity is in violation of these Regulations or in violation or noncompliance with any permit issued hereunder; provided, however that he or she shall identify him/herself and, if such land be unoccupied, that he or she shall make a reasonable effort to locate the applicant or other person or persons having control of such land to notify them of such entry. Filing an application for a permit hereunder shall be deemed express consent to any such entry.

Section 7-3 Violations; Penalties

(a) It is unlawful to engage in any activity not in compliance with these

Watershed Regulations or any amendment thereof and the permit requirements herein. Any person, corporation or other legal entity, either as owner, lessee, permittee, occupant or otherwise, who violates any provision of these Regulations or who engages in any activity not in compliance with these Regulations, shall be guilty of a misdemeanor.

(b) Any person, corporation or other legal entity, upon conviction of a violation of these Regulations, shall be punished by the imposition of a fine in the amount not to exceed one thousand (\$1,000.00) dollars per day for each offense, or by imprisonment for not more than one year, or by both such fine and imprisonment, for each offense.

(c) Any person, corporation or other legal entity shall be guilty of a separate offense for each and every day or during any portion of which any violation of these Regulations is committed, continued or permitted.

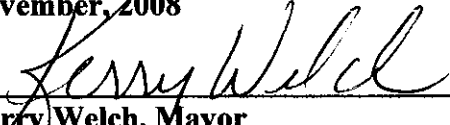
(d) Nothing herein shall limit the Town from seeking any other remedies available by law or in equity, including but not limited to injunctive relief, the recovery of damages and the payment of costs and reasonable attorney's fees. All remedies shall be cumulative

ARTICLE VIII Supplemental Regulations

Section 8-1 Supplemental Regulations

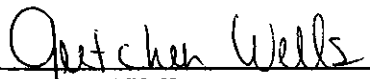
The Board of Trustees may, by resolution, adopt guidelines, criteria or standards to implement the intent and purposes of these Regulations.

READ, APPROVED ADOPTED AND ORDERED PUBLISHED this 12th day of November, 2008



Kerry Welch, Mayor

ATTEST;



Gretchen Wells
Town Clerk

Appendix B

Water Rights

Appendix B

Town of Norwood and Norwood Water Commission

Water Rights

	Name	Amount	Use	Source	Adjudication Date	Appropriation Date	Priority	Case No.
Town of Norwood	Priority 214	0.25 c.f.s.	M	Maverick Draw	10/16/1933	10/21/1926	214	CA 4348
	Town of Norwood Pipeline	0.50 c.f.s.	M	Maverick Draw	7/10/1952	6/1/1935	385	CA5882
	Town of Norwood Pipeline	0.25 c.f.s.	M	Maverick Draw	7/10/1952	6/1/1948	425	CA5882, Absolute, 85CW150
	Norwood Infiltration Pipeline	0.57 c.f.s.	M	Maverick Draw, various springs and seeps	1/16/1967	6/10/1962	513	CA9042
	Norwood Infiltration Pipeline	0.18 c.f.s. conditional	M		1/16/1967	6/10/1962	513c	CA9042; Absolute; 85CW151
	Gardner Springs	0.25 c.f.s.	D/S	Maverick Draw, various springs and seeps	1/16/1967	11/13/1950	478	CA9042
	Gardner Springs	0.50 c.f.s.	I/S		1/16/1967	11/1/1960	511	CA9042
Norwood Water Commission	Norwood Nelson Ditch	10 c.f.s.	M	McCulloch Ck	12/31/1991	7/24/1991		91CW0065
	NWC River Diversion	5.0 c.f.s., conditional	M	San Miguel R.	12/31/1994	11/1/1994		Case No. 94CW244; Diligence: Case No. 08CW55
	NWC Gurley Diversion	5.0 c.f.s., conditional	M	Beaver Creek	12/31/1994	11/_/1994		Case No. 94CW245
	NWC Reservoirs Nos. 1, 2, 3, & 4	#1: 18.4 af	M	Gurley Reservoir, Gardner Springs, Priority 214, Infiltration Pipeline, and Town of Norwood Pipeline	12/31/2001	12/1/1994		Case No. 01CW270
		#2: 91 af						
		#3: 91 af conditional						
		#4: 33 af conditional						

Reservoir Shares/Agreements	Name	Amount	Use	Comment
	Farmers Water Development Company Shares (Owned)	119 shares	I	Certificate
				716 (1)
				717 (50)
				721 (60)
				723 (6)
				727 (2)
	Farmers Water Development Company Shares (Contract)	300 a.f. minimum	D	

Use Codes: M - municipal, D - domestic, S - stock, I - irrigation

Appendix C

WestWater Engineering

Water Rights Yield Estimate

Appendix C
Norwood Water Commission
WestWater Engineering Water Rights Yield Estimate

Water Right	Decreed Amount	Yield					
		Dry Year		Annual Volume (AF)	Average Year		Annual Volume (AF)
		Summer	Winter		Summer	Winter	
214	0.25						
Town of Norwood Pipeline	0.75	0.13	0.067	71.2	0.3	0.2	166.2
Gardner Springs and Pipeline	0.75						
Norwood Infiltration Pipeline	0.75	0.13	0.067	71.2	0.2	0.1	115.6
Subtotal		0.26	0.134	142.4	0.5	0.3	281.9
Gurley 119 Shares				477.6			477.6
Gurley Contract Water				300.0			300.0
Total*				442.4			581.9

Notes:

Summer Defined as 1/2 of the calendar year

Winter Defined as 1/2 of the calendar year

*Total does not include 119 shares of Gurley water held by the NWC (assumed to produce 2.4 AF/share).
Values in this table are based on the work done by WestWater Engineering in the 1995 Raw Water Supply System Feasibility Study. Does not include impact from reduction in return flows from changes in irrigation practices, calls from downstream water rights, or reduced seepage from Gurley Reservoir.

Appendix D

**Gurley Reservoir Annual
Diversion Records**

Appendix D

Gurley Reservoir Annual Diversion Records

Gurley Reservoir Releases

Year	Volume Released
	(AF)
1978	19,052
1979	25,278
1980	18,542
1981	11,941
1982	25,226
1983	34,255
1984	23,677
1985	24,786
1986	23,968
1987	19,321
1988	16,509
1989	20,226
1990	9,967
1991	7,339
1992	8,106
1993	13,533
1994	No data available
1995	No data available
1996	11,262
1997	12,569
1998	10,009
1999	No data available
2000	21,646
2001	17,094
2002	11,989
2003	15,263
2004	No data available
2005	No data available
2006	17,352
2007	29,320
2008	30,248
2009	23,642
Average	18,597

Notes:

Based on Colorado Decision Support System online diversion records of total water through structure at the Gurley Reservoir. Based on a conversation with District 60 water commissioner, annual total of water through structure represents total releases from the reservoir.

DENVER

2490 W. 26th Avenue Suite 100A
Denver, Colorado 80211
Phone: 303.480.1700
Fax: 303.480.1020

GLENWOOD SPRINGS

818 Colorado Avenue
P.O.Box 219
Glenwood Springs, Colorado 81602
Phone: 970.945.7755
Fax: 970.945.9210

DURANGO

1666 N. Main Avenue Suite C
Durango, Colorado 81301
Phone: 970.259.7411
Fax: 970.259.8758

www.wrightwater.com



Wright Water Engineers, Inc.