

**CITY OF GRAND JUNCTION, COLORADO**

**ORDINANCE NO. 5316**

**AN ORDINANCE AMENDING TITLE 13 OF THE GRAND JUNCTION MUNICIPAL CODE (GJMC) REGARDING A GRAYWATER CONTROL PROGRAM IN THE CITY OF GRAND JUNCTION**

**Recitals:**

On September 23, 2022, Ordinance 5094 amended Title 13 of the Grand Junction Municipal Code to add Chapter 13.40 establishing a Graywater Control Program (Program) in the City of Grand Junction. Guidelines and standards for the design, construction, installation, repair, modification, maintenance, and use of graywater and graywater treatment works in the City are prescribed in the Program.

The State of Colorado originally promulgated Regulation 86 – Graywater Control Regulation (5 CCR 1002-86) on May 11, 2015. Regulation 86 establishes the minimum ordinance or resolution requirements for a Program, and amendments became effective on January 14, 2024. Corresponding revisions to the Program are necessary to maintain consistency and compliance with the updated state regulation.

Updates to the Graywater Control Program include addition of a specific Laundry to Landscape graywater use category and updates to methodologies used to estimate graywater flow and determine the required size of an irrigated area. Provisions to further protect public health were also included that limit graywater treatment works at short term rentals and specify graywater uses for irrigating crops. This amendment also includes a reorganization of ordinance sections to align with consistent structure across Title 13 by starting with statements of Purpose rather than Definitions.

The City's amended Graywater Control Program continues to serve the interests of Title 13 of the GJMC that include establishing standards for water supply and water conservation within the City. The Regional Water Efficiency Plan (adopted in 2023) recognizes graywater systems as one regulatory measure that encourages water conservation by allowing graywater to be used for landscape irrigation. Finally, the City's One Grand Junction Comprehensive Plan ("Comprehensive Plan", adopted in 2020) includes specific goals for efficient and reliable management of water resources.

As directed by Title 13 of the GJMC, the Regional Water Efficiency Plan, and the Comprehensive Plan, and in the interest of advancing the public health, safety, and the welfare of the community, the City Council does hereby amend Chapter 13.40 in Title 13 of the GJMC regarding a Graywater Control Program in the City of Grand Junction.

**BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION in consideration of an adoption of the foregoing Recitals that Chapter 13.40 of the GJMC**

shall be amended as follows with additions shown in ALL CAPS and deletions shown in strikethrough:

Chapter 13.40 Graywater Control Program

§ 13.40.010 Definitions **PURPOSE, APPLICABILITY, AND COMPLIANCE.**

- (a) Purpose. The purpose of this chapter is to:
  - (1) Establish a graywater control program (Program) within the City of Grand Junction, Colorado.
  - (2) Reduce per capita water consumption in service of the City's goals for water and wastewater management.
  - (3) Establish standards including requirements, prohibitions, and recommendations, for the use of graywater; and for the location, design, construction, operation, installation, and modification of graywater treatment works.
  - (4) Establish allowed users and uses of graywater within the City of Grand Junction.
  - (5) Assist the City in its effort to protect public health and water quality.
- (b) Applicability. This chapter applies to:
  - (1) Properties within the legal boundaries of the City as the same now exist or as the boundary may change over time.
  - (2) This chapter does not apply to:
    - (i) Discharges pursuant to a Colorado Discharge Permit System (CDPS) or National Pollutant Discharge Elimination System (NPDES) permit;
    - (ii) Wastewater that has been lawfully treated and released to State waters prior to subsequent use;
    - (iii) Wastewater that has been lawfully treated and used at a domestic wastewater treatment works for landscape irrigation or process uses;
    - (iv) On-site wastewater treatment works authorized under and operating in accordance with Regulation No. 43 (5 CCR 1002-43);
    - (v) Reclaimed wastewater authorized under and operating in accordance with Regulation No. 84 (5 CCR 1002-84);
    - (vi) Water used in an industrial process that is internally recycled in accordance with applicable law;
    - (vii) Graywater research activities exempted from graywater control regulations under C.R.S. 25-8-205.3; and
    - (viii) Lawful rainwater harvesting.
- (c) Compliance. All graywater uses and graywater treatment works within the City's jurisdiction must comply with the minimum requirements of this chapter, all applicable State and federal requirements for graywater systems, and all requirements imposed by Mesa County Colorado Health Department.

- (1) Any graywater treatment works installed prior to the effective date of this regulation must be able to demonstrate they meet the minimum requirements of this chapter.
- (2) Should the City Program be revoked or rescinded by the City, all graywater treatment works in the City's jurisdiction must within 365 **CALENDAR** days:
  - (i) If applicable, be regulated by Mesa County under a graywater control program by which the County assumes authority over the existing graywater treatment works; or
  - (ii) Be physically removed or permanently disconnected in accordance with local or State regulations.
- (3) Should a property with a lawful graywater treatment works be de-annexed from the City of Grand Junction, the legally responsible party must within 365 **CALENDAR** days:
  - (i) Ensure the graywater treatment works complies with the controlling jurisdiction of the property; or
  - (ii) Ensure the graywater treatment works is physically removed or permanently disconnected in accordance with applicable local and State regulations.
- (4) Graywater may be used only as allowed under and by the City Program. Unauthorized graywater use and discharge(s) are prohibited.
- (5) All graywater treatment works installed in the City must:
  - (i) Meet all requirements of Regulation No. 86 as may be amended; and
  - (ii) City Building Code; and
  - (iii) Any applicable federal law, State, City, and Mesa County requirements.
- (6) Graywater treatment works are prohibited from being installed in properties that have new or existing on-site wastewater treatment systems. Connection of the graywater treatment works to the ~~Persigo Wastewater Treatment Plant~~ **MUNICIPAL SEWER SYSTEM** is a requirement to own/operate a graywater treatment works.

§ 13.40.020 ~~Abbreviations and acronyms~~ **DEFINITIONS**

**THE FOLLOWING WORDS, TERMS AND PHRASES, WHEN USED IN THIS CHAPTER, SHALL HAVE THE MEANINGS ASCRIBED TO THEM IN THIS SECTION, EXCEPT WHERE THE CONTEXT CLEARLY INDICATES A DIFFERENT MEANING:**

~~*Agricultural irrigation* means irrigation of crops produced for direct human consumption, crops where lactating dairy animals forage, and trees that produce nuts or fruit intended for human consumption. This definition includes household gardens, fruit trees, and industrial hemp as defined by C.R.S. 35-61-101.~~

*Agronomic rate* means the rate of application of nutrients to plants that is necessary to satisfy the nutritional requirements of the plants.

**BACKFLOW CONTAMINATION EVENT MEANS BACKFLOW INTO A PUBLIC WATER SYSTEM OR POTABLE WATER SYSTEM FROM AN UNCONTROLLED CROSS CONNECTION SUCH THAT THE WATER QUALITY NO LONGER MEETS THE COLORADO PRIMARY DRINKING WATER REGULATIONS OR PRESENTS AN IMMEDIATE HEALTH AND/OR SAFETY RISK TO THE PUBLIC.**

**BACKFLOW PREVENTION ASSEMBLY MEANS ANY MECHANICAL ASSEMBLY INSTALLED AT A WATER SERVICE LINE OR AT A PLUMBING FIXTURE TO PREVENT A BACKFLOW CONTAMINATION EVENT, PROVIDED THAT THE MECHANICAL ASSEMBLY IS APPROPRIATE FOR THE IDENTIFIED CONTAMINANT AT THE CROSS CONNECTION AND IS AN IN-LINE FIELD-TESTABLE ASSEMBLY.**

**BACKFLOW PREVENTION METHOD MEANS ANY METHOD AND/OR NON-TESTABLE DEVICE INSTALLED AT A WATER SERVICE LINE OR AT A PLUMBING FIXTURE TO PREVENT A BACKFLOW CONTAMINATION EVENT, PROVIDED THAT THE METHOD OR NON-TESTABLE DEVICE IS APPROPRIATE FOR THE IDENTIFIED CONTAMINANT AT THE CROSS CONNECTION.**

**BASE FLOOD MEANS THE FLOOD HAVING A ONE PERCENT CHANCE OF BEING EQUALED OR EXCEEDED IN ANY GIVEN YEAR. THIS 1-PERCENT ANNUAL CHANCE FLOOD IS ALSO REFERRED TO AS THE 100-YEAR FLOOD.**

**BASE FLOOD ELEVATION (BFE) IS THE ELEVATION SHOWN ON A FEMA FLOOD INSURANCE RATE MAP FOR ZONES AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO THAT INDICATES THE WATER SURFACE ELEVATION RESULTING FROM A FLOOD THAT HAS A ONE PERCENT CHANCE OF EQUALING OR EXCEEDING THAT LEVEL IN ANY GIVEN YEAR.**

*City* means the City of Grand Junction, a Colorado home rule municipality.

~~*Closed sewerage system* means either a permitted domestic wastewater treatment works, which includes a permitted and properly functioning on-site wastewater treatment system (OWTS) with a design capacity more than 2,000 gpd, or a properly functioning and approved or permitted OWTS with a design capacity of 2,000 gpd or less.~~

*Commission* means the Water Quality Control Commission 25-8-201, C.R.S.

*Component* means a subpart of a graywater treatment works which may include multiple devices.

*Cross-connection* means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety risk to the public, to flow from

any pipe, plumbing fixture, or a customer's water system into a public water system's distribution system or any other part of the public water system through backflow.

*Design* means the process of selecting and documenting in writing the size, calculations, site specific data, location, equipment specification and configuration of treatment components that match site characteristics and facility use.

*Design flow* means the estimated volume of graywater per unit of time for which a component or graywater treatment works is designed.

*Dispersed subsurface irrigation* means a subsurface irrigation system including piping and emitters installed throughout an irrigation area.

*Division* means the Water Quality Control Division of the Colorado Department of Public Health and Environment.

**ENERGY STAR (ENERGY STAR ®) MEANS THE ENVIRONMENTAL PROTECTION AGENCY'S DESIGNATION FOR ENERGY EFFICIENT APPLIANCE AS AUTHORIZED BY 42 U.S.C. SECTION 6294A. (NOTE: DETERMINATION OF WHETHER THE APPLIANCE IS DESIGNATED, HAS AN IWF, AND TO DETERMINE THE IWF, VISIT THE DEPARTMENT OF ENERGY'S ENERGY STAR CERTIFIED RESIDENTIAL CLOTHES WASHERS WEBSITE)**

*Facility* means any building, structure, or installation, or any combination thereof that uses graywater subject to a graywater control program (program), is located on one or more contiguous or adjacent properties, and is owned or operated by the same person or legal entity. Facility is synonymous with the term operation.

*Floodplain (100-year)* means an area adjacent to a river or other watercourse which is subject to flooding as the result of the occurrence of a 100-year flood, and is so adverse to past, current or foreseeable construction or land use as to constitute a significant hazard to public or environmental health and safety or to property or is designated by the Federal Emergency Management Agency (FEMA) or National Flood Insurance Program (NFIP). In the absence of FEMA/NFIP maps, a professional engineer shall certify the floodplain elevations.

*Floodway* means the channel of a river or other watercourse and the adjacent land areas that must be reserved **IN ORDER** to discharge the base flood without cumulatively increasing the water surface elevation more than one foot or as designated by the Federal Emergency Management Agency or National Flood Insurance Program. In the absence of FEMA/NFIP maps, a professional engineer shall certify the floodway elevation and location.

*Graywater* means that portion of wastewater that, before being treated or combined with other wastewater, is collected from fixtures within residential, commercial, or industrial buildings or institutional facilities for the purpose of being put to beneficial uses. Sources of graywater are limited to discharges from bathroom and laundry room sinks, bathtubs, showers, and laundry

machines. Graywater does not include the wastewater from toilets, urinals, kitchen sinks, dishwashers, or nonlaundry utility sinks. ~~C.R.S. 25-8-103(8.3)(a)~~

*Graywater control program (Program)* is this chapter and, as applicable, any rule(s), including implementation practices, regulation(s), standard(s) authorized by the City, and which follows the minimum requirements of this chapter and other applicable law(s), rule(s) and regulation(s).

*Graywater treatment works* means an arrangement of devices and structures used to: (1) collect graywater from within a building or a facility; and (2) treat, neutralize, or stabilize graywater within the same building or facility to the level necessary for its authorized uses. ~~C.R.S. 25-8-103(8.4)~~

*Indirect connection* means a waste pipe from a graywater treatment works that does not connect directly with the closed sewerage system, but that discharges into the closed sewerage system through an air break or air gap into a trap, fixture, receptor, or interceptor.

**INTEGRATED WATER FACTOR (IWF) MEANS A MEASURE OF WATER EFFICIENCY IN GALLONS OF WATER CONSUMED PER CUBIC FOOT CAPACITY.**

*Irrigation area* means that area of ground consisting of soil, mulch, gravel, and plant material to which water is directly applied by a graywater subsurface irrigation system.

**LAUNDRY TO LANDSCAPE MEANS A FORM OF GRAYWATER TREATMENT WORKS DESIGNED TO REUSE WATER FROM A LAUNDRY MACHINE FOR MULCH BASIN SUBSURFACE IRRIGATION.**

*Legally Responsible Party*

- (a) For a residential property, the legally responsible party is the property owner.
- (b) For a corporation, the legally responsible party is a responsible corporate officer, either:
  - (1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision- making functions for the corporation; or
  - (2) The manager of operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for approval application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (c) For a general or limited partnership or sole proprietorship, the legally responsible party is the general partner, business matters partner or the proprietor, respectively.

- (d) For a limited liability company, the responsible party shall be the manager or other authorized agent of the company and shall be a natural person.
- (e) For a municipality, State, federal, or other public agency, the legally responsible party is a principal executive officer or ranking elected official, either:
  - (1) The chief executive officer of the agency; or
  - (2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrators of EPA); or
  - (3) When the entity is the State of Colorado, the Commission.

~~Local Public Health Agency means the Mesa County Colorado Health Department.~~

*Modification* means the alteration or replacement of any component of a graywater treatment works that can affect the quality of the finished water, the rated capacity of a graywater treatment works, the graywater use, alters the treatment process of a graywater treatment works, or compliance with this regulation and the local graywater control program. This definition does not include normal operations and maintenance of a graywater treatment works.

*Mulch* means organic material including but not limited to leaves, prunings, straw, pulled weeds, and wood chips.

Mulch basin means a type of **SUBSURFACE** irrigation or treatment field filled with mulch or other approved permeable material of sufficient depth, length, and width to prevent ponding or runoff. A mulch basin may include a basin around a tree, a trough along a row of plants, or other shapes necessary for irrigation.

**MUNICIPAL SEWER SYSTEM MEANS THE PUBLICLY OWNED WASTEWATER COLLECTION AND TREATMENT SYSTEM OPERATED BY THE CITY OF GRAND JUNCTION.**

*Non-single family* means any structure that is not a single family structure.

*On-site wastewater treatment system (OWTS)* means an absorption system of any size or flow or a system or facility for treating, neutralizing, stabilizing, or dispersing sewage generated in the vicinity, which system is not a part of or connected to a sewage treatment works. C.R.S. 25-10-403(12)

*Percolation test* means a subsurface soil test at the depth of a proposed irrigation area to determine the water absorption capability of the soil, the results of which are normally expressed as the rate at which one inch of water is absorbed. The rate is expressed in minutes per inch.

*Potable water system* means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances, where such system has less than 15 service connections or regularly serves less than an average of at least 25 people daily at least 60 days per year.

*Professional engineer (P.E.)* means an engineer licensed in accordance with 12-25-1, C.R.S.

**PUBLIC Nuisance** means the unreasonable, unwarranted and/or unlawful use of property, which causes inconvenience or damage to others, including to an individual or to the general public.

*Public water system* means a system for the provision of water to the public for human consumption through pipes or other constructed conveyances if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days per year. A public water system is either a community water system or a non-community water system. Such term does not include any special irrigation district. Such term includes:

- (a) Any collection, treatment, storage, and distribution facilities under control of the supplier of such system and used primarily in connection with such system.
- (b) Any collection or pretreatment storage facilities not under such control, which are used primarily in connection with such system.

*Regulation No. 86* means Colorado Department of Public Health and Environment Water Quality Control Commission Regulation No. 86 – Graywater Control Regulation, 5 CCR 1002-86.

*Single family* means a detached or attached structure, arranged and designed as a single family residential unit intended to be occupied by not more than one family and that has separate water and sewer services connections from other dwelling units.

*Site evaluation* means ~~a comprehensive analysis of soil and site conditions for a graywater irrigation area.~~ **AN ANALYSIS OF SOIL AND SITE CONDITIONS FOR A GRAYWATER SUBSURFACE IRRIGATION OR MULCH BASIN AREA TO ACHIEVE REQUIREMENTS IN DESIGN CRITERIA FOR SUBSURFACE IRRIGATION SYSTEMS, INCLUDING MULCH BASINS THAT ARE FURTHER DEFINED IN ATTACHMENT A TO THE ORDINANCE CODIFIED IN THIS CHAPTER, GRAYWATER DESIGN CRITERIA.**

*Soil horizon* means layers in the soil column differentiated by changes in texture, color, redoximorphic features, bedrock, structure, consistence, and any other characteristic that affects water movement.

*Soil profile test pit* means a trench or other excavation used for access to evaluate the soil horizons for properties influencing effluent movement, bedrock, evidence of seasonal high ground water, and other information to be used in locating and designing a graywater irrigation area.

*Soil structure* means the naturally occurring combination or arrangement of primary soil particles into secondary units or peds; secondary units are characterized because of shape, size class, and grade (degree of distinctness).

*State* means the State of Colorado or any of its agencies.

*State waters* means any and all surface and subsurface waters which are contained in or flow in or through this State, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.

*Subsurface irrigation* means a discharge of graywater into soil a minimum of ~~four~~ **TWO (2")** inches and no deeper than 12 inches below the finished grade.

*Suitable soil* means unsaturated soil in which the movement of water, air, and the growth of roots is sustained to support healthy plant life and conserve moisture. Soil criteria for graywater subsurface irrigation are further defined in Attachment A to the ordinance codified in this chapter, Graywater Design Criteria.

**WATERSENSE MEANS THE ENVIRONMENTAL PROTECTION AGENCY’S DESIGNATION FOR WATER EFFICIENT FIXTURES OR AN ANALOGOUS SUCCESSOR PROGRAM.**

§ 13.40.030 ~~Purpose, applicability, and compliance~~ **ABBREVIATIONS AND ACRONYMS.**

The following meanings are associated with the acronyms used in this chapter.

ANSI	American National Standards Institute
BK	Blocky
C.R.S.	Colorado Revised Statutes
CDPS	Colorado Discharge Permit System
FEMA	Federal Emergency Management Agency
gpd	Gallons per day
GR	Granular
<b>IWF</b>	<b>Integrated Water Factor</b>
<b>LA</b>	<b>LANDSCAPED AREA</b>
<b>LRG</b>	<b>LOADING RATE FOR GRAYWATER</b>
<b>MAC</b>	<b>MAXIMUM ABSORPTION CAPACITY</b>
mg/L	Milligrams per liter
MPI	Minutes per inch
NFIP	National Flood Insurance Program
NSF	NSF International, formerly known as National Sanitation Foundation
O&M	Operations and maintenance
OWTS	On-site wastewater treatment system(s)
PR	Prismatic

§ 13.40.040 Materials incorporated by reference.

- (a) Design criteria incorporated by reference and cited herein are included in Attachment A to the ordinance codified in this chapter and are referred to herein as the Graywater Design Criteria.
  - (1) The Graywater Design Criteria shall be maintained in accordance with Regulation No. 86, as amended and the most recent version of the International Plumbing Code **RELEVANT PLUMBING CODE(S)** adopted by Mesa County.
- (b) All materials referenced in and/or incorporated by reference in this chapter may be examined at gjcity.org or at the City Hall, Clerk's Office, 250 N 5th Street, Grand Junction, CO 81501.

§ 13.40.050 Permitting, inspection and approval.

- (a) Permitting. Prior to approval for use, all graywater treatment works must be approved by the City of Grand Junction.
- (b) Inspection. Prior to approval for use, all graywater treatment works must be inspected, verified, and accepted by the City of Grand Junction **AND/OR ITS CONTRACTOR THE MESA COUNTY BUILDING DEPARTMENT**.
- (c) Operation and Maintenance (O&M) Manual. All graywater treatment works must have an O&M manual. The O&M manual shall fully comply with the O&M manual requirements, specifications and content all as provided in the Graywater Design Criteria.

§ 13.40.060 Enforcement and oversight.

- (a) Responsible Agency. The City Manager shall be responsible for oversight and implementation of this chapter including, but not limited to, **DESIGN** review, inspection, enforcement, tracking, and receipt of complaints.
- (b) Enforcement. The City and its contractor the Mesa County Building Department (~~Building Department~~) are authorized to perform inspections and take enforcement actions to ensure compliance with this chapter.
  - (1) Enforcement of this chapter shall be in accordance with the duty(ies) set forth in GJMC § 15.08.020.
  - (2) The applicant shall install and maintain any graywater treatment works within the City in accordance with the Graywater Design Criteria in Attachment A to the ordinance codified in this chapter. The City Manager is authorized to perform inspection(s) and take enforcement action(s) to ensure compliance with this chapter.
  - (3) The City shall provide an application for, and when a **AN ADMINISTRATIVELY** complete application is made, filed and fees are paid, review the proposed graywater treatment works.
  - (4) The City shall review and approve, approve with conditions, or deny each application within 30 **CALENDAR** days of the City determining the application to

be **TECHNICALLY** complete. An **A TECHNICALLY** incomplete application will be denied.

§ 13.40.070 Reporting requirements and tracking system.

- (a) ~~Owners (or their legally responsible party)~~ **THE LEGALLY RESPONSIBLE PARTY** of ~~Category B and D~~ **CATEGORY B2 AND C2** graywater treatment works are required to provide an annual self-certification of the legal status of their graywater treatment works. The letter must contain the following:
  - (1) A statement indicating if the graywater treatment works is still in operation;
  - (2) A certification that the graywater treatment works is being operated in accordance with the operations and maintenance manual;
  - (3) A certification that no modification(s) has (have) been made to the graywater treatment works. If modification(s) has (have) been made to the graywater treatment works, the modification(s) must be described in a written statement;
  - (4) Written attestation that the graywater treatment works is overseen by an operator certified according to requirements of Regulation No. 100, 5 CCR 1003-2, if required.
- (b) The **LEGALLY RESPONSIBLE PARTY** ~~owner (or their legally responsible party)~~ or **CERTIFIED** operator of a graywater treatment works must report the following information to the City of Grand Junction for inclusion in a tracking system of graywater treatment works. The information must be received within 30 **CALENDAR** days of the treatment works becoming operational:
  - (1) The legal address where the graywater treatment works is located;
  - (2) The owner or legally responsible party of the graywater treatment works;
  - (3) A list of graywater uses;
  - (4) A description of the graywater treatment works; and
  - (5) Where required, the name and contact information for the certified operator associated with the graywater treatment works.
- (c) ~~The owner or operator of a graywater treatment works must report~~ Changes to any of these items **MUST BE REPORTED** to City of Grand Junction within 60 **CALENDAR** days. ~~of the changes.~~

§ 13.40.080 Fees.

- (a) The City may impose fees for administration and oversight of the graywater control program.
- (b) Plan review fees and planning clearance fees, building permit and inspection fees may be applicable as determined by the City Manager.

§ 13.40.090 Graywater use categories.

The graywater use categories allowed are defined below. A facility may have multiple graywater treatment works if all applicable use and design requirements are satisfied.

~~(a) — Category A: Single-Family, Subsurface Irrigation:~~

~~(1) — Category A graywater use must meet the following:~~

- ~~(i) — Allowed users: single-family.~~
- ~~(ii) — Allowed graywater sources: graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.~~
- ~~(iii) — Allowed uses: outdoor, subsurface irrigation within the confines of the legal property boundary.~~
- ~~(iv) — Design flow: The design flow for a single-family graywater treatment works shall not exceed 400 gallons per day (gpd).~~

~~(b) — Category B: Non-Single-Family, Subsurface Irrigation, 2,000 Gallons per Day (GPD) or Less:~~

~~(1) — Category B graywater use must meet the following:~~

- ~~(i) — Allowed users: non-single-family users.~~
- ~~(ii) — Allowed graywater sources: graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.~~
- ~~(iii) — Allowed uses: outdoor, subsurface irrigation within the confines of the legal property boundary.~~
- ~~(iv) — Design flow: The design flow for a non-single-family graywater treatment works shall not exceed 2,000 gallons per day (gpd) for outdoor irrigation for the facility.~~

~~(c) — Category C: Single-Family, Indoor Toilet and Urinal Flushing, Subsurface Irrigation:~~

~~(1) — Category C graywater use must meet the following:~~

~~(2) — Allowed users: single-family.~~

- ~~(i) — Allowed graywater sources: graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.~~
- ~~(ii) — Allowed uses: indoor toilet and urinal flushing and outdoor, subsurface irrigation within the confines of the legal property boundary.~~
- ~~(iii) — Design flow: The design flow for a single-family graywater treatment works shall not exceed 400 gallons per day (gpd) for all approved uses.~~

~~(d) — Category D: Non-Single-Family, Indoor Toilet and Urinal Flushing, Subsurface Irrigation:~~

~~(1) — Category D graywater use must meet the following:~~

- ~~(i) — Allowed users: non-single-family users.~~
- ~~(ii) — Allowed graywater sources: graywater collected from bathroom and laundry room sinks, bathtubs, showers, and laundry machines.~~
- ~~(iii) — Allowed uses: indoor toilet and urinal flushing and outdoor, subsurface irrigation within the confines of the legal property boundary.~~

~~(iv) Design flow: There is no maximum design flow for a non-single-family graywater treatment works for indoor toilet and urinal flushing. There is no maximum design flow for wastewater from the facility that can go to a closed sewerage system. The design flow is limited to 2,000 gallons per day (gpd) or less for outdoor irrigation for the facility.~~

**(a) CATEGORY A1: LAUNDRY TO LANDSCAPE**

**(1) CATEGORY A1 GRAYWATER USE MUST MEET THE FOLLOWING:**

- (i) ALLOWED USERS: SINGLE FAMILY.**
- (ii) ALLOWED GRAYWATER SOURCES: GRAYWATER COLLECTED FROM LAUNDRY MACHINES.**
- (iii) ALLOWED USES: OUTDOOR, MULCH BASIN IRRIGATION WITHIN THE CONFINES OF THE LEGAL PROPERTY BOUNDARY FOR:
  - (A) LANDSCAPES, AND**
  - (B) EDIBLE CROPS****
- (iv) DESIGN FLOW: THE DESIGN FLOW FOR A SINGLE FAMILY, LAUNDRY TO LANDSCAPE FOR SUBSURFACE IRRIGATION IS LIMITED TO 250 GALLONS PER DAY (GPD) OR LESS.**

**(b) CATEGORY B1: SINGLE FAMILY, SUBSURFACE IRRIGATION**

**(1) CATEGORY B1 GRAYWATER USE MUST MEET THE FOLLOWING:**

- (i) ALLOWED USERS: SINGLE FAMILY.**
- (ii) ALLOWED GRAYWATER SOURCES: GRAYWATER COLLECTED FROM BATHROOM AND LAUNDRY ROOM SINKS, BATHTUBS, SHOWERS, AND LAUNDRY MACHINES.**
- (iii) ALLOWED USES: OUTDOOR, SUBSURFACE IRRIGATION WITHIN THE CONFINES OF THE LEGAL PROPERTY BOUNDARY FOR:
  - (A) LANDSCAPES, AND**
  - (B) EDIBLE CROPS****
- (iv) DESIGN FLOW: THE DESIGN FLOW FOR A SINGLE FAMILY GRAYWATER TREATMENT WORKS IS LIMITED TO 400 GALLONS PER DAY (GPD) OR LESS COMBINED FLOW FOR ALL APPROVED USES.**

**(c) CATEGORY B2: NON-SINGLE FAMILY , SUBSURFACE IRRIGATION, 2,000 GALLONS PER DAY (GPD) OR LESS**

**(1) CATEGORY B2 GRAYWATER USE MUST MEET THE FOLLOWING:**

- (i) ALLOWED USERS: NON-SINGLE FAMILY USERS.**
- (ii) ALLOWED GRAYWATER SOURCES: GRAYWATER COLLECTED FROM BATHROOM AND LAUNDRY ROOM SINKS, BATHTUBS, SHOWERS, AND LAUNDRY MACHINES.**
- (iii) ALLOWED USES: OUTDOOR, SUBSURFACE IRRIGATION WITHIN THE CONFINES OF THE LEGAL PROPERTY BOUNDARY FOR:**

(A) LANDSCAPES

- (iv) DESIGN FLOW: THE DESIGN FLOW FOR A NON-SINGLE FAMILY GRAYWATER TREATMENT WORKS IS LIMITED TO 2,000 GALLONS PER DAY (GPD) OR LESS FOR OUTDOOR IRRIGATION FOR THE ENTIRE FACILITY.

(d) CATEGORY C1: SINGLE FAMILY , INDOOR TOILET AND URINAL FLUSHING

(1) CATEGORY C1 GRAYWATER USE MUST MEET THE FOLLOWING:

- (i) ALLOWED USERS: SINGLE FAMILY.
- (ii) ALLOWED GRAYWATER SOURCES: GRAYWATER COLLECTED FROM BATHROOM AND LAUNDRY ROOM SINKS, BATHTUBS, SHOWERS, AND LAUNDRY MACHINES.
- (iii) ALLOWED USES: INDOOR TOILET AND URINAL FLUSHING AND OUTDOOR, SUBSURFACE IRRIGATION WITHIN THE CONFINES OF THE LEGAL PROPERTY BOUNDARY. TREATED GRAYWATER SHALL NOT BE USED FOR BIDETS.
- (iv) DESIGN FLOW: THE DESIGN FLOW FOR A SINGLE FAMILY GRAYWATER TREATMENT WORKS IS LIMITED TO 400 GALLONS PER DAY (GPD) OR LESS COMBINED FLOW FOR ALL APPROVED USES.

(e) CATEGORY C2: NON-SINGLE FAMILY , INDOOR TOILET AND URINAL FLUSHING

(1) CATEGORY C2 GRAYWATER USE MUST MEET THE FOLLOWING:

- (i) ALLOWED USERS: NON-SINGLE FAMILY USERS.
- (ii) ALLOWED GRAYWATER SOURCES: GRAYWATER COLLECTED FROM BATHROOM AND LAUNDRY ROOM SINKS, BATHTUBS, SHOWERS, AND LAUNDRY MACHINES.
- (iii) ALLOWED USES: INDOOR TOILET AND URINAL FLUSHING AND OUTDOOR, SUBSURFACE IRRIGATION WITHIN THE CONFINES OF THE LEGAL PROPERTY BOUNDARY. TREATED GRAYWATER SHALL NOT BE USED FOR BIDETS.
- (iv) DESIGN FLOW: THERE IS NO MAXIMUM DESIGN FLOW FOR A NON-SINGLE FAMILY GRAYWATER TREATMENT WORKS FOR INDOOR TOILET AND URINAL FLUSHING. THE DESIGN FLOW IS LIMITED TO 2,000 GALLONS PER DAY (GPD) OR LESS FOR OUTDOOR IRRIGATION FOR THE ENTIRE FACILITY.

§ 13.40.100 Design criteria.

(a) Design Criteria.

- (1) All graywater treatment works must meet the requirements of the Graywater Design Criteria in effect at the time of installation of the system. The Graywater

Design Criteria is included in Attachment A to the ordinance codified in this chapter. Attachment A is incorporated by this reference as if fully set forth.

- (b) Sizing.
  - (1) Graywater treatment works must be sized appropriately using the flow projection methods described in the Graywater Design Criteria.
  - (2) The size of irrigation areas must be determined using the sizing protocols described in the Graywater Design Criteria.
- (c) System Modifications.
  - (1) Graywater treatment works requiring modifications must be upgraded to the requirements of the Graywater Design Criteria in effect at the time of modifications. All system modifications must be approved by the City of Grand Junction.

§ 13.40.110 Control Measures.

**CONTROL MEASURES ARE OPERATIONAL REQUIREMENTS REPRESENTING BEST MANAGEMENT PRACTICES THAT GRAYWATER TREATMENT WORKS MUST FOLLOW WHEN OPERATING A GRAYWATER TREATMENT WORKS.**

- (a) General Control Measures. All graywater treatment works and uses must be conducted in accordance with the following control measures:
  - (1) Graywater must be collected in a manner that minimizes the presence or introduction of:
    - i. Hazardous or toxic chemicals in the graywater to the greatest extent possible;
    - ii. Human excreta in the graywater to the greatest extent possible;
    - iii. Household wastes; and
    - iv. Animal or vegetable matter; **AND**
    - v. **FOR LAUNDRY TO LANDSCAPE SYSTEMS (GRAYWATER USE CATEGORY A1), THIS INCLUDES CONTROL OVER THE TYPE OF CLOTHING IN THE WASHING MACHINE (E.G. NO REUSEABLE DIAPERS; NOT USING GRAYWATER WHEN SOMEONE IN THE HOUSEHOLD IS SICK).**
  - (2) Use of graywater is limited to the confines of the facility from which the graywater is derived.
  - (3) All graywater treatment works must have an operation and maintenance (O&M) manual. The graywater treatment works must be operated and maintained in accordance with the O&M manual, including all manufacturer recommended maintenance activities. See the Graywater Design Criteria for O&M manual requirements.

- (i) The O&M manual must remain with the graywater treatment works throughout the system's life and be updated based on each modification and approval made to the system.
  - (ii) The O&M manual must be transferred, upon change of ownership or occupancy, to the new owner **LEGALLY RESPONSIBLE PARTY** or tenant.
  - (iii) For Category ~~D~~ **B2 AND C2** graywater treatment works that have a capacity to receive greater than 2,000 gallons per day (gpd), operational and maintenance records must be maintained for a minimum of the past five years.
- (4) The owner **LEGALLY RESPONSIBLE PARTY** or **CERTIFIED** operator of a graywater treatment works must minimize exposure of graywater to humans and domestic pets.
- (5) Graywater use and graywater treatment works must not create a **PUBLIC** nuisance.
- (6) Graywater may not be stored for more than 24 hours unless the graywater has been treated by a graywater treatment works **THAT MEETS THE DESIGN REQUIREMENTS OF THE GRAYWATER DESIGN CRITERIA**. All graywater must be stored inside a tank(s) that meets the design requirements of the Graywater Design Criteria.
- (7) Temporary or semi-temporary connections from the potable water system or public water system to the graywater treatment works are prohibited. Permanent connections from the potable water system or public water system to the graywater treatment works must **BE CONTROLLED WITH AN APPROPRIATE BACKFLOW PREVENTION ASSEMBLY OR BACKFLOW PREVENTION METHOD AND** meet the design requirements of the Graywater Design Criteria.
- (8) **ANY PROPERTY THAT MAY ALLOW FOR SHORT TERM RENTALS (E.G. AIRBNB, VRBO, ETC.) MAY BE PROHIBITED FROM USING GRAYWATER TREATMENT WORKS.**
- (b) Subsurface Irrigation System Control Measures. All subsurface irrigation systems must be operated in accordance with the additional following control measures: **ADDITIONAL CONTROL MEASURES REQUIRED FOR SUBSURFACE IRRIGATION GRAYWATER USE, INCLUDING MULCH BASINS (GRAYWATER USE CATEGORIES A1, B1, AND B2). SUBSURFACE IRRIGATION GRAYWATER TREATMENT WORKS MUST BE OPERATED IN ACCORDANCE WITH THE FOLLOWING ADDITIONAL CONTROL MEASURES:**
  - ~~(1) Agricultural irrigation with graywater is prohibited by Regulation No. 86 and this chapter.~~
  - (1) **EDIBLE CROP IRRIGATION IS PROHIBITED FOR NON-SINGLE FAMILY SUBSURFACE IRRIGATION (GRAYWATER USE CATEGORY B2).**

- (2) EDIBLE CROPS IRRIGATED WITH GRAYWATER TREATMENT WORKS MUST BE WASHED WITH POTABLE WATER PRIOR TO CONSUMPTION.
  - (3) EDIBLE CROPS IRRIGATED WITH GRAYWATER TREATMENT WORKS MUST BE FOR PERSONAL CONSUMPTION ONLY AND NOT FOR SALE.
  - (4) SINGLE FAMILY UNITS THAT ALLOW FOR SHORT TERM RENTALS (E.G. AIRBNB, VRBO, ETC.) ARE PROHIBITED FROM USING GRAYWATER FOR EDIBLE CROP IRRIGATION AND LANDSCAPE TREATMENT WORKS.
  - (5) IRRIGATION OF SPROUTS, LEAFY GREENS AND ROOT CROPS IS PROHIBITED.
  - (6) Irrigation with graywater is prohibited when the ground is frozen, plants are dormant, during rainfall events, or the ground is saturated.
  - (7) Irrigation scheduling must be adjusted so that application rates are closely matched with soil and weather conditions.
  - (8) Graywater must be applied in a manner that does not result in ponding, runoff, or unauthorized discharge to state waters. For dispersed subsurface irrigation systems, the graywater must be applied at an agronomic rate. For mulch basin systems, the graywater must not be applied in excess of the soil adsorption rate.
  - (9) For mulch basin systems, mulch must be replenished and undergo periodic maintenance as needed to reshape or remove material to maintain surge capacity and to prevent ponding and runoff.
- (c) Control measures that apply to indoor toilet and urinal flushing graywater use ~~indoor toilet and urinal flushing graywater treatment works (Categories C and D)~~ must be operated in accordance with the following additional control measures: **(GRAYWATER USE CATEGORIES C1 AND C2). INDOOR TOILET AND URINAL FLUSHING GRAYWATER TREATMENT WORKS (CATEGORIES C1 AND C2) MUST BE OPERATED IN ACCORDANCE WITH THE FOLLOWING ADDITIONAL CONTROL MEASURES:**
- (1) Graywater for toilet and urinal flushing use must be disinfected.
    - (i) Graywater treatment works that utilize chlorine for disinfection must have a minimum of 0.2 mg/L and a maximum of 4.0 mg/L of free chlorine residual throughout the indoor graywater plumbing system, including fixtures.
    - (ii) Single family graywater treatment works that utilize nonchemical methods, such as UV, for disinfection must have a chlorine puck present in each toilet or urinal tank.
  - (2) Graywater for toilet and urinal flushing must be dyed with either blue or green food grade vegetable dye and be visibly distinct from potable water.

§ 13.40.120 ~~Certified operator of Category D systems.~~ **OPERATION BY DESIGNATED RESPONSIBLE PERSON AND CERTIFIED OPERATOR.**

~~Category D non-single family systems of over 2,000 gallons per day must be operated by qualified personnel who meet any applicable requirements of Regulation No. 100, the water and wastewater facility operators certification requirements (5 CCR 1003-2).~~

- (a) GRAYWATER TREATMENT WORKS FOR NON-SINGLE FAMILY GRAYWATER USE CATEGORIES REQUIRE A DESIGNATED RESPONSIBLE PERSON WHO IS KNOWLEDGEABLE WITH THE DUTIES INCLUDING, AS APPROPRIATE, SPECIFIC MEASURES USED TO OPERATE TREATMENT, MONITORING, INSPECTION, PLANNING, REPORTING AND DOCUMENTATION REQUIREMENTS. THE DESIGNATED RESPONSIBLE PERSON MUST:**
  - (1) BE DESIGNATED BY THE LEGALLY RESPONSIBLE PARTY**
  - (2) CONDUCT OPERATIONS AND MAINTENANCE IN ACCORDANCE WITH THE GRAYWATER TREATMENT WORKS MANUFACTURER'S RECOMMENDATIONS AND THE PROFESSIONAL ENGINEER'S RECOMMENDATIONS.**
  - (3) ENSURE COMPLIANCE WITH THE OPERATION AND MAINTENANCE MANUAL IN THIS REGULATION, AND**
  - (4) ENSURE COMPLIANCE WITH THIS PROGRAM, INCLUDING MONITORING AND REPORTING REQUIREMENTS.**
- (b) A GRAYWATER TREATMENT WORKS WITH A DESIGN CAPACITY GREATER THAN 2,000 GPD MUST BE OPERATED BY QUALIFIED PERSONNEL WHO MEET ANY APPLICABLE REQUIREMENTS OF REGULATION NO. 100, THE WATER AND WASTEWATER FACILITY OPERATORS CERTIFICATION REQUIREMENTS.**

§ 13.40.130 **PUBLIC** Nuisance.

- (a) It shall be unlawful and constitute a nuisance for any person to erect, install, or use a graywater system upon property located within the City without first having obtained a building permit, issued pursuant to this chapter, for an approved, compliant graywater system.
- (b) It shall be unlawful and constitute a nuisance for any person to collect or cause to be collected graywater from any sources except as otherwise expressly permitted under this chapter.
- (c) It shall be unlawful and constitute a nuisance for any person to use graywater, or conduct any graywater activity, upon property located within the City for any purpose except as otherwise expressly permitted in this chapter.
- (d) It shall be unlawful and constitute a nuisance for any person to operate a graywater system or subsurface irrigation system without implementing the control measures provided in this chapter.

§ 13.40.140 Remedies for noncompliance.

- (a) Compliance Orders. Whenever the City determines that any activity is occurring which is not in compliance with a building permit and/or the requirements of this chapter, the City may issue a written compliance order to the legally responsible party containing a compliance schedule (Schedule).
  - (1) The Schedule shall direct specific action(s) by the legally responsible party including dates for the completion of the action(s). It shall be unlawful for any person to fail to comply with any compliance order.
- (b) Suspension and Revocation of Permit. The City may suspend or revoke a building permit for violation of any provision of this chapter, violation of the permit, and/or misrepresentations by the permittee or the permittee's agents, employees, or independent contractors.
- (c) Stop Work Orders. Whenever the City determines that any activity is occurring which is not in compliance with an approved permit and/or the requirements of this chapter, the City may order such activity stopped upon service of written notice upon the legally responsible party. Any and all work or other activity(ies) under, or in reliance on, a permit having issued, shall immediately stop until authorized in writing by the City to proceed.
  - (1) Service shall be by hand delivery or posting on the property.
  - (2) If the legally responsible party cannot be located, the notice to stop shall be posted in a conspicuous place upon the property where the activity is occurring.
  - (3) The notice shall state the nature of the violation.
  - (4) The notice shall not be removed until the violation has been cured or authorization to remove the notice has been issued by the City.
  - (5) It shall be unlawful for any person to fail to comply with a stop work order.
- (d) Civil Proceedings. In case of any violation of any provision of this chapter, or any amendment thereof, the City may, at its discretion, initiate civil proceedings, including administrative citations pursuant to Chapter 1.12 GJMC, injunction, mandamus, abatement, declaratory judgment or other appropriate actions or proceedings, to prevent, enjoin, abate, remove, or otherwise correct any such unlawful condition. Civil remedies provided for under this section are not exclusive and shall not preclude prosecution for criminal violations under the provisions of this chapter.

§ 13.40.150 Severability.

The provisions of this chapter are severable. If any portion of this chapter should be declared invalid for any reason whatever, such decision shall not affect the remaining portions thereof.

**INTRODUCED** on first reading this 18<sup>th</sup> day of March 2026 and ordered published in pamphlet form.

**ADOPTED** on second reading 1<sup>st</sup> day of April 2026 and ordered published in pamphlet form.

*Cody Kennedy*

Cody Kennedy

President of the City Council



ATTEST:

*Selestina Sandoval*

Selestina Sandoval

City Clerk

I HEREBY CERTIFY THAT the foregoing Ordinance, being Ordinance No. 5316 was introduced by the City Council of the City of Grand Junction, Colorado at a regular meeting of said body held on the 18<sup>th</sup> of March, 2026, and the same was published in The Daily Sentinel, a newspaper published and in general circulation in said City, in pamphlet form, at least ten days before its final passage.

I FURTHER CERTIFY THAT a Public Hearing was held on the day of the 1<sup>st</sup> of April 2026, at which Ordinance No. 5316 was read, considered, adopted, and ordered published in pamphlet form by the Grand Junction City Council.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 6<sup>th</sup> day of April 2026.

  
Deputy City Clerk

Published: March 21, 2026  
Published: April 4, 2026  
Effective: May 4, 2026

